



RENZO GRACIE

**TRAINING
FOR**

WARRIORS

THE TEAM RENZO GRACIE WORKOUT

by **MARTIN ROONEY**

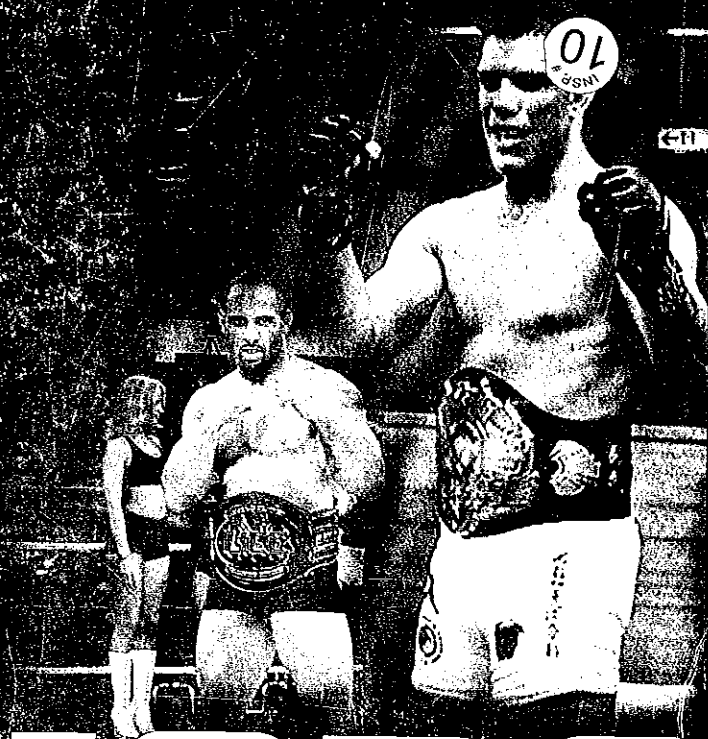
**Training Secrets
That Every Fighter
Needs To Win At:**

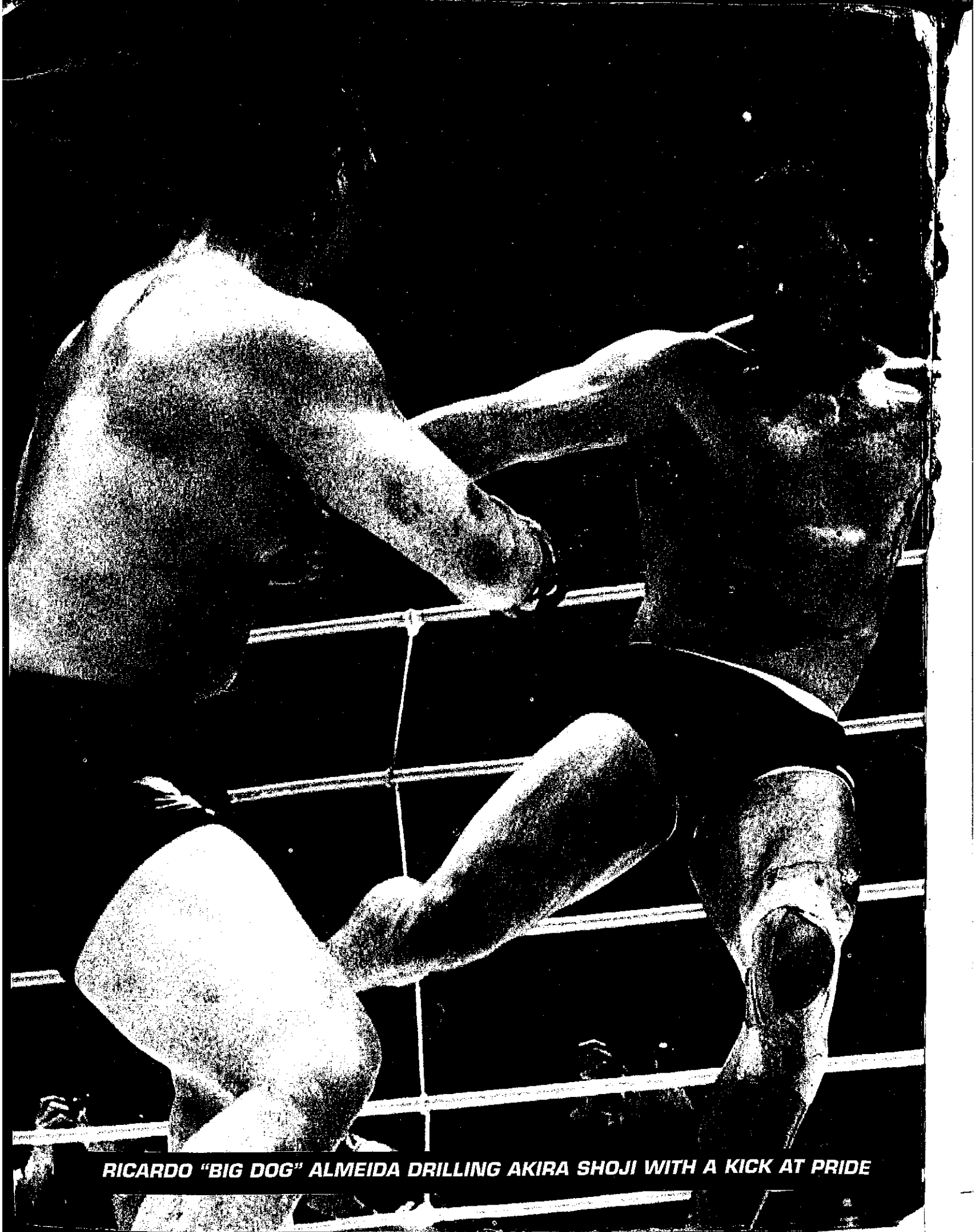
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RICARDO "BIG DOG" ALMEIDA DRILLING AKIRA SHOJI WITH A KICK AT PRIDE



Praise for Training for Warriors

"Martin helped me get ready for my first MMA match. Not only did we work on the physical training, but mental and strategic work too. I thanked him with a 45 second knockout over a much more experienced opponent."

Fabio Leopoldo
Ryan Gracie Black Belt
3-time World Jiu Jitsu Champion

"Every movement during Martin's workouts has a purpose. My training is now more efficient and I am realizing maximal results. Now I always look forward to training."

Celita Schutz
3-time Olympian, USA Judo
6-time National Judo Champion
5th 1999 World Judo Championships

"The confidence I have developed through Martin's method has improved every aspect of my game. This is a must-read for any serious martial arts practitioner."

Gene Dunn
Renzo Gracie Black Belt
6-time US Karate Champion
6-time World Team Karate Member

"Martin clarifies, as no one else, the secrets of good physical and mental conditioning for athletes. That's because he is able to unite academic knowledge and practical success as a coach, in addition to the fact he was (and still is) an awesome competitor himself."

Luca Atalla
Editor Gracie Magazine
Gracie Barra Black Belt

"Over the years, I endured what I thought were the toughest practices with the toughest Division I wrestlers. Now I wake up at 4:30am to head to Parisi's to train with Martin and it is a new adventure every time. This training is the most intense and challenging that I have ever known. Every session leaves me better than the day before both physically and mentally."

Kurt Pellegrino
Pan Am Jiu Jitsu gold medalist
GG and NAGA National Champion
WEC and Reality Fighting Lightweight Champion

**TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN**

Training for Warriors

THE TEAM RENZO GRACIE WORKOUT



By Martin Rooney

RENZO GRACIE

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By Martin Rooney**

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Gracie Family Values

Most people that I have met around the world describe only two things when they are asked about the Gracie Family: fighting and blood ties. This is one of the most inaccurate descriptions that I could ever think of to describe this family. This limited observation has two causes: these people have only seen the Gracie's fight, and they have never met any of them. This article is going to give any people that hold the narrow belief mentioned above insight into what it means to be a member of this family.

I, like many others, was first introduced to the Gracie Family when Royce Gracie entered the Octagon at UFC 1 and dominated the competition in 1993. At that point, even to me they were just a family of fighters connected by a history of techniques and blood. Two and a half years later, a friend of mine told me about a charismatic fighter that I had to meet. His name was Renzo Gracie. Since my first training session at his New York City academy all those years ago, Renzo treated me like a brother. I have been lucky to have met many members of the Gracie family and have accompanied them on trips all over the world. The relationships I developed even got me the honor of writing for Gracie Magazine. The trip to Japan for Pride Bushido, however, would be one of the most historic events I would be involved with the Gracie family to date. It would be the day that they were to take on Japan.

On my flight to Japan to see Pride Bushido, I was definitely caught up in the hype that the Gracie "Family" was taking on Japan. I was excited and also nervous about the pressure that this event could have in store for the Gracie's that were competing. Could this be the end of a revolution that this family started over ten years ago in MMA? Could this be a historical event that could threaten the legacy for what this family has worked for over the last century? These were the questions that everyone was asking, and I too was listening to the propaganda.

The training session on the morning of Pride Bushido eased much of my apprehension. Renzo's punches were crisp and accurate, Rodrigo looked strong and explosive, Ryan was aggressive and focused, and Daniel looked relaxed and confident. Everyone also discussed how great Ralph looked, and that he was surely ready for his match. I think that session calmed many of the people that were there, and demonstrated how ready the Gracie's were for action. As the entire team left the hotel for the arena later that day, Rodrigo Gracie let out a roar, "Are we ready for a war?" As I saw all of the people that left with us in the same black and white Team Gracie shirts, the army that I was now with put me at ease. It was not until the bus ride to the Saitama Super Arena that all of my fears and doubts were completely gone. When I rode for that hour over to the arena I had an epiphany of what this family is all about. By the time the Pride event was over that night, every belief that I developed on that bus ride came true.

There are many characteristics of a successful family. When a family has the characteristics of a quality family, they can take on anything. As I am about to show, these values are as important to the Gracie's success as is their technique and fighting history. These values are the glue that has held this family together and allowed them to take on not just a single country, but the world. The following paragraphs are going to be a back stage description in chronological order of Pride Bushido and what it taught me about this family.



The first essential characteristic of a family that I learned on that bus ride was Unity. A family must be unified in their beliefs and purpose if they are to be successful. If there is not unity present, a family is sure to breakdown. There may not be total alignment at all times within a family, but there must be unity. For instance, there is an old saying, "If it is you versus me, I choose me, but if it is you versus them, I choose us!" Everyone on that bus was unified with only one purpose in mind: victory.

The next characteristic that came on that bus ride was Support. A family is nothing if it does not have a culture in which every member supports the other. This characteristic could not be denied from the Gracie family on this day. There were so many members of the family and a support staff from all over the world that it was absolutely amazing. Everyone was there to help in any way possible. Every member of the team was also supported equally. There was no one that lacked the attention and the support of the entire group.

An interesting characteristic that many people may not understand is that a family must be able to Agree to Disagree. There are going to be arguments. There are going to be differences in opinion and conflict. No family is free from this, and that includes the Gracie's. A family must allow these opinions to make sure there is proper communication. If this is not allowed, the relationships will be superficial. During the bus ride, and during our wait before the fights in the locker room, the Gracie brothers (Ryan, Ralph and Renzo) argued about things as simple as whose gloves were whose and what to wear. To an outsider, this conflict could be seen to undermine the situation, but this did not threaten the integrity of the family or the day. That is because a simple argument cannot disrupt a family that knows it can express its opinions. When conflict is allowed, relationships and the family actually grow stronger. A critical characteristic that was displayed throughout this day by the Gracie family was Trust. Without



A jubilant Team Gracie after winning the first Gracie vs. Japan Bushido title in Tokyo, Japan.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

trust within a family, the family is going to dissolve and fragment for sure. Each member knew what their responsibilities were on this trip. For the fighters, their responsibility was to represent the Gracie legacy and win. For the cornermen, their responsibility was to make sure the fighter was physically and mentally prepared, as well as deliver the right strategy at the right time during the fight. When we were in the locker rooms preparing the fighters for the event, every family member had a job to do. Whether it was preparing the gloves and water bottles, making sure there was enough to eat, stretching and warming the athletes, giving last minute advice or keeping the press out of the room at critical times, everyone was trusted in their position. This trust is not something you are given in a family, this trust is earned. Every member of the team this day earned that responsibility with accountability over time. Because of this fact, there would surely not be anyone let down on this day.

As the fights began I was aware of two characteristics that the family also displayed: Tradition and Pride. A family is about history, and a family will often do anything to defend that honor. Why they defend that history is because of their family pride. When a family has enough tradition and pride present, they command respect. I can only try to imagine the feeling a fighter faces jumping into the ring to fight. Add the fact that your family tradition and pride is at stake, and the pressure could be overwhelming. Because of who these Gracie's are, and what their family represents, they had no problem taking that weight on their shoulders. When the fights were tied 2-2, I could feel the tension in the air. As I stood on the platform behind the curtain with Ryan Gracie and the other members of Team Gracie, I knew what was at stake. Ryan was focused and eager to accept the responsibility of the deciding fight. As the curtain rose and Ryan burst out toward the ring through the cheering fans, he had only one purpose: deliver a win for the family.

Could he win the fight? Could the Gracie family defeat Japan? One might think that for one family to take on the traditions and pride of an entire country would be impossible. On closer examination, however, it should be easy to see why one might take the family over the country to win. Throughout history, countries are often divided by civil war. People within countries are often divided by different interests and desires. This leads to lack of unity, communication, support and trust. Each member of Team Japan may have felt pride to represent their country, but every fighter was surely first there for themselves. This was not true for any member of the Gracie family on this day. Each man was there for a bigger reason than personal fulfillment and country pride. There is one characteristic that Team Japan may have been lacking that could not allow them to defeat Team Gracie: Responsibility. Ryan went into the ring with the responsibility to produce a victory. That is something his opponent may not have possessed.

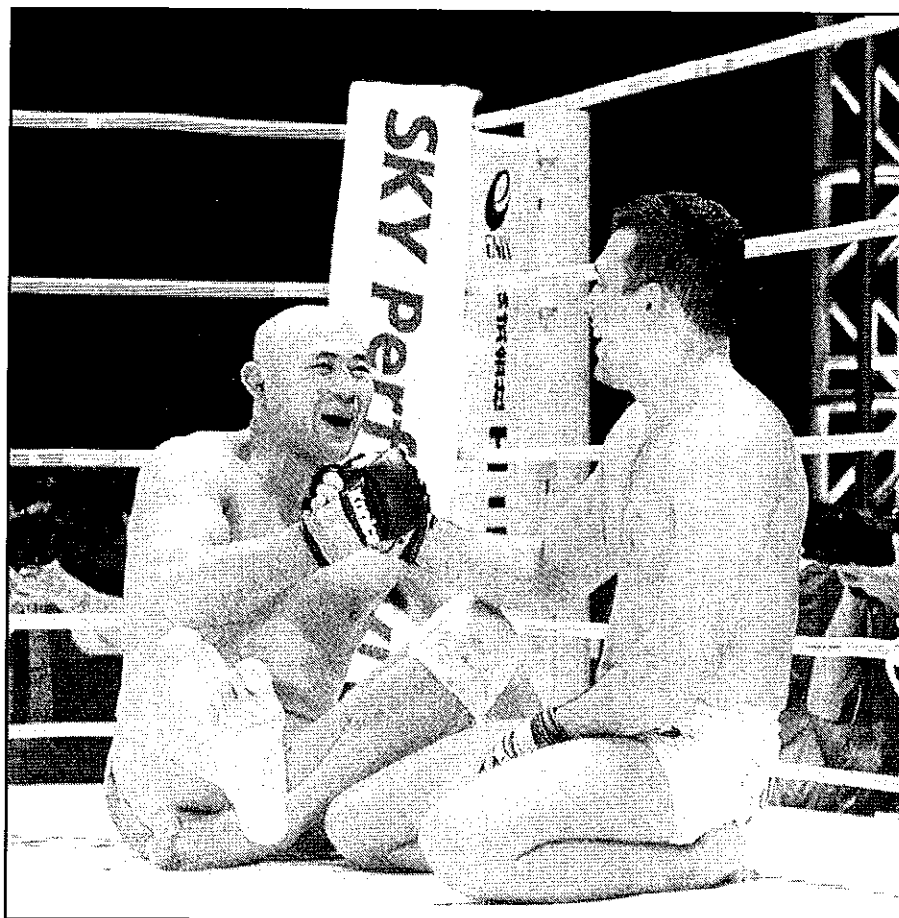
When Ryan delivered his final foot stomp and the referee pulled him away from his knocked out opponent, the Gracie Team swarmed the ring. As different members of the family were hoisted onto the shoulders of other family members, I learned the most important family characteristic of all: Love. To see all the joy and love in the ring at that moment was magical to be a part of. No one that only sees a fight in the ring can ever understand how much love this family has. This is where all of their strength comes from. Not only is this love for members of the immediate family, but it is for the "adopted" members of the family as well. When Ryan addressed the adoring Japanese fans, he yelled,



"I love you, I love Japan!" For that moment, he made the Japanese fans part of the family too, and not one of them would deny the invitation.

The Gracie family is amazing in their ability to make people feel part of their family. This family has touched the lives of so many people around the world that it is difficult to calculate. So when everyone was saying that this was Japan versus the Gracie family, I don't think anyone really understood what that meant. It was not just 5 fighters in the ring connected by blood, but all the things that you cannot see that made the difference on this night.

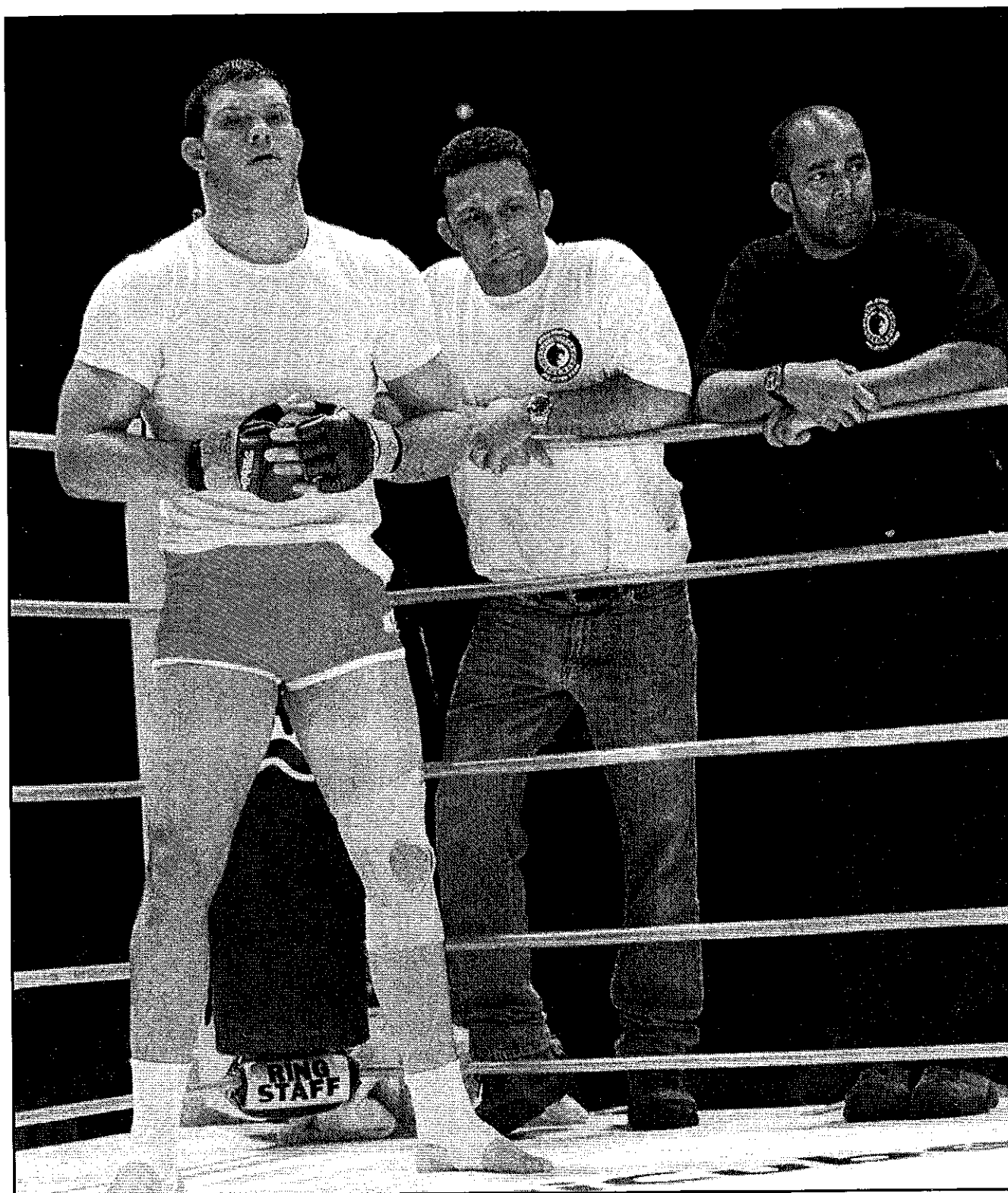
With the understanding of what type of family culture the Gracie's possess, one should be able to see that nothing can threaten this legacy. There is no one win or loss that can disrupt who the members of this family are and what they have done. When a family's culture is interwoven with unity, support, trust, tradition, pride, and love, they can take on anything. That is exactly what this family did in Japan; victoriously.



Renzo demonstrates the Gracie family value of respect following his victory over Otsuka in Japan.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



Ricardo is focused as black belts Renzo and Dr. Jose Alfredo Padilha corner him during his first MMA match at Pride in Japan.

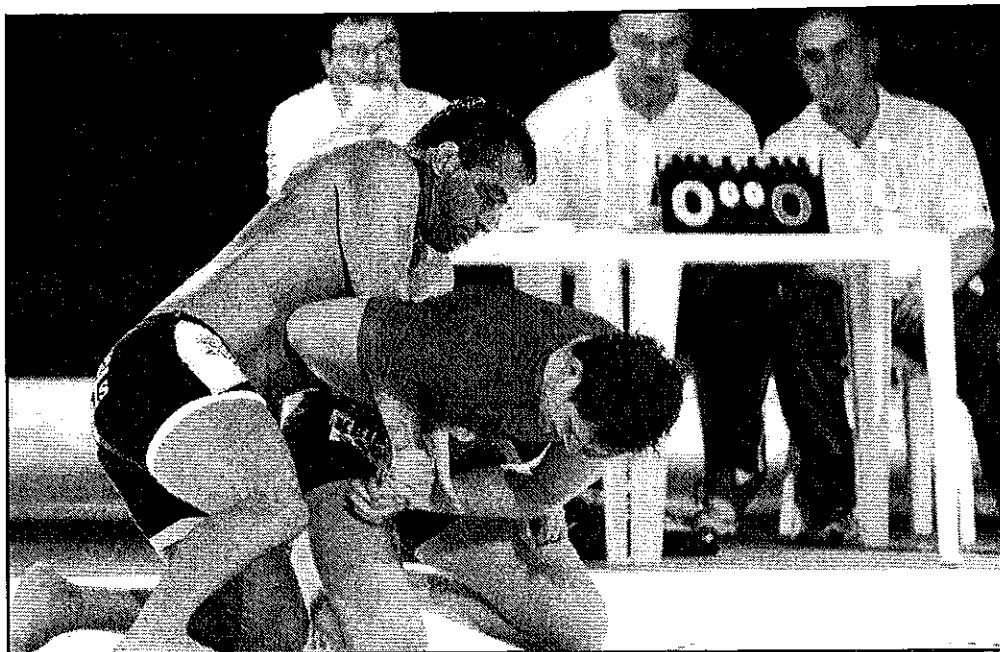


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TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



A victorious Roger Gracie takes on past champion Ze Mario Sperry at the 2003 ADCC.



Ricardo going all out against Jacare during their "Fight of the Year" at the 2003 ADCC World Grappling Championships in Brazil.

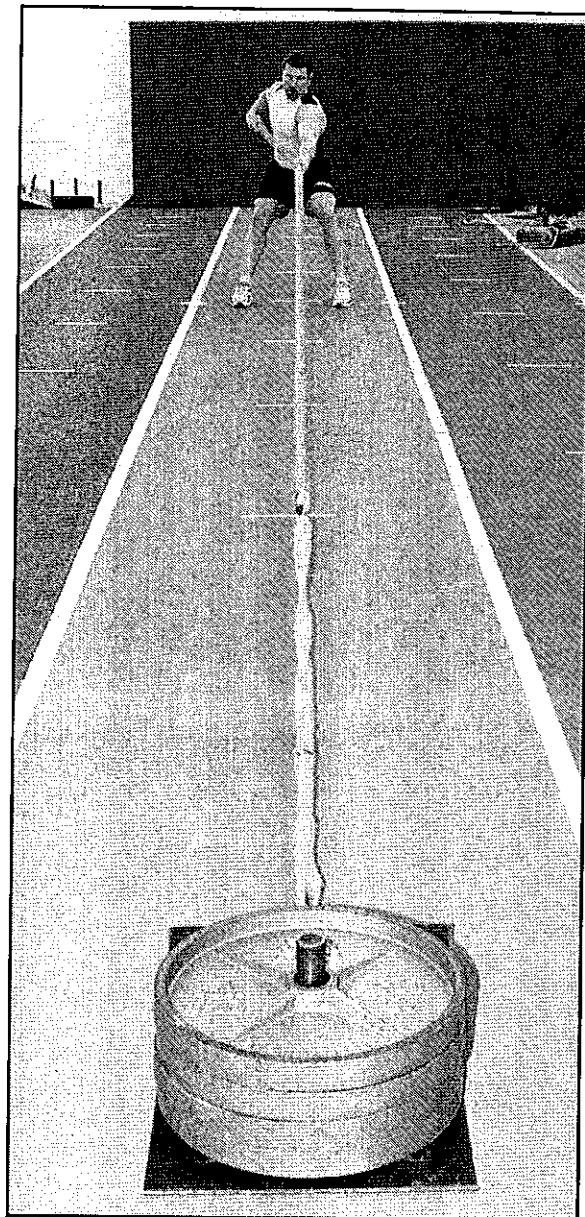
A Revolution is Coming

My name is Martin Rooney. I am a physical therapist and performance enhancement specialist at the Parisi Speed School in Fair Lawn, NJ, in the United States. For many years I have competed in and studied athletics all over the world constantly looking for an edge in performance. I have had the great opportunity to work with some of the best mixed martial artists in the world. In addition to this, I have trained professional football, baseball, basketball, soccer and Olympic athletes in numerous events.

I have given seminars in performance enhancement to the American College of Sports Medicine and run speed camps across the country for Nike. I am on the editorial council for Gracie Magazine in Brazil and write for the Elite Fitness Systems web site. 7 years ago I began training at Renzo Gracie's Academy in New York. This was my introduction to Jiu Jitsu and mixed martial arts on a grand scale. Over the last few years I have trained with Team Renzo Gracie members, Ricardo Almeida, Rodrigo Gracie, Sean Alvarez, Flavio Almeida, Roger Gracie, Igor Gracie, Daniel Gracie, Ryan Gracie, and many other students from Gracie Barra have also come from Brazil and trained at the facility as well. I have had the luxury to accompany these fighters to Japan, South America and the Middle East for competitions. These experiences and time spent training these fighters has led to the ability to write this book.

All of our training over the last number of years has taken place at the Parisi Speed School in Fair Lawn, New Jersey. The Parisi Speed School is a 30,000 square foot athletic training facility that is unlike any other in the United States. The facility has also been visited by top fighters and fitness professionals. Information about the facility has also been featured in Grappling Magazine.

My task for this book is going to be to attempt to change the way readers view training for their specific discipline. MMA training is surrounded by fallacies and myths that are not the best ways to enhance performance. My role is going to be a guide toward the truths of training. For this to occur, the reader is going to have to have an open mind, self-discipline, and a pursuit of excellence. The open mind is to allow for a paradigm shift in thinking. The self-discipline is needed to break from old habits, and the pursuit of excellence is to use the information contained in this book and then reach your ultimate potential. That should be your only real goal.



The author working on his pulling and grip strength.



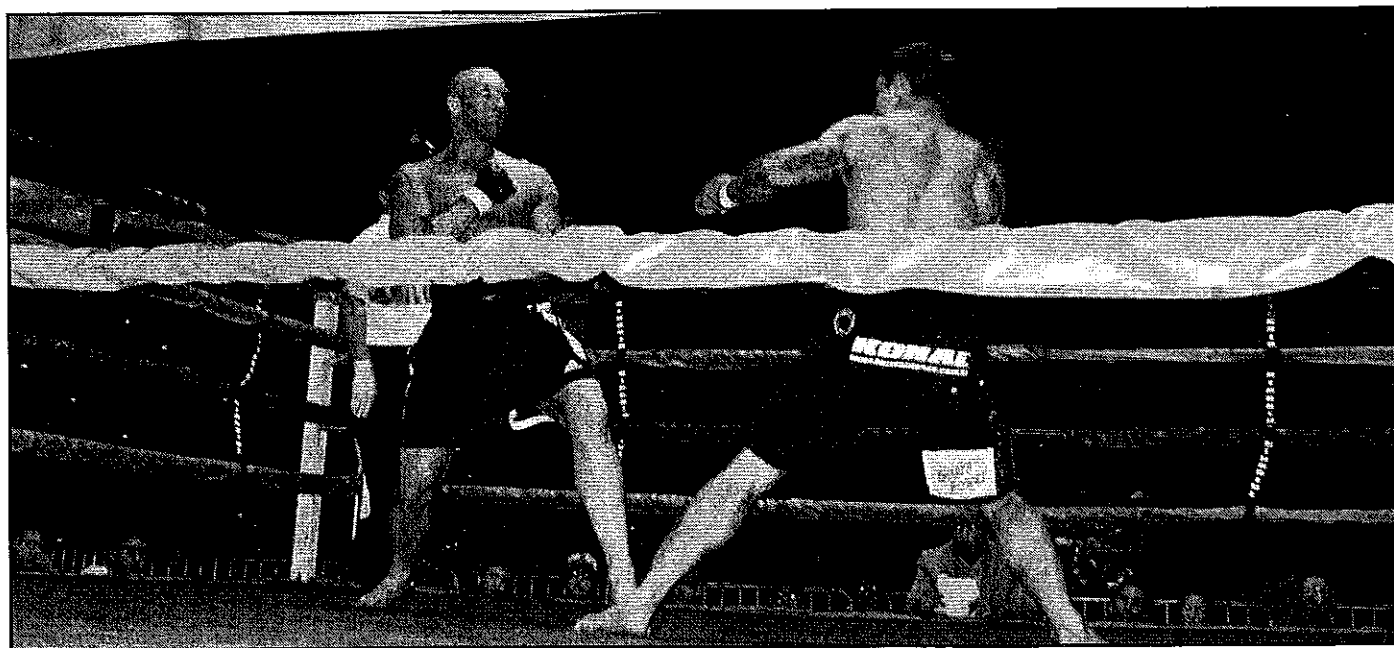
TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

My first question to all the skeptics that feel they either do not need, or know all there is to know about training is: What is the difference between evolution and revolution? Ask yourself this question and form a good answer in your head before you continue further. Evolution can be defined as the slow, gradual change that occurs following the drastic, explosive revolution. The revolution is what is met with the resistance. To give an example, when man left the trees for the ground, the first monkey to jump down and try to walk upright was the revolution. The millions of years that followed where monkey and man refined this skill was the evolution.

When I talk to many of the top jiu-jitsu artists in the world, I see it is time for a revolution in their training. Up until now, most are still just following the evolution of training from times past which were not based in science, but just hard work. I must say here that hard work is not nearly as important as smart work. To be the best in the world in anything, every aspect of what that athlete does must be perfect. Any deviation from this can only lead to eventual defeat or less than what the athlete is capable of. Imagine if MMA was an Olympic sport like track and field. Do you think the training will evolve? How? Why? I'm sure this has your mind thinking now.

As you can see I keep referring to the MMA fighter as an athlete because that is truly what they are. In addition to jiu-jitsu, wrestling or boxing, one can substitute whatever discipline you spend your time training, and the rest of this book will apply for him or her as well. When I look at a martial artist's physical training compared to other athletes of different sports I see many things missing. The foundation of athletics is often incomplete, there is too much specialization too early, a true plan is not often present, nutrition is not always optimal, overtraining is rampant, there is not constant progression or continuity of training, proper variety is missing, and knowledge of training is commonly low.

The first part of this revolution is going to focus on the athlete's foundation. Everything in life must pass through different ordered stages of growth and development. For instance, an infant must first learn to sit, then crawl, then stand, then walk before he can ever run. Each one of these stages is crucial to the next and each one needs the proper amount of time to occur. No stage can ever be passed over for the next without the proper development. There can be no shortcuts here.



Jiu-Jitsu World Champion Fabio Leopoldo about to land the winning right hand in his first MMA Match.



What if the blue belt in jiu jitsu decides compete only against the black belts? We can then easily see that they have not taken the proper steps toward this so the right progress will not result. This example is easy to see, but now what about the blue belt that is not strong or fast enough to execute a technique that he should be able to use? What about the brown belt that is missing flexibility? Here the stages become harder to visualize.

Physical training is also founded in stages. Until one stage is complete, the athlete cannot fully move on. If they do, eventually they will be met with disappointment and defeat. To better illustrate this, later in this book I refer to the Martial Artists Pyramid. Using this model, you can examine your own needs for training and examine your current training plans.

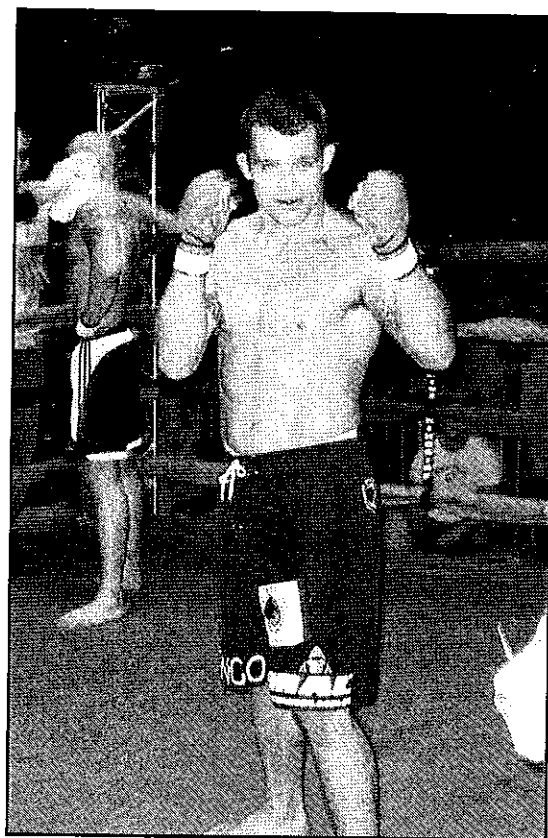
The pyramid is described as having four distinct levels. The bottom most level is the most important to the athlete; it is the foundation of athletics portion. This area is where the athlete develops all the tools required by their sport. These tools are speed, strength, power, flexibility, endurance, balance, coordination, and nutrition. If any of these tools are not sharpened to their optimal level, then further progress to the second level will be hampered.

The next level above the foundation of athletics is the area of technical mastery. Here is where the athlete is able to develop techniques based of the physical preparation made in during the first level. Many techniques may not require much ability to perform, and this can get athletes into trouble. Unfortunately, eventually meeting an athlete with similar technical skill, but much higher physical foundation will lead to trouble. This is why the foundation must be focused on first, not after you begin to notice it is missing.

The third level, after athletic ability and technique is found to be at a very high level, the athlete focuses on mastery of tactics. Correct tactics rely on the athlete's ability to use proper techniques at the proper time. Without the development of foundation and technique, an athlete cannot properly move on to this stage.

Finally, when the athlete has ascended to the fourth level, it is time to now focus on mental training. Here the athlete fully develops his inner self and how it relates to his chosen sport. Without optimal foundation work, technical mastery and the use of proper tactics, the athlete will not full be able to reach this stage. Now ask yourself if you have ascended the pyramid the best way possible.

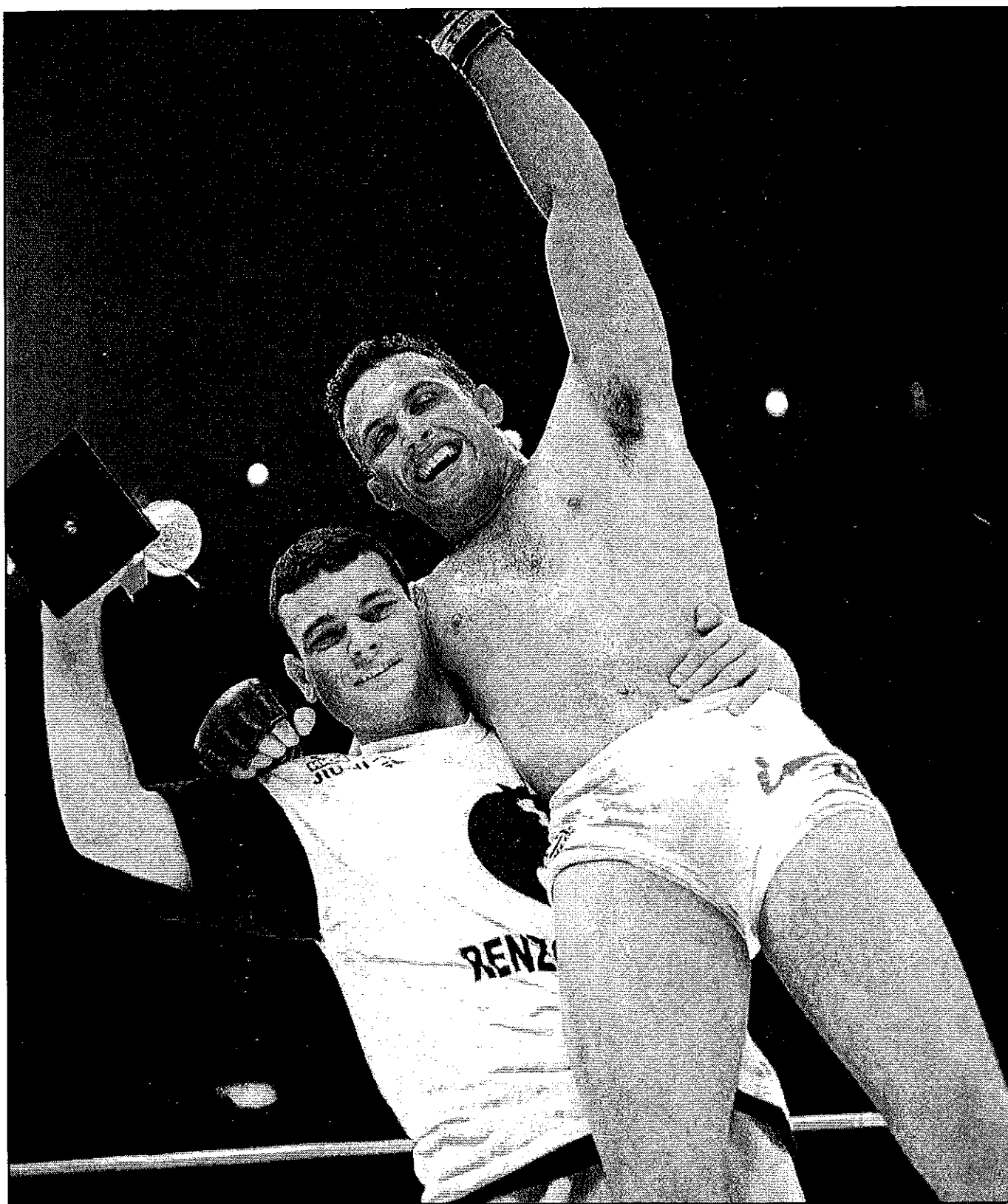
Did you take any shortcuts along the way? Does it help you to identify where you may need to focus more training? Do you think being stronger, faster, more flexible and more confident could make you a better martial artist? Do you think if you had the knowledge of proper training and nutrition you could be better? Are you ready to begin the revolution? Great! Because that is what I am here to help you do. This book will help to give you insight and direction for your physical training. Once you are better prepared with the theory contained inside the following pages, all of your skills will be sure to improve.



*A victorious Fabio Leopoldo
is all smiles!*



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



On the day of victory, no one is tired. Rodrigo and Renzo following another Pride victory.

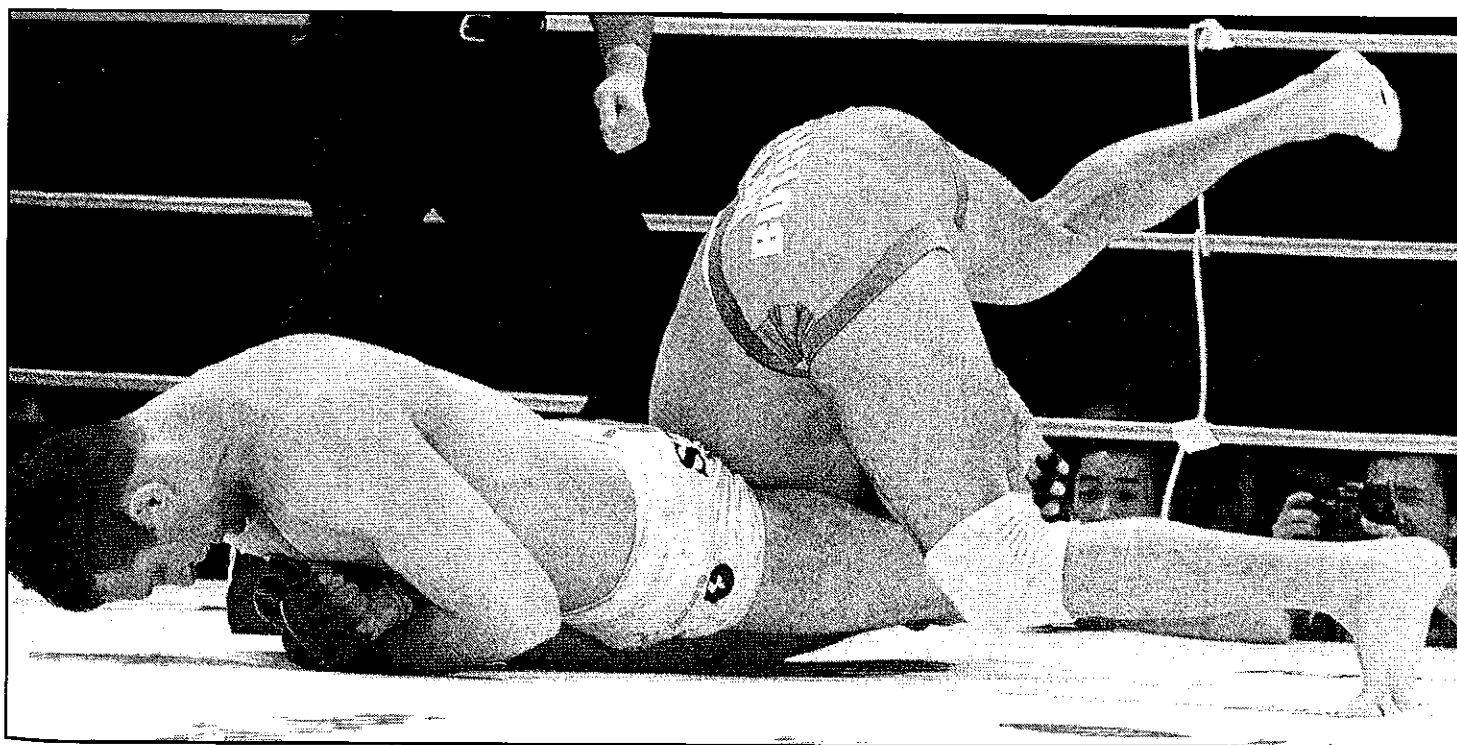


A Brief Look at MMA History

In the last 10 years no sport in the world has undergone more radical change than Mixed Martial Arts. Think about it, MMA is barely ten years old in terms of a world wide recognized sport. When you examine everything about the sport from the first UFC in 1993 until today, you can see a number of revolutions and evolutions in that small period of time. At the root of this transformation are several factors. The addition of new rules, weight classes, rounds and single fights all contribute to the differences we see in today's MMA events. Another major reason for this is the athletes. Not to put down the fighters of the past, but today's MMA competitor looks different and fights different. Today's MMA fighter isn't necessarily a better specimen, just better prepared. So, I would argue that the biggest changes in MMA are because of big changes in preparation; changes in the training of the competitor.

This text is going to revolve around the training aspects of MMA. My intention is to share some theory and application of various methods in MMA preparation as well as introduce some new ideas. I'd like for this book to be a revolution when it comes to physical training for this sport. I'd like you to believe that MMA is better now than it ever has been, and will be better still with the application of the ideas found here. To better illustrate this, I am going to go back ten years in MMA, but it is really as if I could go back for a thousand years of martial arts training.

There have been mixed martial arts competitions dating back over one hundred years, but never had something been put in the forefront like the Ultimate Fighting Championship in 1993. This event set what I consider was the first revolution in motion when it came to competitions involving multiple styles with little rules. Probably the most noticeable and unexpected result was that every fight was going to go to the ground. In much of the martial arts world many people wondered which style would prevail.



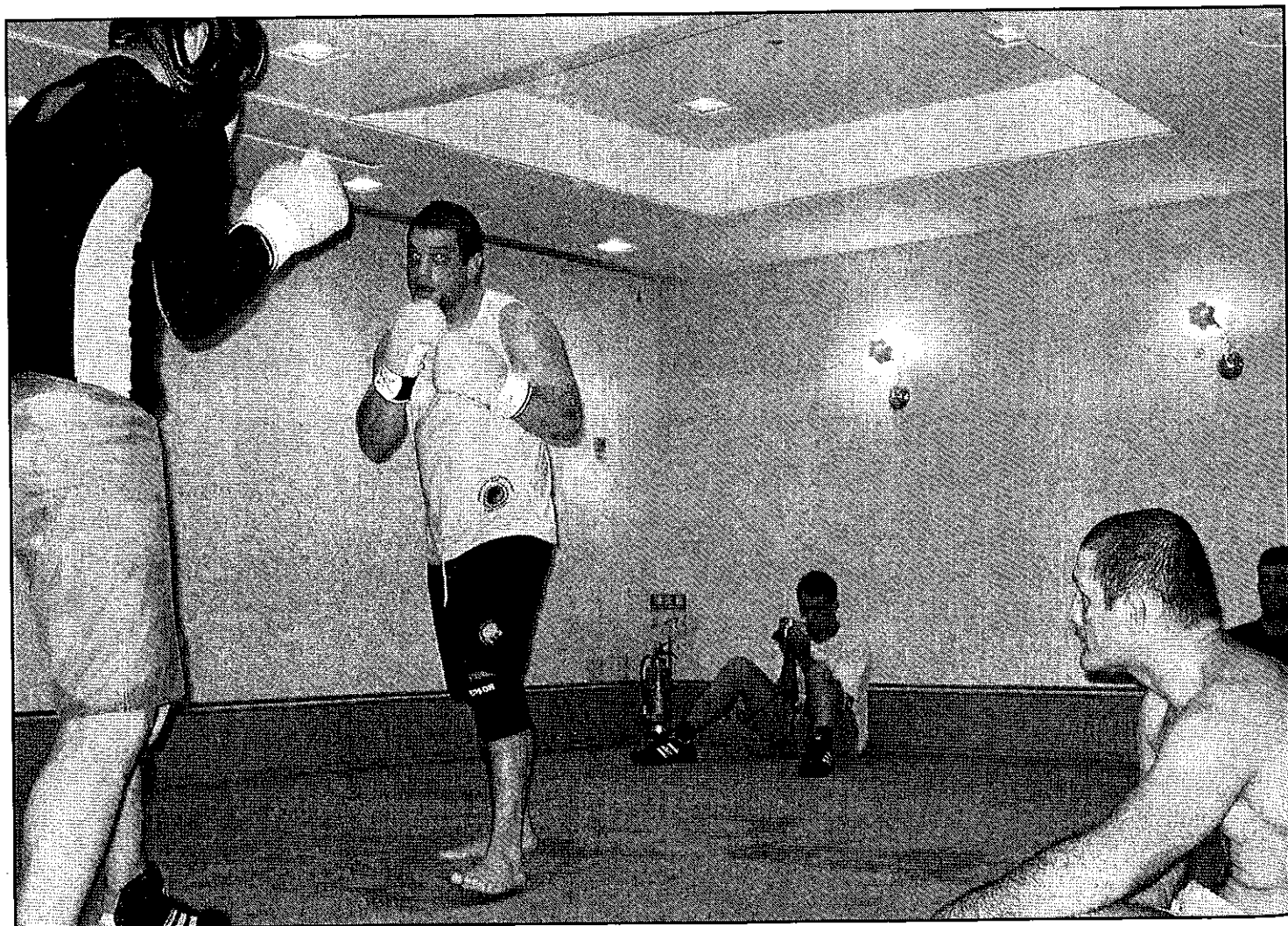
The Master at work: Renzo looking for the arm in his dominant performance over Otsuka.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

Which style had the fastest, hardest punches and kicks? Which secret training methods and techniques would emerge on top? To the surprise of martial artists everywhere all of the striking arts were found wanting in the face of the grappler. Fighters unfamiliar with the takedown and subsequent grappling were quickly finished. Specifically, one style of grappling seemed to have an exact methodology of how to finish fights. Gracie, or Brazilian Jiu Jitsu had emerged victorious over numerous other styles and advanced practitioners of this art form enjoyed tremendous success and fame in the first few years following 1993.

After the ground game was established as a "must have" in the world of MMA, the game began to evolve. Fighters began cross training with ground work, submissions, and submission defense. This led to the next revolution: great submission fighters could be beaten. Superior athletes with some knowledge of the ground and the ability to secure a takedown, defend submissions and deliver solid strikes from inside the opponents guard could win the match. High level free-style and Greco-Roman wrestling began to dominate the sport and the ground and pound was born.



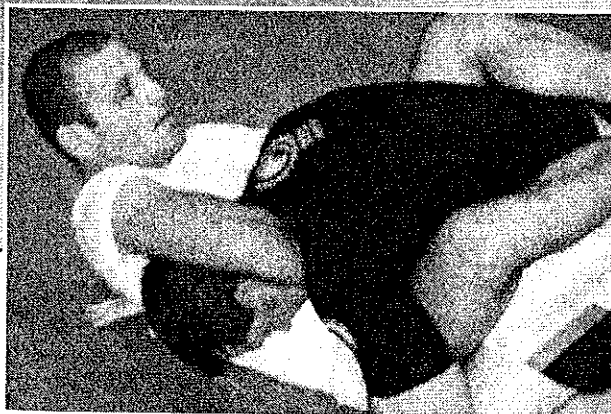
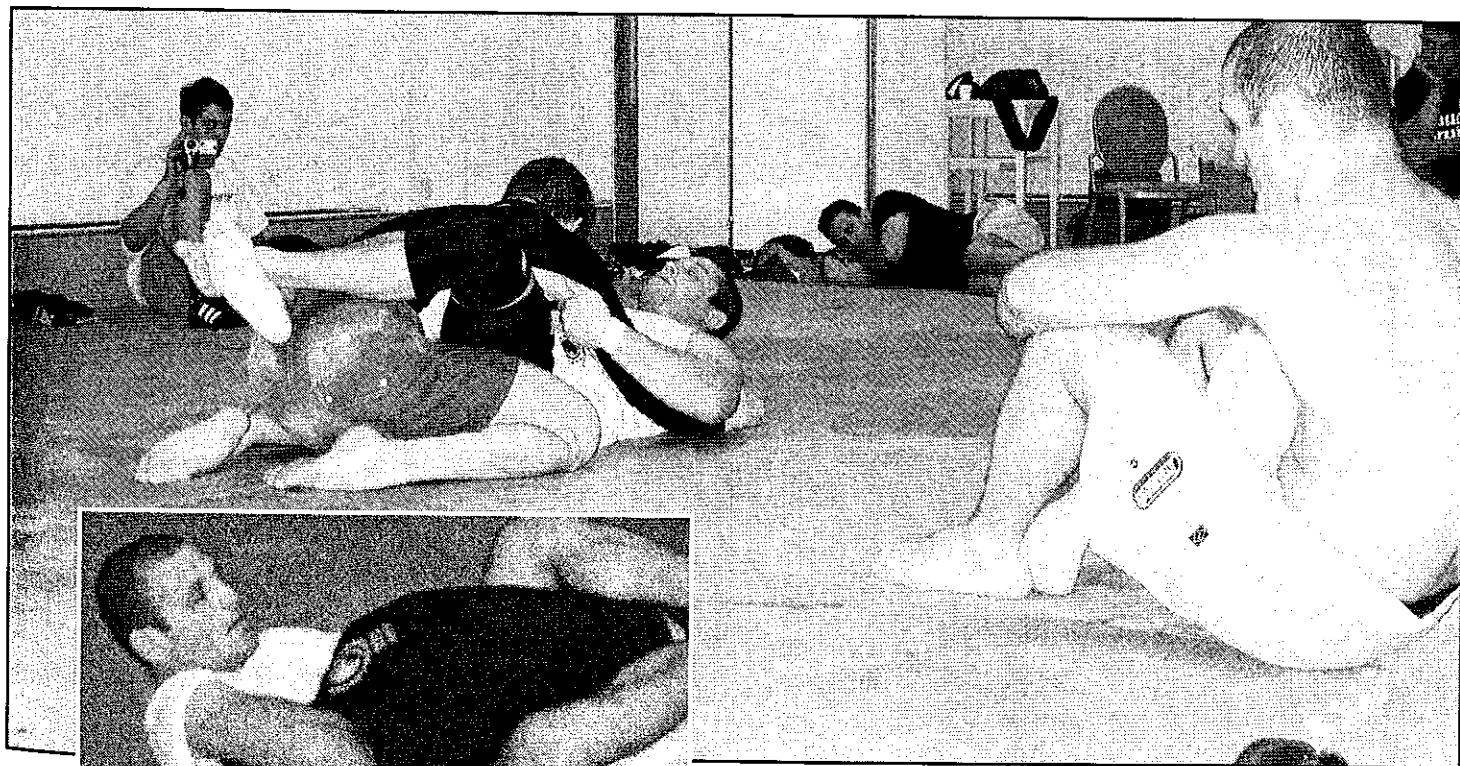
Ralph Gracie intently looks on as Ricardo and Ryan Gracie train for the second Pride Bushido featuring the Gracies vs. Japan.

TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



These ground and pound fighters were successful as were the early BJJ fighters. Their great takedowns and ability to control the fighters without being submitted on the ground led to many victories. It was then that another revolution took place. Fighters with good strikes began to defend takedowns and get back to their feet unscathed. Some of these wrestlers started getting knocked out on the feet. The next revolution was apparent. Fighters now had to develop superior striking skills in addition to their wrestling and submission game. The result of this revolution takes us right to the best fighters seen today. The most successful of today's fighters have ground game, wrestling skills, and superior striking. Look at Vanderlei Silva. Look at Randy Couture. They are two of the most dominant fighters today, and both are very strong in all of the areas above. This is no coincidence; this is the evolution of what a fighter must be to succeed in MMA. But what if each fighter is evenly matched in skill and technique? What if each fighter has the same mindset and the will to win? How will a fighter continue to adapt so that he gives himself the best opportunity to win? That is where physical preparation comes in. That is the next revolution.

In addition to the technical skill, a fighter must possess the right amount of strength, speed, power, endurance, flexibility, and mental toughness. He must also pay great attention to his nutrition and physical status in terms of injuries. He must know how, when, and why to strategically train certain ways at certain times. Without all of this knowledge, much of the training behind MMA is guesswork. When you look at the fighters of today, you see that this revolution has started. The days of the overweight brawler are over. This is the age of the technical, conditioned and strong SUPERFIGHTER. Mixing the martial arts as it were has given birth to martial sport, martial science. Art will always be apparent in what the fight itself brings out of the athlete. But make no mistake; preparation for this art is becoming a science as well.

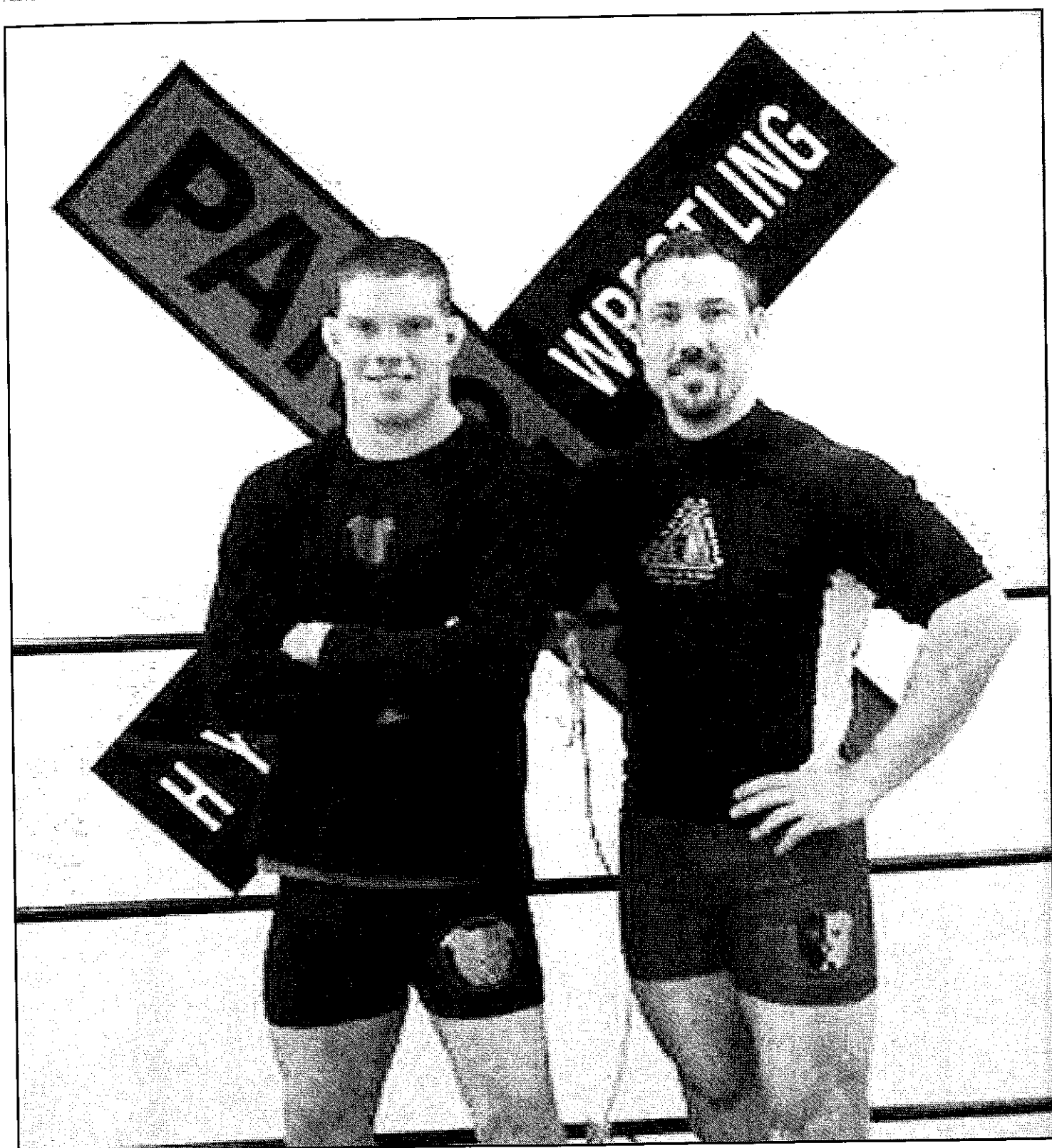


Renzo Gracie and Fabio Leopoldo look on as the two Black Belts engage in some ground work.

Ralph Gracie shows Martin the Guillotine.



**TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN**



Ricardo Almeida and Martin Rooney look confident the day before Ricardo fought for the King of Pancrase Middleweight title.



Introduction to Warrior Training

Today's Mixed Martial Artist is not just a technician when it comes to boxing, wrestling, grappling and muay thai. He or she is first a great athlete. If this is not the case, the fighter's performance is sure to suffer.

There are many books out there today on punching, kicking, grappling and wrestling technique, but little information about how to build the ultimate foundation for a mixed martial artist. Questions revolving around this topic are often the most common asked of us. Common questions are: "How do I get stronger so that it applies to fighting?", "How do I improve my conditioning for fighting?", "How do I increase punching speed", or "How do you eat when you are trying to cut weight?" This text will examine all these questions and more. The answers to these questions have been developed over my combined 15 years of martial arts and training experience. My hope is to close the gap between training and competing in the mixed martial arts arena.

I'd like to offer the following diagram. To me it is critical to understand this for success in MMA. At our facility we call it the Martial Artist's Pyramid.

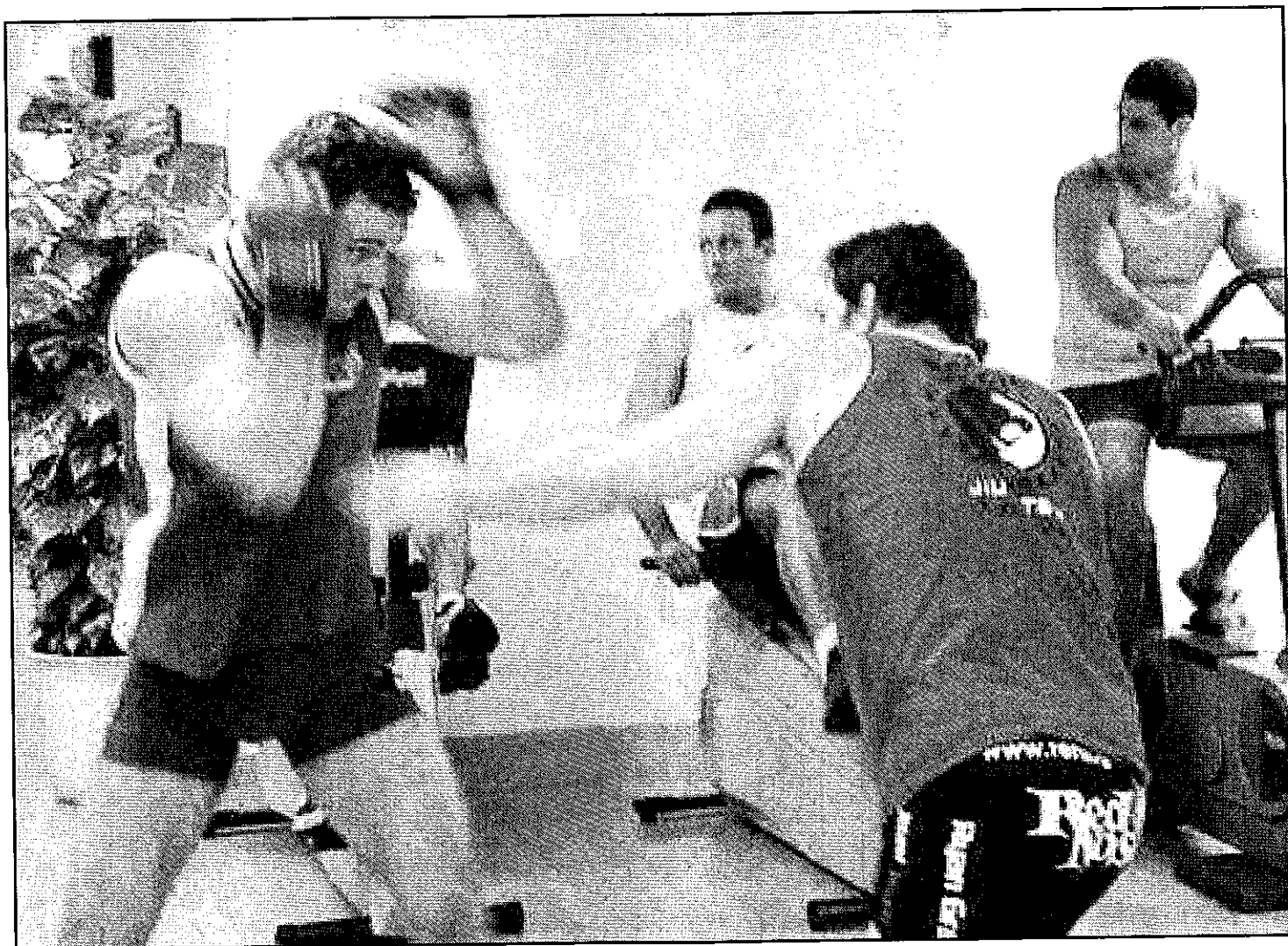




TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

The base of this pyramid is defined by the physical and mental attributes of the aspiring mixed martial artist. The components included in this foundation must be brought to and kept at the highest level if the fighter is to reach optimal performance. All too often, fighters choose to skip this level of the pyramid and jump right to technical and tactical work. Now we will agree that some level of fitness will be developed here during your technical work. We'll also acknowledge that complementary work must be performed to reach your athletic potential.

For it to be an effective tool, this pyramid must be applied. Think about it, if your nutrition is poor and you're not as strong, fast, and flexible as you could be you'll never perform your best in the ring or on the mat. You never want to look back and know that you could have done more, or that the reason for a loss was not being prepared. You never want to see an opportunity for a punch, takedown or submission and miss it because you're too slow, too tired, too weak or too inflexible to pull it off. I hope to give you the knowledge to prepare yourself and your team-mates so that when you see the opportunity to shoot, punch or submit, **YOU SEIZE IT!**

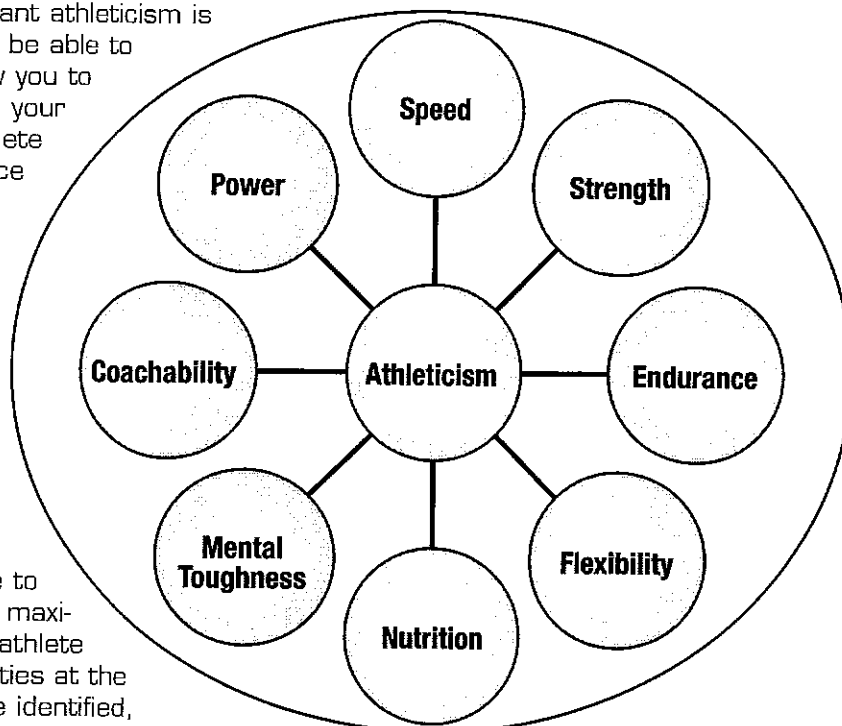


Renzo, Daniel, and Ryan Gracie warm up on bikes for their training as Rodrigo sharpens his hands with Ricardo before Pride Bushido I.



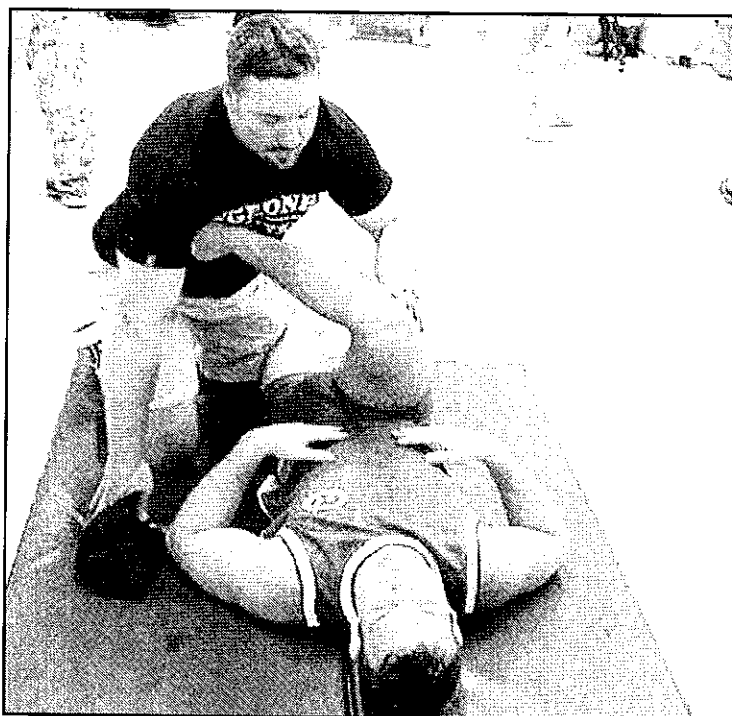
Physical Assessment

Now that you have recognized how important athleticism is to your MMA performance, you must first be able to understand your limitations. This will allow you to see the direction that you need to move in your training. For instance, you may be an athlete that has good strength, but poor endurance and flexibility. Or you could be an athlete that has great wind, but no overpowering strength and speed. In most cases, nutrition and mental preparation are an overlooked area of training for all athletes. By correctly assessing your weaknesses, you can better apply the self-improvement techniques found in this book. An easy tool that we use with all of our athletes for physical and technical assessment is the Athletic Assessment Wheel.



Using this wheel, an athlete should be able to visualize which areas are weak in terms of maximal performance. This exercise forces an athlete to better understand their physical capabilities at the current time. Once areas of weakness are identified, they should be prioritized for improvement. Strong areas can be worked at maintenance levels while weak areas can be focused on more intensely. All too often athletes work on the areas they are good at. For instance, the strong fighter works more on strength and the flexible fighter addresses flexibility. Today's MMA fighter must perform well in every physical area to be successful. Weaknesses in any of these areas create opportunities for your opponent on the mat and in the ring.

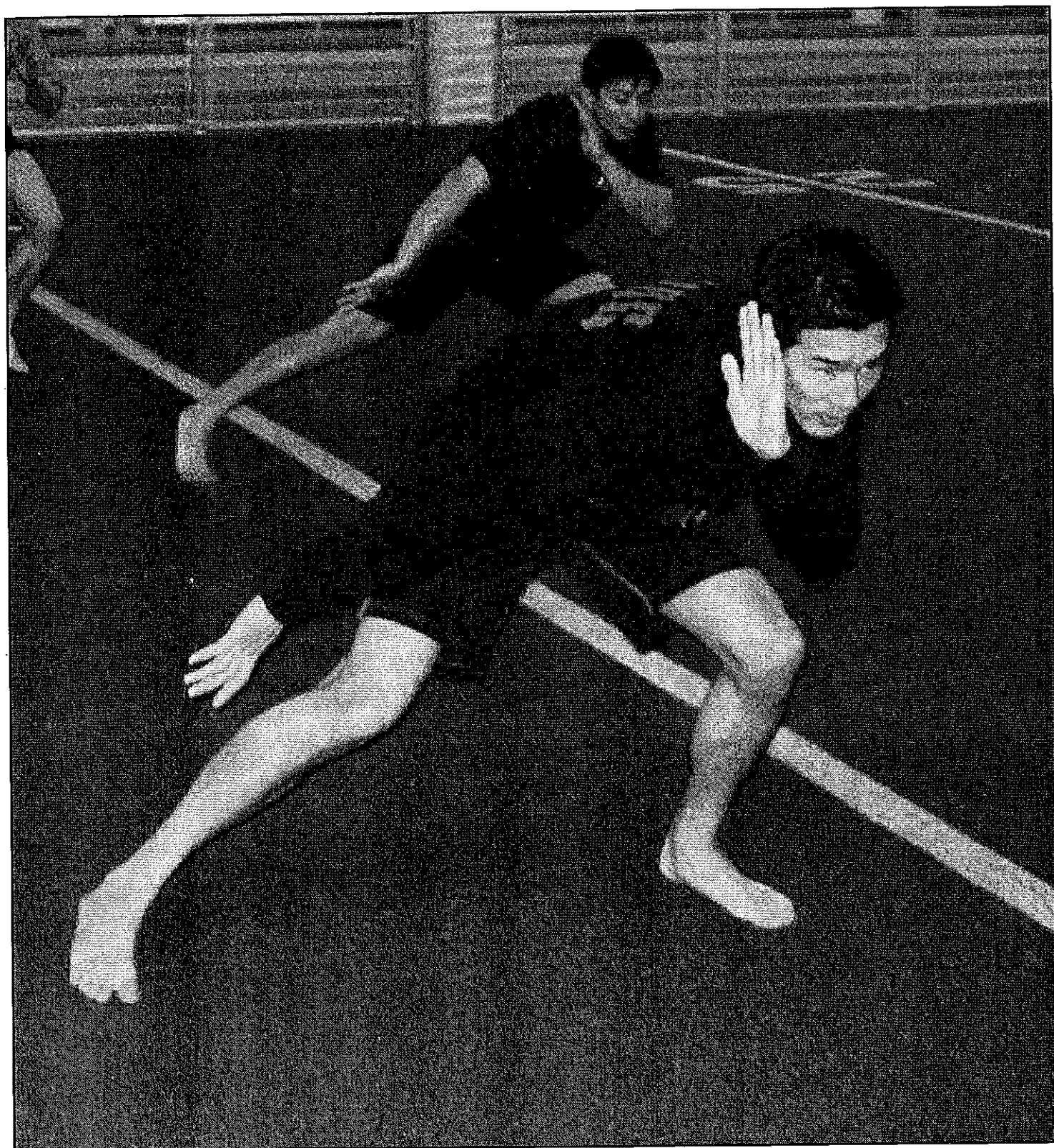
AUTHOR'S NOTE: Assessment can be one of the most challenging areas of performance enhancement. Before beginning any of the programs contained in this book, please first get assessed by a qualified trainer.



Martin Rooney assessing Rodrigo's flexibility before Pride Bushido I.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



Abu Dhabi veteran Alan Teo and his brother Alfred demonstrate perfect technique during the infamous MMA Dynamic Warm-up.

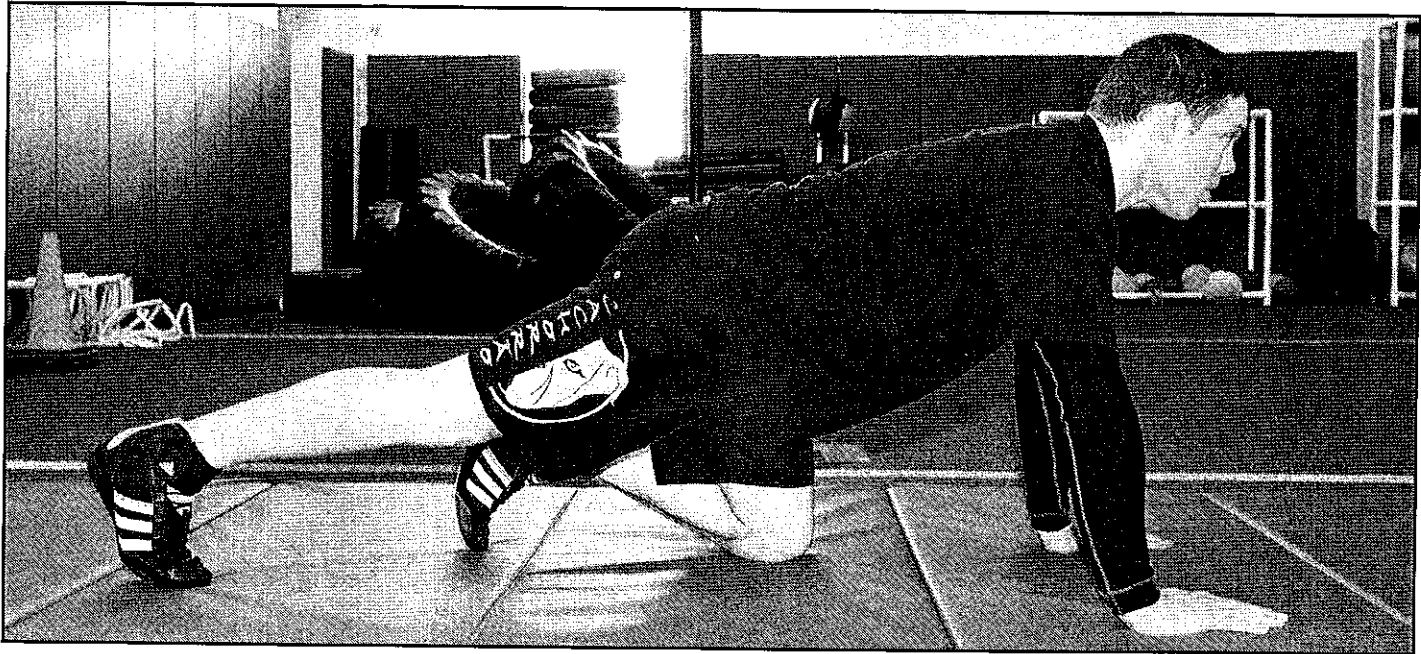


The MMA Dynamic Warmup

Although many have dispelled the use of katas for the mixed martial artist, there is one important area of our training that closely resembles a kata. This area of training is known as our Dynamic Warmup. Why I say that it resembles a kata is that it takes a long time to learn and master; it is religiously performed in a similar manner before every workout, and the artist is always seeking to improve form. The area that I believe may be as abused as much as any medium in training is the warmup. There is a misconception that static stretching and warming up mean the same thing. This is not the case. Slow static stretching has been found to shut down the nervous system and even predispose athletes for injury. Imagine a warmup that could make you stronger, faster, more dynamically flexible and improve your balance and endurance at the same time. This warmup is exactly what I am about to describe in detail.

Many of the aspiring fighters I have seen have often had a general lack of overall fitness, poor local muscle endurance, poor joint stability and balance as well as decreased dynamic flexibility. To begin to remedy these limitations, I start my athletes with the neuromuscular specific exercises called the dynamic warmup. These exercises are a series of ground based calisthenics which keep the athlete moving through the entire warm up session. Although they may seem to only have the athletes running and jumping about, there are many purposes to the exercises.

The dynamic warm up prepares the body for the activities of boxing, wrestling and grappling and addresses biomotor abilities used during MMA including strength and power, neuromuscular coordination, speed, flexibility, general and local endurance, balance and joint stabilization. This warm up increases a fighter's core temperature which is important for performance. With a higher temperature in the core and the specific muscles about to be used, the athlete can be insured better performance with less chance of injury. By using the exercises during the warm up through a complete range of



The "Big Dog" going through the challenging Hip Circuit (for about the thousandth time).

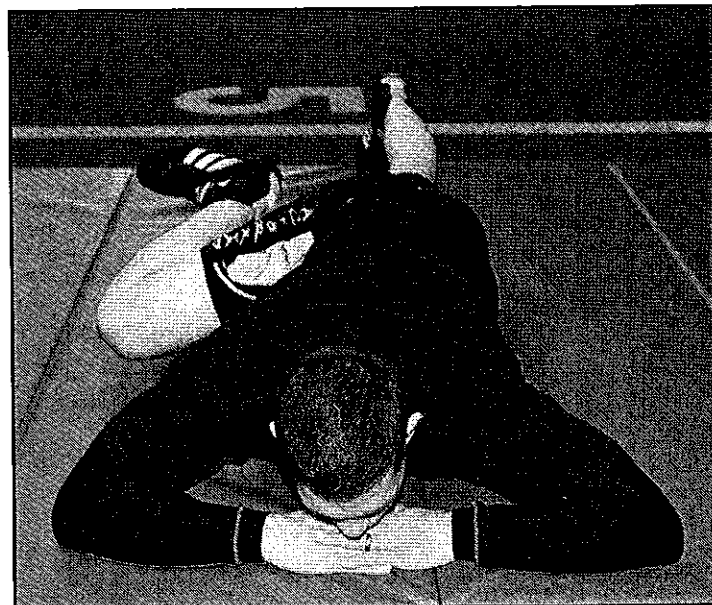
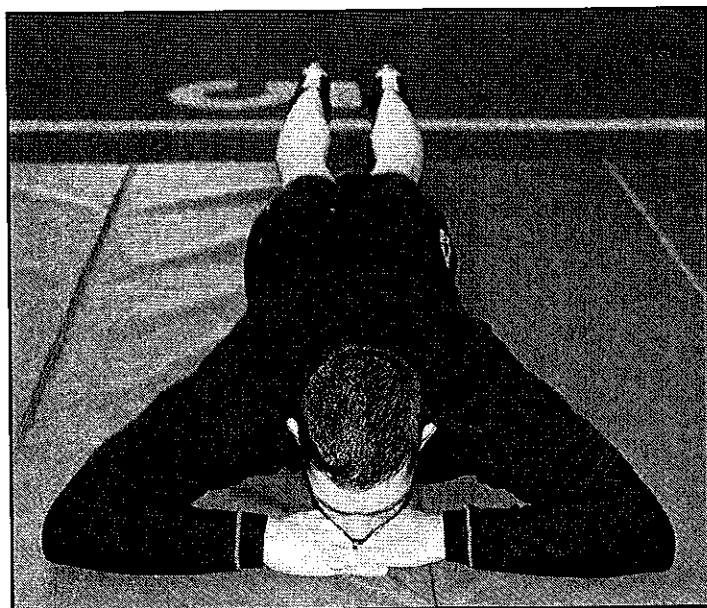


TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

motion, the athlete's dynamic flexibility about the joints are increased and these joints are nourished and strengthened secondary to the compressive forces passed through them. This dynamic stretch is far superior to the traditional static version. Studies have shown that power output is actually decreased following static stretch due to the desensitization of the muscle spindle. By using the dynamic version of stretching the neuromuscular system is prepared to perform taking advantage of an improved stretch shorten cycle and reciprocal inhibition. Obviously, by performing the exercises over and over until they are correct, the athlete also improves in his or her coordination and motor learning ability to process new skills. Local muscular and cardiovascular endurance is also improved with repetitive application of these exercises secondary to the athlete's adaptive responses of his or her metabolic pathways. Joint stability and balance are also improved secondary to the application of the warm up exercises designed to improve the two.

Remember that it doesn't always take a lot of volume of training to make someone tired. I am concerned with the quality of your work just as much as the quantity. Do not sacrifice technique for speed when beginning to perform this warmup. I have found that in the learning of any new skill, there is often an inverse relationship between quality and intensity of the exercise performed. Begin this new warmup at a higher quality and lower intensity. As your skill improves, you can increase the intensity to match the quality of the exercise. You must make sure that you are monitoring your technique and making sure to address any errors. You must also make sure that you do not perform a task much better on one side versus another. These ipsilateral mistakes must be addressed to insure the fighter will reach maximum athletic potential. The fighter must also remember that joint position affects specific muscle recruitment. Because of this fact, the fighter must perform the drills during the warmup properly to maximize the specific training effect desired. As you become more proficient in an exercise, that drill can be phased out for some time to add variety and decreased staleness from the stimulus.

The athlete should also stay consistent with the warm up year round so that the exercises truly become a warm up and not a complete workout in themselves.



Ricardo demonstrating the knee to armpit exercise with impeccable form.



Sample Dynamic Warmup

Okay, now that I've listed the importance of warm-up exercises, let's look at how we put them together in an actual routine. Use this routine before lifting, running, jiu jitsu, or any martial arts training. Following this sample are full descriptions of the warmup exercises. If you are unsure how to perform them, they are all contained on our Parisi Warmup Method video which can be found at parisischool.com.

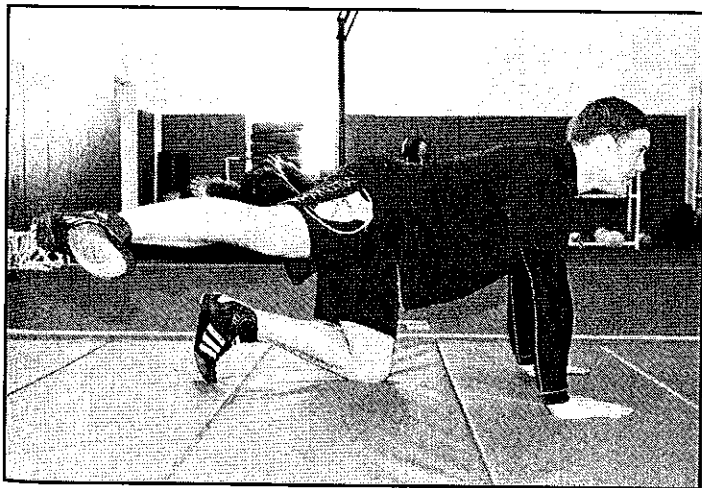
The Warmup is broken up into three portions:

The stationary phase, the movement phase, and the muscle activation phase

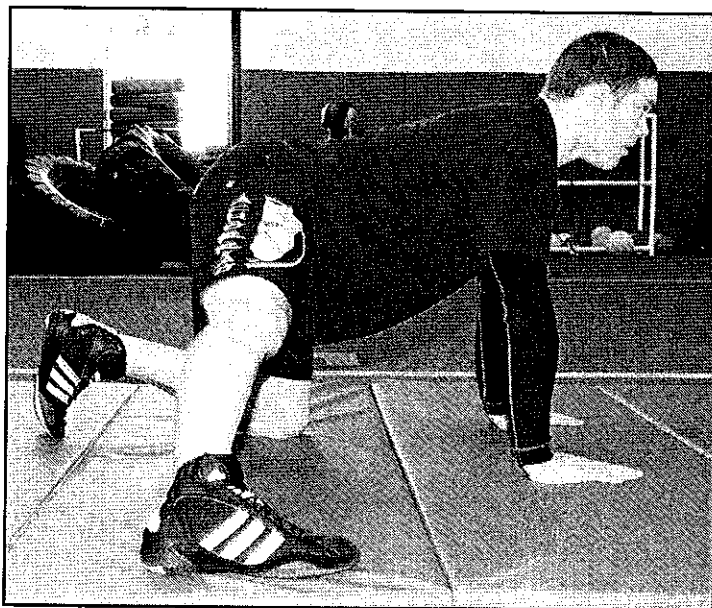
I. Stationary Phase

During this phase, the trainer should cover the toe up position, the landing position and the deceleration position

1. Prisoner Squats X 10 reps
2. Jumping Jacks X 10 reps
3. Seal Jumps X 10 reps
4. Highland Flings X 10 reps
5. Low/Quick Pogo Jumps – 3 sets of 20 seconds
6. High Pogo Jumps – 3 sets of 20 seconds
7. Front Lunge X 5 each side
8. Side Lunge X 5 each side
9. Dot Drill X 5
10. Wideouts X 15 reps
11. Gateswings X 15 reps
12. Scissor Jumps X 5 each side



Ricardo blasts through one of the most challenging portions of the Hip Circuit: the Side Leg Raise





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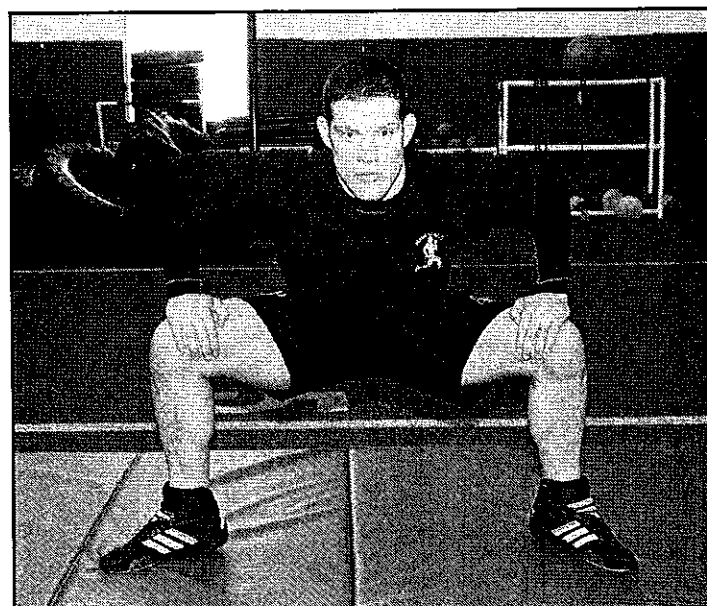
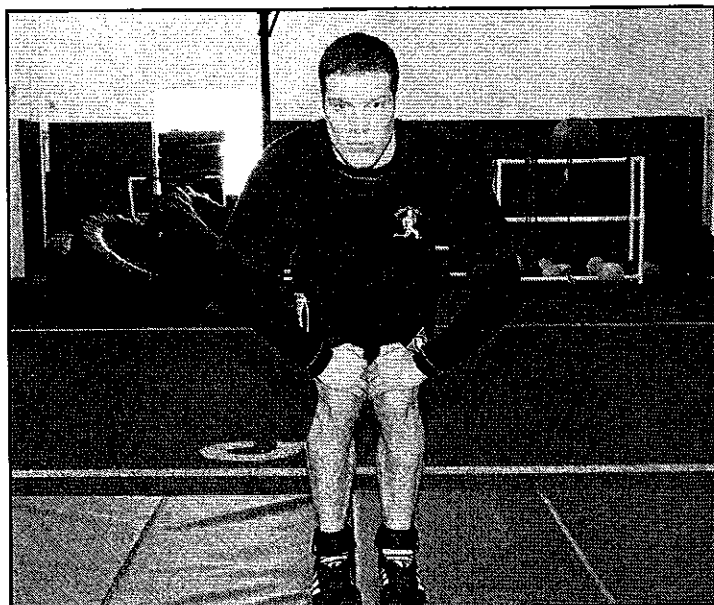
II. Movement Phase

During this phase, the trainer should cover the arm position, head position, and recovery position

13. Front Skipping 20 yards down and back
14. Skip and Scoop 20 yards down and back
15. Backwards Cycle 20 yards down and back
16. Side Shuffle 20 yards down and back
17. Carioca 20 yards down and back
18. High Knee Carioca 20 yards down and back
19. Walking Leg Kicks 20 yards down and back
20. Walking Front lunge 10 yards down and back
21. Walking Side Lunge 10 yards down and back

III. Muscle Activation Phase

22. Bridges/ Double and Single Leg X 10 reps each
23. Lying Leg Kicks X 10 each leg
24. Side Leg Raise X 10 each leg
25. Inside Leg Raise X 10 each leg
26. One Arm/One Leg Supermans X 10 each leg/arm
27. Double Leg Supermans X 10
28. Fire Hydrants 10 each leg out to side
29. Fire Hydrant Circles 10 forward and 10 backward each leg
30. Fire Hydrant Straight Leg Raise 10 reps
31. Prone Lying Knee into armpit X 10 each leg
32. Prone Lying scorpion X 6 each leg
33. Supine Lying Iron Cross X 6 each leg



Ricardo works to improve his Dynamic Flexibility with Gate Swings.



- 34. Frog Thrusts X 10
- 35. Mountain Climbers/ Groiners X 10 Reps each
- 36. V sit rollovers X 5 each side
- 37. Rollovers to hurdler seat X 5 each side

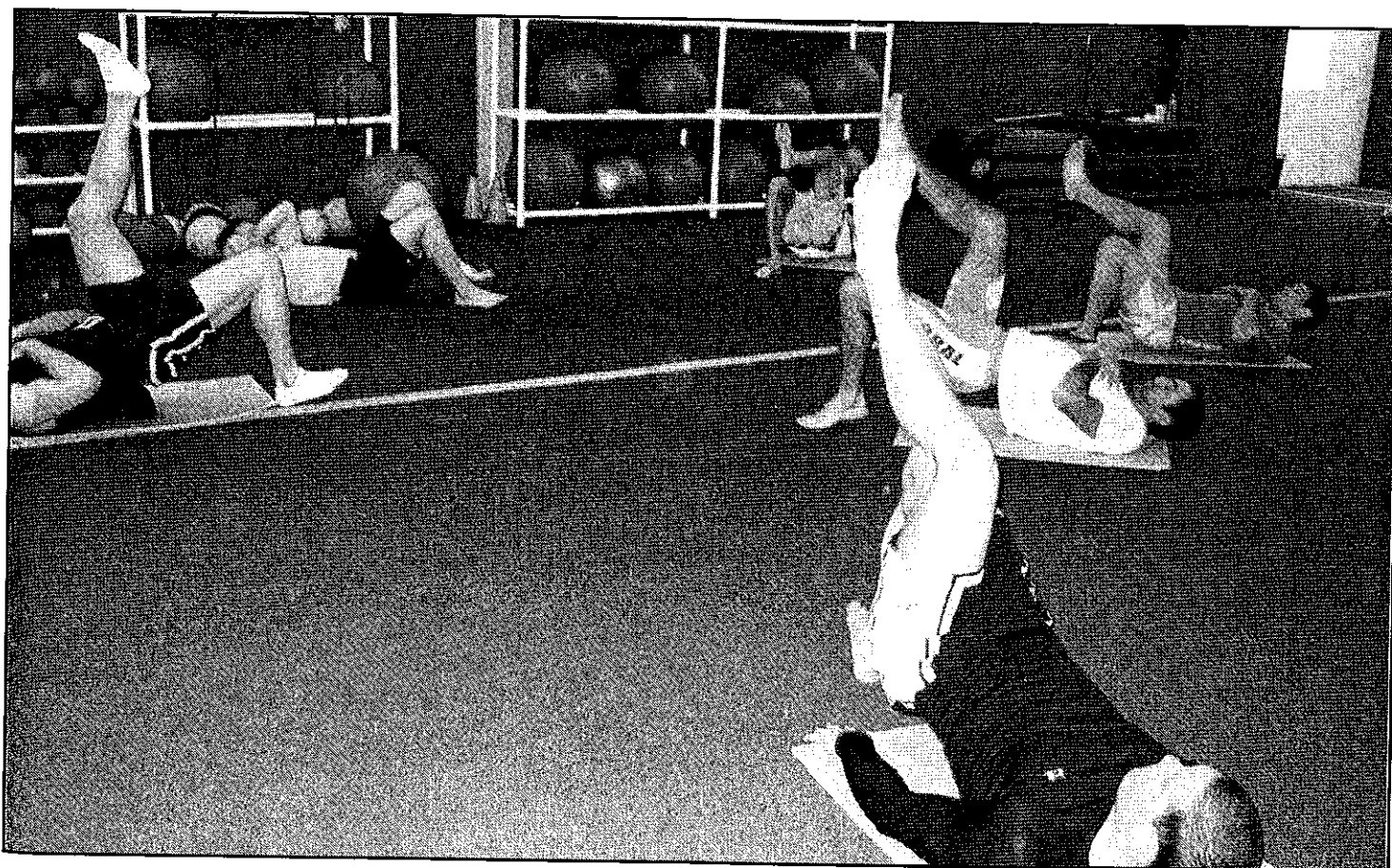
I. Stationary Warm-Up Drills

1. Prisoner Squats:

- Athlete stands with feet wider than shoulders
- Hands behind the head with interlocked fingers
- Sit back while bending at the knees, shins stay vertical, weight on heels

2. Jumping Jacks:

- Begin with feet together and the arms at the side
- Jump the feet apart to the side wider than shoulder length
- Abduct arms overhead elbows straight, return to start position
- Keep the knees and elbows fully extended and the ankle dorsiflexed



The team that trains hard together wins together. The morning crew rips through another warmup.



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3. Seal Jumps:

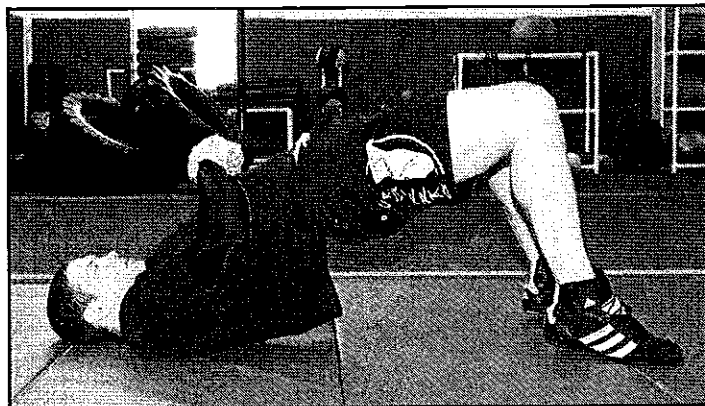
- Begin with feet together and hands together in front at shoulder height
- Jump by splitting the feet and fully horizontally abducting the arms
- Return to the initial position
- Keep the knees and elbows fully extended and the ankles dorsiflexed

4. Highland Flings:

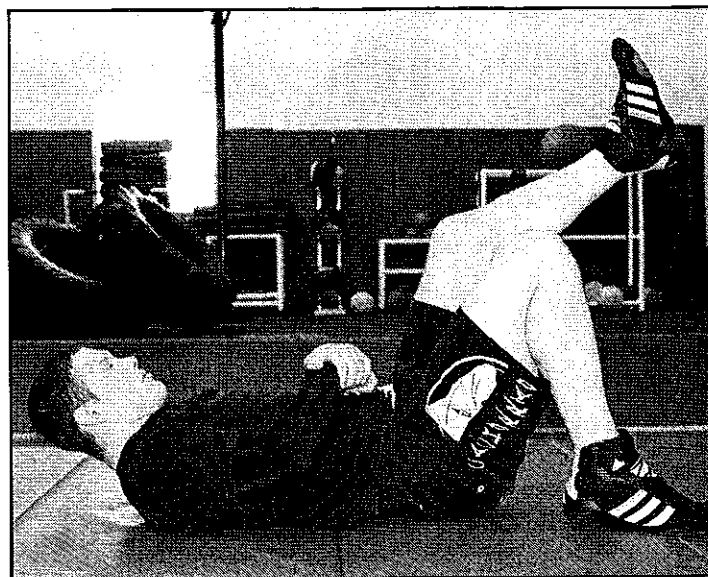
- Begin with feet shoulder width apart and arms horizontally abducted
- Jump so the right leg crosses over the left and arms cross midline
- Return to initial position and then reverse the arms and legs
- Keep the knees and elbows extended and ankles dorsiflexed

5. Pogo Jumps (low):

- Begin standing with legs together and arms at sides
- Stay in rigid position and jump keeping limbs extended
- Maintain dorsiflexion and quickly leave ground after landing
- Jump as fast as possible as if jumping rope



Ricardo works posterior chain strength with bridges.



You can add more intensity with the single leg version.



6. Pogo Jumps (high):
 - Same position as number 5 above
 - Now jumping as high as possible and dorsiflexing the ankles after every jump
7. Front Lunge:
 - Begin with hands on hips, finger back and thumbs forward
 - Keep pelvis tucked, chest vertical and step forward on front leg
 - Lower the back knee to the ground and explode to start position
 - Focus is hip/body stability, hold the position
8. Side Lunge:
 - Begin in same position as number 7
 - Step out to the side loading the leg keeping the feet forward
 - Align the nose, knee and toe
 - Goal is to activate the lateral stabilizers
9. Dot Drill:
 - Begin with feet together and the hands at the sides
 - Jump forward while splitting the feet wider than the shoulders
 - Jump backward and return to original position
 - Jump backward again and split the feet apart the same distance
 - Return again to the initial position
10. Wide Outs:
 - Begin in a squat position with the knees together
 - While in squat position, jump and open legs past shoulder width
 - Feet stay pointed forward and the head should not change height
 - Return to the initial position and repeat
11. Gate Swings:
 - Begin in the squat position with the knee together
 - Stay in the squat, jump and open the legs, feet and knees point out
 - Focus is the stretch across the groin muscles, head stays level
 - Return to the original position
12. Scissor Jumps:
 - Begin standing with the feet together and the arms at the side
 - Jump into a front lunge position, keeping good arm/leg form
 - Chest and head remain vertical and jump back to initial position
 - Jump into lunge again alternating the other leg forward



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II. Linear Movement Drills

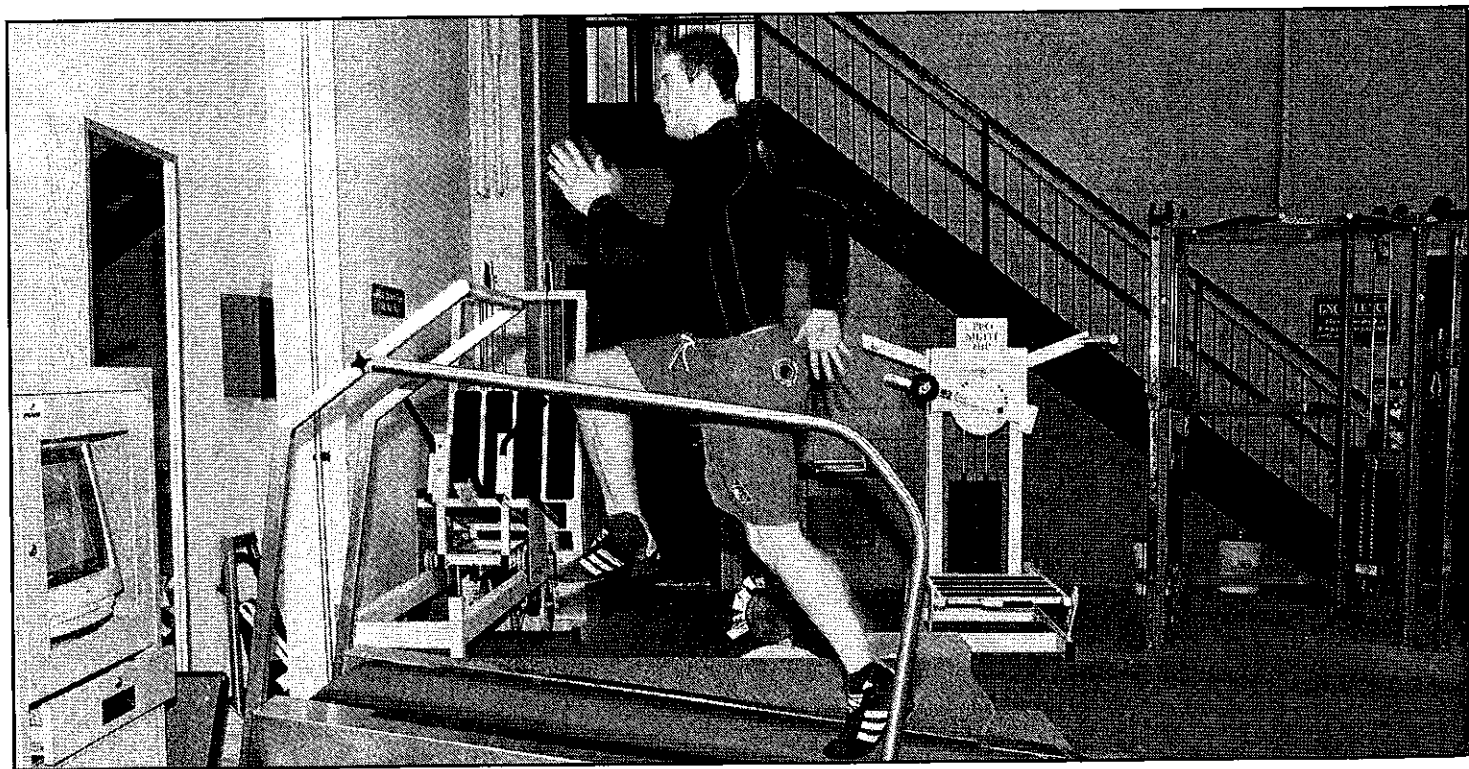
A. Warm Up Exercises

13. Forward Skip:

Goal: Hip positioning.

- Pelvis tilted up
- Squeezing the butt together
- Tightening the abdominals

Hip Positioning: Having the athlete sprint with the hips in the up position allows for a more effective contraction of the hip flexors in the recovery phase of the sprint. If the hips are down rotated back in the incorrect position in the transition phase from hip flexion too hip extension, could dangerously lengthen the hamstring further than the cross bridges would allow the muscle to contract without tearing. By having the hips tilted in the forward & up position allows a safer lengthening from the hamstring because of the ischial tuberosity of the hip, the origin of the hamstring, is brought forward. A technique for the athlete to feel the hips in the forward and up position is done by having the athlete put the middle finger of his right hand just below the umbilical and the thumb of the same hand about two inches above the umbilical. Squeeze the abdominal with both fingers and bring the pelvis forward and up. Feel the hips rise into the up position. Another way to acquire this position is to place both hands on your hips with thumbs forward resting on your superior anterior iliac spines. Rotate both hands so the fingers come forward and squeeze the abdominals until the hips are in the forward and up position.



Ricardo demonstrates the excellent sprinting form he developed over the last 4 years of consistent training.



13a. Power Skip Forward:

Goal: Active warm-up and horizontal force application into the ground for vertical lift.

- Starts with left foot forward and right foot back.
- Right arm is forward and left arm is back.
- Athlete begins skipping action by driving the right leg forward while driving off the left leg pushing in the down and backward direction.

The focus of the skipping action is placed on casting the front leg as it comes forward then actively driving the foot down and back landing directly under the hip in a flat footed position.

The athlete's goal is to try and attain vertical lift on each skip.

The force application of the front leg coming back is similar to the take off step of a high jumper in track & field.

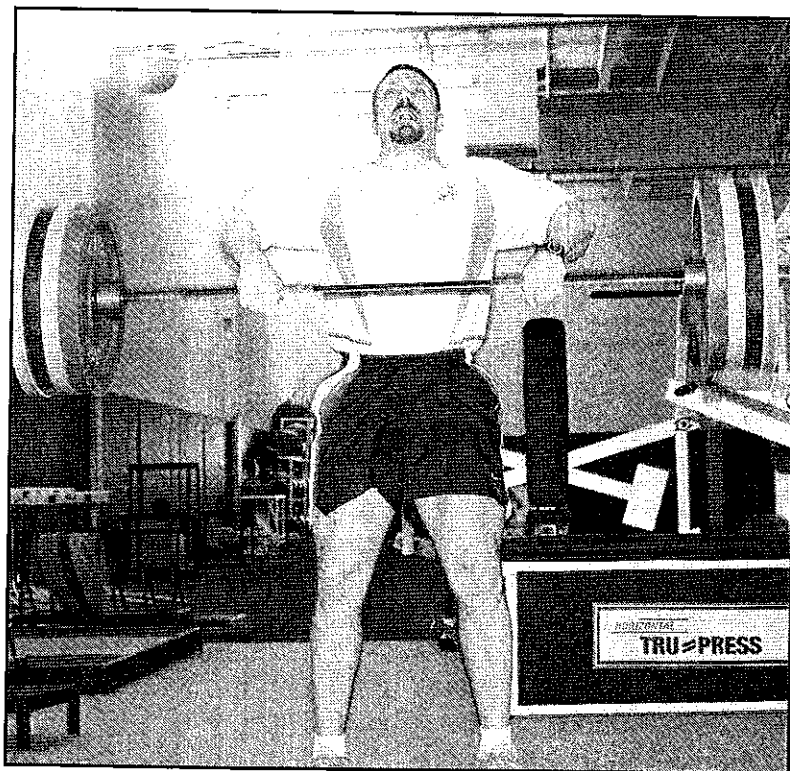
The force is violently placed into the ground on each skip and the goal of the athlete is to stabilize the knee joint upon landing so vertical lift is attained.

The athlete maintains good erect posture and focuses on keeping the ankles cocked and the hips up on each skip.

Make sure the arms and legs are synchronized on every skip.

Coaching Cues: Ankles cocked, toe-up, cast front leg, drive actively back and down landing flat footed, stabilize the knee, vertical lift, stay tall at waist.

* When performing backward movements your goal is to utilize the hip flexors elastically to put force into the ground. In addition, due to the principle of reciprocal inhibition, this action will relax the hamstring, which will attribute to the lower risk of hamstring injuries.



Martin demonstrates some power with a 305 pound power clean.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

14. Skip and Scoop:

- While skipping slowly, the athlete then lowers into a forward lunge position
- As the athlete squats to the floor, the athlete scoops the arms to the ground and forward
- The hips fully lower and the athlete rises from the lunge position forward

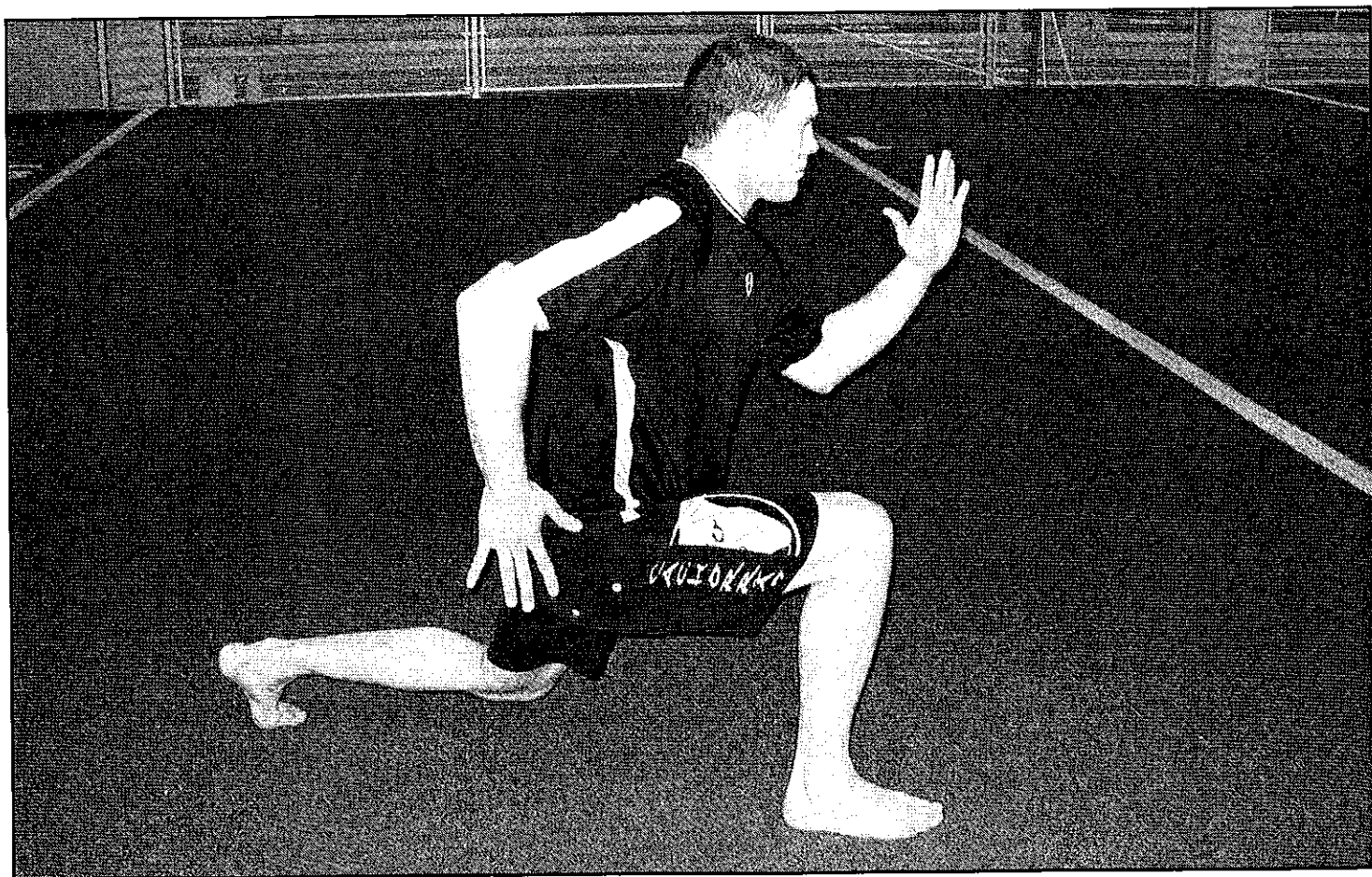
The athlete then repeats two more skips and then lunges leading with the other leg

15. Backward Cycle:

Goal: Active warm-up of hip flexors.

Coaching Cues:

- Heels to butt
- Explode back as far as possible
- Reach back with the foot and pull the body through backward



Master technician Ricardo showing everyone how the Lunge Walk is done.



III. Lateral Warm-Up Drills

16. Side Shuffle:

Goal: Active warm-up of abductors and adductors and improve lateral movement skill ability

Coaching Cues:

- Toes up light feet
- push with trail foot
- pull with lead foot
- keep one foot in contact with ground
- maintain wide base
- do not cross feet
- keeps hips and head level

16a. Side Shuffle with 180's:

Goal: Active warm-up and improve lateral movement skill ability with change of direction

Coaching Cues:

- Ankles cocked
- light feet
- wide base
- do not cross feet
- push with trail leg
- pull with lead leg
- stay level with head and shoulders.

17. Carioca:

Goal: Active warm-up and increase trunk mobility

Coaches Cue:

- Toes up, light feet
- Be aggressive with the arm action

18. High Knee Carioca:

Goal: Active warm-up and increase hip flexor firing ability and lateral change of direction

Coaching Cues:

- Step over the opposite knee
- drive knee up while driving the opposite arm back
- keep ankles cocked
- stay light on your feet.

19. Walking Leg Kicks

Goal: Dynamically stretch the hamstrings and activate the hip flexors and abdominals

Coaching Cues:

- Take a few quick steps and kick up leg to opposite hand
- Kick the leg up straight, and as high and fast as possible
- Switch back and forth from each leg



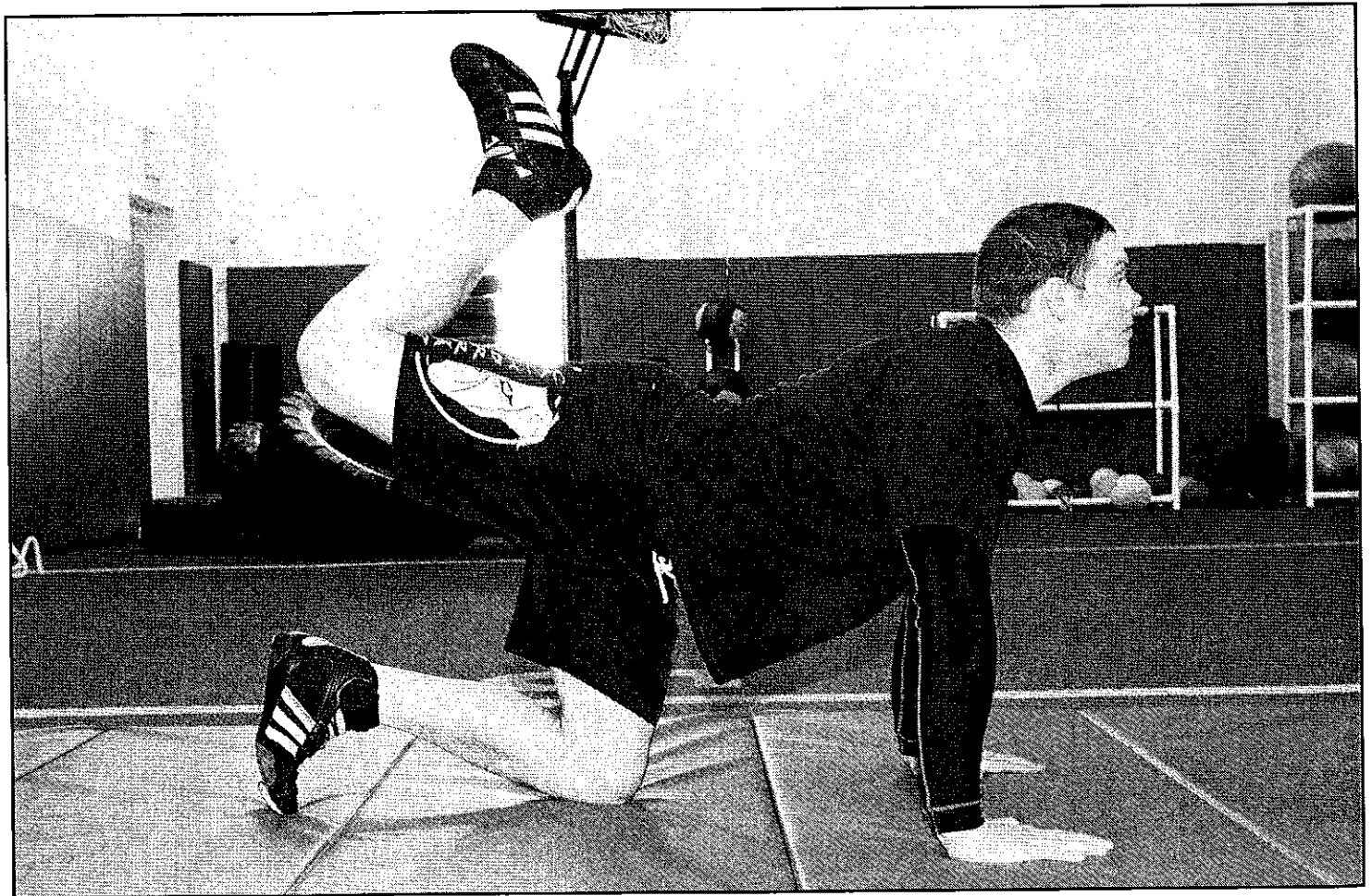
TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

20. Walking Front Lunge

- This is a stability exercise that requires strength and flexibility
- The athlete lunges forward bringing the back knee almost to the ground
- The arms stay at 90 degrees and use an opposite arm, opposite leg relationship

21. Walking Side Lunge

- The athlete gets low in the athletic position
- The athlete steps out as far as possible to the side keeping the feet and hips square
- The athlete stays on the balls of the feet
- The athlete slides over the outstretched foot and keeps the head level



Ricardo completes the Kneeling Scorpion with exacting technique.



IV. Mat / Floor Drills

A. Muscle Activation Exercises

22. Bridging/ Single and Double Leg
- The athlete begins lying on his back with the hands across the chest
 - The athlete pushes into the ground and lifts the hips as high in the air as possible
 - This is performed on either one or two feet
23. Supine Straight Leg Lift:
- Begin lying supine with the head on the floor, legs straight, ankle dorsiflexed
 - Lift one leg through full flexion at the hip and return to the floor
 - Do not touch the leg back to the floor, maintain ankle dorsiflexion
24. Side Lying Leg Lifts:
- Begin lying on side with shoulders, hip and ankle forming a straight line
 - Keep both ankles dorsiflexed and internally rotate the top hip (toe down)
 - Abduct the hip through the full rom, use hip abductors not flexors
 - Make sure athlete is lying totally on side, not supporting with the arm
25. Side Lying Inside Leg Lifts:
- Begin on side, top leg crosses over bottom with top leg foot flat on floor
 - Bottom leg is kept straight with the ankle in dorsiflexion
 - The bottom leg is adducted maximally with no rotation at the hip
26. Prone Alternating Arm/Leg Raise:
- Begin lying prone on mat with arms extended forward and the legs straight
 - Thumbs can be pointed to the sky and ankles must be kept dorsiflexed
 - The left arm and right leg are then simultaneously lifted, keeping both straight
 - Then the limbs are switched, make sure dorsiflexion is kept
27. Supermans/Skydivers:
- Begin lying prone on mat with arms extended forward and the legs straight
 - Thumbs are pointed to the sky and ankles are kept dorsiflexed
 - Lift both arms and legs at the same time keeping the limbs straight
 - Try not to let the thighs or arms touch the ground between reps
28. Fire Hydrants:
- Begin kneeling with hands on the floor and both ankles dorsiflexed
 - Keep the hands under the shoulders and the knees under the hips
 - The shoulders and hips are kept square and parallel to the ground
 - Keep the knee bent so the calf touches the hamstring
 - Extend and abduct the thigh backward at a 45 degree angle



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

29. Fire Hydrant Forward Circles:

- Begin in the hydrant position explained in number 6
- Circumduct the thigh so the knee scribes a large circle forward
- Maintain dorsiflexion and keep back from rotating and the arms straight
- Shoulders and hips are kept square and parallel to the ground

29a. Fire Hydrant Backward Circles:

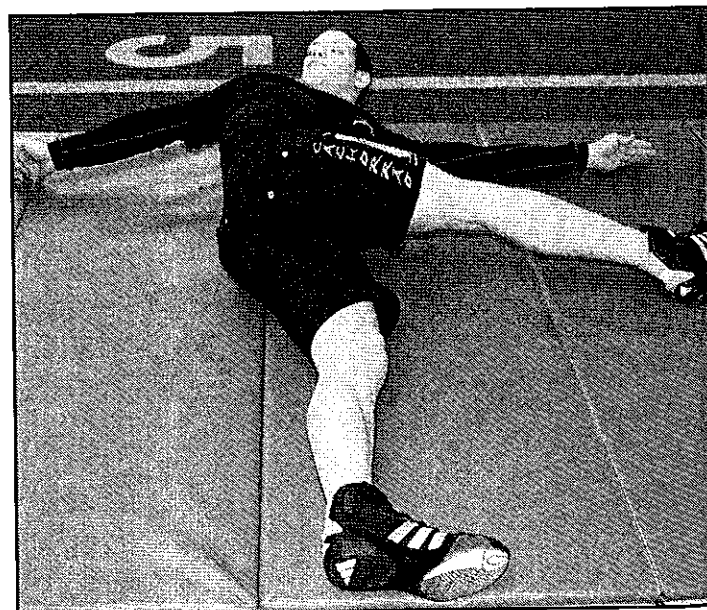
- Begin in the hydrant position explained in number 6
- Circumduct the thigh so the knee scribes a large circle backward
- Maintain dorsiflexion and keep back from rotating and the arms straight
- Shoulders and hips are kept square and parallel to the ground

30. Fire Hydrant Straight Side Leg Raise:

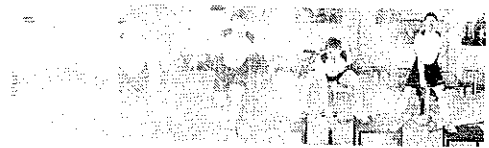
- Begin in the hydrant position explained in number 6
- Straighten and abduct one leg perpendicular to the line of the body
- Lift the straight leg to max abduction and return to floor but do not rest
- Maintain dorsiflexion and keep shoulders and hips square

31. Prone Knee into Armpit:

- Begin in the prone position with the hands out to sides
- Abduct one leg out to the side bending at the knee
- Keep the ankles dorsiflexed and the leg off the ground the entire exercise
- Bring the knee up into the armpit and return
- Keep the chest down and do not rise up on the side of the exercise



Ricardo demonstrates the Iron Cross Dynamic Mobility exercise.



V. Dynamic Mobility Exercises

32. Iron Cross:

- Begin in the supine position with arms abducted to the sides
- Sweep the straight left leg across the body to the opposite hand
- Turn the head in the opposite direction of the leg and keep toes up
- Keep stationary leg on the midline and stabilize leg during movement

33. Cobra Stretch:

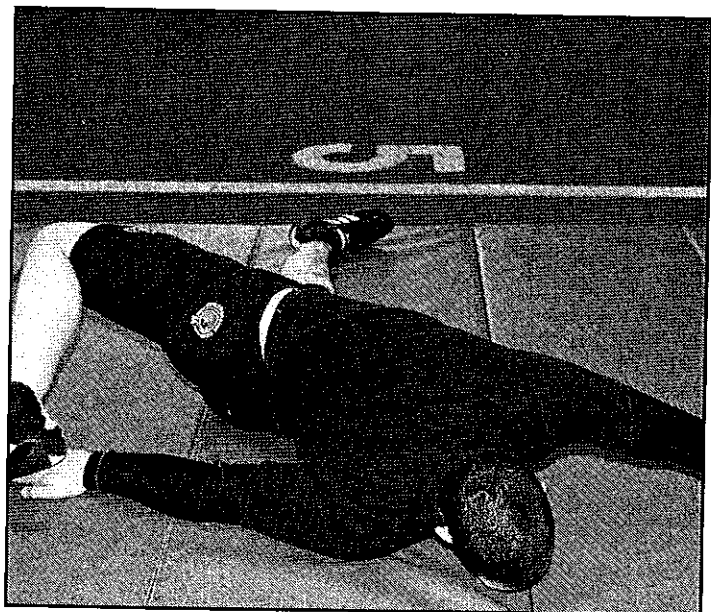
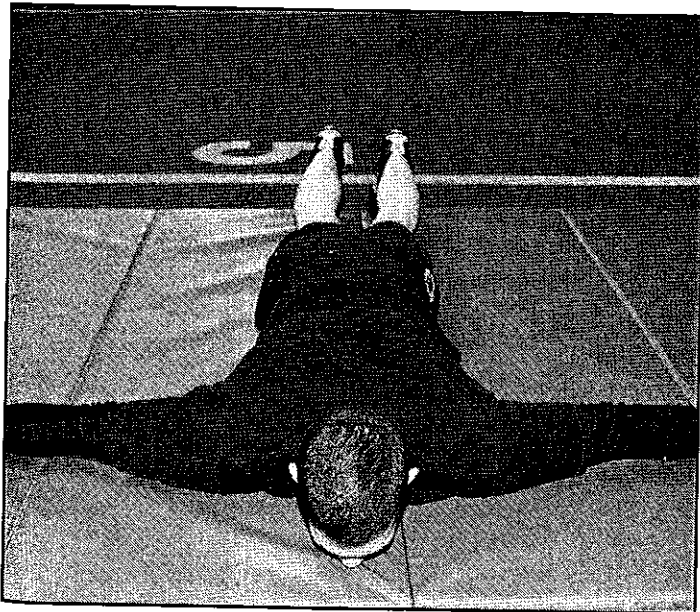
- Begin in the prone position with the arms abducted to the side, palms down
- Reach back with folded left leg to try to touch heel to right hand
- Maintain the dorsiflexion during the exercise
- After contacting the hand, rhythmically roll and switch sides

34. Frog Thrusts:

- Begin in the pushup position
- Jump the feet forward toward the hands keeping the knees inside the elbow
- Return to the push up position and then alternate knees outside elbow
- Focus is on keeping the hips low, try to keep shins vertical and feet flat

35. Mountain Climbers:

- Begin in the pushup position
- Jump only one foot forward on the inside of the elbows
- On return of that foot, the other foot then alternates into forward position
- Focus on low hips and executing full hip flexion and extension



Ricardo working Hip Flexor Flexibility with the Cobra Stretch.



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35a. Groiners:

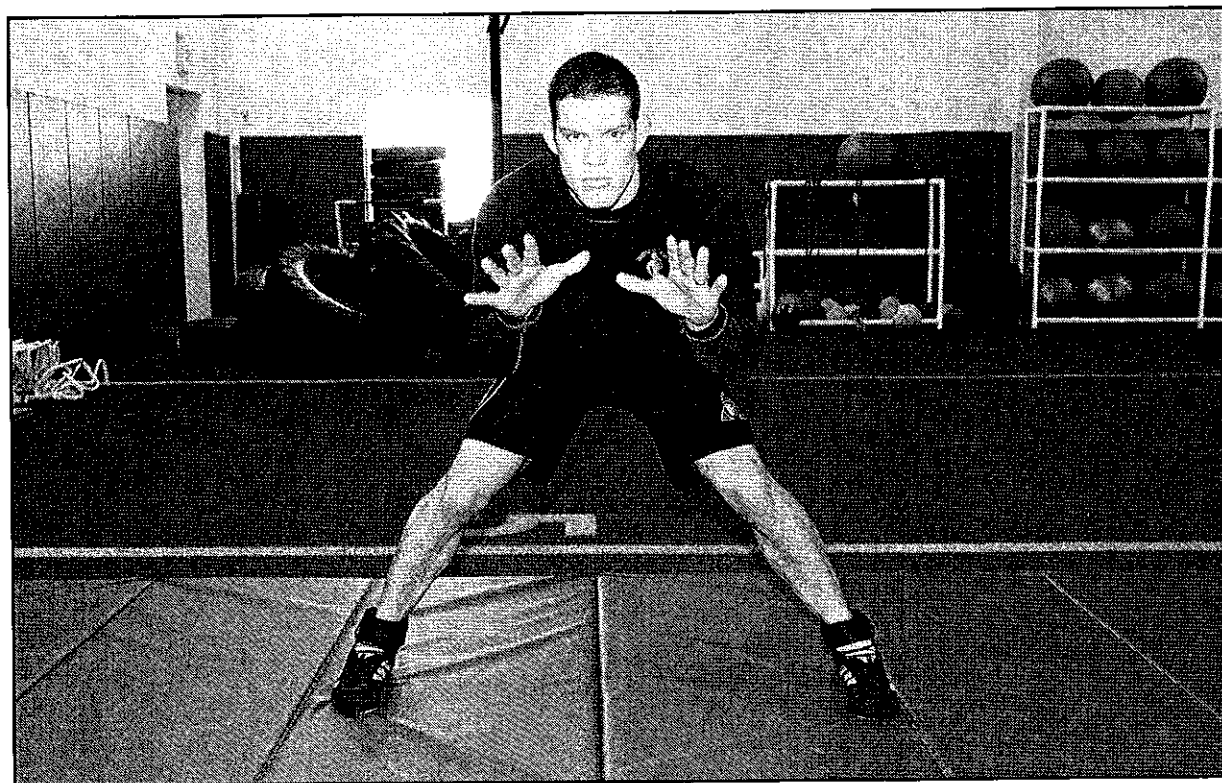
- Begin in the pushup position
- Jump only one foot maximally forward with foot outside the hand
- On return of that foot, the other foot alternates into outside position
- Focus is on maintaining straight body position and hips low

36. Rollovers To inside Hurdler Seat:

- Begin seated on the ground with the legs extended in front of the body and toe up
- Roll back and touch the toes to the floor and roll back toward sitting
- Flex one thigh and externally rotate that leg to position foot on opposite knee
- Stretch forward in this hurdler seat position and roll backward again
- Reverse legs in the hurdler seat position upon return

37. Hurdler Seat Exchange:

- Begin in the hurdler seat position with the hands on the ground
- Roll over into the prone position with the legs together
- Continue to roll in that direction and push up into the opposite hurdler seat
- Roll in the other direction and once again reverse the hurdler seat position



Ricardo demonstrates the functional position of the Wide Outs.



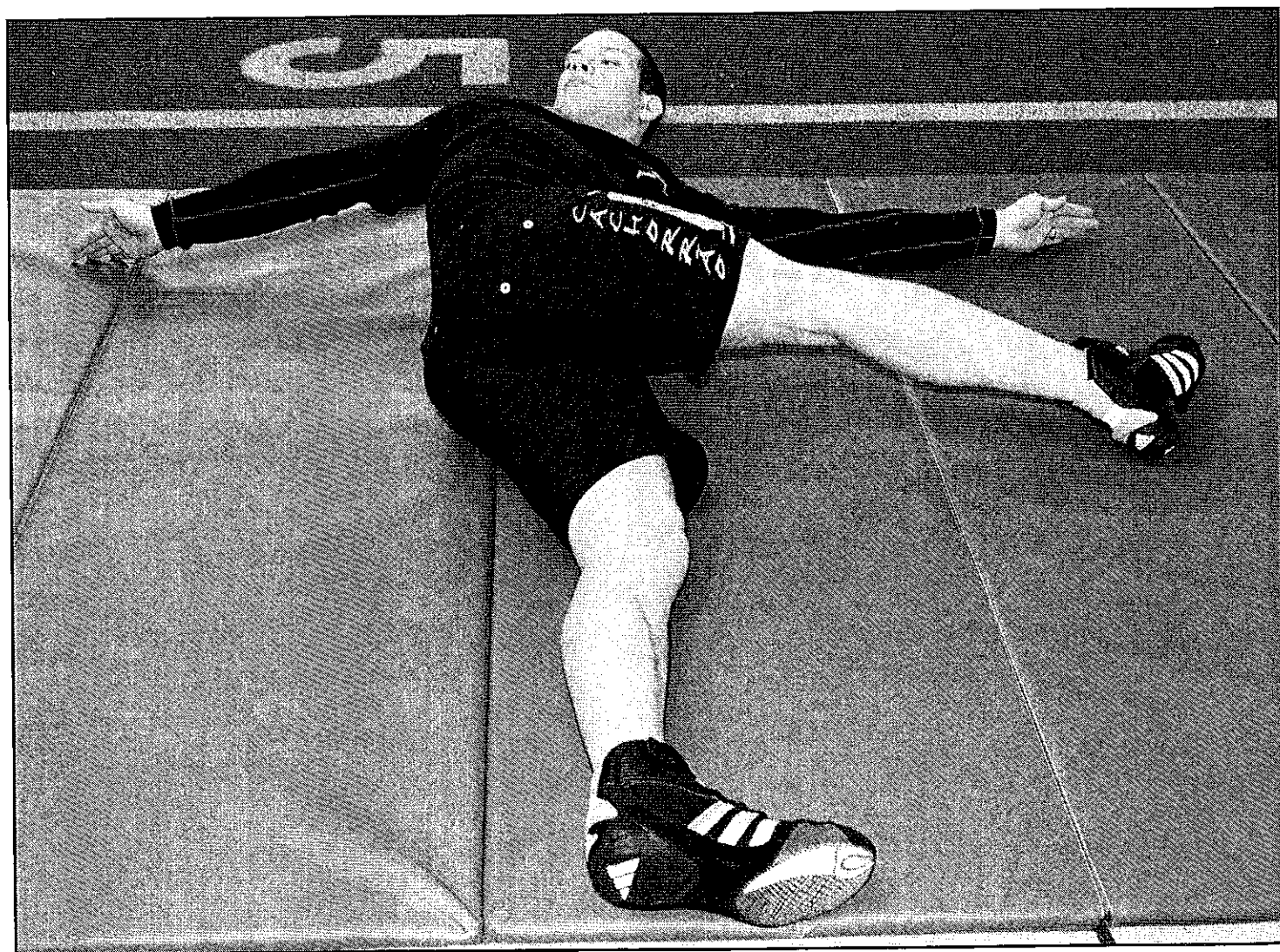
20 Great Tips for Using the Dynamic Warmup

1. Warm up seen from 3 different perspectives:
 - A. Warm-up tool (increase core and muscle temp, warm the nervous system, increase HR, increase blood flow),
 - B. Training exercises (increase plyometric effect, increase strength, increase ROM, increase technique, increase speed, improve coordination, increase endurance),
 - C. Assessment tool (assess strength, speed, coordination, ROM, balance, endurance, unilateral deficiencies). *this is important here. A well trained coach can learn everything they need to know about their athlete from watching them warm up. This will also determine exercises the athletes need to work on more and help create their program.
2. Each movement must be performed at the highest possible quality. The better the performance, the increased chance the motions will take place on the mat.
3. Begin teaching a client with the Quality over Intensity model. Make sure the client first performs each drill perfectly before adding any intensity. Raise the intensity slowly, never sacrificing the quality.
4. The warmup can have a number of different forms depending on the training/competition for that day. There can be a short pre competition warmup of 10 min or a 60 min warmup that actually becomes the workout. The art is in the rep, set, rest and exercise selection.
5. This is not the only rigid form of the warmup. There can be an upper body, core and lower body warmup. This keeps the athlete from becoming stagnant.
6. There are many coaches that can make you tired. There are many coaches that understand the sport event and technique. Few understand the training that underlies the sport. The dynamic warmup is the cornerstone of every program, and a huge tool in the toolbox of any trainer.
7. Make sure that the athletes can perform every exercise with equal aptitude on each side of the body. Address any limitations in form that take place on either side of the body.
8. The warmup is difficult at first. Not just from a motor learning standpoint, but from a conditioning standpoint as well. Most athletes are very fatigued and sore following their first few experiences with the dynamic warmup. This soreness will help to guide you to the athlete's weakest links. Over time they get used to it and it becomes a true warmup.
9. The warmup is general preparation for any sport. Many athletes try to get too specific too soon without ever building their athletic foundation. Regardless of the sport you play, increased strength, speed, coordination, balance, endurance and flexibility are sure to help you toward success. This warmup is a tool to get you there.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

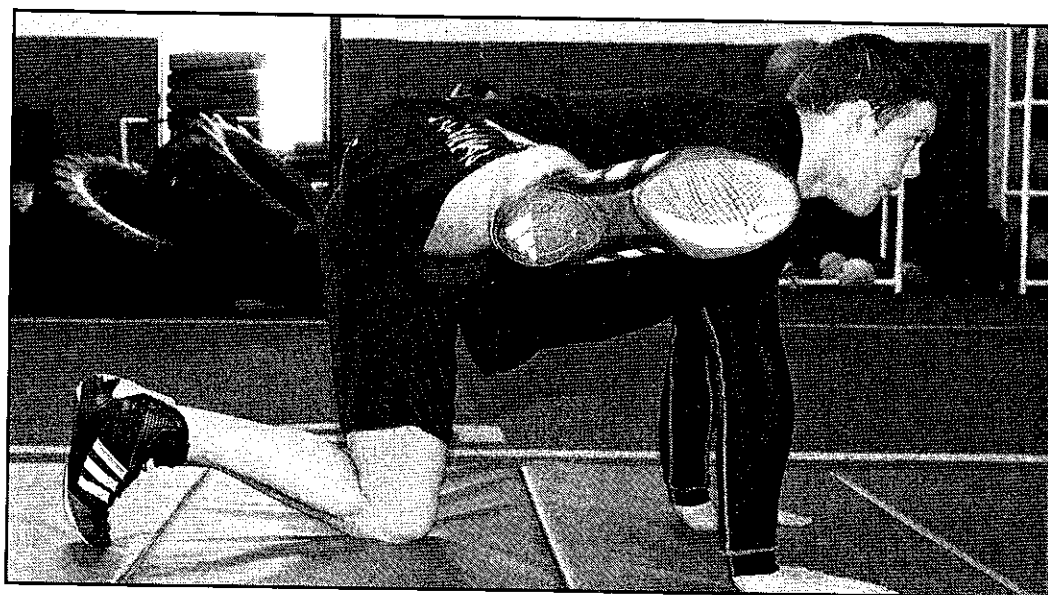
10. It does not take much for the warmup to deliver changes in performance. Just 30 minutes of the warmup 3 times per week and you are already going to be a better athlete.
11. The Warmup is like a kata in the martial arts. Every exercise and set and rep should be performed to perfection with purpose. This is called Kaizen in Japan. The goal is to always be a little better at every piece of the warmup every time you perform it. Each rep has purpose toward taking you toward your goal. Knowing that, strive for the best performance of each.
12. The warmup is also fun. It is a change of pace from the traditional jog and stretch routine of America. The different exercises keep you moving and thinking, and every one of them is designed to improve performance.
13. The warmup will lead to better performance in that workout. Due to the increased temperature and blood flow, the nervous system will fire faster and stronger.



Dynamic flexibility is critical to high level performance.



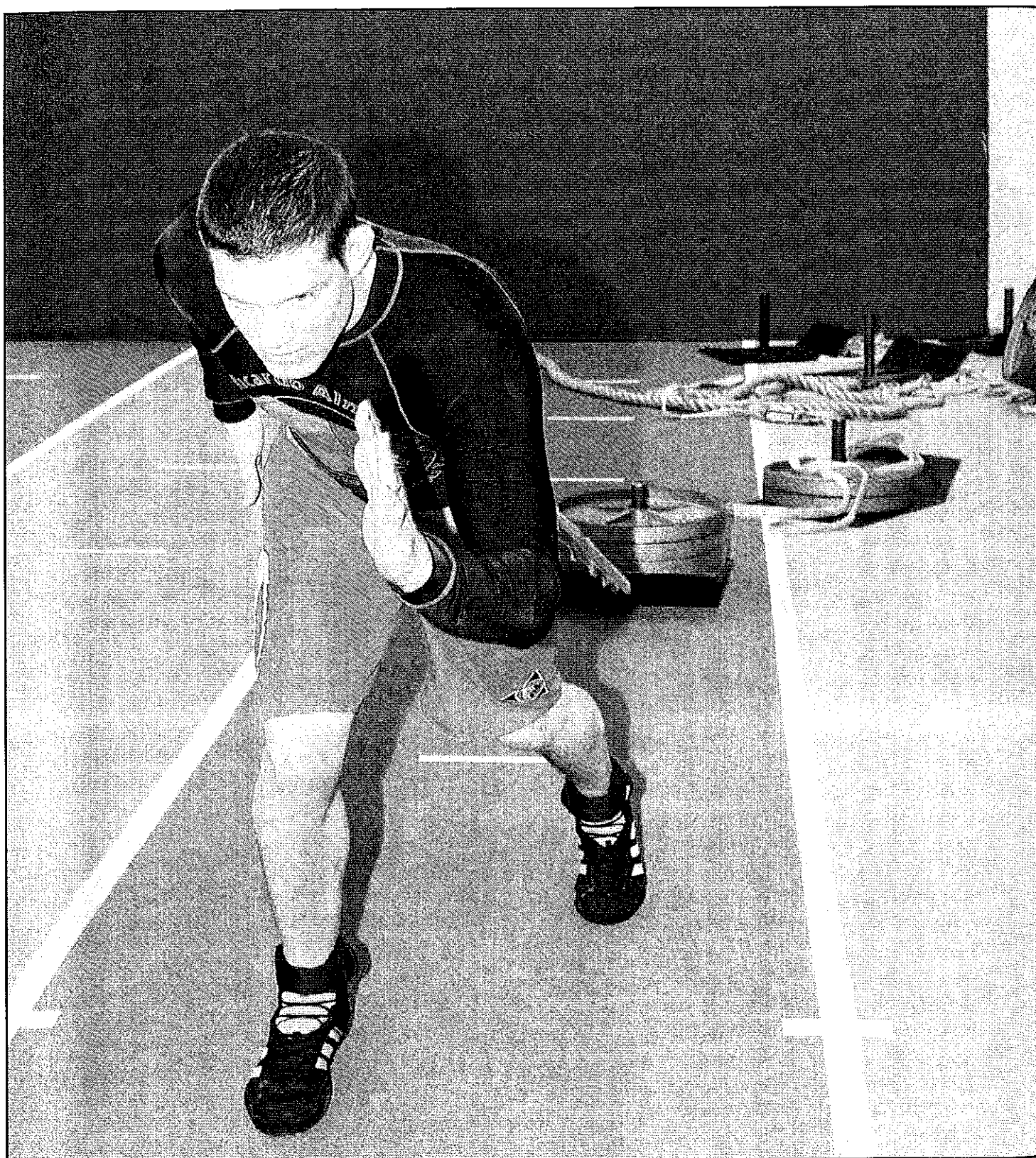
14. The rest periods during the warmup are great times for coaching or motivation for the athletes about what is to come. A coach should take advantage of this period and keep the athletes focused.
15. The warmup should be organized and have continuous flow. Stick to the 3 separate phases. For instance, the athletes don't need to be up and down on the ground. Keep portions of the warmup in order and it will be much easier to work with a large group and keep them organized.
16. The warmup should crescendo at the end. The goal is to be steadily increasing the intensity and speed of the warmup to lead immediately into the practice, training, or competition.
17. The warmup should be performed consistently throughout the year. Failure to stay consistent will not lead to optimal results.
18. The Dynamic warmup is an injury prevention tool. Proper landing and deceleration technique are critical here as well as the increased strength of the hips and core. This increased eccentric (force reduction ability) control, improved endurance, flexibility, and motor programs will also decrease the chance of injury as well.
19. Advanced athletes can perform the warmup barefooted or in socks on a good surface like a turf field or field turf. This added stimulus will increase the strength of the intrinsic muscles of the feet and lower leg. This will also increase proprioception and balance and lead to increased performance and less chance of injury. Always check the area for holes or objects before performing without shoes.
20. Stay consistent with the exercise performance when it comes to competition. Athletes are known to forget to warmup well before competition because of the excitement. Although the mind may be ready, the body may not be. Make sure to correctly go through the ritual of the warmup.



Ricardo crushes his hip musculature with Forward Side Leg Raises.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



Ricardo works on one of his favorite pieces of equipment to develop physical endurance and mental fortitude: The Sled.



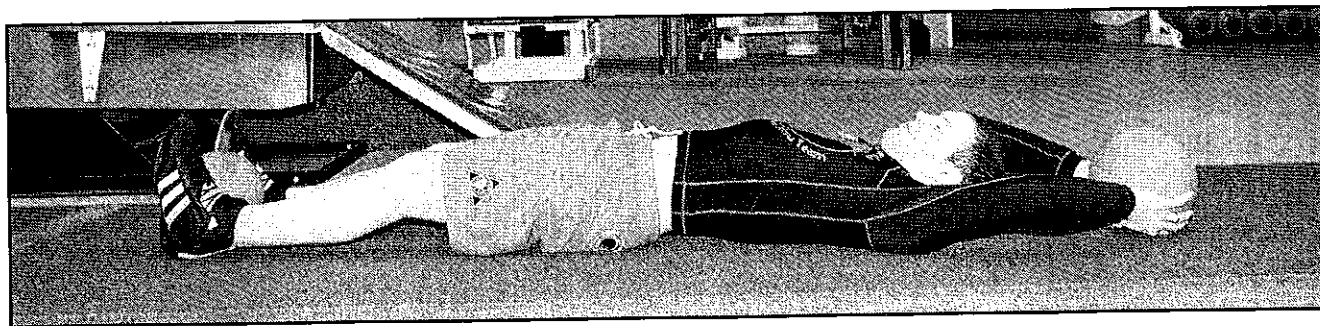
Endurance Training for MMA

During the time spent training elite fighters, there was one book that really stood out as a motivator for our "conditioning" sessions. This book was Steven Pressfield's *Gates of Fire*. This book chronicled the Battle of Thermopylae in ancient Greece. This was the battle in which 300 Spartan soldiers held off millions on Persian warriors on a narrow mountain pass. We could only imagine what type of endurance those warriors had to have to make their stand. This endurance was what we were searching for in our years of training experimentation. This section of the book gives you the results of those physically and mentally demanding experiments.

Before I begin, you must first understand why I feel that endurance is one of the most important physical characteristics a fighter can possess. Think about all of the fights you have watched and all of the sparring you have ever taken part in. In each of those, as you watched one athlete becoming more fatigued (it could even be you), you begin to see the end in sight for that fighter. All too often the stronger, faster fighter can come out blazing, have his storm be weathered by his opponent, and then fatigue and get knocked out. A fighter can have great strength, speed and power, but that is only as good as the ability to demonstrate those characteristics over time. If you run out of gas during a fight, all the strength and speed mean nothing. Physical fatigue has a number of effects over a fighter. First, the hands start to drop, and the mouth begins to open from the excessive mouth breathing. Then rapid breathing and increased lactic acid start to have mental effects. Slowly as the fight is taken from our warrior. The fatigued fighter begins to care less about the victory and more about survival. In a fight, the consequences of this attitude are severe. Although this is something that is very brief, the consequences can last forever. There is one simple way to make sure that this does not happen. Increase your endurance and that little voice that says, "It is ok to give up" will never be heard again. Many of the fighters I have worked with think that endurance training is satisfied with either occasional "road work" or hoping on the bike or elliptical for 30 minutes. Neither of these is going to get you to a high level MMA career. Look at a match and really see what is going on. Watch how the fighters expend their energy and how and when they tire. Of course, strategy and technique play a role in longer fights and how you expend energy, but your cardiovascular base still must be well built. Endurance for an MMA match involves being able to repeat explosive movements over and over as well as strong isometric muscular contractions that may have to be held for a period of time. If you don't have the ability to do this, you either better be finishing off opponents in the first minute, or you are going to be in big trouble.

The most important way that you can work on your endurance for fighting is simply to fight. This may sound elementary, but many fighters are often focused on technique, and or slow down the training whenever fatigue sets in. The only way to expand your threshold is to push through the current level that you are at. You can manipulate your training to do so. All too often, I watch fighters train just to "roll" or box that day with no attention toward what they are trying to accomplish. Every training session, and every rep and set of that session should have purpose. If not, you are wasting your time, not improving, and running the risk of injury. By simple timing rounds and monitoring your work output during them can help you assess where you are at. After that, you need to set up training sessions that are specifically designed to improve fight endurance. Our favorites are to do takedown or ground and pound rounds with 4-5 other fighters. What you can do is 3-5 five minute rounds where you rotate in a fresh fighter every minute. This can be very taxing, but help you to expand your threshold for pain. No matter how strong you are, or how fast you are, if you don't have good endurance, you are going to have problems. Aside from the actual fight training, there are a number of ways that I have also found

success training in the facility for specific endurance for MMA. The ultimate result of this training was Ricardo Almeida's 5 overtime, 50 minute grappling match at the 2003 ADCC World Grappling Championships. Called by many perhaps the best grappling match ever, it was voted "Fight of the Year" for the ADCC. That same competition also saw Roger Gracie out last grappling legend Ze Mario Sperry as a result of better endurance as well. Both Ricardo and Roger had both trained very hard with me on endurance before ADCC, and the results spoke for themselves.

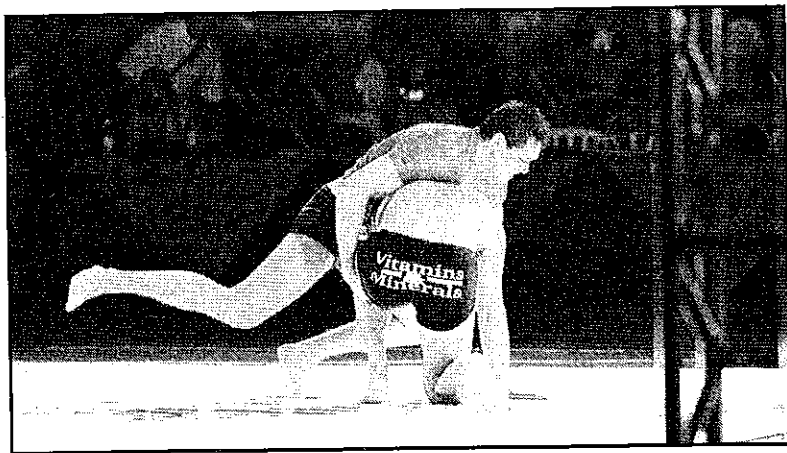


One quick way to start your endurance sessions is through our Active Dynamic Warmup. By keeping the pace fast and no rest between movements, there are few athletes that can tolerate the warmup the first time. Besides this, there have been a number of fighters that have come in and thrown up just from the warmup. (As a side note, if an athlete throws up from training, their body and nervous system were not prepared for what it was just put through. In other words, they were out of shape). After the warmup, I like to use bar complexes with my athletes. Although this may sound simple it is great for taxing the athlete and teaching proper lifting techniques to the more inexperienced fighters. My colleague and strength coach at the University of Kansas, Jonas Sahratian has helped me to further develop these bar complexes with my fighters. These will be better described in the sample workout section of this book.

After the complexes we move to the killer training. I like to do interval high speed treadmill sprints with active recovery. I like to work at 8-10 mph with a 15% grade on the treadmill with sprints from 15-20 seconds. This is followed by 1-2 minutes of med ball work as recovery. Then back onto the treadmill

and the circuit is repeated. We may do this for 10-15 sets. This helps the fighters to develop the anaerobic threshold that is needed for a fight. This training alone, however, would still not be enough. When my fighters are further out from a fight and strength training is needed, we may also fit strength work in between the treadmill sets instead of the med ball. Examples here might be pull ups and chins ups, core work, or even squats or deadlifts. This is very taxing for the athlete.

Another method of MMA endurance work we have come to enjoy is our sled pulls for time. When I say time, though, I am not



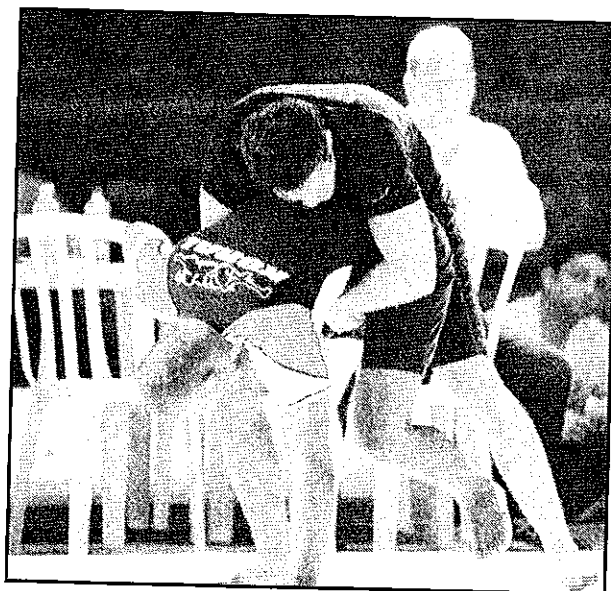
Roger Gracie upsets the past champion Sperry with superior endurance.

talking about short times, but long ones. Depending on the length of the upcoming fight, we will walk 50 yards forward, backward and sideways while pulling moderate weight for the duration of the upcoming fight. This could be anywhere from 15-20 minutes straight. This takes time to get used to, but in addition to the physical adaptations that take place, mental toughness is increased as well. Suppression of the little voice I spoke of before is a key element of this drill. Although this is tiring and mentally tough, the contractions used here are all concentric with the sled. You will need much more than the ability to perform repetitive concentric contractions to win in MMA.

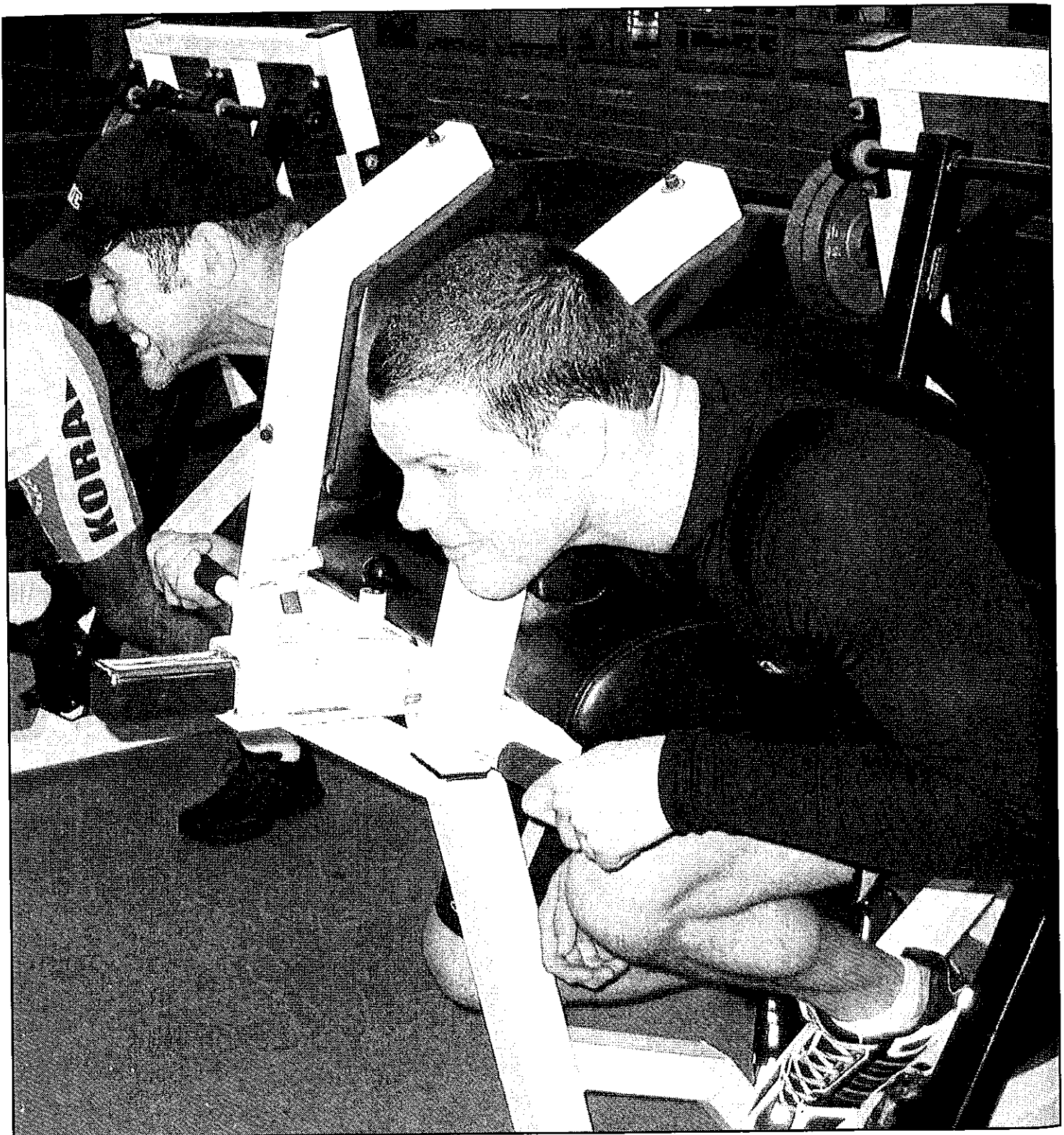
As will be stated later in the deceleration section of this book, eccentric contractions are critical to sport success. That is as true in football as it is in MMA. The fighter must be able to absorb force correctly whether it is from changing levels, shooting in, sprawling, or landing from a takedown. The better conditioned an athlete is for this, the more endurance he is going to appear to have during the fight. Exercises the fighters like for this are the front, side and back push lunge series. We like to perform these for 15-30 seconds alternating legs for the rest. For the upper body, we like to perform what we call plyo pushups on the low boxes. Here we alternate plyo pushups from the low and high box working on the eccentric portion of the movement for 15-30 second sets. Another similar version to work on eccentric contractions of the whole body is the classic up downs. Here the athlete sprawls and lands on the feet and hands. By controlling the eccentric contraction of the upper body and how much the athlete's elbows bend, you are working the contraction. Then the athlete pops back up to the standing position and repeats. This can be done for reps or time. In addition to this, the medicine ball work is great for working the eccentric and concentric component specifically for endurance. All of the throws previously listed are excellent to develop this characteristic.

A final piece of our endurance work is our isometric work. For anyone who has not performed isometric work in the gym before, it may appear less taxing because there is no movement. There is nothing that could be further from the truth. When you watch a fighter gassing out in the ring and it seems as though there has not been much action, look at the amount of force that have still been put in to their contractions to hold positions in the clinch and on the ground. These isometric contractions will have your heart jumping out of your chest. We will usually perform our isometrics during our lifting sessions. We will mix isometrics right into the lifts that we are performing that day. For instance, if we are pressing and pulling, we may do 3 pull ups followed by a 10-30 second isometric hold, followed by three more pull ups. We also use these patterns with the bench, squat, dips, and curls. You can perform these sets until failure to really get the heart rate up and test the mental toughness. The strength developed is mainly in the range of the isometric, so we try to make the angle as specific to MMA as possible, but it also conditions the muscle for the upcoming stresses of a fight and protects the muscle and tendons from injury. One very specific isometric exercise we use is the isometric medicine ball or punching bag choke. This involves having the athlete actually perform maximal choking movements on an object to improve isometric strength and endurance.

As I have said before, how you train is how you are going to fight. This goes for your endurance as well as your specific fight techniques. From the immortal words of Sir Ernest Shackleton on his quest for the South Pole, "Through endurance, we shall conquer".



Ricardo on the back of Jacare during their epic bout.



Gene "The Machine" Dunn and Ricardo crush their legs during a classic Team Renzo Gracie leg training session.



Leg Training For MMA

If there is one under worked area of the body in MMA fighters, it is the legs. As we all know, the upper body is most athletes' favorite area to train, and the area that gets the most attention. Although many of these athletes believe this upper body work is going to lead to more powerful and faster punches and better clinches, without the right leg strength, the fighter is going to be in big trouble.

As Bruce Lee once said, "Take power from the ground through your legs, hips and back". Everything starts from the ground up. To properly execute a powerful punch, kick or takedown, the legs have to be strong. Just slow down some film of some of the top fighters and look where these motions all originate from. They all start at the feet and move up the chain. The same goes for powerful sprawls, sweeps and mounts. Without proper leg strength, these are all going to hurt performance in the ring. After working with high level fighters now for a number of years, and my experience as a physical therapist, there is one major aspect of training I have found to be true: You can mold your body into anything you want. You just have to put it in certain positions all the time and add the appropriate stresses. Think about it, if you want your earlobes or bottom lip to have a huge hole in it, just put it in the position and add the stress. Using that body art example, having a good set of legs should be seen as not only easier, but much less painful. If you spend tons of time on your back doing ground work and don't work too much else, your legs are going to develop a certain way. Unfortunately, this development is not going to help your MMA career.

Today's successful fighters look very different from the fighters of 10 years ago. Not only are they leaner and bigger, but their leg development is especially impressive. The days of the weak, thin legged fighter are over. Knowing this, leg training has to take precedence in your strength work.

When we are talking about lower body training, you must remember that all of the components (lower/core/upper) of the body are connected and interrelated. No one portion works without the function of the other two (if you don't believe that just try to throw a kick or punch with an injured abdominal region or groin). Understanding this, the most important area of the lower body to focus on first is the Posterior Chain and the Center of Power. The Posterior Chain includes the Calves, the Hamstrings, the Glutes and the Low Back Erectors. All of these muscles are intertwined to produce powerful muscular contractions around the hip. The Center of Power includes the Abdominal muscles, the Hip Flexors, the Obliques and the Low Back Rotators. This region of the body will be covered in the core training section.

Almost every athlete I have ever worked with (especially the fighters) has had an undeveloped Posterior Chain. An easy way to examine the development is to look at the muscle mass of the low back erectors, the glutes, and the hamstrings. If you turn the athlete to the side and these muscles are flat, we already know we have a major overhaul of strength training ahead. These muscles have to be strong to develop punching and kicking power, the ability to drive the opponent into the cage or ropes, the ability to attack and defend takedowns, and the ability to control your opponent on the ground. Without



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

strength here, you are missing performance from every aspect of the fight game. What you must also know is that when we are talking about lower body training, that does not just mean all double leg exercises. As you can see on the following list, we do both double and single leg exercises at all times. You must remember that many of the muscles of the core and back work differently when on one leg instead of two. When watching an MMA fight, the fighter is also supporting himself on one leg at different times during the fight. Stability and strength needs to be developed for this reason. You will also see that our exercises are free from machines, but more use either bodyweight or bar and dumbbells to get the job done. This is because in the ring you are not locked into a machine controlling your movement.

Over the years, I have found the exercises that I like the best for the development of this region. The compiled list is as follows:

1. The Box Squat, single leg box squat

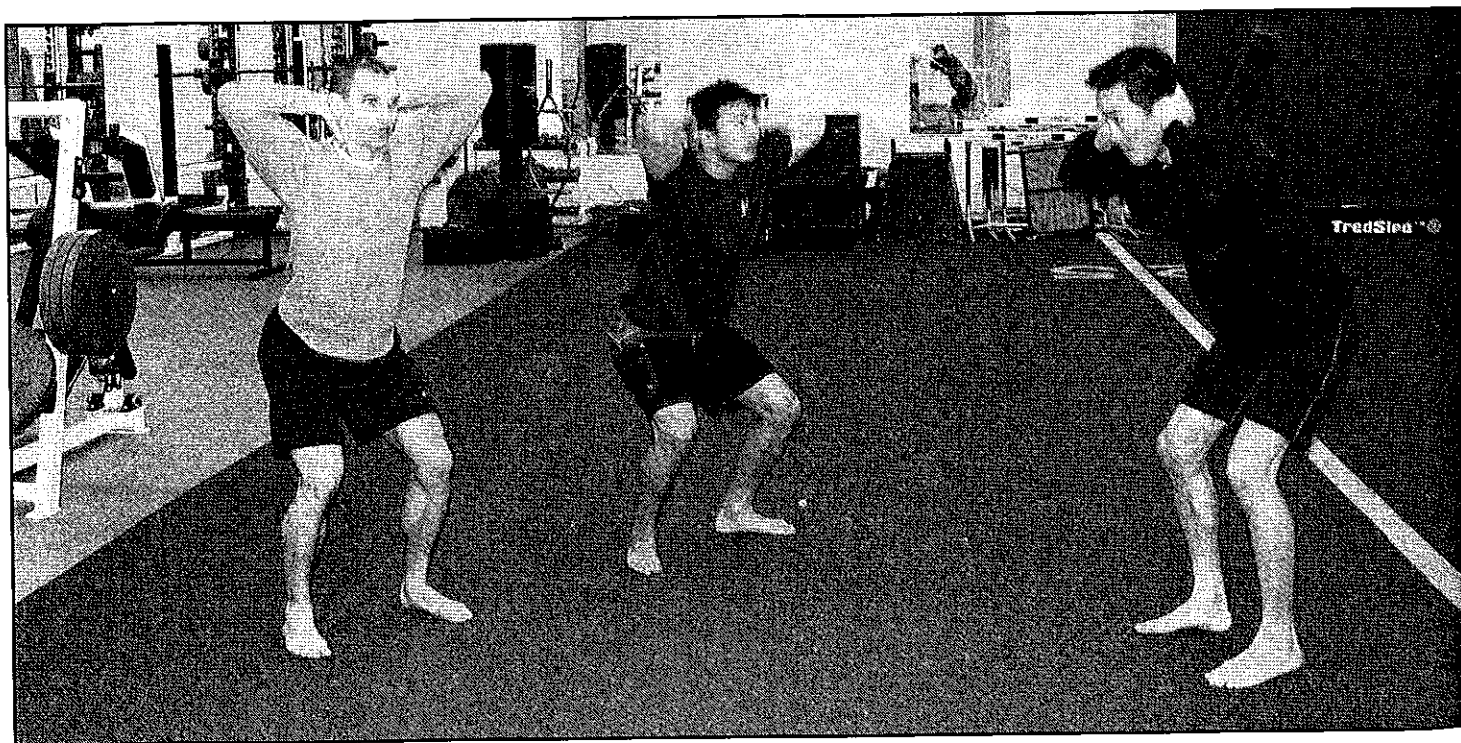
- A great description of this exercise can be found on elitefitnesssystems.com

2. The Deadlift, the single leg deadlift

- The single leg version can be performed using a dumbbell

3. The Zercher Lunge Pick Up

- The exercise begins with the bar on the pins. This is at a low height where the athlete must get down in the lunge or position to begin a takedown. The athlete shoots the arms under the bar in a Zercher grip and stands from the lunge position bringing the feet together at the highest point. Then the athlete reverses the motion and lowers back down on to the pins. This is a great exercise for takedowns and lifts.



The Thursday night crew: Dave Maver, Alfred and Alan blast through a punishing set of 100 Prisoner Squats.



4. The Weighted Hip Pop Up

- This exercise begins with the athlete on his back with one heel up on a bench in front of him. The other leg is held at 90 degrees with the knee and foot in the air. The athlete places a 45 pound plate along the shin of the leg in the air and holds it stable with both hands. The athlete then drives the heel that is on the bench into the bench and lifts the hips as high in the air as possible squeezing the glutes, hammies and calves. Return after a pause at the top and repeat.

5. The Single Leg Hamstring Curl

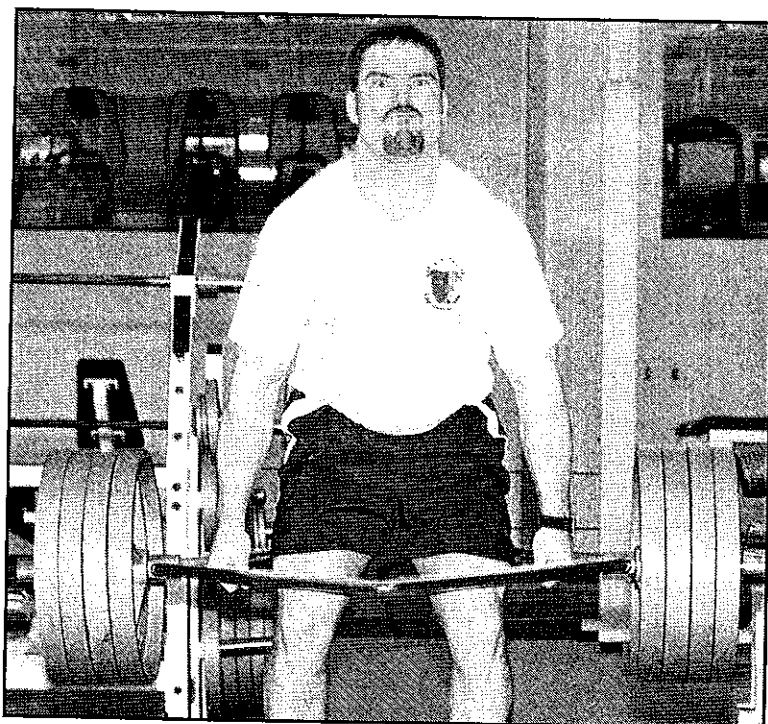
This exercise is crucial for ground work. Although this exercise is losing popularity when it comes to running and hip extension exercises for the hamstring, knee flexion strength is important to the MMA fighter. I like to perform this exercise single legged to make sure that both sides are equal. This exercise is very versatile depending on the time of training. I use slow eccentrics during times of strength building, and explosive eccentrics into concentrics for power development.

6. The Bar Lunge Walk

-This exercise is the ultimate for glute, hamstring, quad and core development for the MMA fighter. The athlete begins by placing the bar across the back in a back squat position. The athlete then steps forward lowering the back knee to the ground while keeping the chest up. The athlete then steps all the way up and through to bring the other foot out in front of the body. I also like to step out to the side slightly as I move forward to really engage the adductor muscles as well. We usually perform a set of 12 to 16 steps, but with 225 on the bar, sometimes 8 steps can be enough.

7. The Side Crossover Squat Series

This exercise was a little invention to build both strength and endurance in the MMA fighter for takedowns and takedown defense. The athlete begins with the bar in the back squat position and performs one deep back squat, but then only returns half way back up to full knee extension and pauses. From there, the athlete slowly crosses one foot over the other moving sideways and then steps that foot out from behind to return to the back squat position. As the athlete moves to the side, the key is not to change height, so that there is constant stress on the muscles. From here, the athlete performs another deep back squat and repeats for 6 reps to the left and 6 reps to the right. One squat and crossover hold count as one rep. Begin light at first. 135-185 will be a challenge to your hip stability on the crossover at first, and the heart is going to be jumping out of the chest.



Martin works some leg, back and grip strength with a 6 rep set of 405 pounds on the trap bar deadlift.

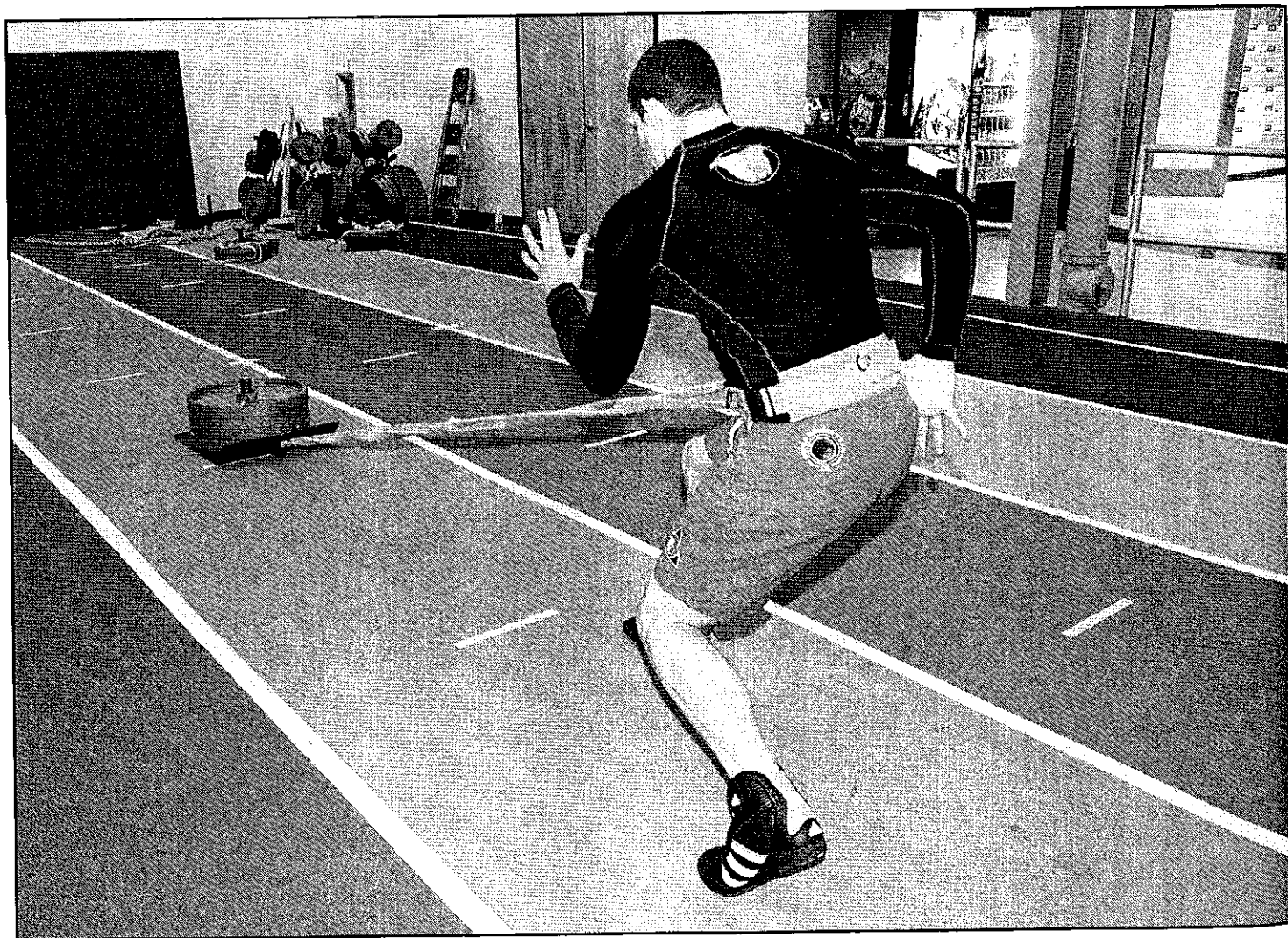


8. Glute Ham Raise

Another one of my favorite exercises, I use this both as a warmup and a training tool. With no weight added, we will do 4 sets of 8 at the beginning of training just to activate the posterior chain. With a 45 pound plate across the chest or behind the head, this exercise begins to feel like hamstring torture. This exercise is great for locking out arm bars and leg locks.

9. Calf Raise Triple Series

I feel that the calf is often overlooked in training. This muscle group is essential for standup footwork and control during shots and takedowns. I like to work what I call the triple series. The athlete begins performing 5-8 reps of calf raises with the feet pointed forward. Then the athlete turns the toes out for 5-8 reps and then toes in for 5-8 reps all in a row. For people that have not worked calves, go easy at first. 3 sets of this with considerable weight may have you limping around like you have just been kicked by Vanderlei Silva. Make sure that you perform this exercise to full ROM. Get a controlled stretch at the bottom of the movement and make sure to rise completely up onto the balls of the feet.



Ricardo fills his Quadriceps with blood during sets of 65 yard Backward Sled Pulls.



10. Heavy Sled Pulls

- Sled pulls are another favorite among the most sadistic fighters that I train. We do forward pulls, backward pulls, side pulls, with heavy weight. We also do feeder workouts with lighter weights and more movements on light recovery days, but for now I will describe the heavy pulls. On heavy days, we will usually pull a desired weight 20 yards down forward and 20 yards down backward. We will keep adding weight until someone drops out. In the endurance section of the sample exercises of this book, you will also find how we use the sleds for fight simulation.

11. Cable Knee Pull Throughs

- One of the most devastating tools in today's MMA fighter's arsenal is the knee strike. Powerful knees from in the clinch are consistently taking out fighters at all levels. This exercise combines the strength of the lats and abdominals of the upper body and the hip flexors and quads of the lower body to fire the knee into the head or body of the opponent. I like to have my athletes perform this motion on our cable column. We hook the cable around the fighter's ankle and have them leave the foot as far behind them as possible. The athlete leans forward and holds a bar at head height in front of them to pull from. The athlete then replicates the knee stroke motion and repeats for 8 reps. Then they switch to the other leg. After this exercise we always finish with actual knee strikes to train the movement at actual speed.

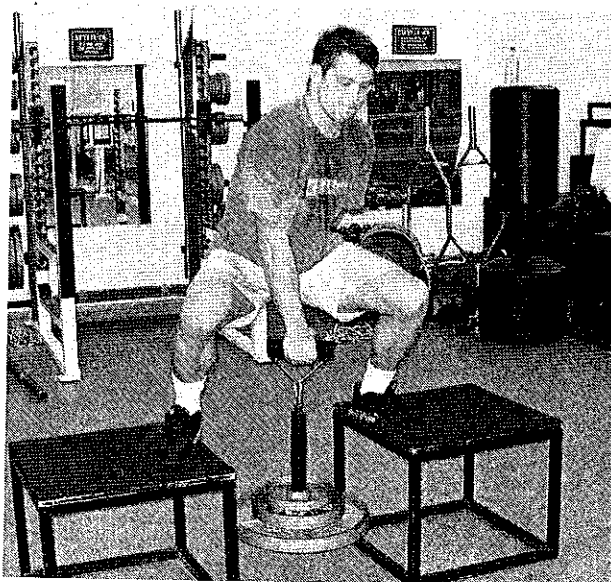
12. The Heavy Step Up

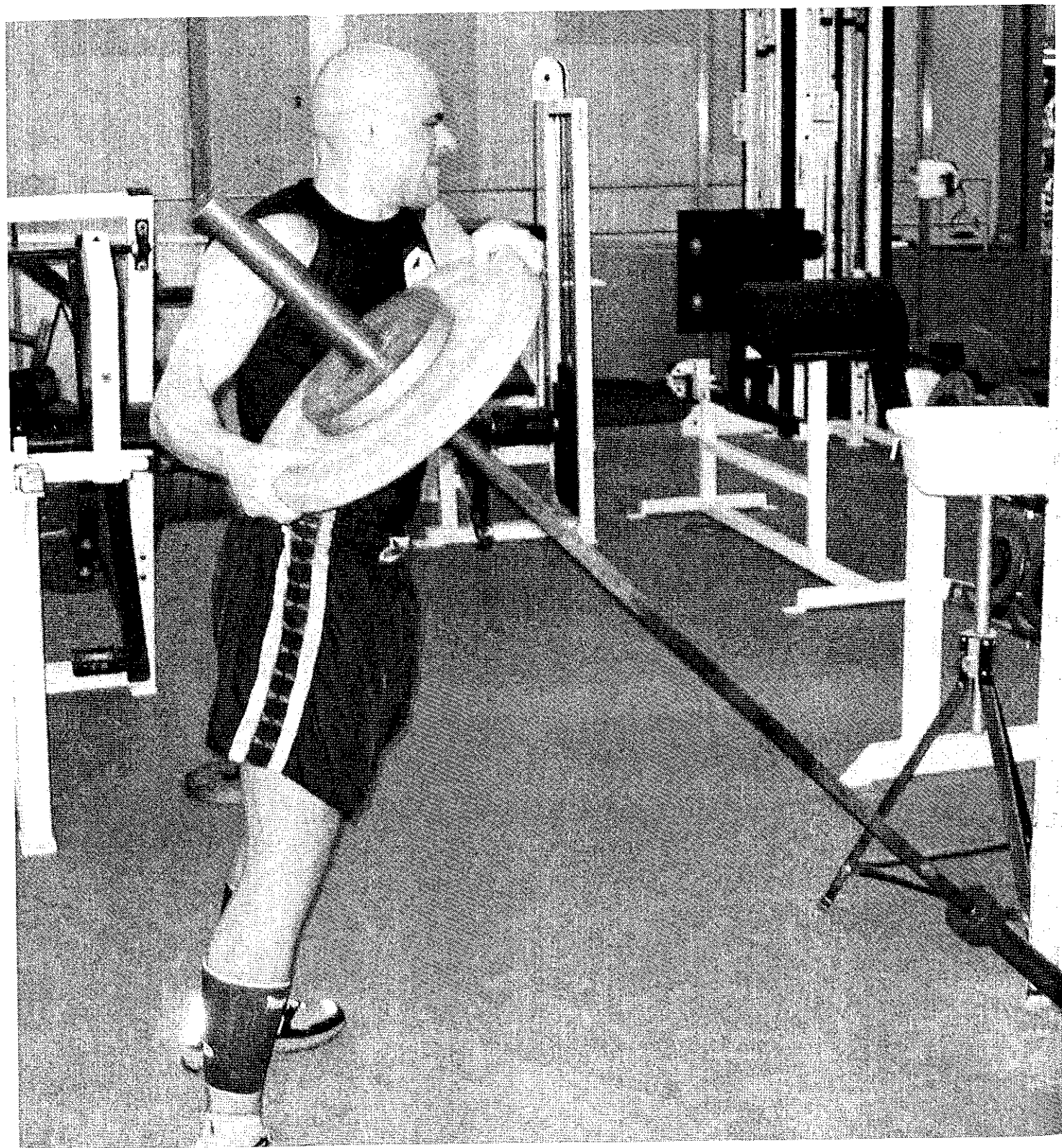
- This is another tough exercise for the posterior chain. The athlete can either use a bar, dumbbells, or heavy sandbag for this exercise. I like to use all three because each variation requires different actions of the muscles involved. The athlete begins with the whole foot on a box. Depending on how much weight you use will help to dictate the height of the box. We constantly change the box height to change the stimulus. The athlete presses into the box with the heel and drives up to full knee and hip extension. I like to have another higher box in front of the athlete to force them to step forward into even more hip extension. You can really feel the difference between the two when this is performed. After reaching maximal height, the athlete performs a slow eccentric to return to the ground. Many athletes begin with this exercise by kicking off of the ground with the bottom foot. By using heavy weight, I have found that a lot of the help from the kick is neutralized, so go heavy or go home.

13. The Rolling Thunder High Box Lift

- I really like the Rolling Thunder. You can find it at Ironmind.com. It is a great tool not only for grip strength, which I do feel is important in hand fighting, but also for core and leg strength as well. The limitation I found with the Rolling Thunder was that I didn't feel I was getting enough leg work involved. So I improvised. I placed the Rolling Thunder between two high boxes and this forced me to go through over double the ROM. I turn my feet slightly out and focus on sitting as deep as possible instead of bending at the waist. Not only has this increased my fighter's grip strength, but their level changing and takedown defense is tougher as well.

Fabio crushing his legs, back and grip on our killer Rolling Thunder Hybrid exercise.





American Muay Thai Champion Joe Sampieri shreds his core in preparation for the upcoming bout.



Abdominal Training for MMA

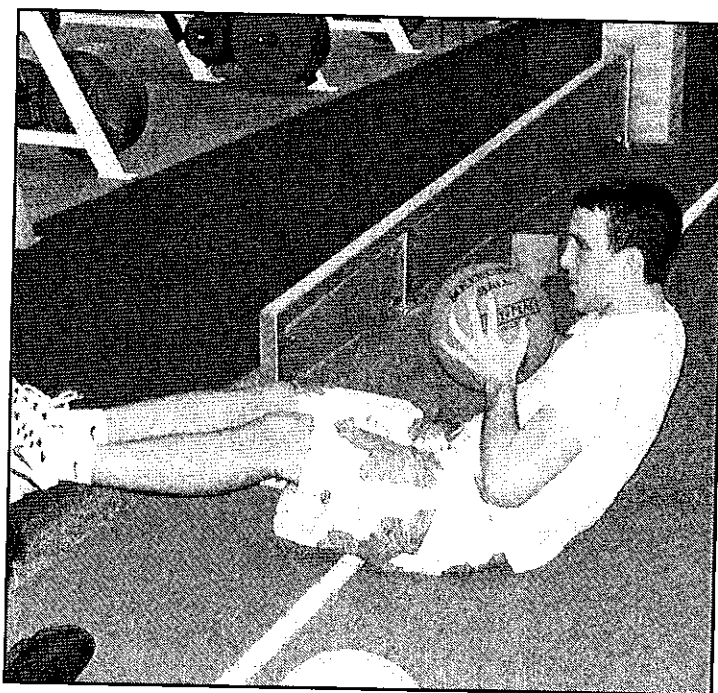
The abdominal region of the body is a critical training zone for an MMA fighter. Without a strong core, the fighter will be unable to throw powerful punches and kicks, apply throws or takedowns, or work from the bottom or top on the ground. This is probably one of the most neglected and misunderstood areas of the body when it comes to training, not just for MMA, but for all sports. The abdominal muscles are some of the most popular muscles to train by athletes and fitness enthusiasts all over the world. The only problem is, most people are either using them in training for the wrong reasons, or they are just plain training them incorrectly. When you look at gyms around the world, there are more exercise gadgets, videos and classes that are specific to abdominal training than for any other area of the body. Not only that, you can always find gyms packed with people working their abs almost every day, yet how many of the people in all of these gyms have a good looking set of abs? Usually it is almost none of them. This fact should tell us all that most people are not doing the right things to show off their abs both in the gym and outside of it as well.

There are three main reasons that I have identified why people train the abdominal area:

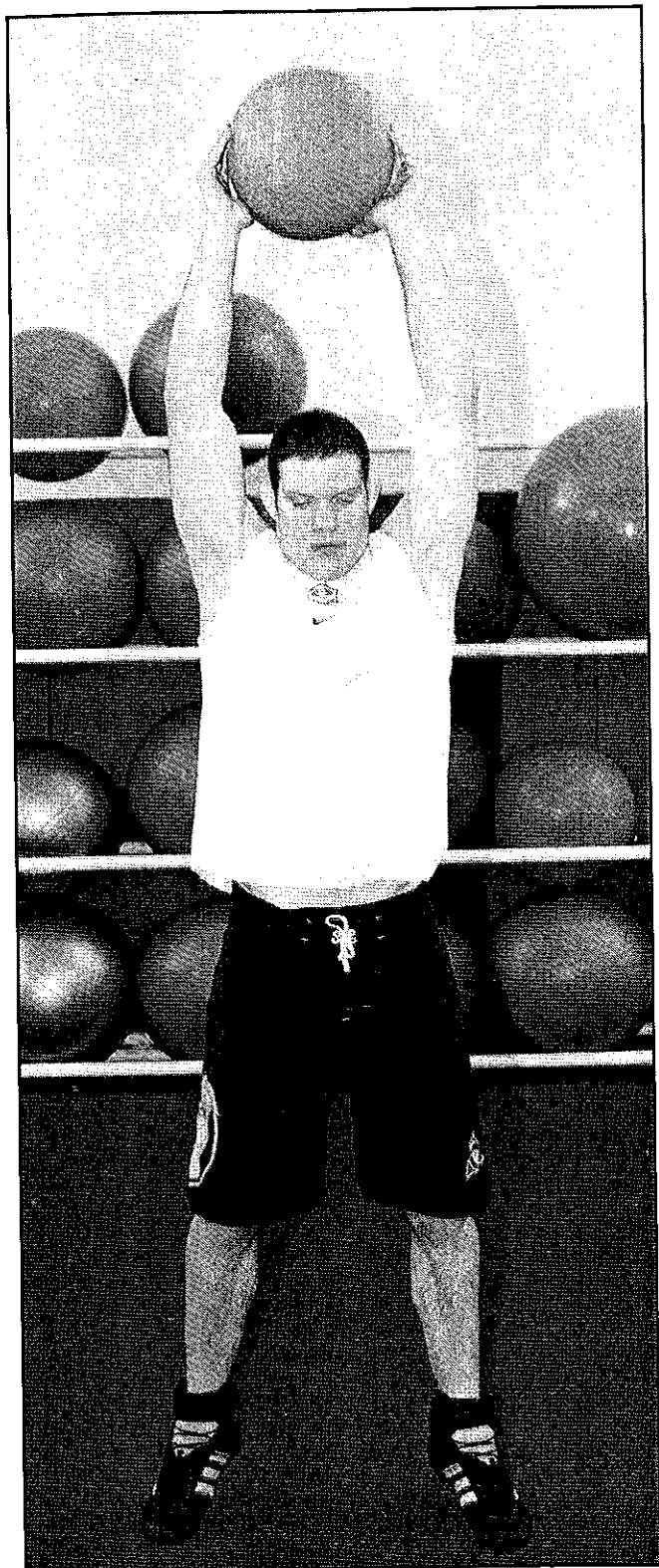
1. The most common reason is that people want a thinner, more defined waist and abdominal area.
2. The second reason is that people want to strengthen their abdominal area for fitness or sports related reasons.
3. Finally, people commonly work their abs because they want to protect their back [this is a commonly seen prescription by doctors, therapists, and trainers around the world].

The Fastest Way to a Thinner Waistline

If I had a dollar for every time a trainee or athlete asked me what abdominal exercises are the best to thin their waists and make them look more defined, I would be a millionaire. Even though it may seem commonsense, (and you know fitness equipment manufacturers want you to believe it) working the abdominal muscles is not a good way to thin your waistline. This is known as the Spot Theory, and it is actually a terrible use of your time if that is one of your goals at all. The truth is, diet, exercise and nutrition play the biggest role in whether or not you can see those rock hard abs. Let's face it, everyone has a nice set of abs, just most of us have them covered with a layer of fat. No matter how much you work those muscles, until you decrease your body fat percentage, you still won't see at thing. So the two best exercises I can suggest for developing better looking abs are the table bench press (where you push yourself away from the table early) and the reading of a quality nutrition book.



Igor Gracie toughens the midsection with Russian Twists.



*Ricardo building anterior chain power with
Med Ball Slams.*

NEWSFLASH!

The Abs are just like other Muscles

Would you curl your arm up and down for hundreds of reps if you wanted to make it stronger? Probably not. Most people would instinctively grab a heavy weight and do a low number of reps with that weight and then repeat. All of us know by now about the Principle of Progressive Overload, yet no one ever seems to apply it to abdominal training. Take a hard look at how we train our abs "to get stronger." Usually it is with a limited number of exercises for thousands of reps, almost every workout with no external weights involved.

The abdominal muscles respond to training just like the other muscles of the body. Use heavy resistance and low reps, they get stronger; use no resistance with lots of reps, they build endurance. Either method you choose, you'll need to leave time for recovery to improve. If you try to train them every day, increases in strength are going to be hard to find. Beside this fact that most people are training their abs with the wrong reps, sets and recovery schema, they also don't seem to apply the Principle of Variety either. Usually most people just use some form of sit ups and maybe a twisting motion. The training of the abdominal area requires much more than this to work all of the muscles completely. Knowing this, your workouts should now begin to add heavy resistance to the exercises you are doing as well as adding new exercises periodically to add a new stimulus to the training.

These new exercises should also have purpose toward your specific goals. For instance, if your sport requires rotation with strength, like wrestling and grappling, your training better have some of the same. If all you do is crunches and that is not a major movement in your sporting event, you may be wasting your time.

A great piece of advice is to treat the abdominal area just like you would other parts of your body. Most people work their legs one day, and save upper body for another. What about the core? Why should the most important area that links the arms to the legs be treated any different? If you are training smart, this region should have its own day as well. Start throwing it in and you will thank me for the results.



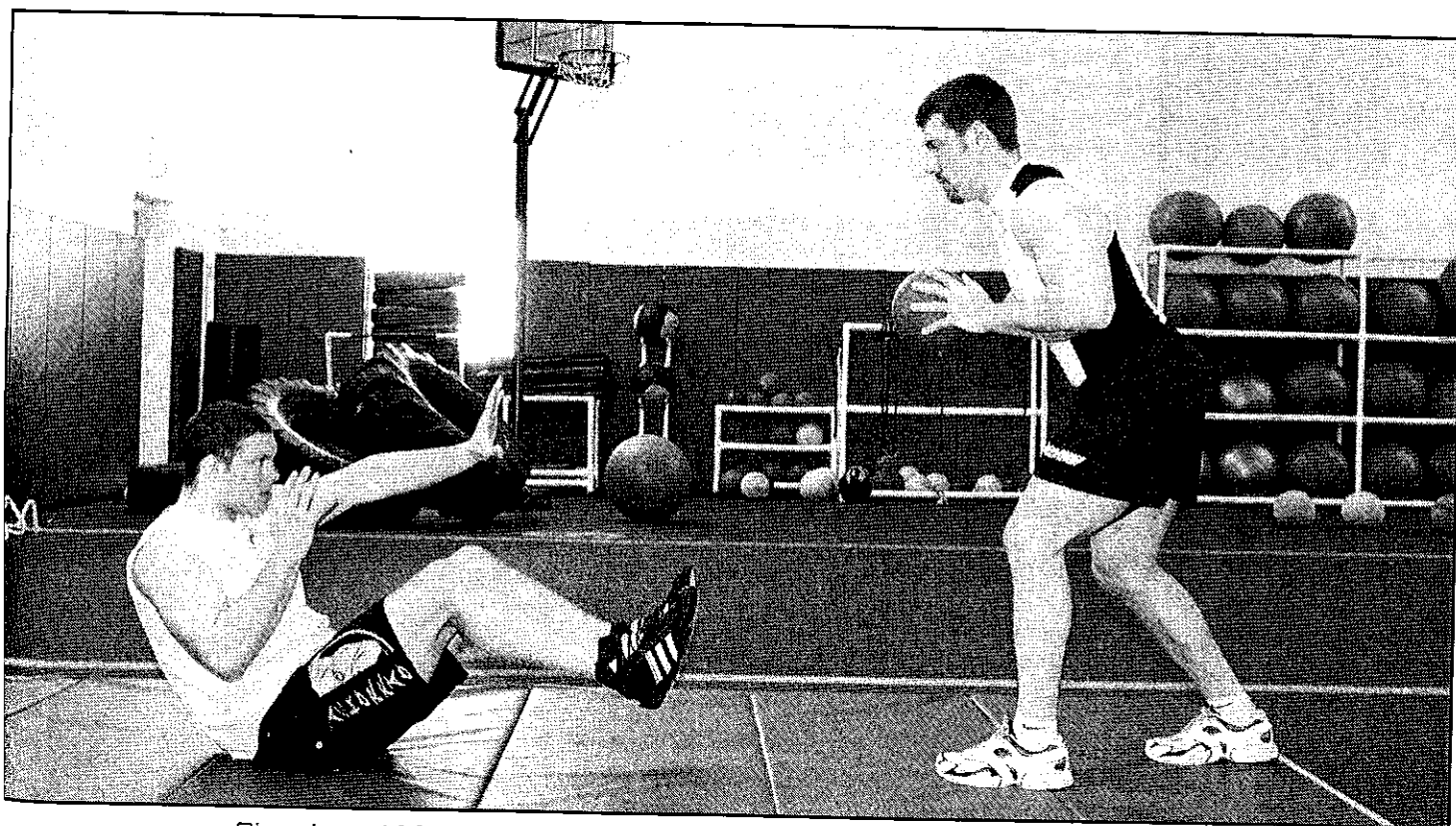
Want to Protect the Back? Then Work the Back!

Since the muscles of the abdominal wall and lower back are all sheathed in the same envelope, many practitioners believe that the abs are the ticket to good back health. They are on the right track, but unfortunately, they often fail to see the real issue. There is an optimal abdominal to back strength ratio. Most doctors and trainers will focus on the abdominal area, train it incorrectly, and completely forget about training the low back. To strengthen the core properly, the low back region should have the focus, not only because it is more functional, but it is a great way to work the abs as well. For instance, squats, deadlifts and overhead presses are exercises that are feared by many athletes, doctors and trainers, yet they are much more effective ways to train the core than high rep sit ups or crunches that do nothing more than leave you with a burning stomach.

If nothing else, I hope this article has you questioning your ideas about and methods of training the abdominal region. To summarize, if you follow a healthy diet, and train properly, you can have the abdominal region you always dreamed of. If you don't follow the concepts expressed above, you will probably continue with the abs you've got no matter how "hard" you work them

Tough to the Core

Just about everyone would love to have a great set of abs, but how many people ever say that they would like a strong set? All of the athletes I have ever trained want to see that defined six-pack stomach, but none of them are usually concerned with how it can help their performance. Core strength is



Ricardo and Martin work on developing strength and stability around the core.



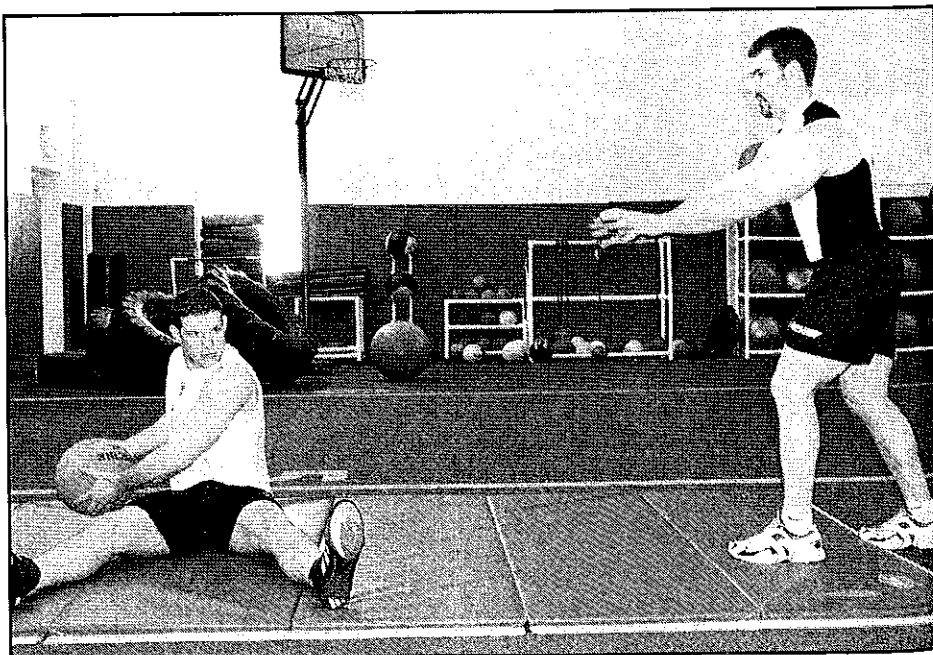
critical to athletic success. The core is the link between the upper and the lower body. We call this region the fighter's "Center of Power". This area includes the fighter's abdominal muscles (Rectus Abdominis and Transverse Abdominis), the Internal and External Obliques, the Low Back Erectors and Rotators, and the Hip Flexors. As we often preach to our athletes, "you could have the strongest arms and legs in the world, but if your core is weak, anyone can knock you on your ass."

As my previous article on core training stated, definition of the abdominal area is about 90% low bodyfat. Low bodyfat is related to nutrition but is also related to exercise. Sit ups alone won't give you a six pack, you must combine this with diet and the right anaerobic interval exercises. If you solely want to look good, read a nutrition book and lose the fat. If you also want a bulletproof core along with the looks, then read on my friends.

Core strength is developed just like strength in other areas of the body: progressively heavier amounts of resistance with the adequate amount of recovery. As I have stated earlier, if you want to bang out a thousand crunches, go right ahead, but in the hour it takes you to develop nothing, you'll be sorry.

I will say something that many fitness enthusiasts might disagree with. There is no best abdominal program for fighting. There is no best exercise that will work forever. There is no one machine that will give you everything your core desires. A proper program must evolve with proper amounts of variety and changes based on individual needs. There are an endless number of exercises and machines to choose from, it is up to you to build the program that works best for you, and change it when the time comes.

For many of you out there that want to get going right away, here are my favorite 15 core exercises. Many of these you may never have seen or tried before. Now remember, these are specific to athletic performance with the abdominal area and low back in mind. As you will see there are more rotational movements in addition to flexion. This is the way I want my athletes to develop strength. If you want to really get the core strong, you cannot forget your squats, deadlifts, cleans, and lunges which are some of the most powerful core exercises around. Try to create a separate core training day and pick any 6 or 7 exercises from the list. Then every 4 workouts, remove two of the exercises you were doing and add two new ones. This way, you will have month's worth of training if you hit the core once or twice a week. Here they are, and remember, start with a weight you can handle, but do not be afraid to push the weights up high. This is the only way to get really strong. As for reps and sets, let's keep it simple and perform 6-8 reps for 3 sets for now unless otherwise instructed in the description.



*Ricardo firing the 5 kg ball with
Seated Twisting Throws.*



15 Exercises to an Iron-Cast Core

1. The cable and physioball side twist and shout

Begin standing with your feet and hips facing perpendicular to the cable column with your left shoulder closest to the column. Cradle the physioball between your arms against your chest, and twist the shoulders to the left so you can grasp the handle. Make sure you are far enough away from the column to get a full stretch. While maintaining your hip and foot position, now twist all the way to your right. The ball will act as a cam against the cable and rip into the obliques and low back. Return slowly and under control.

2. The cable and physioball downward twist and shout

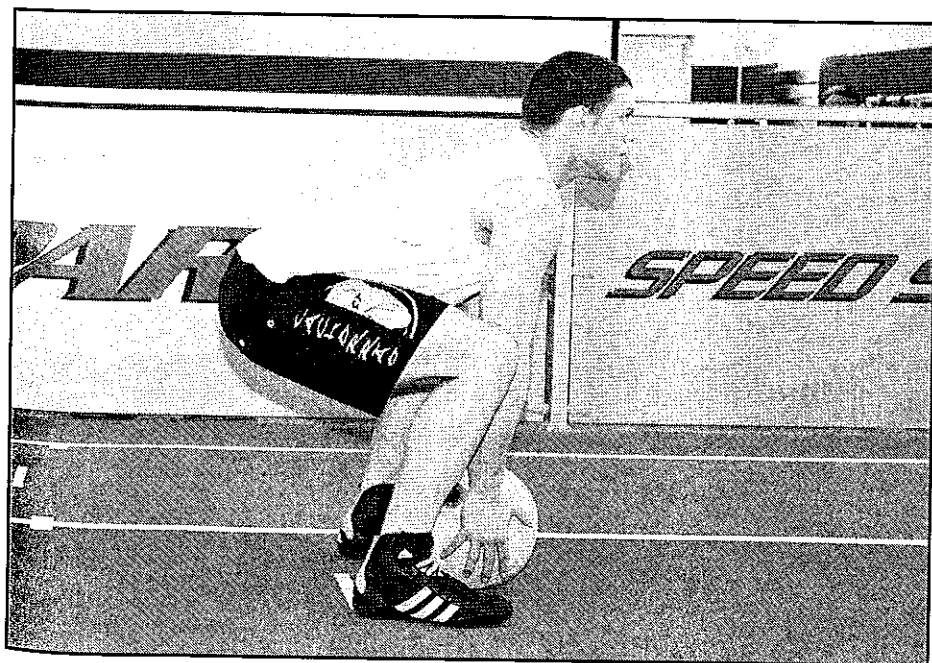
Place the handle at the highest position on the cable column. Now return to the same position in the side twist and shout, but move along the diagonal. Now you are bringing the handle down and across your body.

3. The cable and physioball upward twist and shout

This is the final angle to perform this exercise on. Now move the cable handle to its lowest point and repeat the exercise as in numbers 1 and 2. Remember that you can try to mix the angles of the pull every few weeks to add to the training effect.

4. The Olympic bar one hand snatch

This is a great exercise I came up with by accident. Begin by placing one non weighted end of an Olympic bar in a corner or against a solid foundation that will not allow it to slip. Then weight the other end accordingly and move to the end of the bar. Face perpendicular to the bar. Squat down grasping the open end of the bar with the left hand. Use the legs and core to quickly stand and snatch the bar up to an extended position. Slowly return down to the floor and repeat. This exercise should be performed rapidly and use a weight that is challenging to achieve results.



A 50 pound Med Ball is a great tool for core training.



5. The Olympic bar one hand punch

This exercise can be used as a continuation of number 4, or by itself. In the finished position from number 4, the athlete is facing the bar with the arm held overhead. Now the athlete lowers the left hand to the left shoulder. Then with an explosive movement of the arms and legs, the arm is punched forward and up. The key to this lift is to stabilize the core and not allow it to rotate during the exercise.

6. The Olympic bar twist

Now the athlete begins with the bar held out front over head with the arms outstretched. The athlete then allows the bar to move on a circular pattern to the right while keeping the hips and feet forward. By using the core, the athlete throws the weight back up to the starting position and moves now to the left. Each side counts as one rep. Make sure to keep the hips facing forward and don't use too much arms in the lift.

7. Cable Hip Flexor shredder

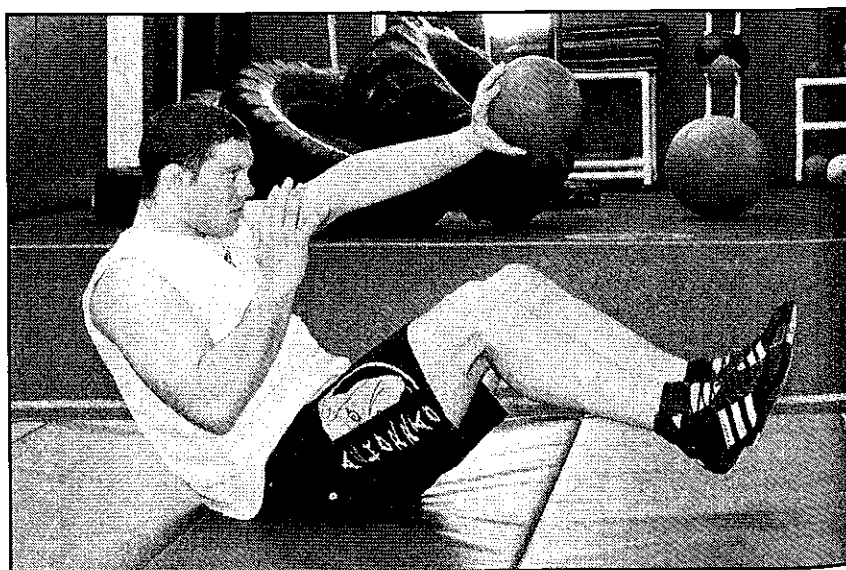
The athlete begins on his or her back with the hands holding them in a stable position. The bar is held by keeping the toes pulled up. The athlete then brings the knees up as high as possible while trying to maintain a flat back against the ground. The athlete then returns under control and repeats.

8. Overhead dumbbell or bar sidebends

The athlete begins by holding the dumbbells or bar in each hand overhead. The athlete then bends directly to the side keeping the arms held straight overhead as well as possible. The athlete then returns to the starting position and bends to the other side.

9. Beg for mercy leg lowering

This is not for the weak in the core. This exercise is tough! Start by lying on your back on a bench. Then grasp the bench behind your head with both hands. After that, bring the feet and torso up to the vertical position with only the shoulders remaining on the bench. Then lower you body under control back to the bench and repeat. For beginners, you can keep more of your body on the bench during the exercise.



Fighters that don't work the "Core" are missing the center of power.



10. Boxer's dumbbell speed twist

This exercise is to be done as fast as possible. Begin sitting on the floor with your feet in the air (you should be balancing only on your buttocks). Hold a dumbbell out front with both hands. Begin twisting side to side as fast as possible for 50 repetitions. Keep the feet in the air the whole set and make sure that the shoulders are twisting and not just the arms. Check each week to see how fast you can perform 50 reps. This will insure you are doing it right.

11. The Unilateral Side Bend

This exercise is like one you may not have seen before. This is because one side is weighted while the other is not. The athlete stands with the unevenly weighted bar and tries to assume the position that the bar is equally weighted (level). The athlete then bends as far to the side as possible at the waist, and then returns to the level position. Keep the hands on the bar close to the shoulders to add more tension.

12. The Forward Bar Roll

This exercise is done with a weighted bar on the floor. According to how much the athlete decides to move, and the starting position he chooses, will decide the amount of difficulty of the exercise. Start on the knees with the hands on the bar at shoulder width apart. Then roll the bar forward on the ground while keeping the arms and low back straight. Roll the bar out until the body is horizontal, and then return to kneeling by contracting the abs. To increase the tension, try starting the exercise from the standing position.

13. The Alligator

This is one of the toughest exercises out there, and until you perform it, you might think it is just for the arms. With this drill, the athlete starts in a pushup position with his toes placed on an object (25 pounds plate, Frisbee, etc.) that will slide with some resistance on the floor. From this position, have the athlete "walk" 20-25 yards on their hands both forward and backward for sets. This can be done slowly or for speed. Keep the back flat and you will feel the abs working like crazy.

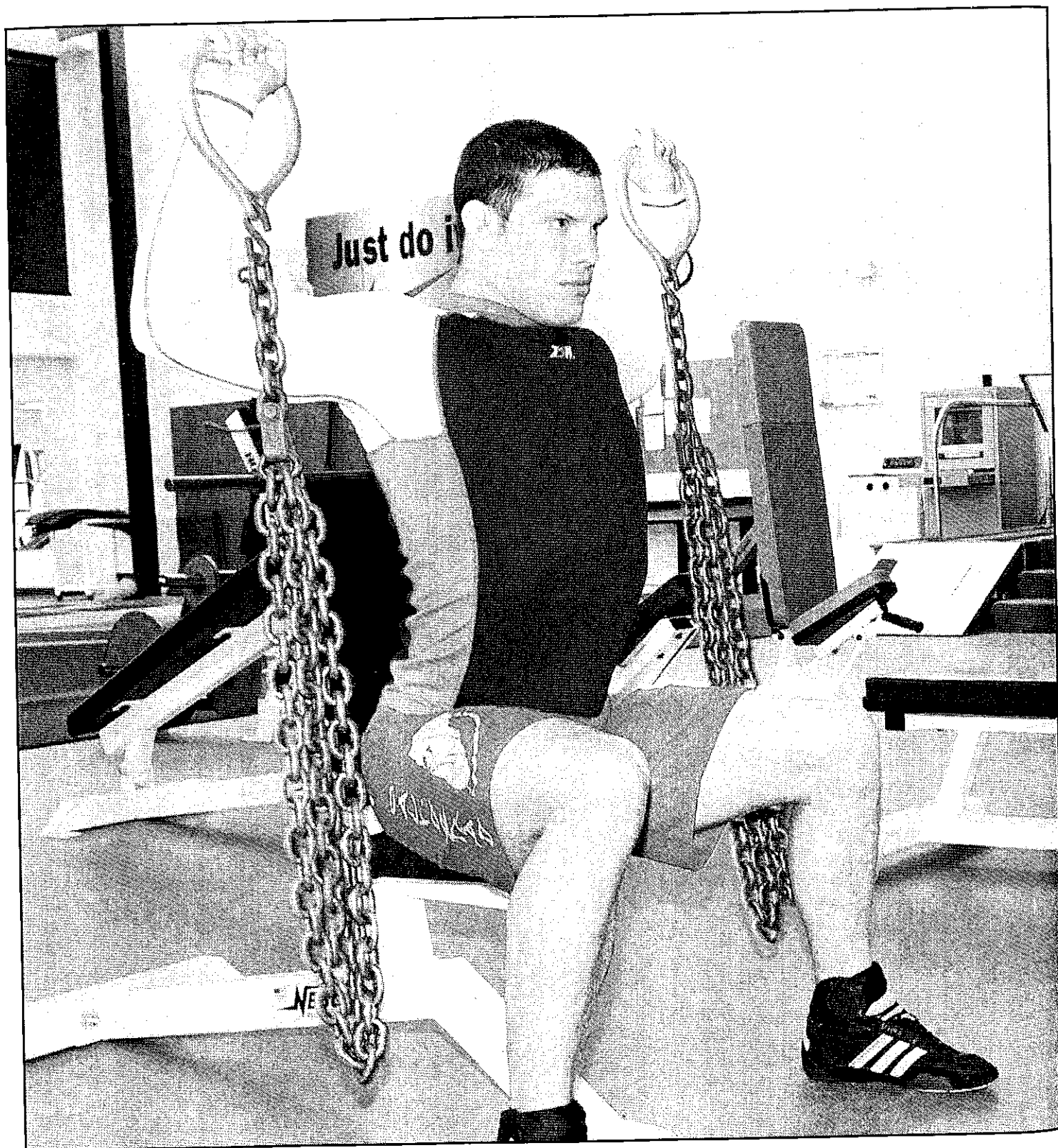
14. The Hoover

This is an "old school" exercise, but powerful when done correctly. The athlete begins with short inhalations and exhalations for 5 seconds and then expels all the air out of the lungs. Then the athlete maximally "sucks in" their stomach muscles and holds for 20 seconds. This crushes the transverse abdominis muscle.

15. The 50 Pound Pike Up

During this drill, the athlete holds a 50 pound med ball (get one, there are many uses) with the hands and a 10 pound med ball between the feet. The athlete begins with lying on his back with the legs straight and feet outstretched overhead. The athlete then rises into the pike position by bringing the ball in the hands to the ball held by the feet. Keep the low back flat during the process.

Enjoy these exercises and proceed with caution. You may be sore the first few times you do them. If you aren't, then stop being soft and raise the weight.



Ricardo hammering away on the Rotator Cuff with 30 pound chains during a shoulder circuit.

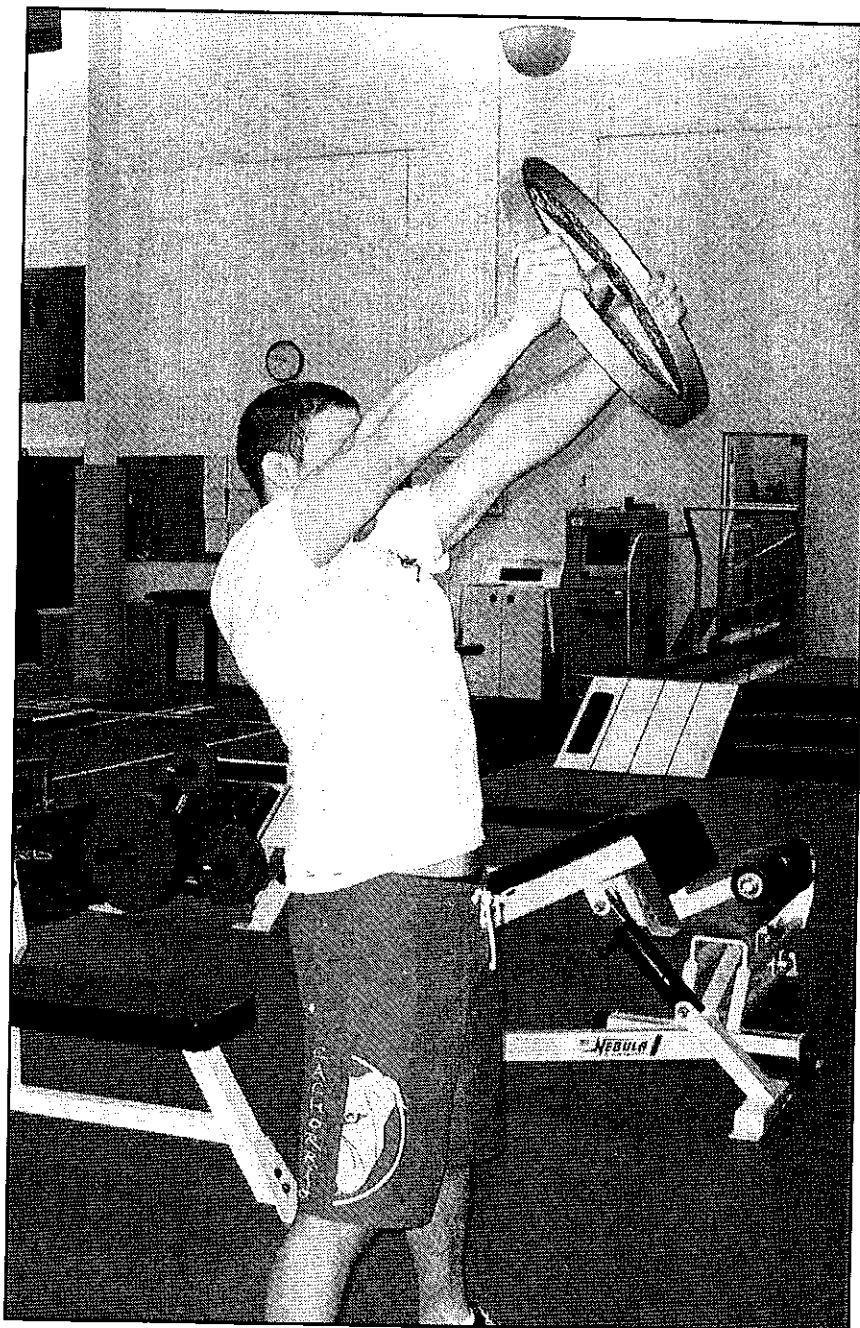


Upper Body Training For MMA

Probably the most popular region on the body to be trained by any athlete is the upper body. Although we have said that the lower body and core are critical to a fighter's success in the ring, upper body strength still is needed as well. Even though many of the successful fighters today have impressive upper body physiques, do not let that push you into overtraining the upper body. All training has its place. We just think that everyone feels this region needs more attention than it really does.

When we think about upper body work, the first thing that comes to mind is pulling strength. Most athletes I talk with when they first begin with us think of pushing strength. Pulling strength is a key component of MMA performance and injury prevention in the shoulder. This is often where many athletes are weak. Where we attack this type of strength first, is with a number of different variations of the pull up and chin up.

The Pull Up and Chin up are some of the most unpopular exercises we have ever come across. I have rarely ever seen an athlete get as pumped to do some max chin work as they are for max bench. Most of the time this is because they have worked much more on bench, and quite frankly, are just better at it. No one likes to do what they are not good at. Our advice is to learn to love the chin and pull up by performing them. The better you get at them, there are some exciting variations to experiment with. These are the best exercises for the development of most of the musculature of the upper body.



Ricardo cranks out his delts and traps with a 45 pound front plate raise.



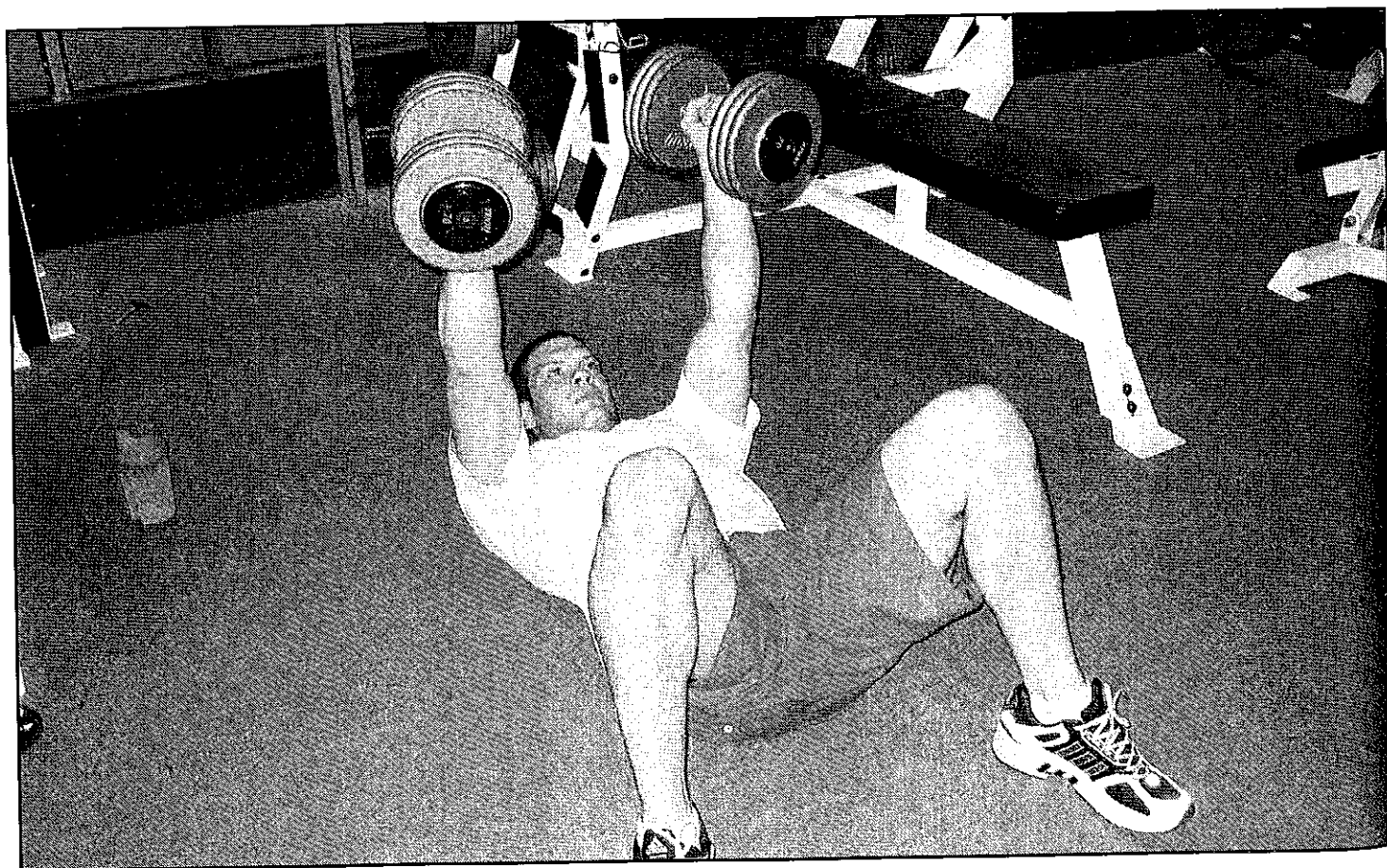
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For athletes that cannot even perform a pull up or chin up (we know who you are), you can begin with negative chin ups, or isometric holds at the top position. The negatives can start at 5-10 seconds and then work up to 30 seconds. You can do these for sets of 8-10 reps. At that point, you should be getting close to doing a full chin up or two and can work to improve from there.

After you are able to do 5 or more, you can begin to vary grips. You can do pull ups into neutral grip into chins and see how many reps of each you can get in a row. The goal would be to do three sets of 5 of each style in a row.

Once you are mastering that style you can alternate grips (one hand over, one hand under), or even grab one wrist and pull up. From here, you can try two finger chin and pull ups, or the dreaded middle finger pull ups. We like to use the Talon gripper, which can build good strength for the gi work in grappling.

Speaking of grappling, you can throw a gi over the bar and do chins and pulls from it as well as using a towel or rope. This is great for grip, and you can do isometric holds or max negatives for time (just hold as long as you can till you hit the bottom).



One of the staples for upper body strength and power is the Dumbbell Floor Press.



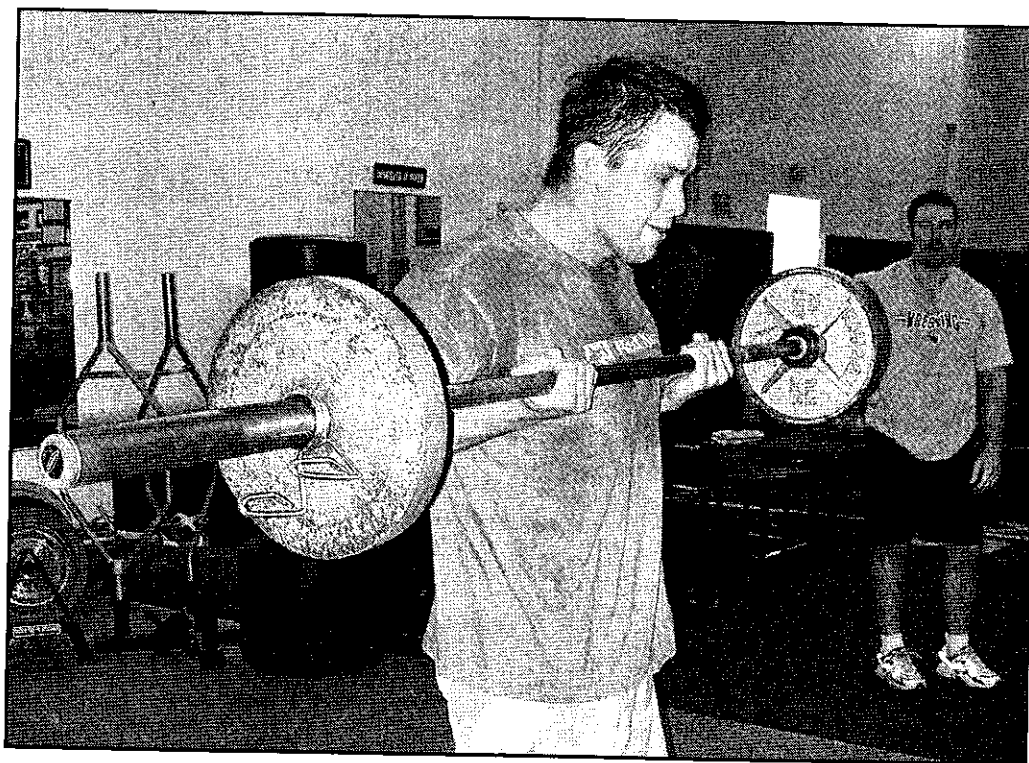
Once you are tearing it up here, no you can move to the tough stuff. Renzo showed us what we call the push/pull pull up. Here you hold your chest close to the bar and push and pull the chest back and forth while keeping the body height. These are great for wrist and forearm strength. To get even tougher, you can try releasing pull ups. Here you pull up, let go of the bar and then catch again. Added difficulty is when you clap in between the release and regrab. Do these into isometric holds to really work the area.

The ultimate test of chin prowess is the one arm chin. Just hold the bar with one hand and pull up over the bar. This makes the one arm push up seem like a push over.

In addition to the pull and chin work, we also do pushing work as well. We perform bench presses, incline bench presses and decline presses. We use bar bells and dumbbells to perform these lifts. We use bands and chains to create different tensions to increase strength in the upper body. These are only used further away from a fight and when strength development is deemed a priority in our training cycle.

Back to the back, we also perform one arm rows in the knee on chest position. Here we are working specific muscles to holding this position. We may mix in some isometric holds here as well. On an incline, we will also perform what we call dumbbell keylock lifts. Here the athlete lies face down on an incline and retracts the scapulae and then externally rotates at the shoulder with the elbows at 90 degrees. This is a killer for the upper and middle back musculature.

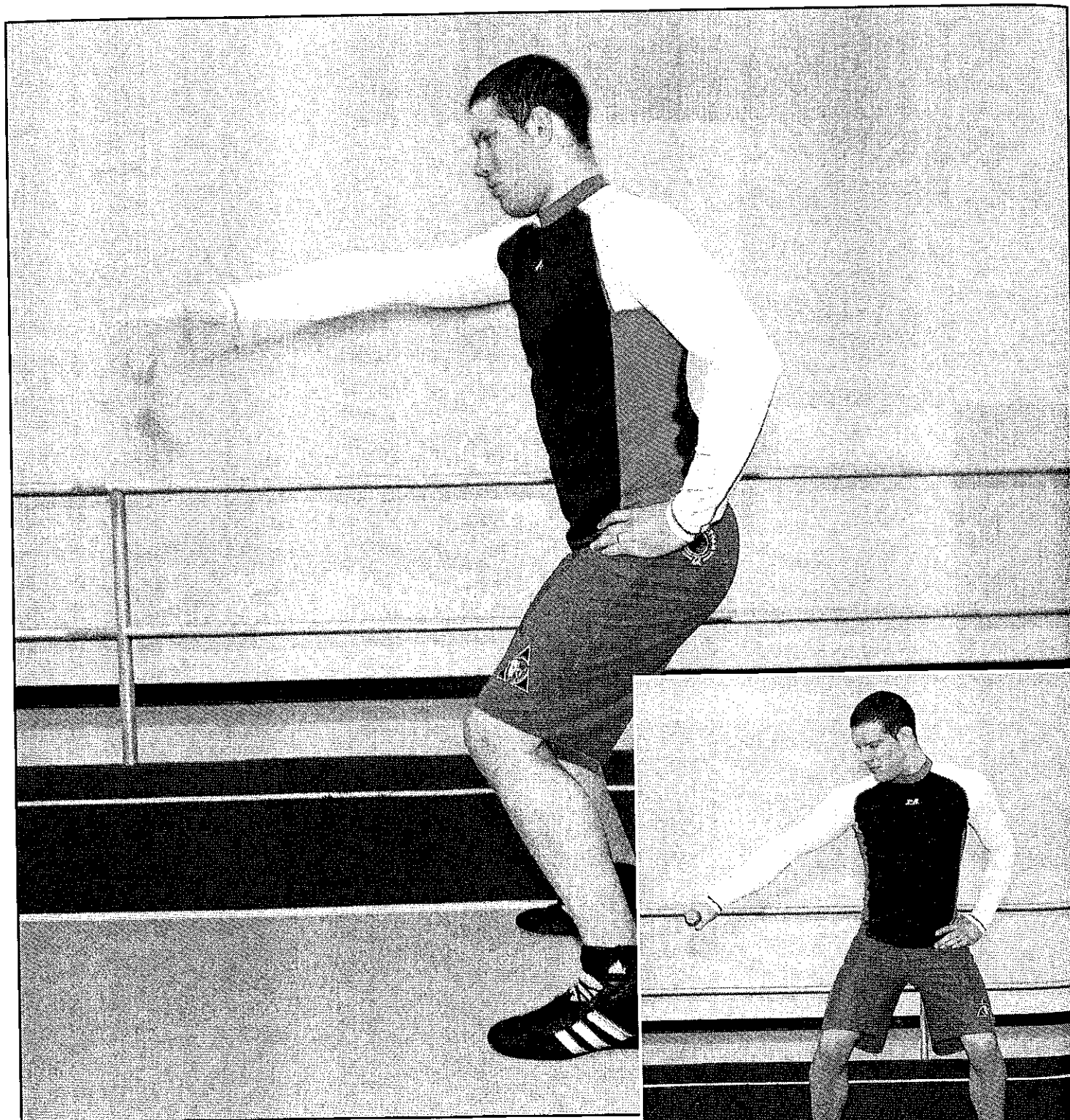
We also do front plate raises for our shoulder work and high rep chain work for lateral flies. Yes, we do some bicep and tricep work, but this is not a priority in our training.



Fabio Leopoldo impresses the group with a 12 exercise set of Bar Complex Training with 95 pounds in under one minute!



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



Ricardo works on his hand speed during a few sets of explosive drop training.

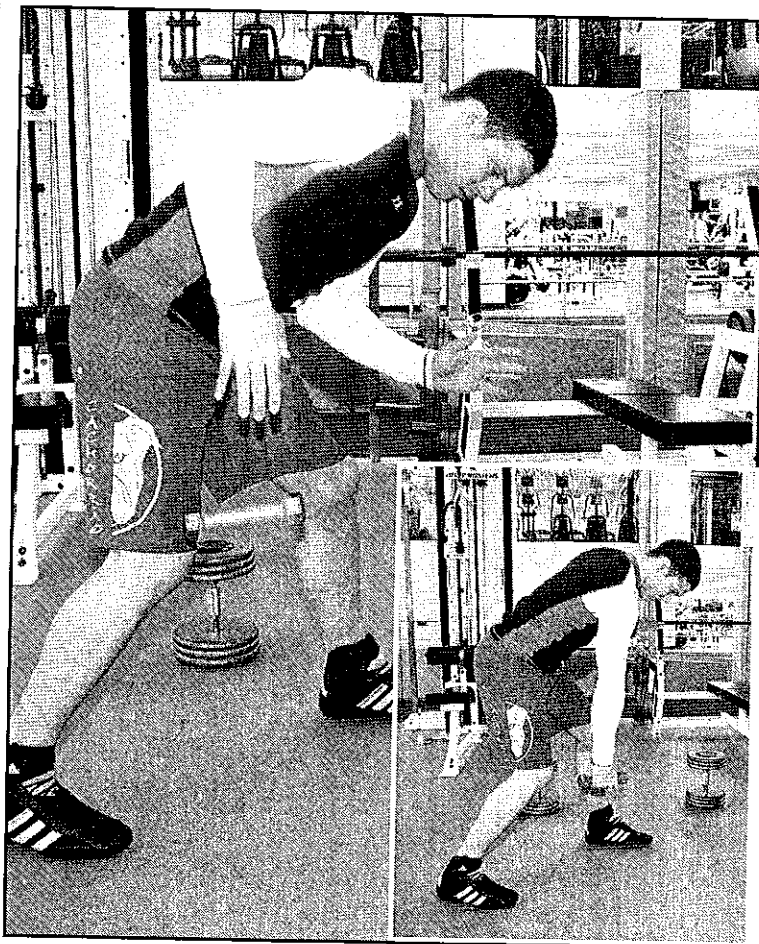
Training to Increase Punching Speed

When I put down the title for this chapter, I knew this might be an area many athletes might skip to right away. I caution you that this section of training was put here in the book for a reason. Without the proper strength, endurance, motor control and flexibility, this section is not going to produce optimal results. Make sure that you put on your shirt before you put on your tie. Do your base work, before you get to the extras.

I have heard different philosophies of training when it comes to increasing punching speed. Some coaches don't like the use of weights at all. They feel that they way to improve speed is to improve technique. Other coaches believe that maximal strength development is the key. These coaches believe that without maximal strength, you are unable to develop the tension needed to throw a fast, powerful punch. Some coaches follow an Olympic lifting format believing that this will translate into more power in your punch. Although each of these methods does have some merit, I believe that they are all incomplete. To just train punching without strength work will have limitations. To train solely for maximal strength may limit the rate of force development needed to fire that knockout blow. Olympic lifts are to general, and do not focus on the specific muscles needed in the right sequence. Each of these methods has their place in training, but there must be some work done that challenges the athlete to move as fast as possible using the exact muscles to throw the punch.

Now you may be thinking, is he going to tell me to punch using weights? Is that the secret? My answer would be a resounding, "NO". The old days of punching with weights in the hands are over. If you look at the way the muscles are used to do this, the resistance is going in the wrong direction. With weight in the hands, the weights are resisting according to gravity in the downward direction, not against the direction of the punch. Another limitation to punching with weights is that the speed of the movement is slowed down in addition to the improper recruitment of the muscles. Our answer to this old time of training is something I call Drop Training.

In Drop Training, you first get your body into the common position that you are going to be in during a fight. This may be in the knee on chest or on the knees position or feet position as if you were in someone's guard ready to drop bombs on him. From these positions we perform our Drop Training exercises. We use very light weights, so that the speed of movement is our priority. The dumbbells for these exercises may range from as low as 1 to 3 pounds. The goal here is to increase the internal tension in the



Ricardo pounding away on his favorite drop training exercise.



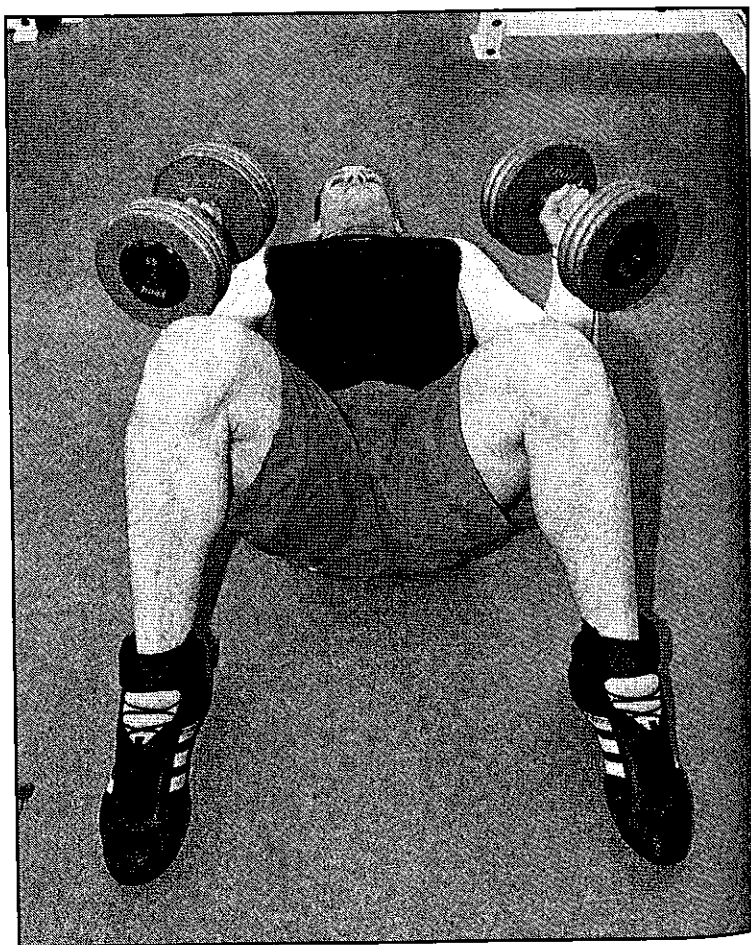
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muscle to overcome the inertia of the arm and throw a very fast punch. This training helps the athlete by improving their motor programs through reciprocal inhibition as well as improves local muscular endurance with higher repetitions. In other words, this type of training teaches the athlete how to turn on and turn off the correct muscles at the right times to be as fast as possible. Drop Training can be done from any position and with almost any muscle. We use the punching activity in the actual positions for the ring, but they can be used in other ways as well.

During the Drop Training, I also like to use other types of exercises and contractions as well. For instance, in between sets of Drop Training we may work heavy isometrics or concentric and eccentric contractions. The take home message is that the exercises do not have to be performed by themselves. They can be integrated into an entire system.

In addition to Drop Training techniques, we also do a number of other lifting exercises and techniques. There is one concept that must be remembered when thinking of training to increase speed. Regardless of the weight that is used, the intent of the lift must be to move the weight as fast as possible. Oftentimes, many of the athletes we see training are training at slow speeds although they could still move faster or increase the intent of the lift. This is a critical aspect to work. Exercises I like to develop speed and intent of movement that are particular to punching speed are the floor press with dumbbells. Here the athlete is lying on the floor with the elbows on the ground at the sides with the dumbbells in the hands. The athlete explodes up as fast as possible with the weight to the elbow extended position. From here, the athlete lowers the weight and rests for 3 seconds to remove the stretch reflex. Then the athlete explodes up again. My athletes usually do this for low repetitions (4-6). After this set, we rest 15-30 seconds and then do shadow boxing at full speed to utilize the increased motor recruitment produced by the exercise and then repeat for 3-5 total sets.

Along with the floor press and the idea of moving the weight as fast as possible, the fighters also perform speed benches to improve speed, strength and power of the upper body. These are done using the bar bell. The lift is performed as fast as possible for 3 reps. The system that I put together is that we will either work up to weights that we can do 3 reps as fast as possible in either 2 or 3 seconds depending on how close we are to the fight. What this means is that you will start with the bar and add 5 pound increments timing each set of three with the stopwatch. Each time will be your record for three reps with that weight, and



Ricardo also adds bridging into his floor presses to stimulate fight specific movements.



each workout your want to set a new record for that weight. You can graph out the results to check progress and or lack thereof. We usually use this type of training for about 4 weeks leading up to a fight. Staying in the 2 second range keeps the weight lower and the key is to move quickly with the weight instead of just solely how much weight you can move at one time. This method is great for improving speed, strength and coordination.

The one limitation that I do see for the floor press and the speed bench is that there is deceleration at the end of the movement. As with most lifts, there is a deceleration that must take place, or the weight is going to come flying out of the hand. This deceleration is an aspect of the motor program that I do not want to ingrain into your punching. I want the punch to be thrown right through the opponent, not slow down to meet him. To train this aspect, my athletes do a lot of what I call Release Training. The simplest form of this that we use is medicine ball work. By explosively overcoming the inertia of the ball and then releasing the ball, the deceleration that takes place at the end range of the movement is much less than with bar and dumbbells. There is a huge variety of exercises that I use here. One of my favorites is to perform punching and chopping exercises using a light med ball (2 pounds) and a rebounder. I have a complete series that we use here to work on hand speed and motor programs for hip and core rotation. All of the exercises are performed in proper punching form. The format is as follows: 10 right hand and then 10 left hand punch throws, then 10 overhead throws, then 10 side chops from right and 10 side chops from the left, 10 hip throws from the right and then 10 hip throws from the left, ending with 10 punch throws again from each side. These are performed for speed and really get the heart rate up a bit and improve fluidity of movement and hand-eye coordination.

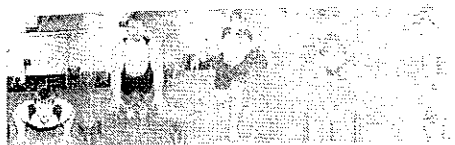
My athletes also do a wide variety of standing, lying and sitting partner throws. We do chest passes, overhead passes, overhead pounds into the ground, sitting side rotation throws, standing twist and crossing throws, Russian twists, and distance forward and backward throws through the legs. All of these can be done separate or together to create a great workout. As I stated in the endurance section, I like to perform many of these in between sets of treadmill or tire work as active recovery.

In addition to the lighter med ball activities, we also do heavy throwing work as well. We use med balls and sandbags varying anywhere from 25-175 pounds. We will do pick ups and throws for distance, slams, and pick ups and twisting throws with these implements. These are performed to develop strength, endurance and techniques for punches, takedowns and throws.

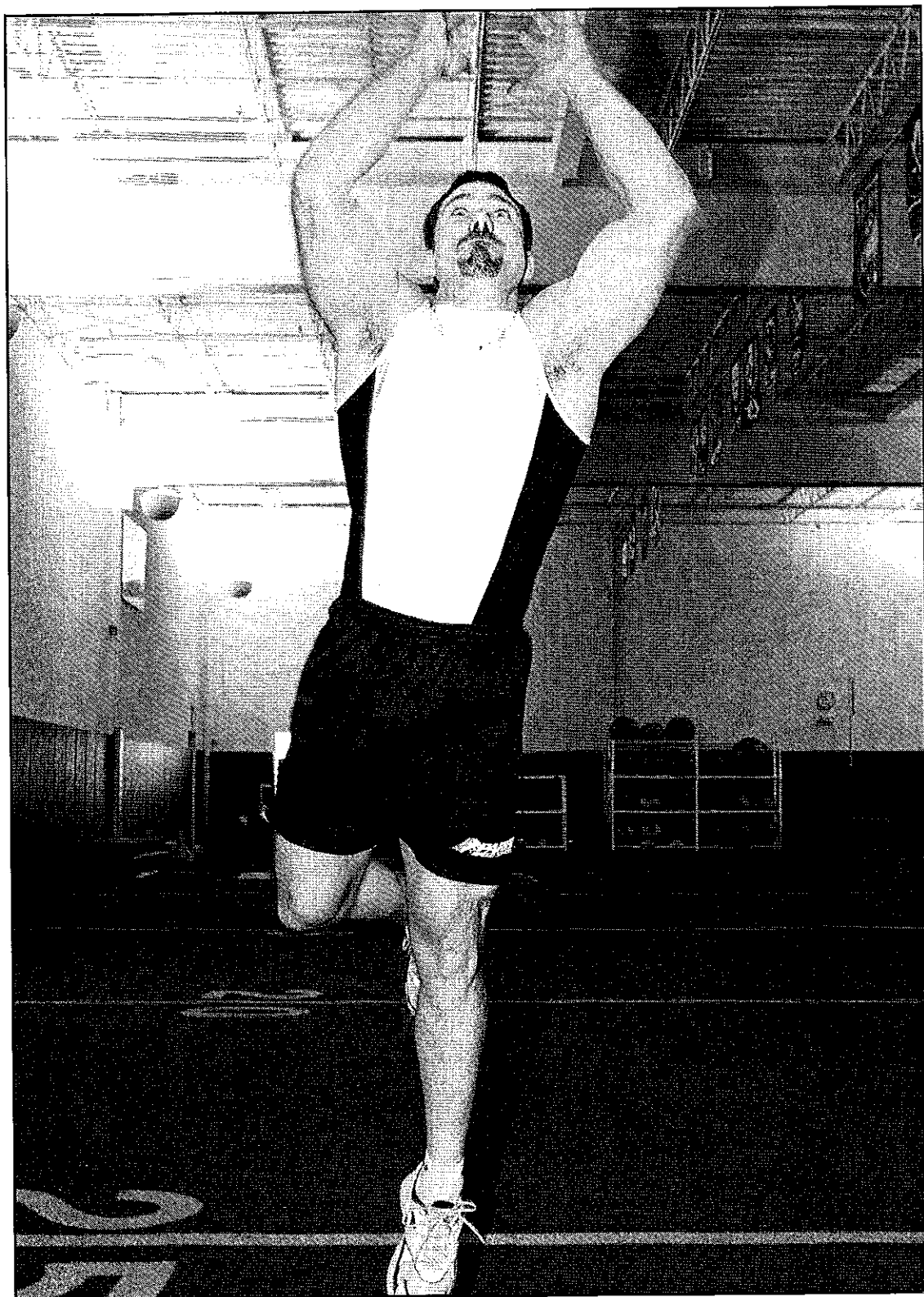
Finally, I need to state that there must be a balance between the anterior and posterior muscles of the shoulder to maximize punching performance and decrease the chance of injury. As I have said in this book, balance and symmetry are keys in training. One must also remember the importance of the legs and core as muscles for punching speed and power as well since this chapter may be misleading with all of its discussion of the upper body. The rotator cuff are the decelerating muscles of the shoulder that need to be developed to reduce the risk of injury during punching. It is common to see boxers and punchers develop injuries in this region of the shoulder that can lead to long term problems.

The bench press exercises and chin up and pull up routines are great for the development of the rotator cuff, as is the bear crawl progressions and the incline lying dumbbells cleans described in the upper body section. Make sure that these are lifts that are still performed to make sure that the muscles of the shoulder are strong and balanced.

As stated earlier in this section, there is a good bit of base training that must take place before an athlete every reaches the level to begin these advanced exercises. Although some medicine ball work and drop training can be done by a beginner, the complete use of these exercises should be done when the athlete has attained a high level of strength and endurance.



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Martin working hard to stick the landing from a max height Single Leg Crow Hop.

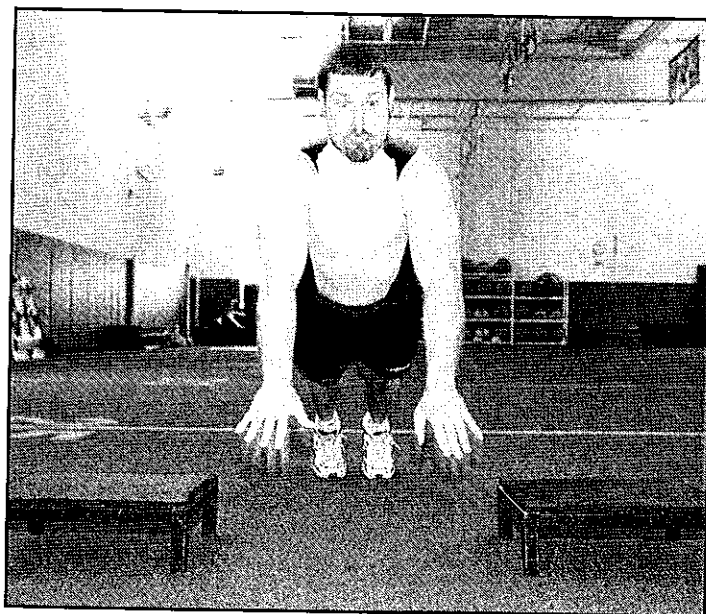
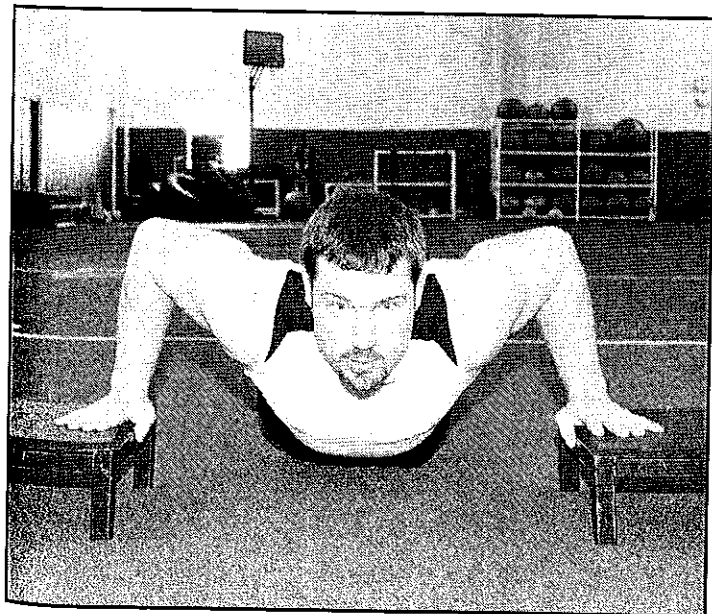


Deceleration/Eccentric Training for MMA

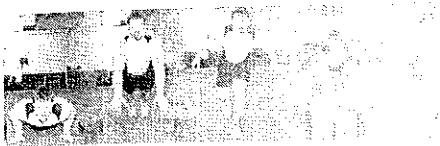
A less known aspect of training that we introduced to our training a few years ago was deceleration training. At first, this form of training was viewed as novel to us and misunderstood. This led to a slow adaptation of the concept into our training program. Over time, we began to recognize the importance of and power behind this method of training for MMA. The purpose of this chapter is to examine the importance of deceleration training, demonstrate how and why it should be used, and why it is so important for MMA. This aspect of the program is going to become mainstream in all training systems someday. To understand this first and apply it will continue to give you the edge at the current time.

If there is one thing we know, every fighter would like to have improved agility, faster sprawls and lightning takedowns. But ask yourself, "How would I train myself to improve this speed?" Would you work on running or takedowns in the linear direction? Would you work on lateral change of direction and reaction time drills? Would you hit a bunch of the Olympic lifts to hopefully improve your power? Most of the time, most trainers and fighters will state one or all of the above. The interesting thing that is often left out by trainers is that speed training is also improving an athlete's stopping speed. If an athlete does not stop correctly or quickly in any direction, or cannot control forces being applied to their bodies, performance in the ring or on the mat will be limited and chance for injury increased. What a great paradox: Stop faster and you will demonstrate greater speed of movement in the ring!

All muscles function in three ways. Concentrically, they function to create acceleration. Isometrically, they function to create stability. And let us not forget, eccentrically, the function to create deceleration. This deceleration can be better explained by stating that eccentric contractions are used in force reduction. An athlete cannot shoot, jump, punch, kick, or stop an attack without using all three types of



Our Plyo Pushup Series is seen as a must to develop strength and prevent injury.



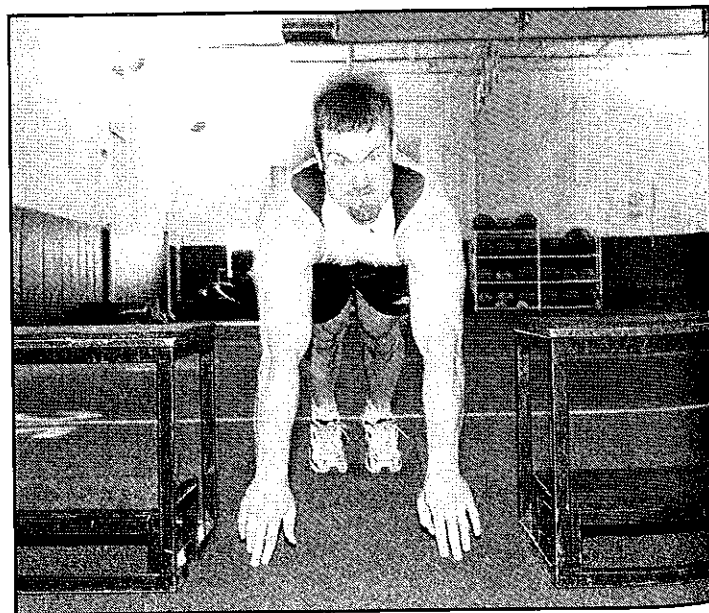
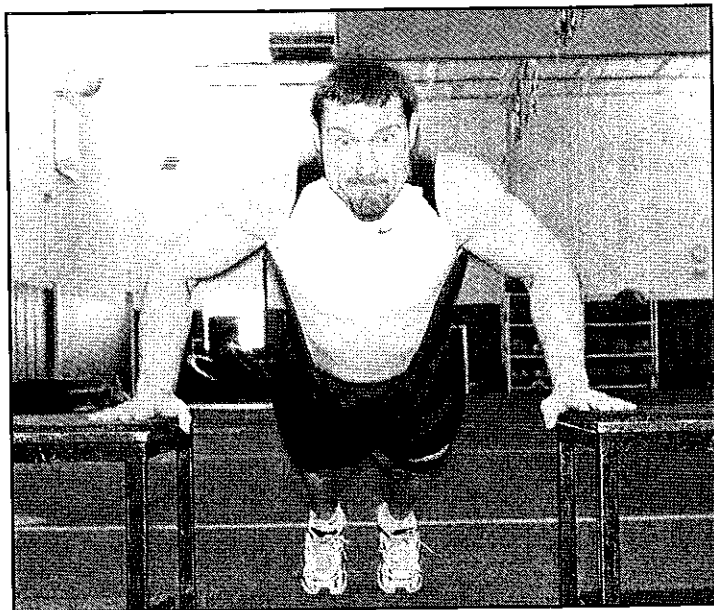
TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

contractions. We must, therefore, not neglect any of these in our training. Right now, however, most programs we see are heavily weighted toward the concentric, or force production capacity. Today's athlete is focused much more on starts than finishes. (Another interesting paradox when you look at the fight game). Athletes are focused more on what weight they can lift, than how well it is lowered. For this change to take place, there just has to be slightly more attention to detail. Simply put, the demands in your training need to replicate what you will do in MMA. Deceleration (force reduction) and eccentric control are a huge aspect of MMA and need to be addressed correctly in your program.

Two aspects of this training that have to become mainstream in your program right now are the deceleration and landing position. These two positions, when used correctly, are powerful agents to improve performance and decrease chance of injury.

The Deceleration Position can be described as the stopping position we get into when we stop for sprints, and movement skills. You are going to have to chase an opponent across the mat or ring at some time. The ability to correctly stop and change direction are directly related to how well your nervous and muscular system will allow you to do that. In this position, we keep the knees bent and the shoulders over the knees and ankles. When stopping quickly in this position, the body is in a balanced position for quick attack or retreat (sprawls). Being too high, or in the wrong position can result in disaster.

The Landing Position is another interesting examination of motor skill. Most athletes land incorrectly from jumps. They will tend to land too stiff with the joints of the body in the wrong positions to correctly absorb force. We use the landing position with both the feet shoulder width apart, in the wrestling stance, and also landing in the lunge position. By training your body to quickly absorb force in these positions, your body is much more prepared for MMA action.



Martin shows how to increase the height (and intensity) of the Plyo Pushup exercise.



Both of these techniques work the eccentric component of movement. By doing this, every one of our athletes improves their neuromuscular control and improves the structural integrity of their connective tissue (muscles, tendons, ligaments). This is easily seen to decrease the chance of injury during training. These techniques need to be utilized every session and performed flawlessly. Our Deceleration Video is an excellent tool to see all of the exercises described in this chapter. It can be found at parischool.com in the store section.

The ways we use these drills are:

1. Scissor Jumps

The athlete begins in the standing lunge position with the back knee close to the ground and the arms at 90 degrees. The athlete jumps in the air from this position and switches the feet and arms in the air. The landing should be kept as soft as possible, and when the athlete absorbs the force, the jump and switch is repeated.

2. Pogo jumps into Lunge landings

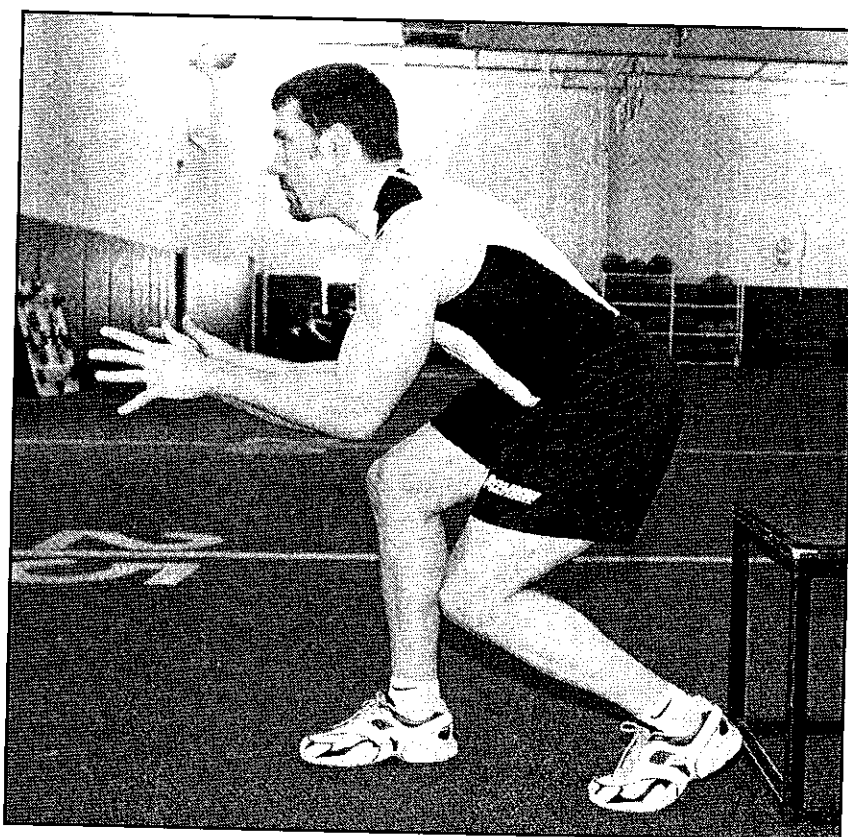
The athlete begins with the pogo jumps as described earlier in the book. As the athlete finishes the set, he jumps in the air and lands in the lunge position as described above in #1.

3. Push lunges to all sides

This is one of my favorite MMA exercises. The athlete begins standing facing forward with the pushing partner facing the athlete. The pusher stands on the athlete's right foot with his right foot to stabilize it. When the athlete lifts his left foot from the ground, the pusher throws the athlete to his left side. It is the job of the athlete to land and stop the fall in a good athletic position. I like to make sure the athlete is stabilizing and making a solid quick stop. This can be repeated to the other side as well as to the front and back lunge positions.

4. Altitude Landings in all positions

These are another powerful set of exercises. The athlete begins on a box. Begin with low heights at first and progress to higher. The athlete steps (not jumps) off



Martin sticks the position during an Altitude Landing Drill.



the box and lands in either the landing, wrestling stance, or lunge position. The goal is to stick the landing quickly and effectively. Remember that this style of eccentric training is tough on the muscles at first. Begin with only a few reps during the first few sessions.

5. Sprints into decelerations

This is not a specific drill as much as it is directions for all of your sprint work. Every sprint should be followed with a very technical deceleration. The athlete should lower his center of gravity and decelerated in a controlled motion with the foot contacts remaining as soft as possible.

6. Broad jumps to the front and the side

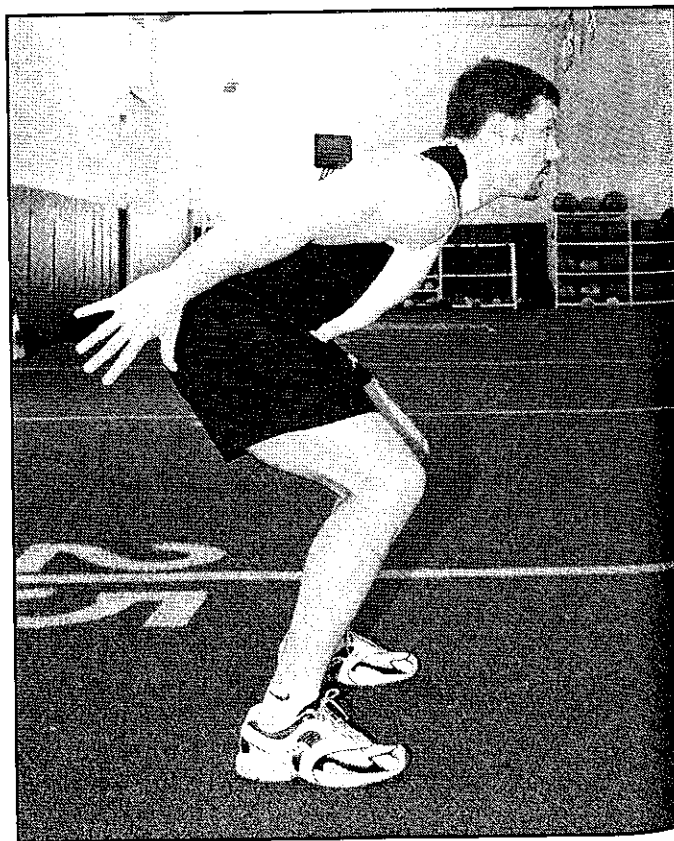
These are great drills to work on deceleration ability. The athlete performs either a maximum broad jump to the front or the side. The goal is not jump the distance covered, but also the quality of the landing as well.

7. Crow hops

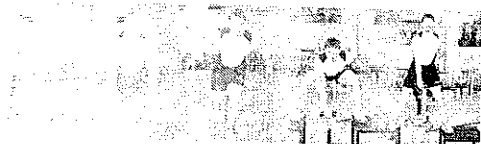
This is one of the most challenging exercises. The athlete begins standing on one foot and lowers himself into the quarter squat position. The athlete then jumps as high as possible in the air off of that one foot and lands again only on that foot back into the quarter squat position. The athlete should then hold the position for a second and then jump again.

The techniques above can be seen to use eccentric contractions to stabilize a movement. This is powerful in stopping, landing and injury prevention, but advanced eccentric training can also help to improve concentric contractions and overall power output. Science has shown that the better an athlete is able to use eccentric contractions as pre movements, more kinetic energy is produced in the subsequent concentric contraction. Think about it, the better an athlete is at using a powerful eccentric contraction before a vertical jump, the more kinetic energy is going to be generated into the concentric phase of the jump. The same goes for punching, kicking and shooting here too. Any fan of MMA that has ever seen an athlete buckle at the knee, hip and low back during a fight or grappling match is seeing a lack in eccentric strength.

Both of the above examples should start to stimulate a fighter to think that not only are eccentrics critical to our training, but they are something that can be improved upon. The easiest step to begin working on this area is to address the eccentric component during your strength sessions. Think about it, if an athlete does not pay attention to the eccentric component of a lift, there is often little eccentric training in that session



Martin blasts out another set of 5 Broad Jumps.



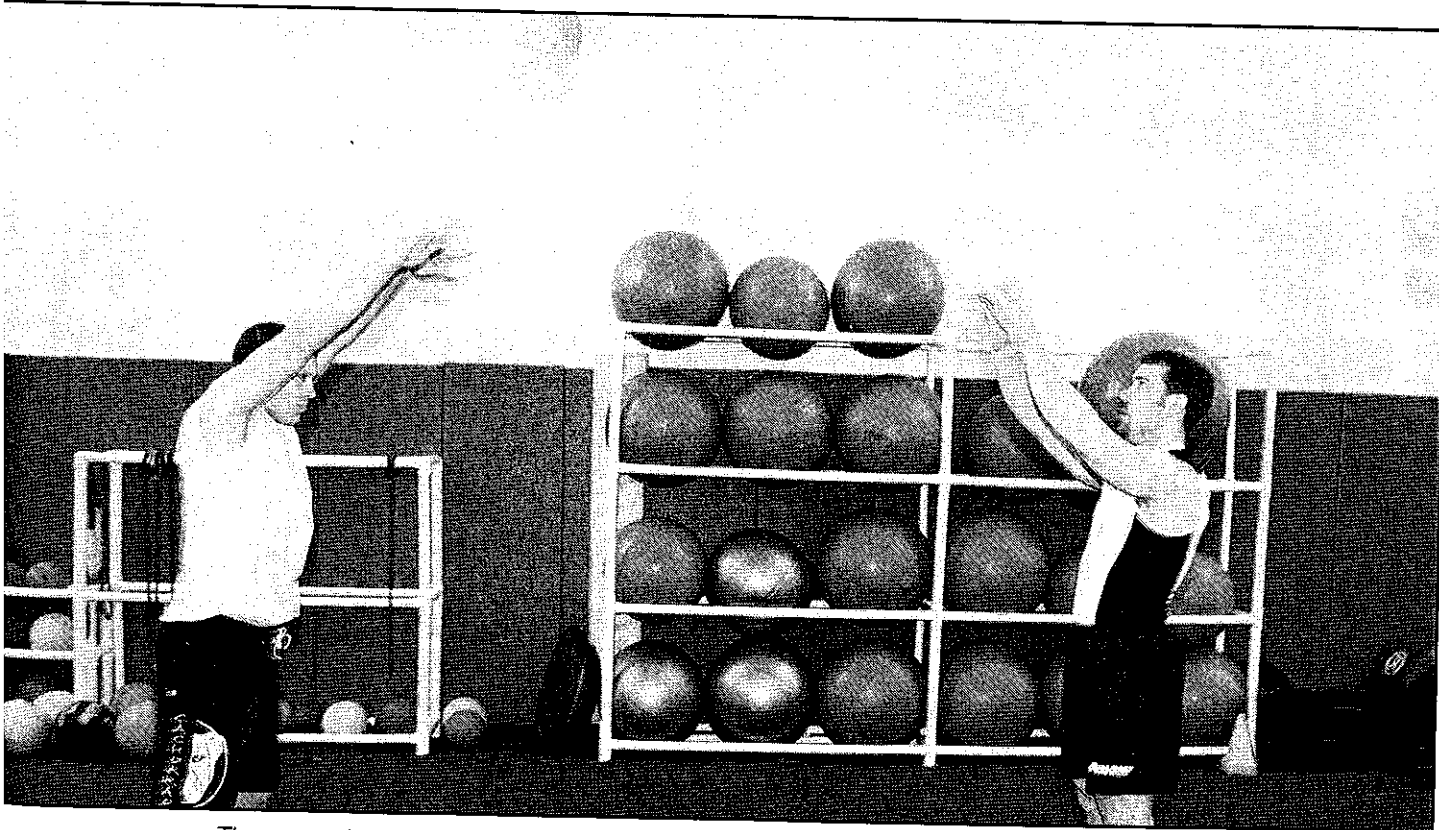
when compared to concentric. We must monitor this component and make sure it is being properly worked. A good rule of thumb would be to set the tempo on the eccentric phase at 1-3 seconds depending on the level of the athlete. The best exercise when you look at it from an eccentric standpoint is the lunge walk. Interestingly, this is an exercise which many athletes demonstrate more motor and structural deficiencies. This is due to the inability for an athlete to avoid the powerful eccentric component. If athletes don't develop the ability to perform well eccentrically, change of injury is increased.

Another favorite type of deceleration training we perform is with the use of medicine balls. To use the medicine ball correctly, all three forms of muscular contractions (concentric, isometric, eccentric) must be utilized. By catching a weighted ball quickly, reversing its motion and firing it back out, the fighter's body is also getting an impact stimulus through the body with that quick force reduction. As any fighter knows, the ability to absorb force in a fight is just as critical as the ability to deliver force.

Our favorite Deceleration Med Ball Exercises are:

1. Front throws

The athletes begin facing each other with the arms outstretched. Athlete A throws the ball to Athlete B using a chest press. Athlete B absorbs the force of the ball and instantly fires the ball back.



The team burns out the shoulders with a set of 50 overhead med ball throws.



2. Overhead throws

The athletes begin facing each other with hands overhead. Athlete A throws the ball to Athlete B using a pullover motion. Athlete B absorbs the force of the ball, stretches completely behind the head and throws the ball back, keeping the hands overhead until the ball returns. This burns the rotator cuff.

3. Side Cross throws

The athletes face each other in the athletic position. Athlete A throws the ball as if he were throwing water from a bucket. He throws the ball from his left side to Athlete B's left side. Athlete B then catches the ball, twists at the core and returns the ball. The key here is to twist at the waist and shoulders but not at the hips and feet.

4. Same side throws

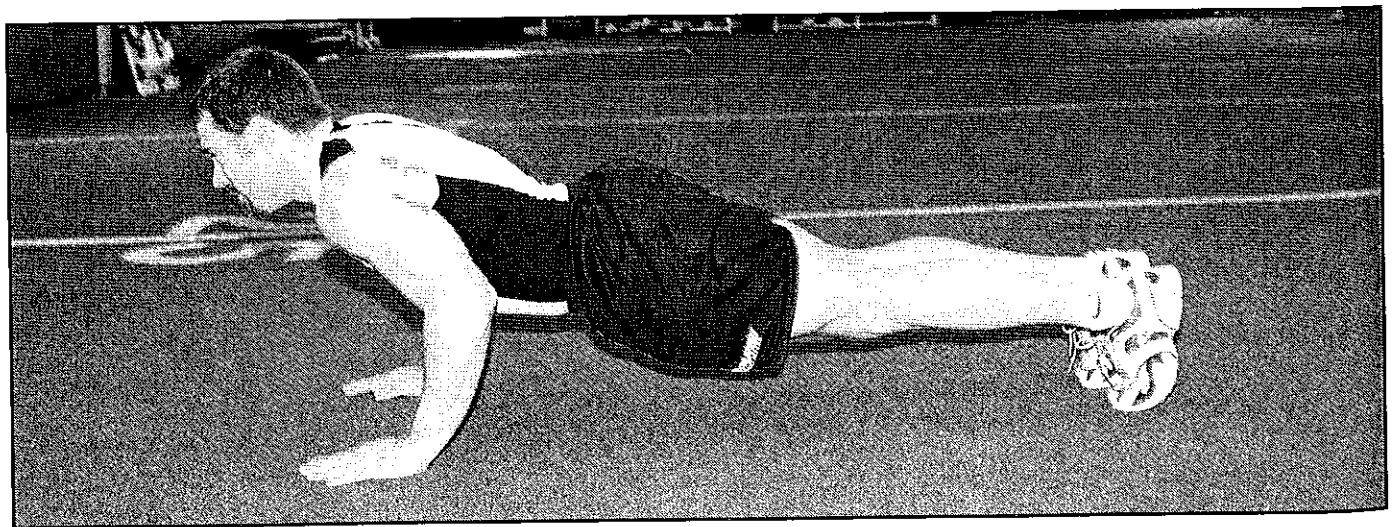
This is the same start position as #3, but the athletes now throw to opposite sides. So, if Athlete A is throwing from his left side, he throws the ball to Athlete B's right side. The twist and the rules behind it are still the same.

5. Seated twisting throws

This is one of my favorite med ball exercises to isolate the torso. Athlete A sits on the floor with is side to Athlete B. Athlete B throws the ball to A and A catches it, twists completely to the side and then returns and throws the ball back to B. Repeat for the number of reps prescribed and switch sides.

6. Abdominal impact catches

This is best performed with a soft leather med ball. I don't recommend this with a hard rubber ball. This time, the athletes repeat the exercise in #1, but instead of catching the ball with the arms, the ball is trapped against the chest. The goal of each athlete is to throw the ball as hard as possible. This will develop both power and the ability to absorb force.



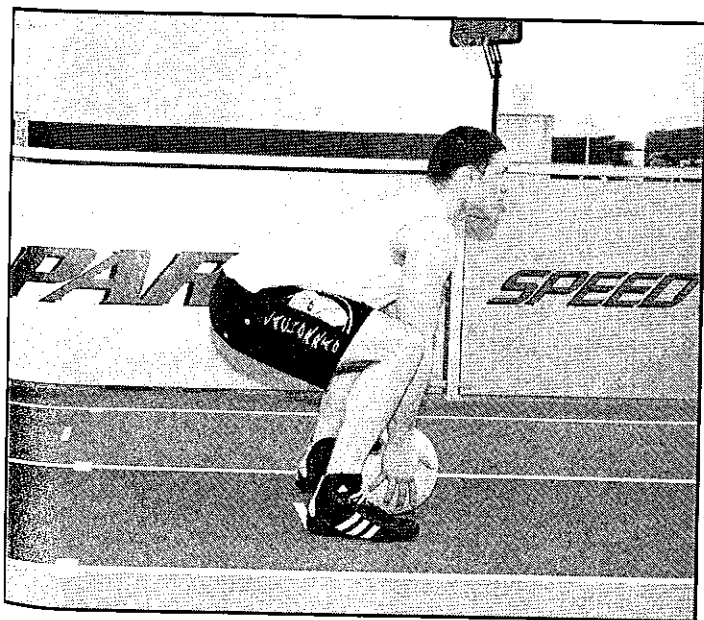
Martin shocks the upper body by falling from the standing position onto outstretched arms to a stop.



7. Group Speed Circle throws

This is a favorite of the team. The athletes all begin in a circle and depending on the number of athletes, there will also be 2-3 balls used. The athletes begin with one style of throws and keep the ball moving with that throw style in either the clockwise or counterclockwise direction. The athletes should perform all throws and at maximal speed. Having different weighted med balls here is also fun. Then, as a finisher, we always use one ball and do random maximal throws in the circle. Here you have to stay alert and ready for a fast ball pass.

Once your eccentric strength is improving, Plyometric activities are another way to improve your overall power output. The key to these exercises is to reduce the time of the eccentric and amortization phase before the concentric contraction. If this can be done, speed and power of movement will both be increased. Before certain plyos are used, however, the athlete must first demonstrate adequate eccentric strength to perform. This can be worked on with deceleration, landing, and lifting techniques. Once the athlete's nervous system begins to adapt to the training, jumps following eccentric landings can be added. Studies show that there is up to a 2 second window for potential energy to be stored and released as kinetic energy following an eccentric contraction. This tells us athletes can first delay the ground contact slightly and then shorten it to 1 second or less as they improve. To further add stress to the eccentric contraction, the athlete can land first from a higher surface (altitude landing) and then jump concentrically (depth jump). This can be shown to greatly increase the force of the concentric contraction due to neural improvements and structural integrity adaptations. Before an athlete is ready to do depth jumping, first have them to landings from the height you are going to use for a week or two. If you ever see anyone doing "box jumps", and they are allowing the athlete to jump on the box but just step back down, they are missing half of the exercise. The athlete should also finish with the eccentric landing as well. The best way to perform these landings would also be in the joint positions you would like to fight from i.e. you boxing or wrestling stance. This will better prep their muscular and nervous system for the rigors of their sport.



Ricardo demonstrates his suplex power with a 50 pound med ball backward throw.

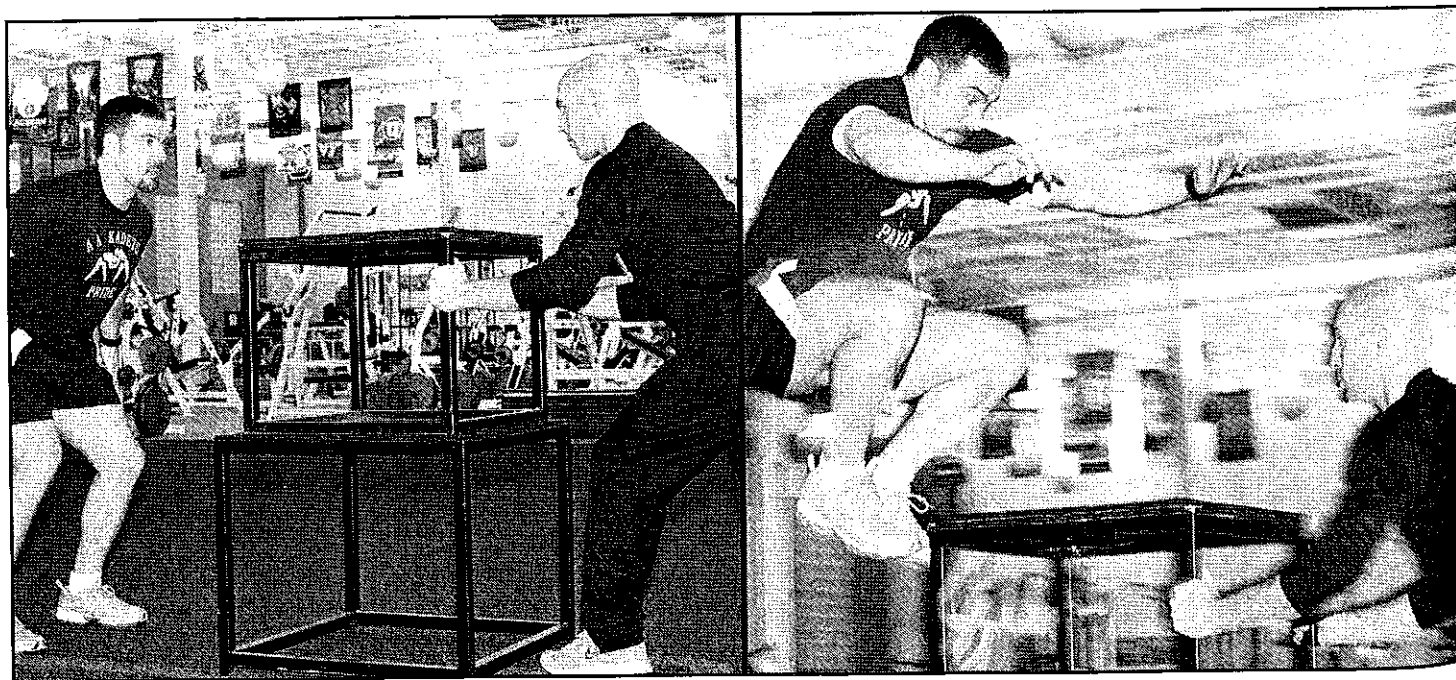


So What Exactly is Plyometric Training for MMA?

One of the goals of my training system is to stimulate the athlete to use a greater force in a shorter period of time while shooting in, jumping, punching or kicking. One of the training techniques used to achieve this is plyometrics. Even though most athletes today are familiar with the term plyometrics, few really understand how this training technique enhances performance. Plyometrics began being used in the late 1960s by Russian track and field athletes. Until the 1980s, plyometrics were strictly used by the track and field athlete. After this period of time, other sports began to apply plyometrics to their training as well. Simply stated, plyometrics involve maximal muscle contractions at the highest velocity possible. By using this type of training properly, physical performance can be improved.

Research tells us that elite athletes spend less time during ground contact, yet they impart the same amount or more power into the ground than less skilled athletes. The true purpose of plyometric training is to decrease the ground contact time of an athlete while sprinting, jumping, or kicking. Ground contact time can simply be seen as the phase of time that elapses while the eccentric contraction (stretch) of a muscle group is reversed and the concentric contraction (contract) of that group begins. So if you look at a long jumper, this phase would be seen as the time it takes when his plant foot hits the ground until he pushes off and leaves the ground for the jump. If he can make that phase happen faster and more powerfully, he will jump farther. This phase of movement is where all plyometric activities are focused. Once believed to be genetic in nature, research is indicating that this period of time can be reduced. By reducing this phase, we are increasing the speed and power of movement. This translates directly into higher velocities for sprinting, jumping, punching and kicking.

Plyometrics can be seen to be related to Newton's third law of physics that "to every action there is an equal and opposite reaction". As the athlete's body is directed into the ground, the forces are used by the muscles to propel themselves for running and jumping. This does depend on the muscle and tendon's capacity to store this force as elastic energy and then transmit that force back into the resultant muscular contraction. When a muscle is stretched, the elastic components are lengthened and when this stored elastic energy is recovered by the muscle the resultant concentric contraction is enhanced.



Martin and Harrison Bernstein work on a set of (5) 50 inch Box Jumps.



The faster the velocity of the stretch is applied, the more ability the muscle has to develop force. Specifically, plyometrics target the muscles fast twitch fibers. These fibers are in charge of speed and higher power production. Since most sports focus around the need for explosive movements, these are the type of fibers you want to be training.

Before ever starting a plyometric program, you must assess your previous training experience, age, physical maturity and conditioning, flexibility and strength. The more experienced an athlete is with training, the younger he can begin plyometrics and the more intense the exercises can be. Prepubescent athletes should not perform high shock activities, but low intensity plyometrics should be fine. Full range of motion is a prerequisite for performing plyometrics. Athletes must also have a good strength base before performing plyometrics. The athlete should maintain a strength program for a few months before beginning plyometrics. During these strength activities the trainer should pay particular attention to using functional strength activities which use the core musculature which will be addressed during the plyometric activity.

Before a plyometric training workout, the athlete should first warm up with a dynamic warmup procedure. This should involve at least 15 minutes of calisthenics and light skipping and sprinting motions. This warmup will enhance the muscle's ability to perform the plyometrics and decrease the chances of injury. The programs should always involve variety to decrease plateauing during training. These exercises will include many different varieties of jumps and explosive movements. Recovery between workouts is accepted to be 48 to 72 hours which would dictate about 2 plyometric workouts per week. The volume is regarded by the number of foot contacts performed per session. The intensity and volume of the exercises should have an inverse relationship during your training programs. This means that if the stress of the exercise is very high, the number of repetitions should be kept low. Try This at the Gym

This is a great example of a beginner plyometric workout that is sure to make you more explosive. Jump for fifteen seconds with as short and fast jumps as you can staying in one place. Keep your body straight and pull your toes up after every short jump. Let your arms help in quickly pumping yourself up and down. Count the number of contacts you can make in fifteen seconds and try to beat it for 6 sets. Rest 30 seconds in between each set. Try it before your workouts 3 times per week and see if you can increase the contact number over a few weeks. If you do, you have made yourself more powerful using plyometrics!

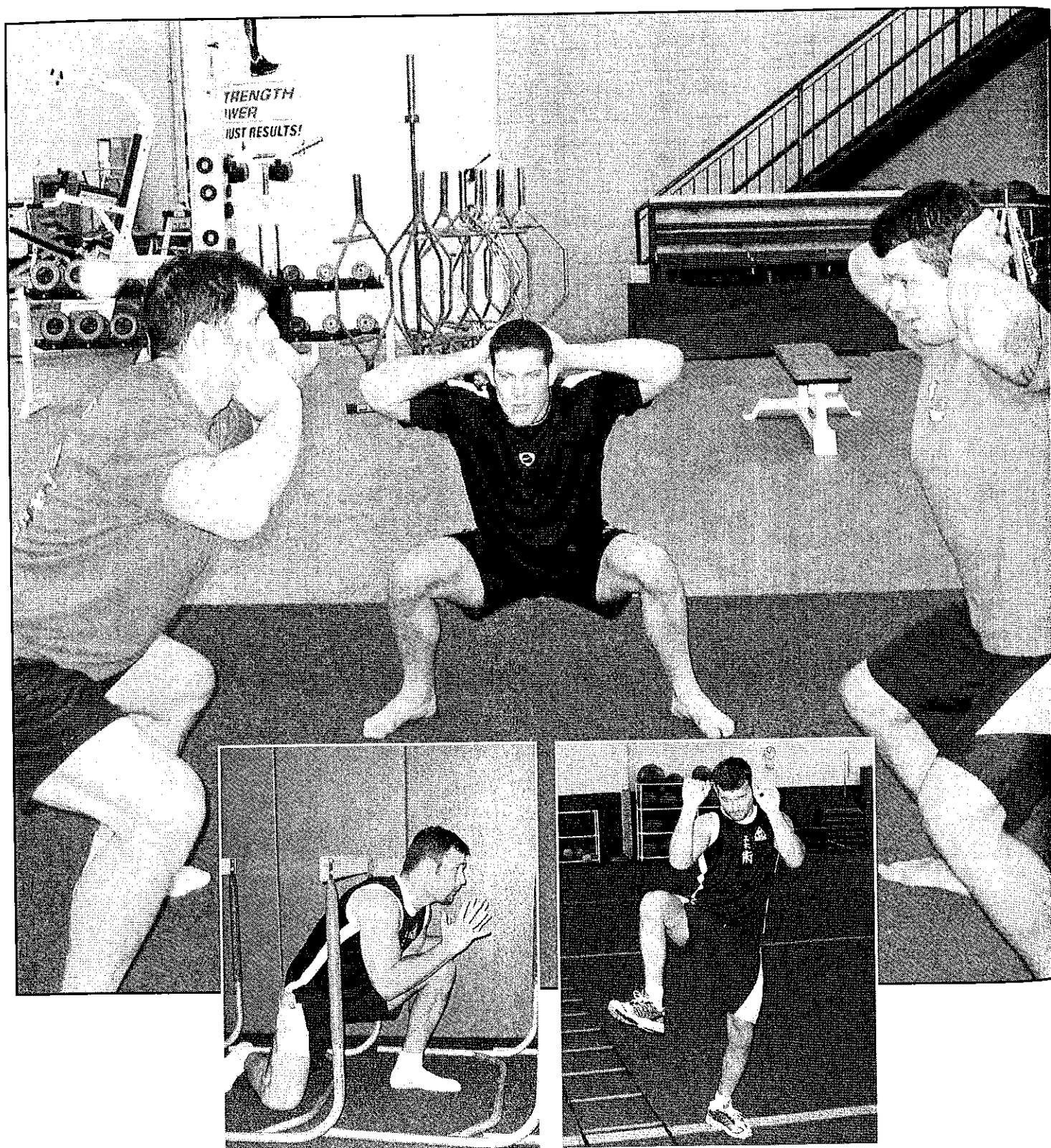
The most advanced way we use eccentrics in our training at this time would involve fast eccentric movements with weights and also the use of Jump Stretch bands. The fast eccentric increases the possible kinetic energy for the concentric contraction following it, and the bands actually increase the eccentric tension further by pulling the bar down even faster with gravity. A great resource to see how these are properly used is the elitefitnesssystems.com website.

We use the bands during:

1. Bench Press
2. Squats
3. Deadlifts
4. Tricep Pushdowns
5. Punch Twists

Eccentrics are all around us. They are essential to be successful in MMA. Our Training System is always evolving. This is one piece of the next evolutionary step. The Eccentric sets up the concentric. If it cannot do this, performance is going to suffer and injury is going to happen.

TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN



The team shows off some of the familiar movements of our training sessions.



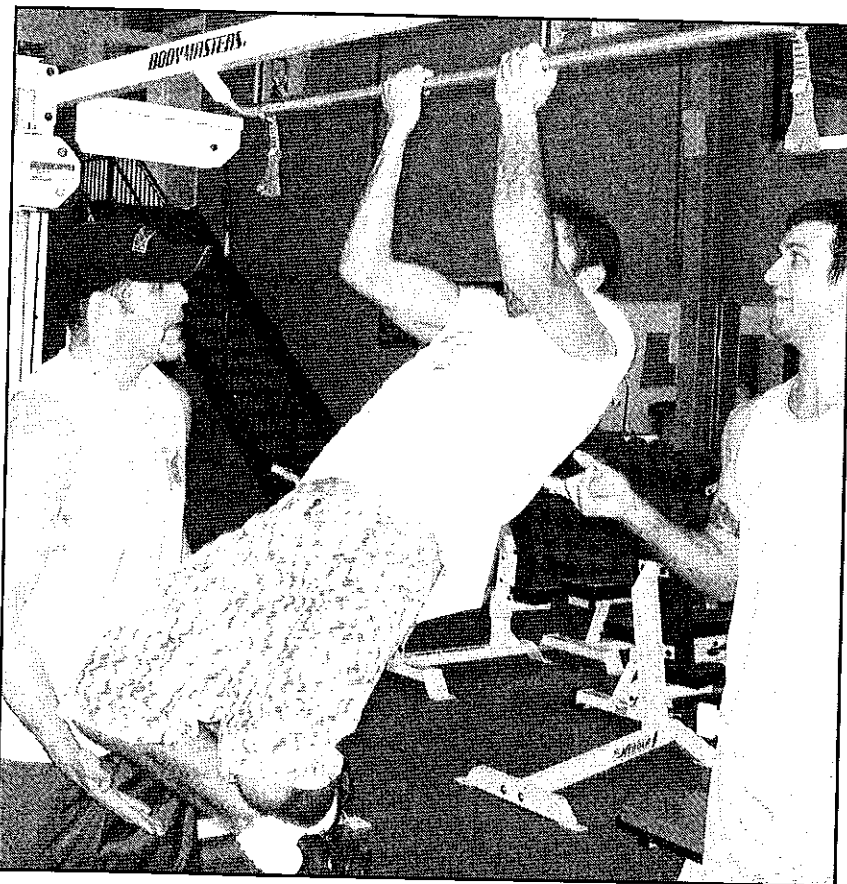
Sample Workouts

I. Beginner's Body Weight Circuit

This circuit is designed to prepare the athlete for the training that is to come. We believe that there is a certain level of fitness that you must possess before you even need to work with weights. This level of fitness is also necessary to participate in your MMA training. This workout is great for athletes that need to develop body weight strength as well as for advanced athletes that are looking for a new challenge in their training. Your ability to move and control your own body mass is critical in MMA. Only working with barbells and dumbbells and or machines is not going to completely develop the strength needed to be a MMA fighter.

This circuit will be repeated through 1-3 times depending on the level of the athlete. The goal is to be able to eventually perform 3 full circuits in as little time as possible. So not only do you count reps and sets, you are also trying to improve your time each workout. This workout should be performed 2 times per week in addition to your MMA training. If you cannot do the number of reps listed, record your maximum number and try to improve each week. If you are unable to do any pull ups, chin ups, or dips, you can replace them with 10 second negatives. This is performed by starting at the top and slowly lowering your body for the full 10 seconds and repeat 3-5 times each set. Until you are able to perform the number of repetitions listed, it is not time to move on to weights. We believe you must first be able to control your own body weight first before you think of adding external resistance.

1. Body Squats X 30
2. Push Ups X 20
3. Chin Ups X 10
4. Lunge Walks 20 yards X 2
5. Crunches X 20
6. Supermans X 20
7. Sitting Russian Twists X 20
8. Dips X 10
9. Pull Ups X 10



II. Leg Training

A. Beginner's Leg Workout

As stated in the text, legs are a critical aspect of the MMA fighter's training. Since the leg muscles are large, they are going to take more time to heal. One strength training session per week will be fine for the legs.

Gene and Rolles Gracie willing "Gordinho" Correa to another gut wrenching rep.



With all of the other training (boxing, wrestling, grappling etc.) the legs are getting continued work there as well.

With all of the sets and reps listed, these numbers do not include warmup up sets. The numbers listed describe the maximum weight you can perform for that number of reps. The goal is to increase the max number you can do for reps over the 3-4 workouts you perform the lifts. If the exercise calls for the addition of weight to you body mass, (i.e. dips, chins, pull ups, glute ham raise, etc.) add the maximum amount of weight possible to complete the reps listed.

Begin all lifting sessions with the Dynamic Warmup for 20-25 min.

1. Trap Bar Deadlift 4X8
2. Box Step Up 3X 6 each leg with a 2 second eccentric
3. Single leg hamstring curl 3 X 5 with a 5-0-1 tempo
4. Standing Calf Raise 3 X 12 reps

B. Intermediate Leg Workout

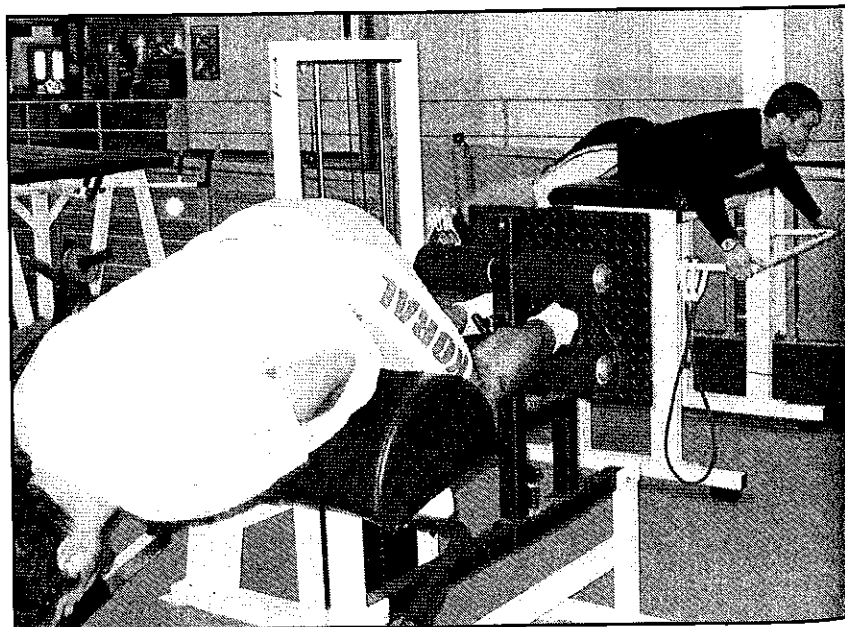
Begin with the Dynamic Warmup for 20-25 min.

1. Box Squat 5 X 6 Reps
2. Lateral Box Step Up 3 X 6 with a 2 second eccentric
3. Forward Sled Pull 3 X 20 yards
4. Backward Sled Pull 3 X 20 yards
5. Sideways Sled Pull 3 X 20 yards

C. Advanced Leg Workout

Begin with the Dynamic Warmup for 20-25 min.

1. Standing Zercher Pick ups 5 X 5
2. Barbell Lunge Walks 3 X 12 steps
3. Squat and Sidestep Crossovers 3 X 8 squats and crossover steps
4. Glute Ham Raise 3 X 6
5. Standing Calf Raise 3 X 5,5,5 (toes straight, toes in, toes out)



Ricardo and Gordhino whacking the posterior chain during a leg training session.



III. Core Training

A. Beginner's Core Workout

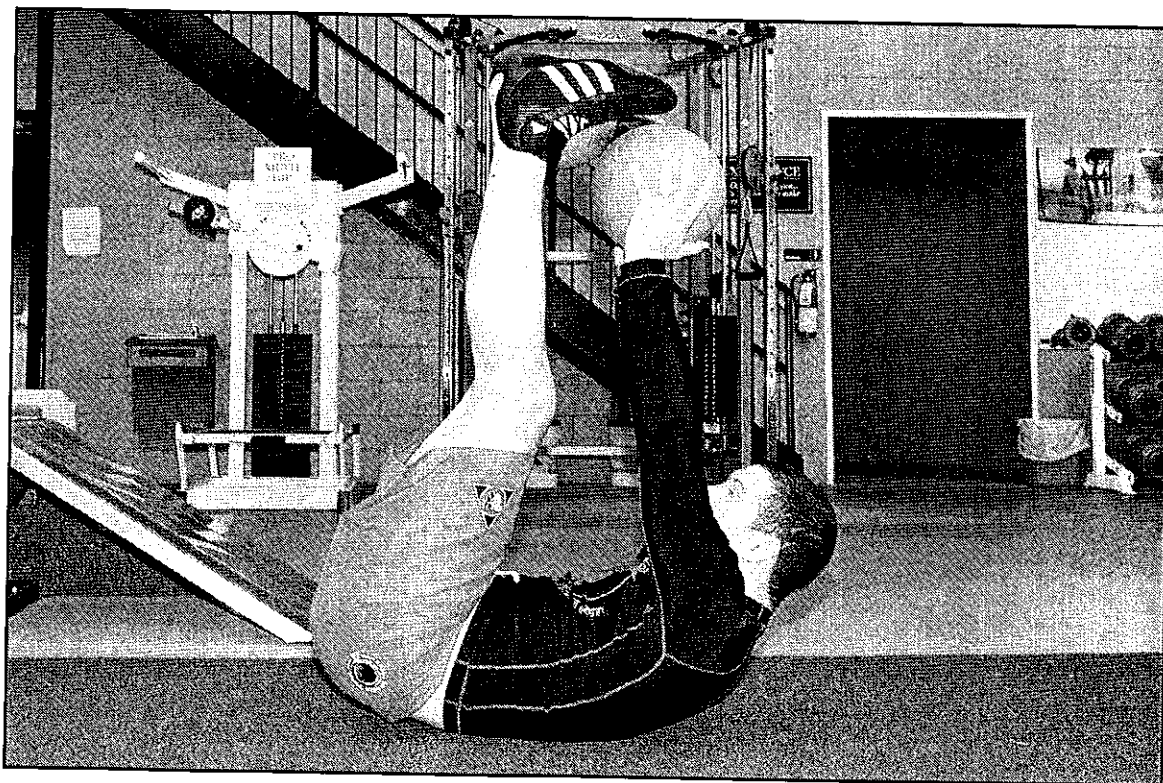
Begin with the Medicine Ball Active Warmup for 20-25 min.

1. Med ball Toe Touches 3 X 10 (use 20# ball)
2. Pike Ups 3 X 10
3. Med Ball Russian Twists 3 X 10
4. One arm dumbbell Side Bends 3X 6
5. Reverse Hyper 3 X 8
6. End with Stability hold/vacuum series

B. Intermediate Core Workout

Begin with the Medicine Ball Active Warmup for 20-25 min.

1. 50# med ball toe touches 3 X 10
2. 30# med ball Pike Ups 3 X 10
3. Standing Bar Twist/Busdrivers 3X6 each
4. Overhead dumbbell Sidebends 3 X 5 each side
5. Physioball Ab Curl 3 X 8
6. End with Stability hold/vacuum series



Ricardo hammering his core in between grueling sprints on the High Speed Treadmill.



C. Advanced Core Workout

Begin with the Medicine Ball Active Warmup for 20-25 min.

1. Standing Unilateral Bar Sidebends 3 X 6 each side
2. Single Arm Deadlifts 3 X 5 each side
3. Physioball Twists 3 X 8 each side
4. Bear Crawl Plate Drags (forward and backward) 3 X 15 yards
5. Speed Russian Twists 15# x 50 reps X 3 sets
6. End with Stability hold/vacuum series

IV. Sample Upper Body Workouts

A. Beginner's Upper Body Workout

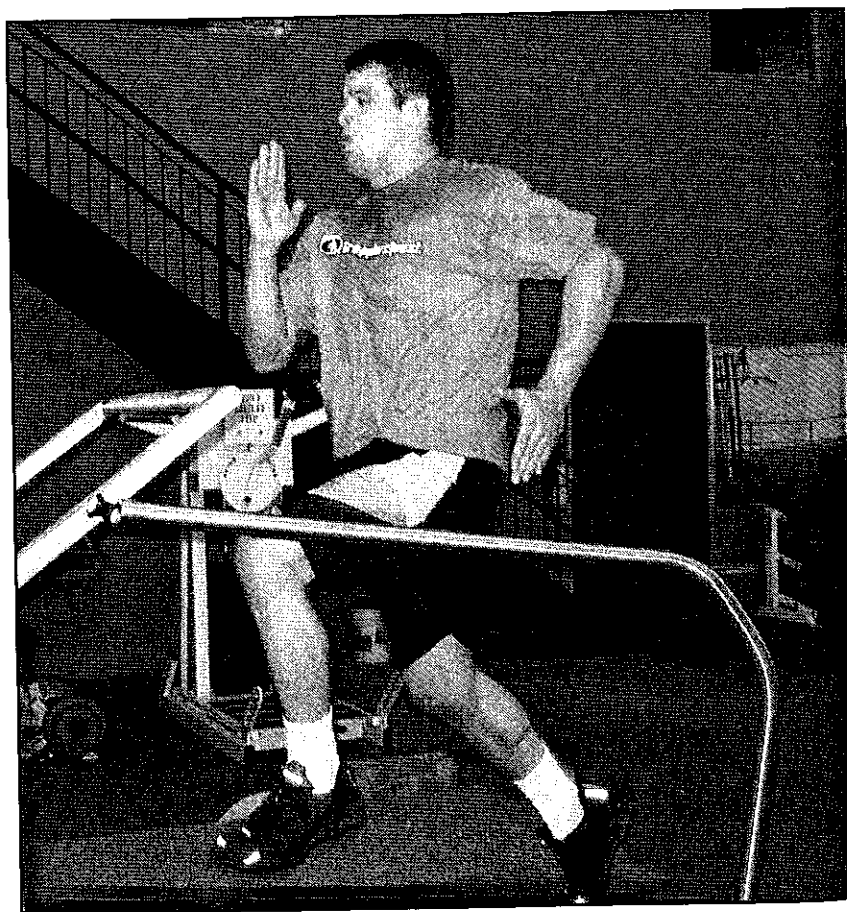
Begin with the Medicine Ball Active Warmup for 20-25 min.

1. Bench Press 4 X 8 reps
2. Chin Ups 4 X 8 reps
3. Weighted Dips 3 X 8 reps
4. One Arm Row 3 X 8 reps each arm
5. Tricep Pushdown 3 X 15 reps
6. Bar Curl 3 X 8 reps

B. Intermediate Upper Body Workout

Begin with the Medicine Ball Active Warmup for 20-25 min.

1. Floor Press Dumbbell 4 X 6 reps (3 sec pause at bottom)
2. Jiu Jitsu Back Circuit (pull up, neutral grip, chin up in a row) 3 sets X 6,5,4 reps
3. Jump Stretch Band Pushdowns 4 X 25 reps
4. Dumbbell Zottman Curls 3 X 8 reps
5. Front Plate Raise 3 X 8 reps



Fabio shows awesome form during a 15 second all out, 15% grade sprint.



C. Advanced Upper Body Routine

1. Isometric Bench Series (3 reps, 8 sec iso, 3 reps, 8 sec iso, 3 reps)
2. Release Pull Ups (3 reps, 8 sec iso, 3 reps, 8 sec iso, 3 reps)
3. Isometric Weighted Dip Series (3 reps, 8 sec iso, 3 reps, 8 sec iso, 3 reps)
4. Standing One Arm Row Isometric (3 reps, 8 sec iso, 3 reps, 8 sec iso, 3 reps)
5. Drop training series (fly, front raise, one arm row) 3 X 8 reps each arm

V. Sample Endurance Workouts

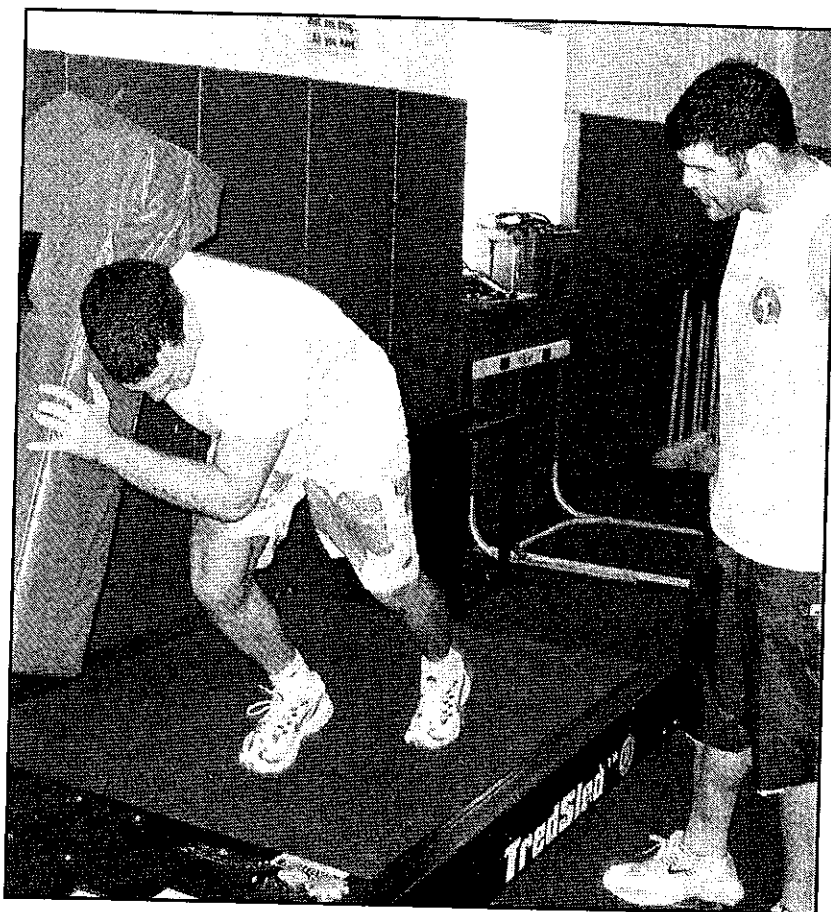
A. High Speed Treadmill Circuit

Beginner's Endurance Session

During this session, you must have a treadmill that goes up to at least 10 mph and 10% incline. The goal of this training is to increase the amount of lactate in the system to allow the athlete to better deal with this training effect.

After performing the Movement Skill Active Dynamic Warmup, the athlete goes immediately to the treadmill.

Perform 10 sets of 15 second sprint with 65 second rest. Monitor heart rate after each set. This will help as a guide to show improvement of exercise tolerance for future workouts. After the 10 sets, then perform 3-5 sets of 8 seconds sprinting, 8 seconds holding on with the hands and 8 seconds sprinting again.



Gene Dunn shouts encouragement as Igor Gracie digs out a set on the TredSled.

Intermediate Endurance Session

This circuit can also be adapted to use the medicine ball during the recovery. This active recovery is stressful and takes time to get used to.

Advanced Endurance Session

The treadmill active recovery can be an upper body workout. For instance, in between the sets of treadmill, the athlete is performing sets of bench, dips and chin ups. This is difficult and takes a period of time to prepare for.



B. Track Endurance Workout

We also like to go to the track and do interval sprint and jogging work.

A sample workout is 10 100m sprints at about 85% while walking the 100m curves for the recovery.

Another form we like is sprinting 12-15 40 yard dashes and walking the recovery.

This would be performed after the full Movement Skill Dynamic warmup.

Note: You must ease into this style of training or shin splints are sure to plague you. Give your body time to get ready for this style of training with a few easy weeks of lighter volume.

C. Stadium Stair Running

If you have a nice set of stadium stairs nearby at either the local college or high school, they can be a great tool for your stamina training.

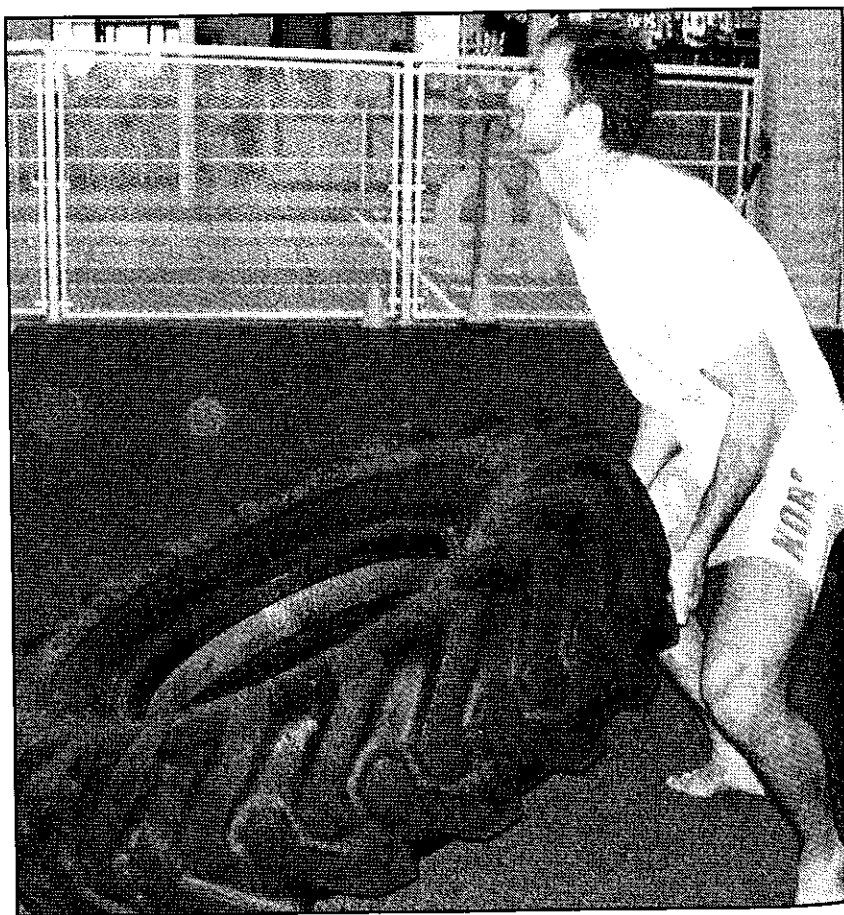
We like to create different patterns that we run the stadiums on to keep us fresh. A great way to run the stadiums is to run 4-5 5 minute rounds. You can alternate the pace between running hard up the stairs and jogging the side and downward portions. There are an infinite number of ways to use the stairs. The first step is getting out there and trying them out.

D. Grass Field or Turf Agility Endurance Sessions

A grass field is a great place to train. This will save your shins from the impact, but you must make sure that you know your field. What we mean here is scan the area for holes, bumps or ruts that could lead to a turned ankle.

If the field is marked off, that is even better for these sessions.

A sample session we like is doing repetitive 60 yard shuttles with a number of different styles of running. This means you run 5



Gordhino pounds out another flip with the 300 pound giant tire.



yards then back to the start line, run 10 yards and back to the start line, and then 15 yards and back to the start line. You can run forward the whole way, forward down and backward back, you can run forward down and side shuffle back, you can side shuffle the whole way, you can do an up down at the line, and the list goes on.

This style of training is great for the deceleration strength, and is demanding.

E. Tire Flip Endurance Workout

Giant tires have gained acceptance in the training world since their popularity increased with the World's Strongest Man competitions. We believe that the tires are a great tool for training core and leg strength as well as building stamina.

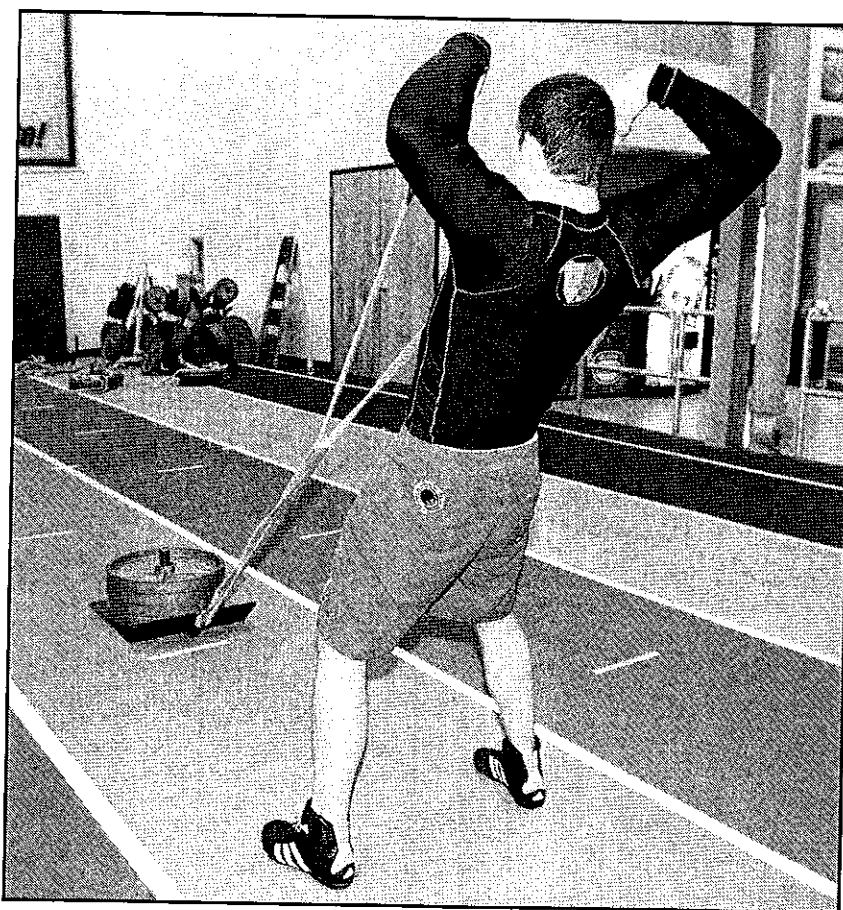
After a full Movement Skill Warmup, we like to do our tire training. You must know the weights of your tires, and make sure that you use proper form when performing the lifts. The tires have been known to leave many of our fighters with sore low backs. Don't overdo the training until the athlete is acclimated.

We have 4 tires at the facility that ascend in weight from 145 to 190 to 220 to 250 pounds. We lay the four tires next to each other along the turf field. We then flip each tire 5-10 times and run to the next tire and repeat through the series. You then can jog back and flip through again once you have become greatly conditioned, or you can rest between sets. You can use passive or active recovery here. We like to perform pummeling drills for our recovery. We do this for 2-3 min and then repeat the circuit again. This is a very demanding workout, but your takedowns are going to get strong.

F. The Sled

Another very versatile tool that we use often at the facility is the pulling sled. This piece can be used for speed, strength, and or endurance depending on the speed, weight, and distance that you use.

Early in our training we did very heavy pulls for shorter distances (20-30 yards), with rest periods in between. This produced and



Ricardo works his back and grip with a set of Sled Cleans.



incredible pump in the legs and had the heart almost jumping out of the chest. Since then, we have moved to a more endurance mode with the sled as our strength has increased.

Now we do 65 yard pulls for 15-20 minutes straight. Here we pull 65 yards X 2 forward, then 65 yards X 2 sideways and 65 X 2 backward. Then we go right back to forward again 65 X 2 and repeat the circuit through. You do not stop until the chosen time is completed.

The choice of weight is yours. We start off the first session conservative and add 25 pounds each workout until we are at our max.

The hands can be kept up during this training and you can shadow box with nothing or with band resistance during the pulls.

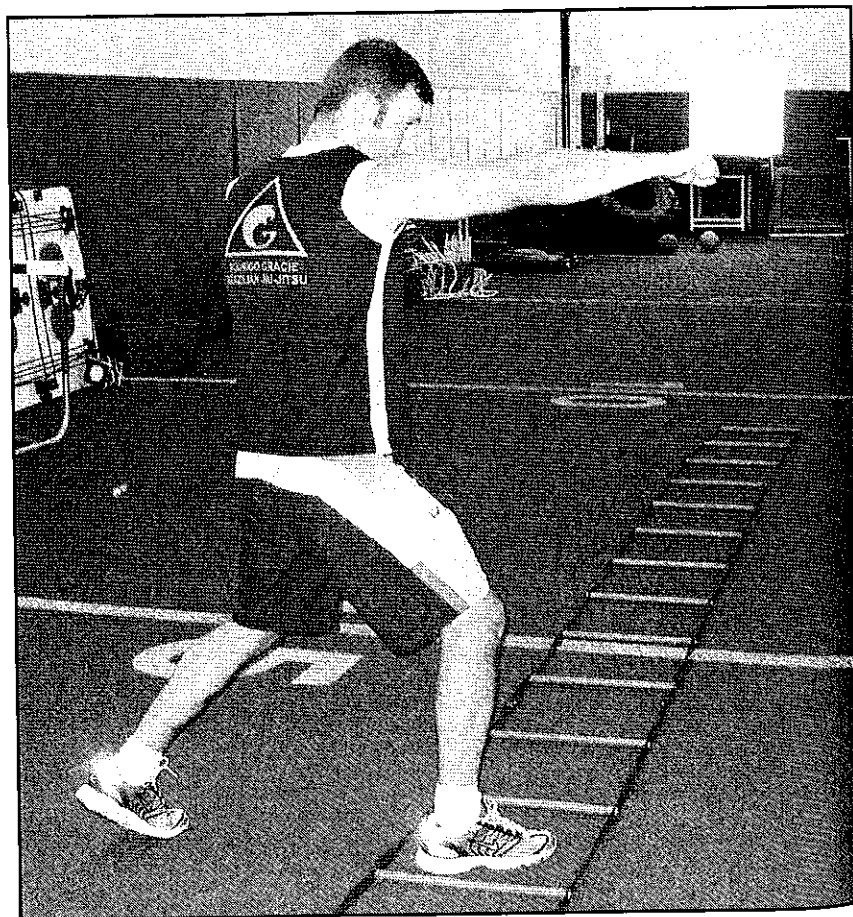
This is also demanding and takes time to get used to.

G. The Ladder

The ladder is a tool. Just like any tool in training, it can be used wrong, and it can be used correctly. We like the ladder as an endurance tool, but it is also great for improving the stretch shortening cycle, improving your footwork and foot speed, and improving coordination. There are a number of drills that you can perform using the ladder for both the upper and lower body. We like to use the ladder as active recovery in between certain sets of exercises. For instance, we may do a full warmup, the incline treadmill work and then do 10 straight minutes of ladder followed by sled work. The ladder is a great change of pace and really challenges an already fatigued athlete to control his body. The way we use the ladder is we do each exercise twice through the ladder, jogging back to the starting point after each rep so there is continuous movement and alternating speeds. A sample workout is as follows:

Lower body

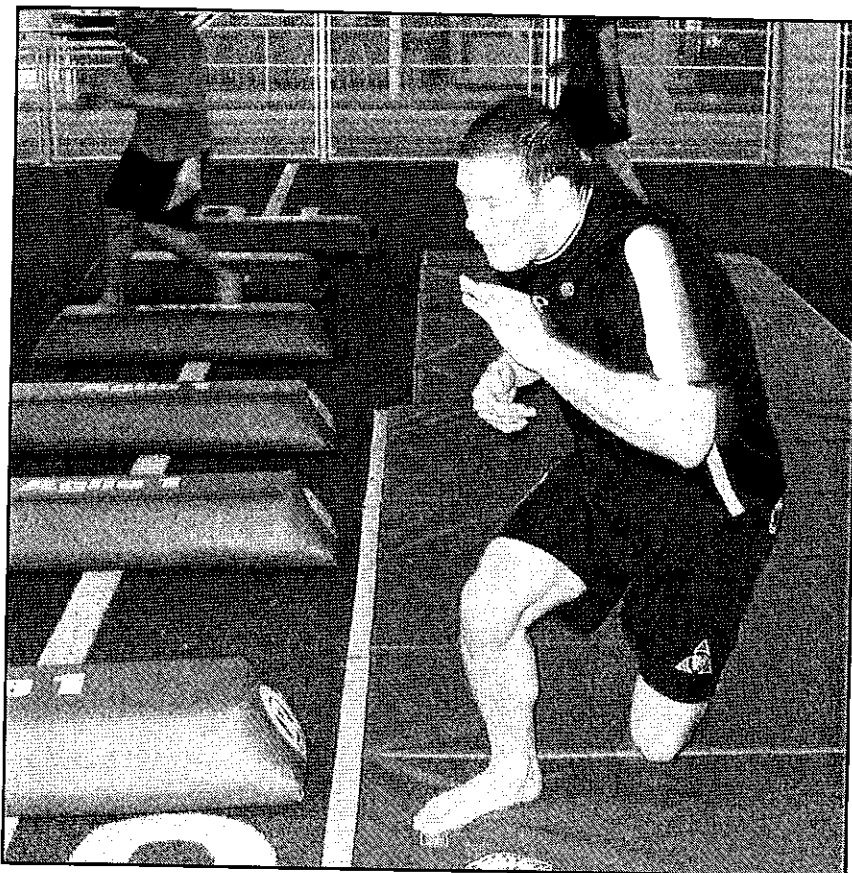
1. Two feet in each box run forward X 2
On this exercise the athlete takes as fast steps as possible



Rodrigo Gracie pops some jabs during a ladder warmup session.



2. One foot in each box run forward X 2
The athlete must bring the knees up as high as possible
3. Two feet in each box run sideways X 2
The athlete again uses as fast steps as possible
4. Slalom hops X 2
Athlete hops side to side while traveling down the ladder. Each jump there is a new lead foot in the ladder. Keep the hips over the ladder as you move forward.
5. Twisting Hip Rotations X 2
The athlete begins with one foot in the ladder and the entire body is facing forward. The athlete jumps and now even though the upper body and shoulders are still facing forward, the hips and feet are perpendicular to the shoulders and the other foot is now in the ladder.
6. Boxer's lead foot in and out X 2
The athlete just feints in and out of the ladder with the lead leg. A jab can also be thrown with this exercise and different tempos can be tried out.
7. Two feet in two feet out on the side X 2
The athlete steps both feet into each box and then out of the box one at a time. The athlete should keep a 1-2-3-4 rhythm in his head.
8. Muhammad Ali from side X 2
The athlete switches the left and right foot out of each box as he travels down the ladder.
9. Muay Thai Kick defense X 2
The athlete steps in the ladder with the left foot, then in the ladder with the right and then as he steps out of the ladder with the left, the right knee and arms are used in a muay thai kick defense position. Use a 1-2-3 count on the drill.



Gene, Fabio and Ricardo rip through an endurance obstacle session.



10. Crossover shuffle X 2

The athlete begins with both feet outside the ladder standing alongside it. The athlete first steps in the ladder with the outside leg and then steps both feet outside of the ladder on the other side. Then the athlete recrosses back into the ladder with the outside leg from that side and repeats down the ladder.

Upper Body

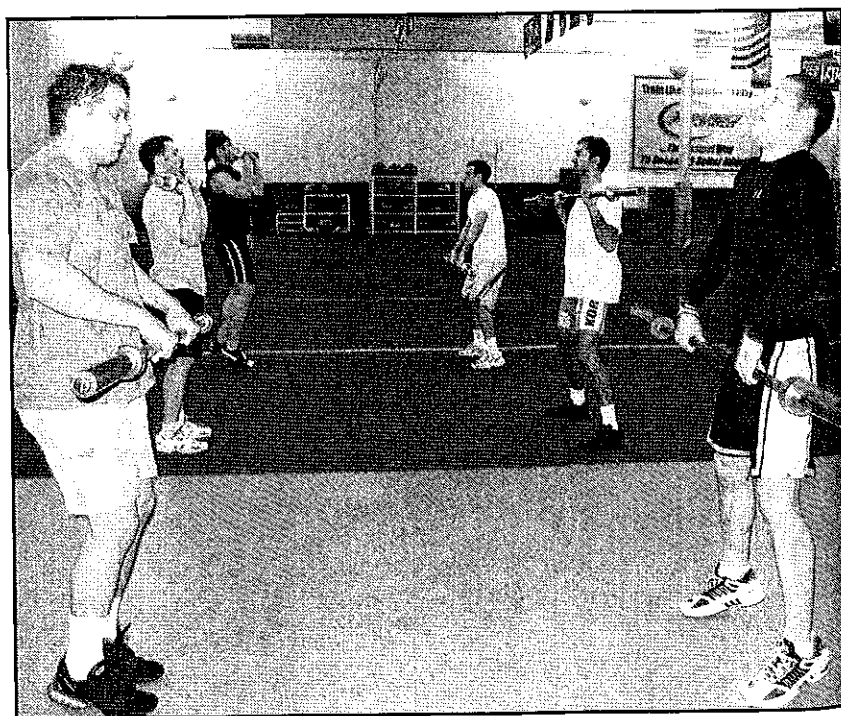
These exercises are the same as above, just using the hands.

1. Two hands in each box forward X 2
2. Two hands in each box sideways X 2
3. Two hands in, two out on side X 2
4. Crossover shuffle with hands X 2

H. Bar Complexes

As I said earlier, bar complexes are an awesome tool to fire athletes up and teach toughness and technique. There are endless variations for the complexes and you can use a barbell or dumbbell. I prefer the barbell. This next sample is the complex that we are currently using: Begin with the bar only. Do each set for 6 reps. Use good technique, but move as fast as possible. Record your time. Perform 3-5 sets, and try to lower the time each set. The goal is to do all 12 sets in one minute. Each workout, add 5 pounds. Do not rest between exercises. Take 1-2 minutes only between sets.

1. Stiff Legged Deadlift
2. Shrug
3. Hang Clean
4. Front Squat (jump at top of motion)
5. Push Jerk
6. High Pull
7. Bent Over Row
8. Snatch
9. Back Squat (jump at top of motion)
10. Good Morning
11. Tricep Extension behind neck
12. Bar Curl



Team Renzo blasting through another full-speed bar complex set.



VI. Explosive Training Workout

This style of workout is performed close to a fight or competition. This creates maximal stimulation of the athlete with less muscular soreness.

This workout should be performed following the complete Movement Skill Dynamic Warmup. We like to include Tire Flips in this session.

Workout 1

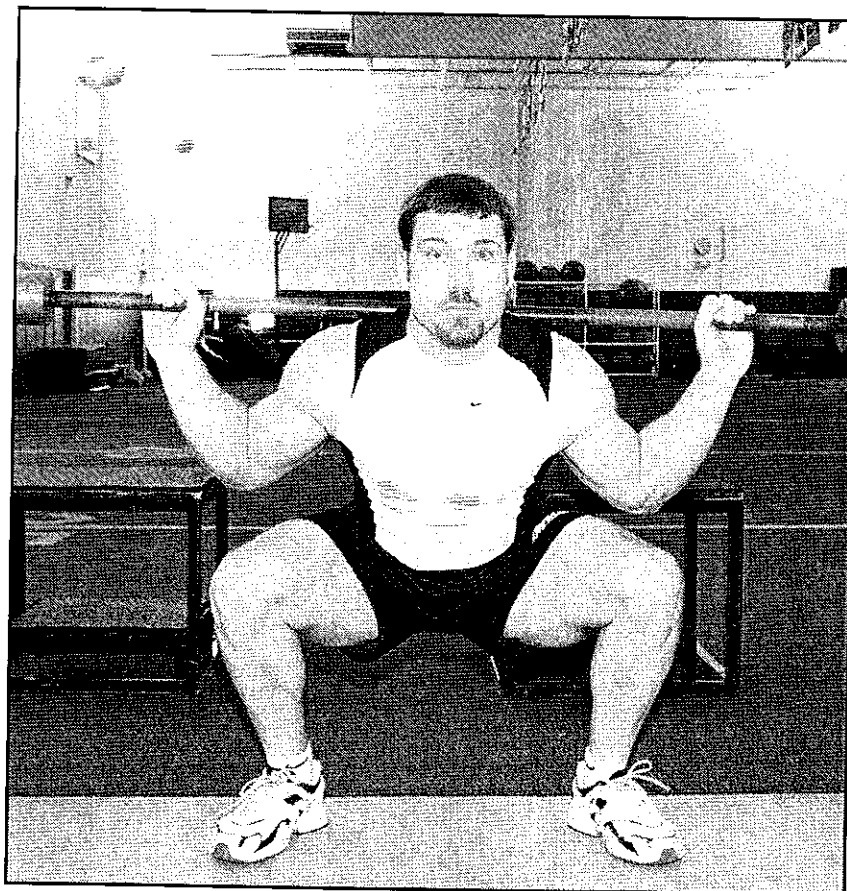
1. Jump Snatch on the Box 5 X 3 reps
2. Hang Snatch 5 X 3 reps
3. Speed Push Press with alternating feet 3 X 10 reps
4. Drop Training Upper Body Series 3 X 8 each arm

Workout 2

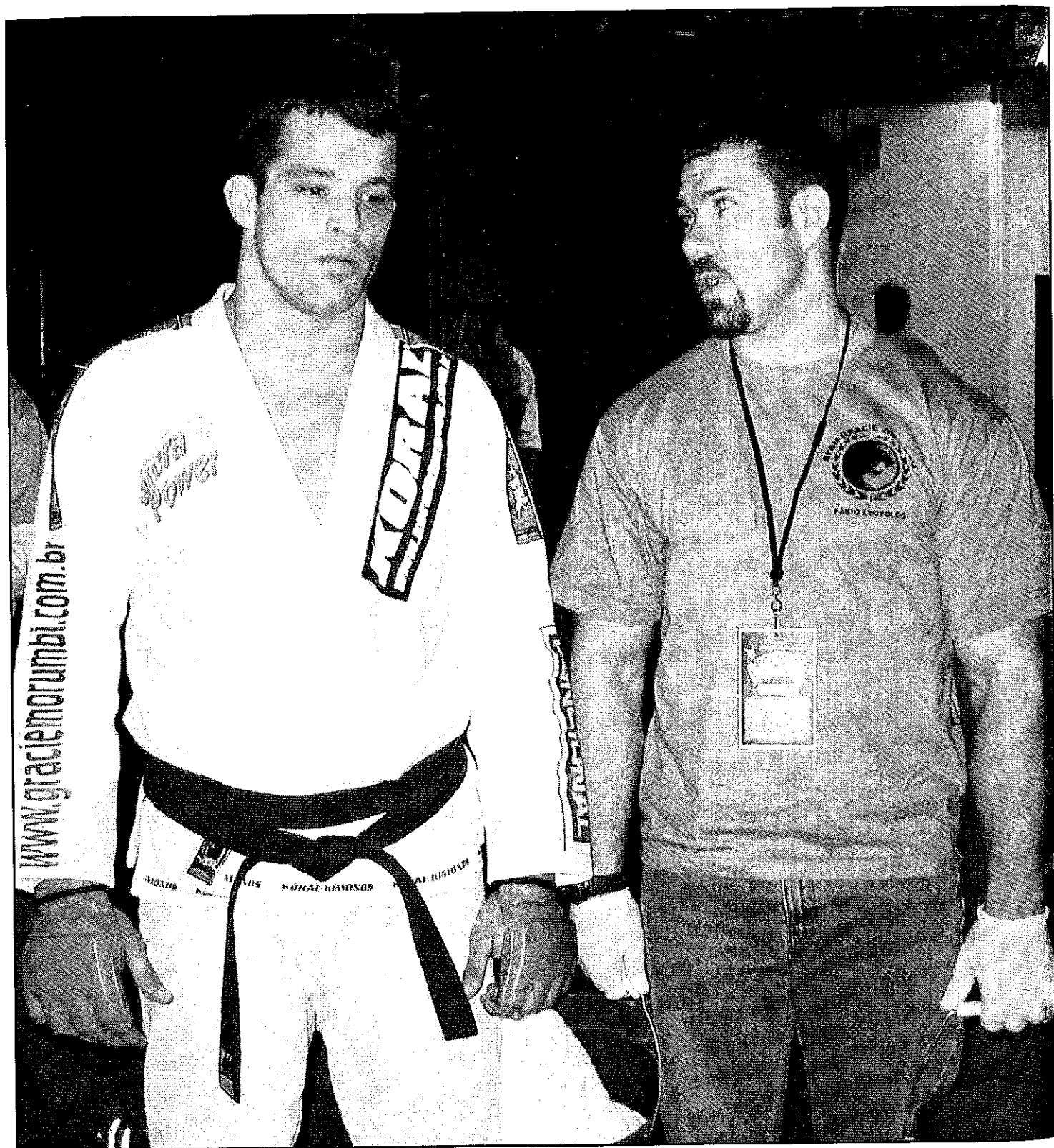
1. Hang Cleans 5 X 3 reps
2. Romanian Rhythm Squats 50 X 3 (10 flatfoot, 10 toes, 10 flatfoot, 10 toes, 10 flatfoot)
3. Heavy Forward Med Ball Chest pass 1 x 8 throws
4. Heavy Overhead Backward Med Ball Throws 1 X 8 throws

Workout 3

1. Plyo push up series 3 X 10 reps
2. Explosive push ups to high box 3 X 5 reps
3. Jump ups from knees on floor 3 X 5 reps
4. Box Jumps 3 X 5 jumps
5. Hurdle Jumps 3 X 5 jumps



Back jump squats add strength and power to any fighter.



Martin offers a last piece of advice to Fabio before he enters the arena for his first Pro MMA bout.



The Pre-fight Warmup

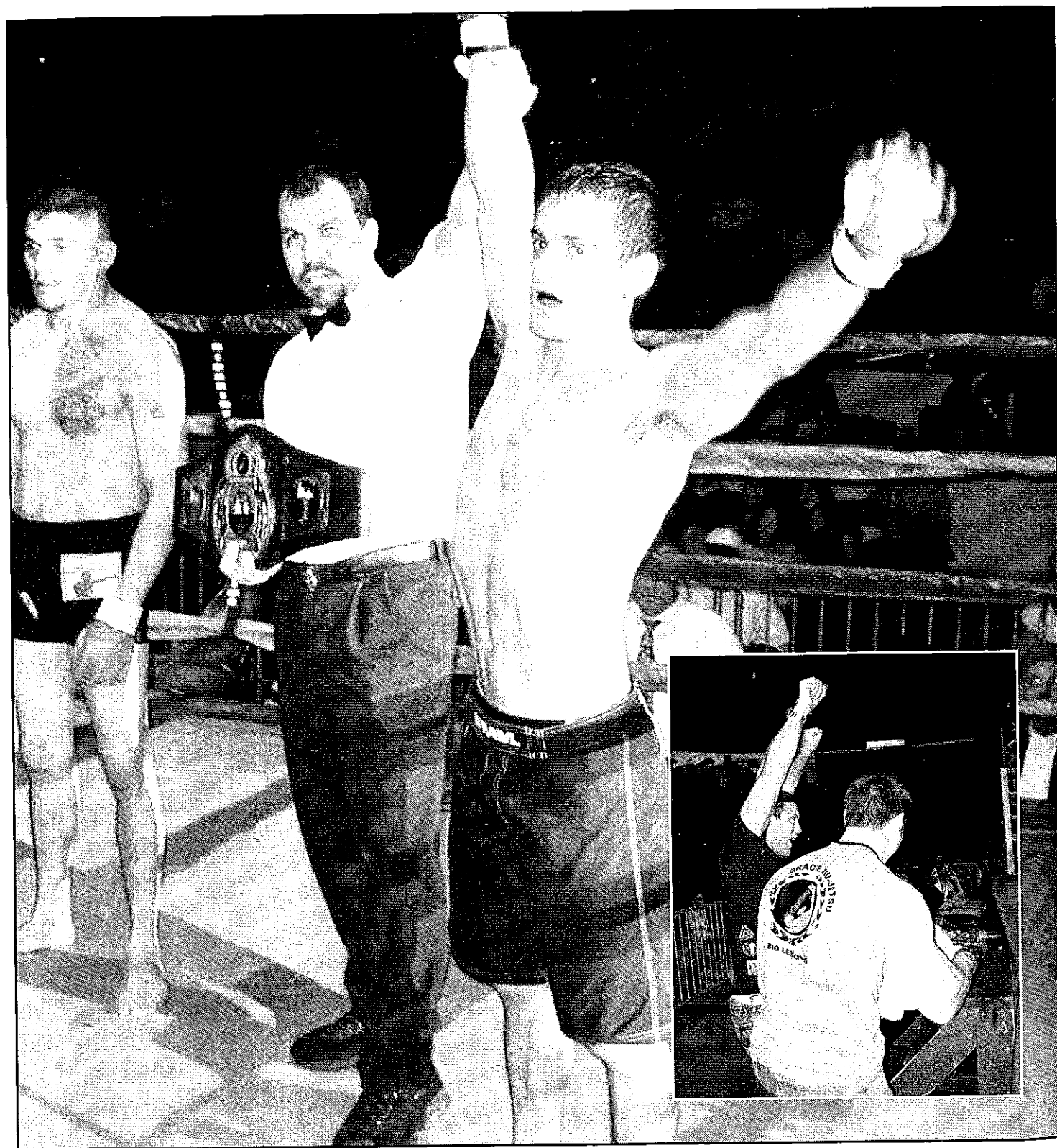
The months of training leading up to a fight can have gone perfect and your mind can be focused on the fight, but if you blow the pre-fight warmup, you may never get the chance to show off the skills and conditioning that you have developed in the ring. The pre-fight warmup is essential for a number of reasons. The pre-fight warm up prepares the body for activity and addresses biomotor abilities used during the fight including strength and power, neuromuscular coordination, speed, flexibility, general and local endurance, balance and joint stabilization. This warm up increases a fighter's core temperature, which is important for performance. With a higher temperature in the core and the specific muscles being used, the athlete can be insured better performance with less chance of injury. Studies show that a warmer muscle is able to generate more speed, strength, and therefore, power. By using the exercises during the warm up through a complete range of motion, the athlete's dynamic flexibility about the joints are increased and these joints are nourished and strengthened secondary to the compressive forces passed through them. This dynamic stretch is far superior to the traditional static version. Studies have shown that power output is actually decreased following static stretch due to the desensitization of the muscle spindle. This should tell any fighter that slow static stretches are the antithesis of what you should be using pre-fight. By using the dynamic version of stretching the neuromuscular system is prepared to perform taking advantage of an improved stretch shorten cycle and reciprocal inhibition. This nervous system response is critical for lightning fast punches, takedown, and sprawls. Besides all of the scientific reasons behind this warmup, there is also a mental component as well. By having a set routine and or ritual of the pre-fight warmup, the fighter can reduce nervousness and stay focused on the moment instead of the fight which may still be upwards of an hour or more away.

There are many mistakes that I have seen fighters make when it comes to the pre-fight warmup. For instance, I have watched athletes begin to warmup hours before their fight, expend tons of energy and adrenaline, only to go and gas out during the fight. I have also watched fighters stay too relaxed, not warmup adequately and then get taken by surprise before they even get going in the fight. These two examples should demonstrate a number of things that a fighter and his team need to know to insure an adequate pre-fight warmup. First, the fighter needs to understand the event order, how long introductions are, and if there are any intermissions and or pre-fight ceremonies. This will make sure that the fighter and the corner understand when the warmup should begin. If the fighter does not have this information, and does not have a specific timed warmup in mind, there can only be insecurity and increased nervousness as a result. Preparation is a key to success here.

This should also lead a fighter to the conclusion that the warmup they use pre-fight should be the same one that they have used everyday in training. The body will be used to this scenario and best prepared by this. The mind will be allowed to be on autopilot, so there is nothing to think about. As we always tell our team, the day or week of the fight is never the time to do something or learn something new. If you are trying to do that, there is surely going to be self doubt to follow. We have seen fighters easily lured into changing their whole routine during the day of the fight. Then the fighter will later look back and see he did not follow his pre-fight plan at all. The nerves on fight day can make you do crazy things. You need to be focused and make sure that you execute the plan. Nothing that you can do new minutes before the fight is going to make the difference. Go with what you know.



TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN



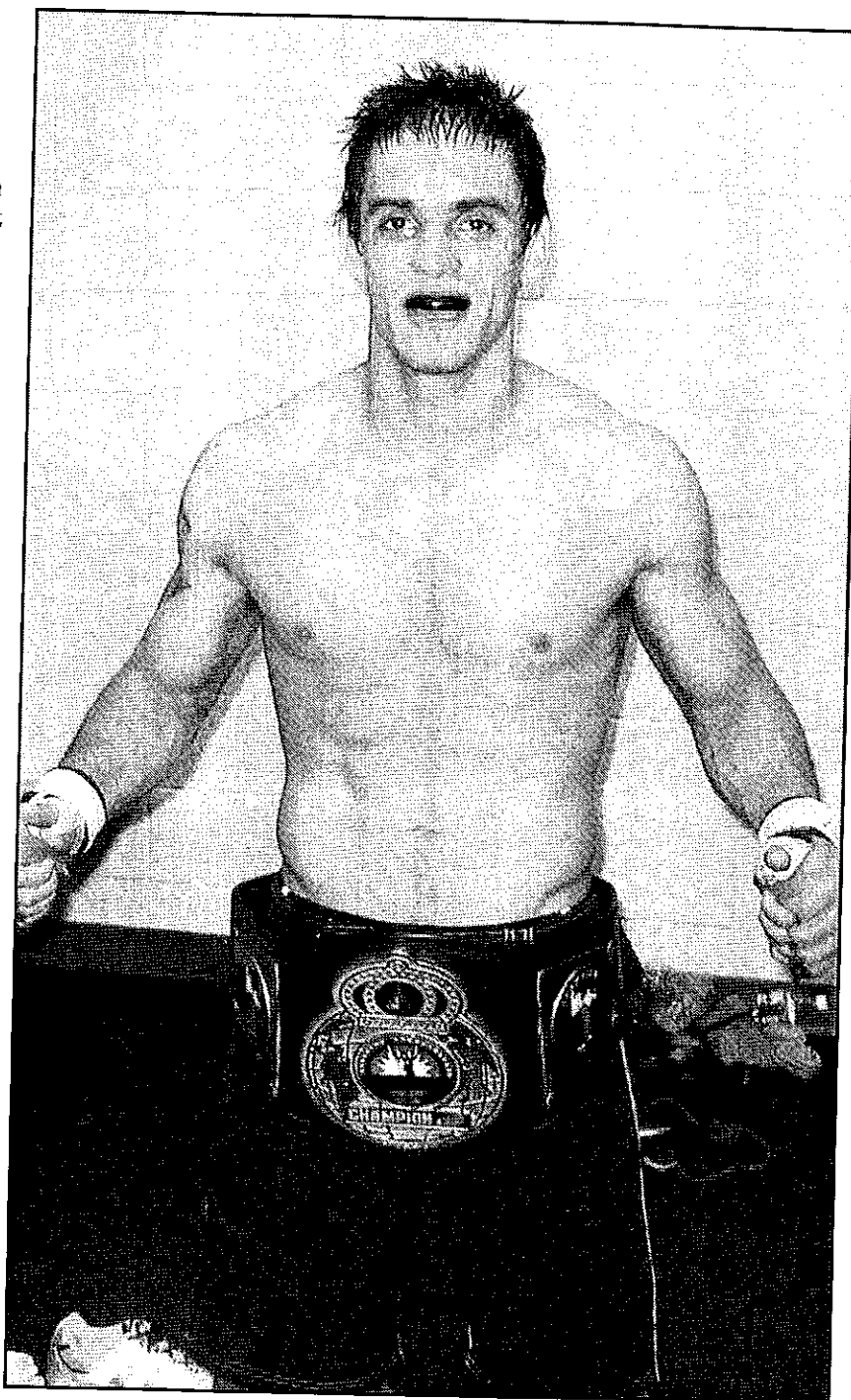
Ricardo and Martin erupt as Renato Migliaccio wins the title!

Every fighter will have a tendency to start the pre-fight warmup early. Have people or things on hand to keep your mind off the fight until it is time to get ready. This will keep your adrenaline and cortisol levels low. Preferably surround yourself with positive friends that keep the mood light. This will create a relaxed environment.

The pre-fight warmup should start easy and crescendo just as the opening bell rings. Many fighters have a tendency to warmup hard early, then cooldown while standing in the tunnel, walking to the ring, waiting for announcements and then the fight begins. You should use every bit of this time as the final prep for being ready to fight. This should be something that is practiced physically and mentally. Every fighter has thrown millions of punches and kicks and spent countless hours on takedowns and grappling. The warmup and fight preparation must have the same detail to insure maximal results.

Practicing the warmup over and over will allow the fighter to exactly know when their body is ready. The last thing a fighter needs to do is expend too much energy before the fight. I have seen fighters throw hundreds of kicks, punches, box and pummel for an hour leading up to the fight, then not throw one kick or punch during the fight and gas out in the first round. Don't let the rush of the fight get the best of you. Stay under control. It is far better to start a little late in your warmup than too early. The hardest part is starting on time.

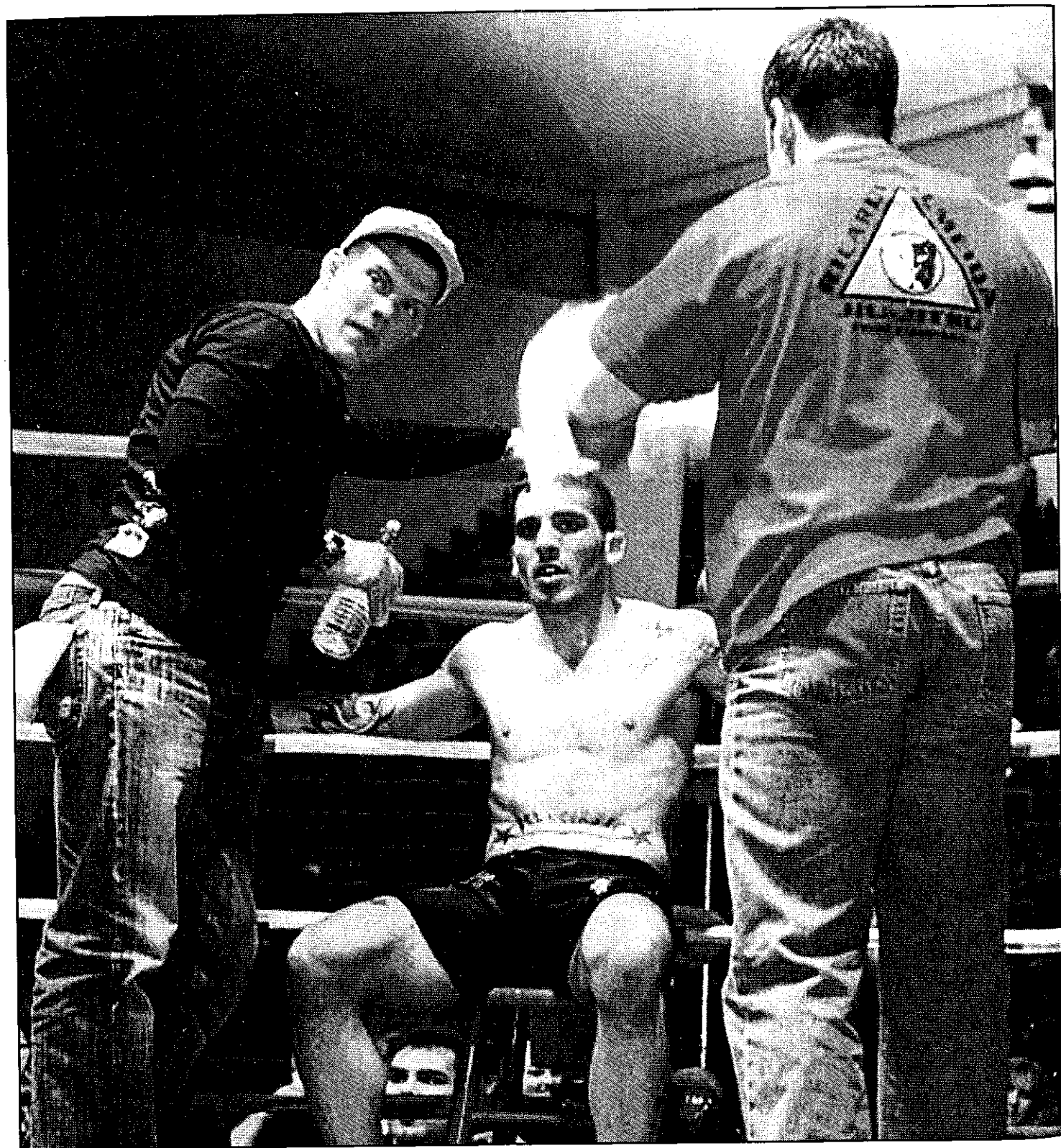
Interestingly, a pre-fight warmup really shouldn't take more than 20 minutes to completely have your body ready for action. This will insure that you have not depleted too much energy or adrenaline. Some athletes may like a little longer, but they must make sure not to tire themselves out. This may be hard for the fighter to understand, but the warmup does not have to be an hour of hard work.



Renato and his new piece of hardware.



TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN



Ricardo and Martin cornering Kurt Pellegrino during another most dominant performance for the team.

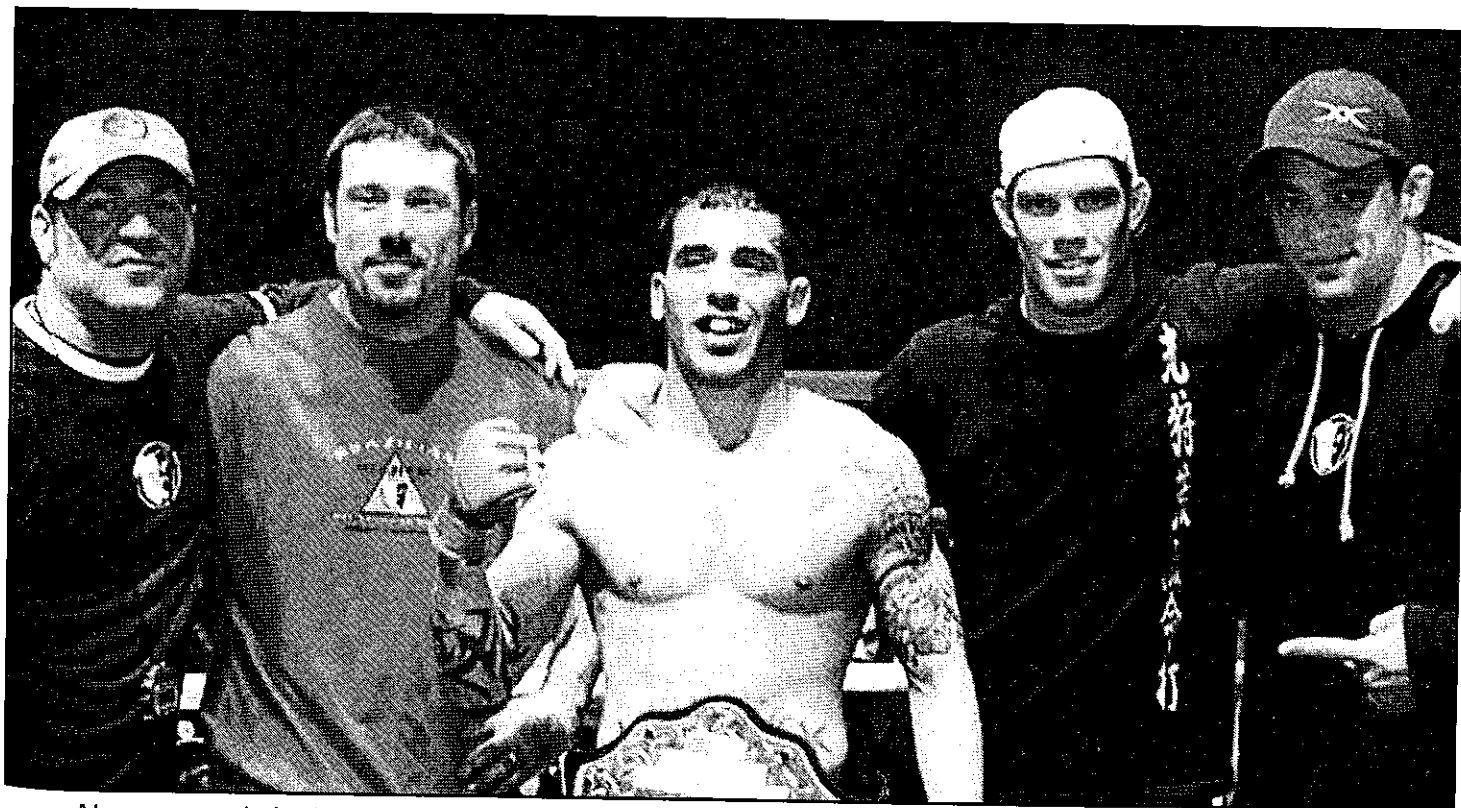


The Essential Cornerman

The cornerman and second are critical people when it comes to a fighter's success. They have a huge ability to influence a fighter in the direction of victory or defeat. Over the years, we have come to see that there is an art to cornering a fighter. In all of my experiences in sport, including racing 90 mph in a bobsled, there is no adrenaline rush like that of being in the corner of a fighter that you have worked closely with. This section will demonstrate how multifaceted a corner must be and illustrate his many responsibilities for his fighter.

The first thing that must be said is that the corner must be incredibly involved with the fighter's training and life. If this does not happen, the corner will not be able to accurately support the fighter during the fight. The corner's job begins long before the fighter ever steps into the ring on fight night. He is responsible to help break down the opponent for the upcoming fight, help form the correct fight strategy, monitor training, diet and weight cutting, be a constant positive source of support for the fighter and honestly evaluate progress or lack thereof.

As the fight approaches, the corner must help taper training and get the fighter into the right mindset. We now see how much of this whole game mental preparation is. The fighter must have a clear mind and no negative thoughts. There must be only a clear strategy that must be cleanly executed. The corner is there for support to clear the fighter of having to think about anything but getting ready for the fight. The less decisions he has to make on the day of the fight, or the less things he has to worry about, the better. In cases when the fighter is far from home, the corner is there to relax the fighter with the familiar security of home.



No one can do it alone: Rob Scheier and Fabio are there to help Kurt add another belt to his collection.



The more confidence a fighter has in his cornerman, the better. The relationship must be a strong one in which the two parties know themselves and their capabilities inside and out. They must both understand the fight plan, and know how to manipulate the plan if needed.

When it comes to the fight, the corner must have great vision and use proper cues. When we talk of vision, we mean a great understanding of the fight game and an ability to give critical and useful feedback that can affect the fight in a positive nature. All too often, a corner either says nothing or too much. Feedback needs to be appropriate, effective, and timely. Things should be kept short and it should always follow the fight plan. The fight is never time to introduce something new, or to demonstrate too much emotion.

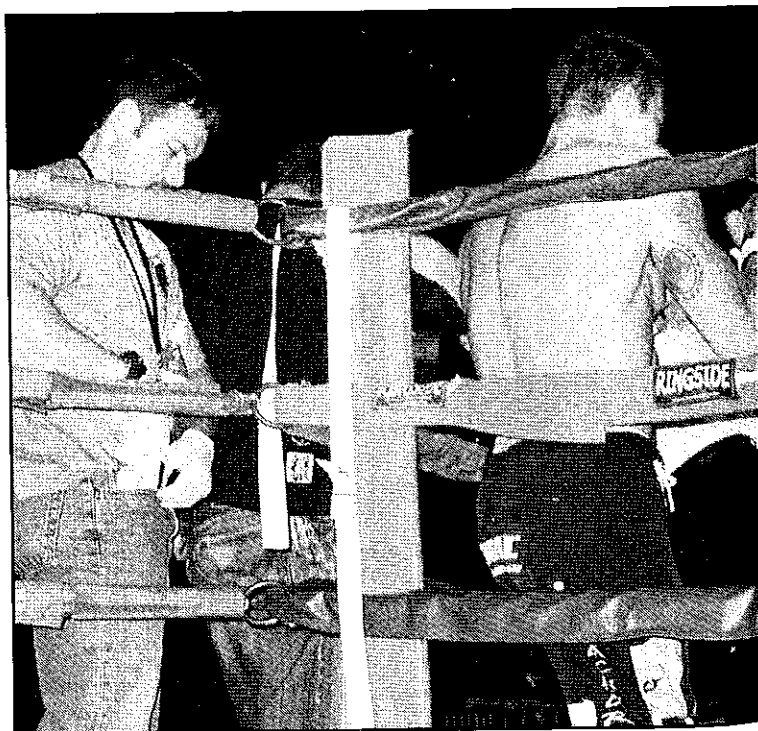
The corner should be relaxed and focused on the moment. The feedback that they deliver can change the fight, but it must be performed correctly. In between rounds is a critical time for the corner to deliver crucial feedback. Contrary to popular belief and movie lore, we don't believe that yelling at a fighter or trying some motivational tactic is going to work here. A corner should give the most important piece of feedback that the fighter can focus on that the corner feels can influence the fight in their direction.

The fighter must also have the ability to focus in between rounds. This is necessary if the fighter is to process the information and use it at that time. He may be hurt, tired, or bleeding, and a corner must be able to refocus him in between rounds on the plan. This is something that should be worked on throughout training. If not, it is not something that is going to just occur during the fight. The stronger the bond between the corner and fighter, the more likely that this use of the information is going to happen.

The corner must make sure that the fighter makes weight and is eating well leading up to the fight. The fighter should not be allowed to try something new or different here. This should hammer home the point that everything from fight technique to cornering cues, to diet should have all been practiced and assessed many times before the fighter ever gets to the day of the fight. Too many times we have watched fighters blame what they ate that day on their failure to win or ill feelings during the fight. This is something that just should never happen.

The team of corner and seconds must also have great trust in one another and a defined social hierarchy. If everyone is shouting to the fighter during the fight or in between rounds, the fighter will be over stimulated, frustrated and get nothing from the feedback. Short, sweet and precise feedback from the appointed person is critical at this time.

A corner must also try to be objective during the fight. A close round is easy to see in the favor of your fighter's favor, but you must be able to



Martin has all the tools of a cornerman: water, tape, stop watch, gloves, vaseline, towels, and trust.

see what is really happening to give the proper feedback. Falsely leading your athlete to believe that he took the first two rounds could change how the fighter attacks round three than if he is lead to believe that the fight is really close. A fighter being able to understand exactly where he is during a fight is also an ability to be developed.

As one can see, the corner's responsibility is much more than bringing out the water and getting to stand ringside. This person should want to lead their athlete to victory, but they must also be able to do their job in defeat. A corner must stay positive and support the fighter regardless of the outcome. No one is ever undefeated. Losses are inevitable and a corner must be prepared for this to happen. How a loss is handled can strongly influence how a fighter rebounds for his next fight. The corner can focus on the process and not the outcome. For instance, if your fighter has improved his training, conditioning, diet, mental toughness or technique for this fight, use this information to remind the fighter of the positive process. The outcome of any one small match cannot outweigh the months of development that took place beforehand.

A corner must not let the fighter make the mistake of thinking that "this is it" or that this fight is any more "special" than any other day of training. The corner should keep the fighter thinking that this is just another day at the office. This will reduce the pressure and stress for the results. The fighter has suffered far worse through the months and years of training than what can happen during the fight. Remind your fighter of this and how prepared the fighter is for that day.

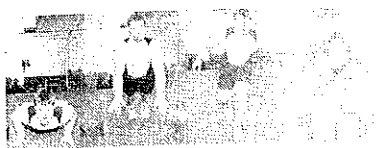
A corner must make sure that the fighter has properly warmed up for the fight. The proper pre fight warmup and common mistakes made are covered in the pre fight warmup section of this book.

A corner must also be ready to protect his fighter at all costs. This could mean something as simple as throwing in the towel, to something as complex as defending your fighter in the ring if a melee breaks out. The fighter and corner should discuss these situations so that neither man's name is disgraced by the actions of the other.

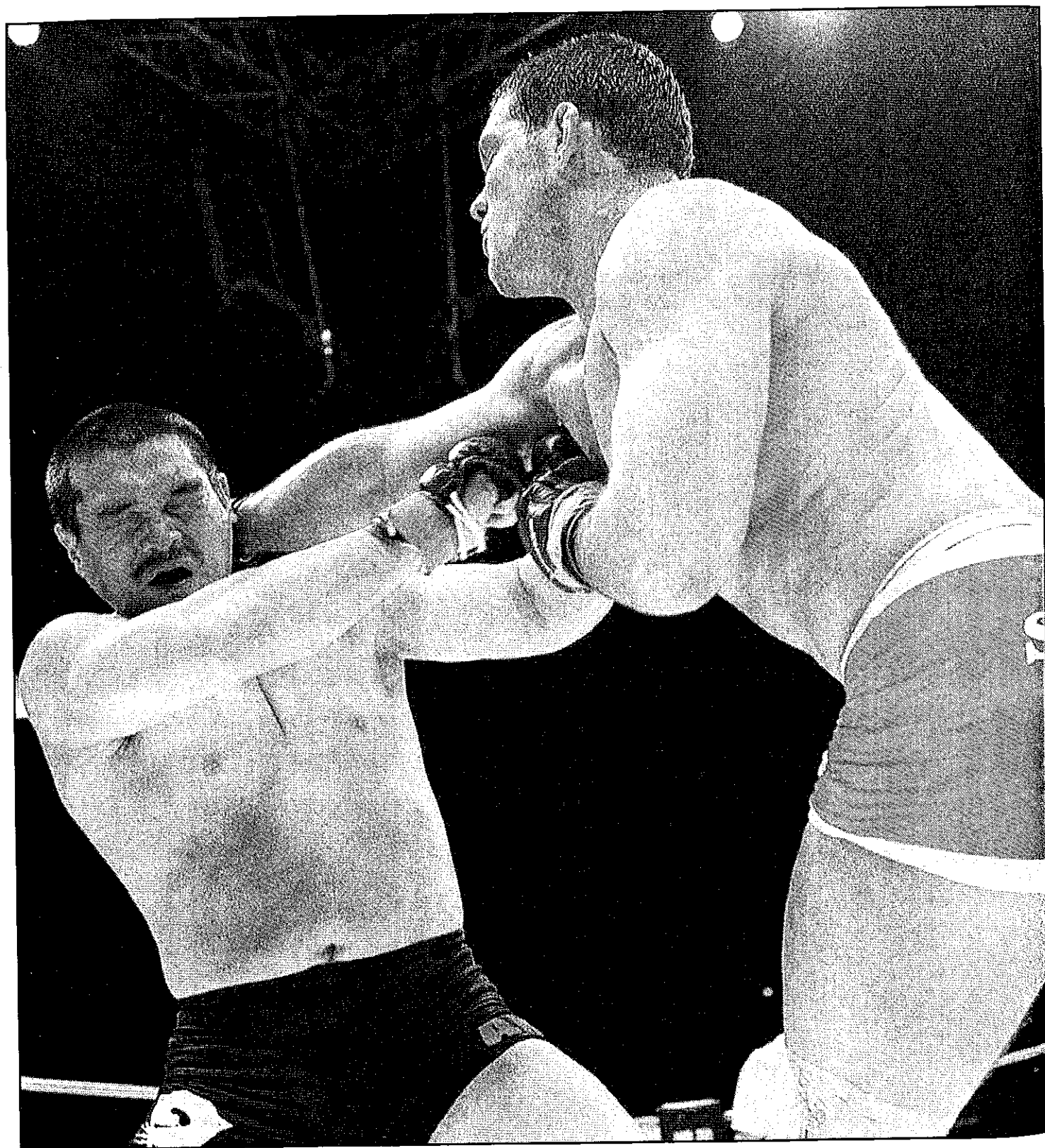
The corner's job is a critical one. It involved in depth planning over months of time and constant rehearsal with the fighter to insure a perfect performance on fight night. If the corner understands the responsibilities listed above and adheres to them, their fighter is going to surely have a better chance for success in the future.



Ricardo injects a last bit of confidence into Fabio with words of wisdom.



TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN



Akira Shoji eats a right as Ricardo earns his first MMA victory at Pride.

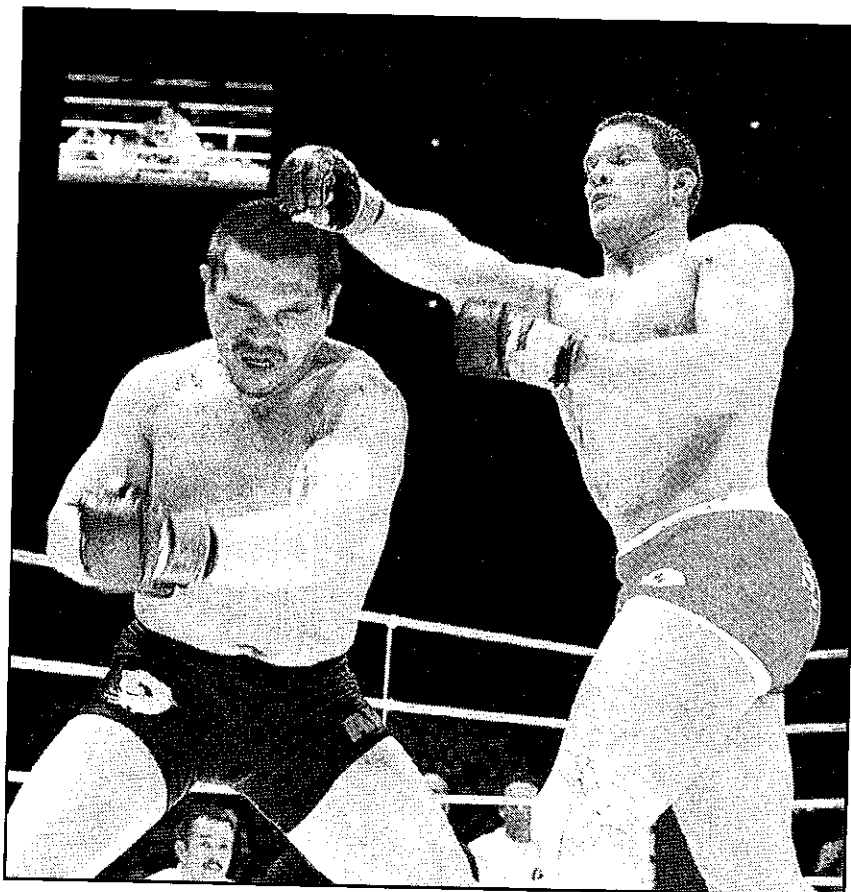


Fighter, know your opponent, but first know thyself!

The training that I perform with my athletes and myself is always evolving. I love that fact that I can look back from a few months to a few years and always see changes and progress in my methods. One of the biggest areas that I have begun to focus on with my training is the actual mental training with my athletes. A long time ago, I used to think that being mentally tough meant that you had a strong will, or that you could really endure pain. Now I see that neither of those scenarios are possible if you don't have complete control over yourself and your emotions. That is the essence of mental toughness. Actually being able to control yourself during any situation because you know that you are the only one that gets to choose how you react to any situation. One of the best ways to begin to develop this control is to have a plan.

Viktor Frankl is the ultimate example of mental toughness. In his landmark book, *Man's Search for Meaning*, Frankl talks of his time spent in a Nazi concentration camp. They stripped him of everything he had. They took his family and friends from him. They took away his food and in many ways, his life. The breakthrough that Frankl made was that they could take everything away except for the most important thing: his mind. He realized that they could never change what he thought and that he was in control of his emotions. This knowledge gave him strength, and Viktor Frankl, not only survived, but went on to pioneer a branch of Psychology called logotherapy.

The first thing that I need my athletes to understand is that they are in control. No one can make them do anything or feel any way. It is completely their choice. This takes the blame away from external sources and requires responsibility and honesty from the athlete. Once the athlete begins to accept responsibility for their action and reactions to things, I feel that they are now ready to take steps toward reaching their goals.



A stunned Shoji cannot keep pace with the "Big Dog".

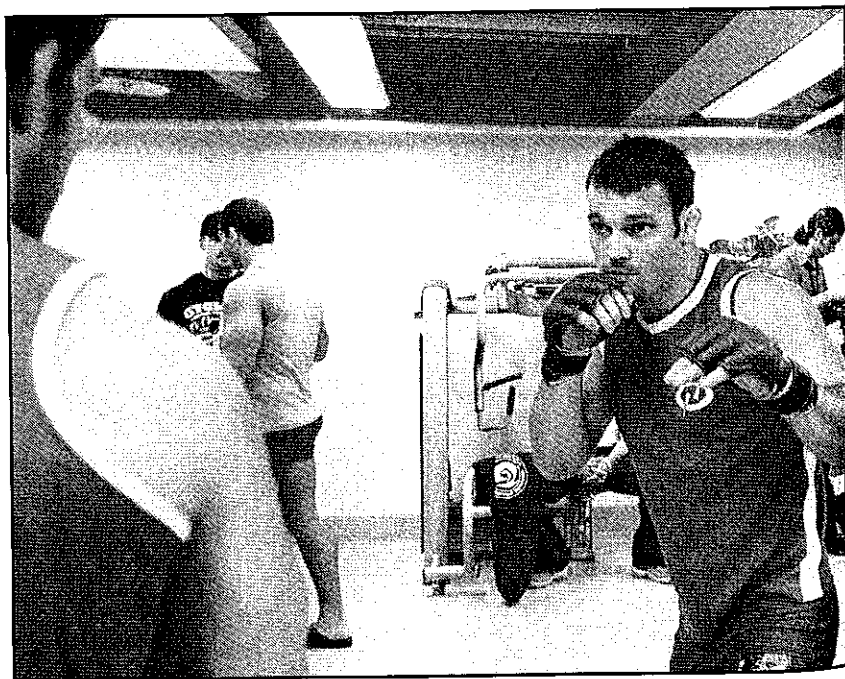


When I began training a number of high level athletes in a number of different sports, I mainly focused on their physical characteristics. I wanted to make them stronger, faster, more flexible, and ensure that their diet was perfect. They were machines that I wanted to finely tune for performance. As I have matured as a trainer, and really seen what separates the good from the great athletes at all levels, I have found that the physical component is one piece of the puzzle, and in some cases, not the most important.

Think about it, you can have the fastest, most technical athlete, but if they have the wrong strategy for their competition, they might not come out on top. On the contrary, if you have a good overall athlete with a superior strategy and confidence, they are a force to be reckoned with. The race does not always go to the fastest and the swiftest at the highest level, it often goes to the athlete that is most mentally and strategically prepared.

When I started training elite mixed martial arts fighters years ago, I understood the demands of the sport and prepared my fighters like a madman. I included cutting-edge science and nutrition into their programs, and the athletes were as fit as they had ever been. There was one piece of our training that was missing, and the result of this deficit would eventually change my training forever. The fighters ran, jumped, lifted, grappled and groaned through our workouts. These sessions were intense and directly specific to their fights. For a long while, we were on a big winning streak with everyone. Renzo Gracie was winning Pride fights in Japan, Rodrigo Gracie was winning Pride fights in Japan, Sean Alvarez went on to win the UCC heavyweight title, and Ricardo Almeida was winning in the UFC. I was on top of the world, and felt the training was at a high level. Then, on the night of January 11th 2002 at the Mohegan Sun in Connecticut, all of that was about to change. Little did I know that I would have a horrific experience that would enhance my training forever.

I was cornering my good friend Ricardo Almeida for his fight against Russian Andrei Semenov. We didn't know a lot about him, and received little film of him before this fight. Our training had consisted of hard lifting, running and lactic acid training to mimic the physical demands that would take place during the fight. Ricardo was spending a lot of time boxing as well, and was feeling much more confident with his hands. As the fight got closer all everyone talked about was how he was going to knock this guy out. Jiu Jitsu, which is Ricardo's strongest suit, took a backseat to striking and conditioning at this time. Ricardo was to make weight at 185 which he did



Rodrigo Gracie looking razor sharp before Pride Bushido.



masterfully. We had researched and practiced how to drop weight correctly and then rehydrate back to 195 before the fight. Everything went perfect and the day of the fight, and he was adrenalized. As we got ready for the fight in the locker room, Ricardo was working a lot of hands, and getting himself into a frenzy. As we finally went out for the fight, he was screaming like a wild animal in a rage. This was what we had programmed him to do, because this was how we had trained for this fight.

The fight began and was all Ricardo. He attacked wildly with the hands, and did not look as skilled as we might have thought. He scored takedowns, but Semenov just kept getting back to his feet. On more attacks by Ricardo, the Russian was countering and scored a jab that broke Ricardo's front tooth. Ricardo's mouthpiece was so thin that the tooth went through the mouthpiece and cut his bottom lip in half down the middle. Ricardo kept attacking but he was getting hit.

Everyone has seen a fight before in the ring, but few have ever been right up against the cage when it is your best friend in there and the plan is going all wrong. When Ricardo came to the corner at the end of the first round, I saw the blood and the look of confusion and fatigue in his eyes. I did not know what to say, I was unprepared. Renzo gave him some advice, and Ricardo went back on the attack with punches and submission attempts. Each time the Russian escaped and got up, you could feel Ricardo's hope diminish. Finally Ricardo was taken down with an overhand right counter by the Russian and called out.

Many people that have seen fights only see the fighter in the ring. Few rarely see the fighter afterward or get to spend the next number of hours with that fighter in an ambulance and emergency room. That drive to the ER was one of the hardest times of my life. They made me ride in the front with Ricardo in the back, so I was unable to talk to him. I had to have the right things to say, but what do you say to an athlete and friend that has just trained his heart out for months and fought his heart out in the ring only for a loss? Interestingly, the driver of the ambulance was watching the fight and gave me what I needed. He saw the fight totally different than I did. He told me how amazing Ricardo looked and that his attacks were the most exciting events of the night. He saw Ricardo as a fighter that really "went for it", and that he had nothing to be ashamed of. I was blinded of this because I was only looking at the outcome, not the process.

When we got to the ER, Ricardo was obviously hurt. Not so much physically, but emotionally. The lip looked bad, and already there were abrasions and bruises all over his face that were exposing themselves. What a fighter changes into an hour after the fight is something that the crowd rarely sees. As we sat together on the hospital bed waiting for his stitches, I told him how great he had performed and what a great show he had put on for the crowd. I let him know how close he was and that I thought he was surely winning the fight up until that point. I only stayed positive, and did my best to make light of the situation. After the stitches, we went back to the arena for the press conferences. I cannot imagine what it felt like as current and past fighters came up to him to give their condolences. To stand there battered with half a front tooth and a stitched up face while everyone tells you how great you were takes guts. Ricardo had them on this night. Our bus ride back to the hotel was a lonely one. BJ Penn and Renato Babalu had also lost that night and were on our bus. As you can imagine, it was a quiet ride back.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

It was on that bus that I resolved to never let what happened that night ever happen again. I knew I had to investigate the situation and that there was going to be a number of things to learn and areas to improve. We were winning, but we could not sit back on past success. We needed to get better as a team fast, and I was going to lead the way. I began to see so many of the mistakes we made. I began to see really how unprepared we were for this fight in so many ways. I began to see that this setback was a necessity for us to ever go on to greatness.

The simplest thing I can say that the fight taught me was strategy development. Ricardo was physically and nutritionally ready for the fight, but his warmup and actual fight strategy needed a major overhaul. I have come to find that how an athlete trains leading up to a fight is exactly how they are going to perform. If you box, you will try to knock the guy out, if you grapple, you will take him down. You are not going to not practice the foot stomp and then use it in a fight against your opponent. From that moment on, I would force ourselves to do a S.W.O.T analysis to help us define the strategy for our fights. The chart I have included is what we have developed to make our strategies for upcoming fights. S is for strengths of both you and your opponent. W is for weaknesses of you and your opponent. O is for the opportunity you and your opponent have for success. T is for the threats that you and your opponent present for one another. By watching tons of film on your opponent, you can answer all of these questions and develop a fight strategy and make sure you don't fall prey to your opponents. At the highest level, whoever opposes their will and strategy on their opponent is going to win. On this night, I found out that we fell directly into Semenov's plan.

A month after Ricardo's fight, Rodrigo Gracie had a Pride fight in Japan versus Daijiro Matsui. We used our new S.W.O.T analysis perfectly. We studied his film and came up with the exactly training and fighting plan for Rodrigo to execute. We got so specific that Rodrigo only worked on a few types of submissions days before the fight. As we studied Matsui, we found him predictable according to what hand he was leading with. If it was the left hand, he was going to punch, if it was the right, he was going to shoot. Now that we knew this, Rodrigo was prepared and would kill him on the ground. So the plan was to take no risks, use punches to set up the ground, and tap him out. The plan was executed so perfectly, it was amazing. Rodrigo even finished Matsui with the exact choke he was practicing only hours before. The result of our lessons were becoming clear. There would be no stone unturned in any aspect of future fights.

Interestingly, when I was in the locker rooms at the Saitama Super Arena in Tokyo, the Dutch coach that helped prepare Semenov for his fight with Ricardo was there. He told me that their only game plan was to try to knock Ricardo out since they knew they couldn't compete on the ground. The coach also told me that their plan was that any time Semenov was taken down, he was to get back up and create space to punch. I was upset by this, because I now see that we had fallen right into their strategy. I only wish I could have learned this lesson earlier and with less magnitude.

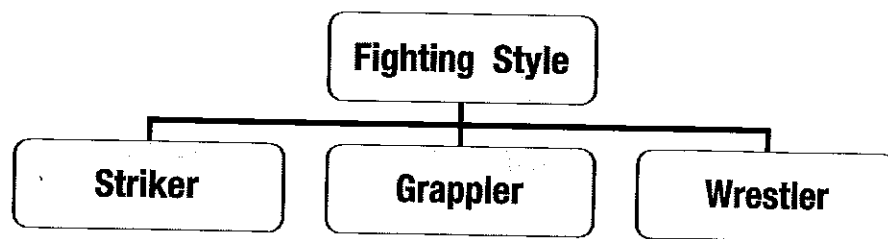
Since we have increased the depth of our physical, mental, and strategy training, Ricardo is on a roll. He has won 6 fights in a row in Japan including the King of Pancrase Title. Of course, we used our new system to prepare for this fight as well. I know it is sometimes hard to remember, but that one setback has led to all of these future successes. From now on, everything to us is a lesson, and we are pre-



pared to be taught. This open minded attitude is allowing us to continue to move forward where other athletes might either be stopped or decide to quit altogether.

When using the included charts, you must remember to perform the S.W.O.T analysis on both you and your opponent. Also get your coach and teammates to do this as well for you. This is to make sure that there are no biases present and that you all come together to form the right plan. After the plan has been formed, you must stick to it, and mirror the plan in your training. How you train is going to be how you compete.

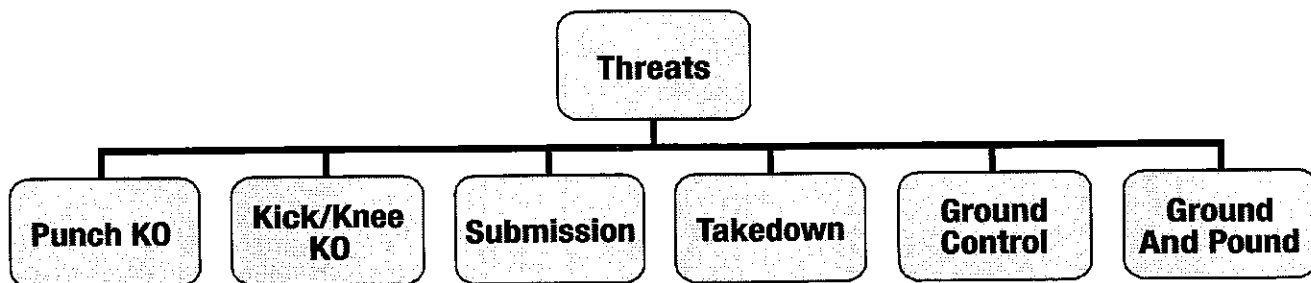
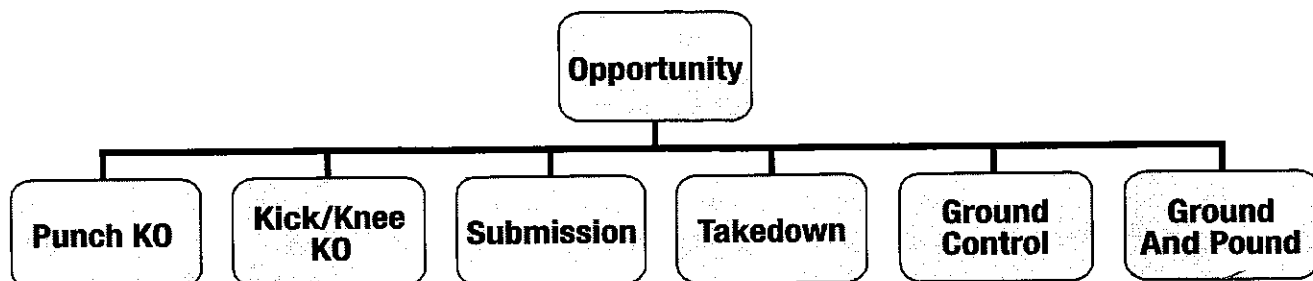
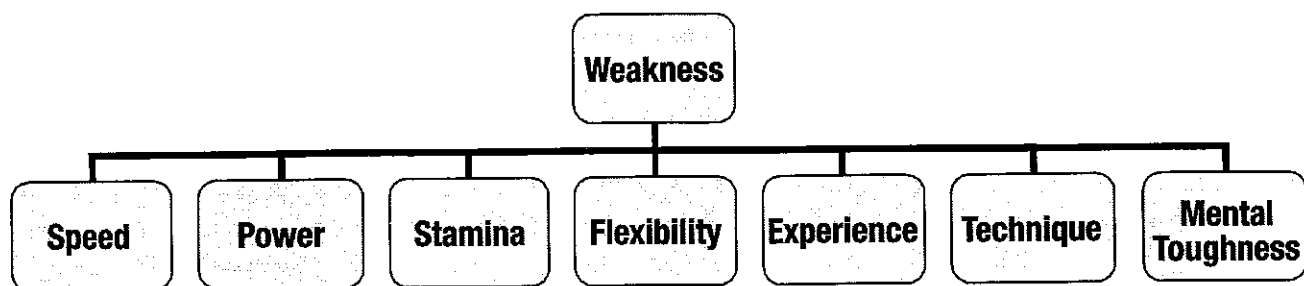
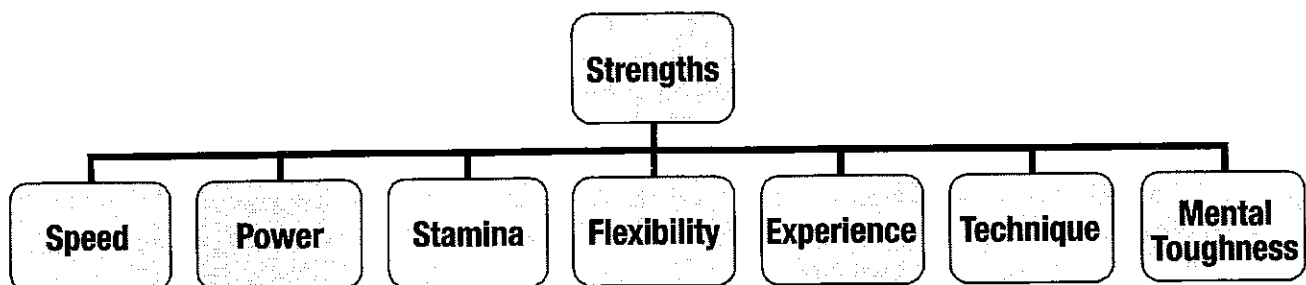
The first aspect of the analysis is to make sure you understand the overall style of yourself and your opponent. I have broken down a fighter into 3 broad styles: Striker, Grappler, and Wrestler. Although you may have all components as a fighter, you will obviously be able to rank them in order of ability. For instance, I would say that Vanderlei Silva is a Striker, Grappler, Wrestler, while Randy Couture is a Wrestler, Striker, Grappler. Minotauro would be a Grappler, Wrestler, Striker and Mirko Crocop a Striker, Wrestler, Grappler. So you should easily see that when Minotauro and Mirko fought, whoever imposed their greatest strength on the other would win. Mirko did land shots which was his strategy and greatest strength, but Minotauro got the submission when it went to the ground. Knowing yourself and your opponent is the first step to forming the plan for the fight.



After you know the styles, now you must understand the strengths and weaknesses of yourself and your opponent. Knowing this will help you to begin to specifically design your fight strategy as well as help you to better design your training to improve on your flaws. Using the charts, you identify where you are strong and weak according to the characteristics I have listed. The technique characteristic can be used to determine how your striking, grappling and wrestling talent is at this time. Once you are finished here, you will begin to see both sides of the fight. This will lead you to the individual opportunities and threats that you and your opponent pose for each other.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



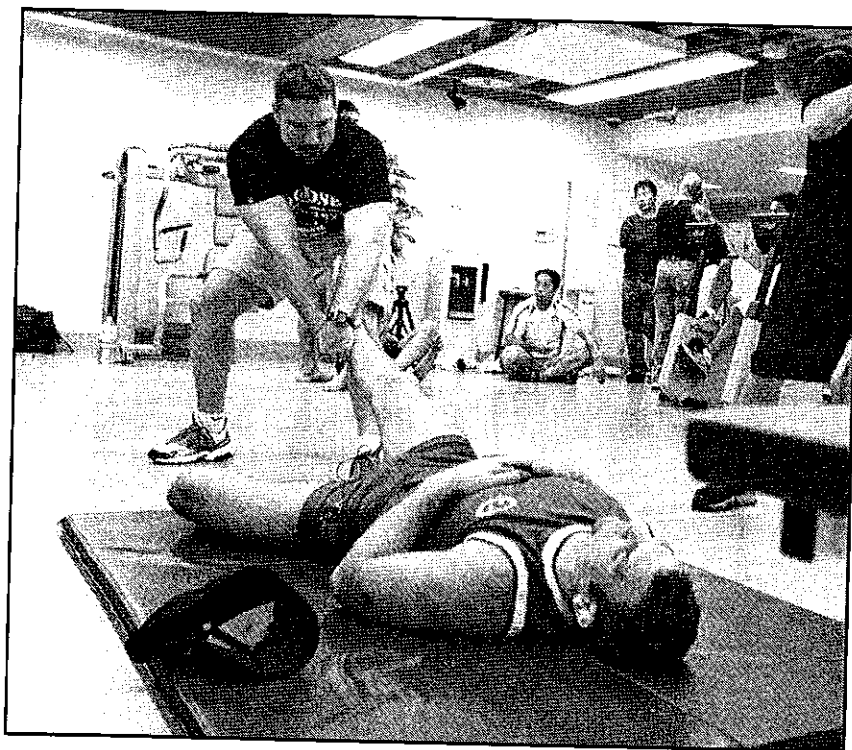


You must be honest with yourself during this entire analysis. Even though you may want to bang with your opponent because you don't like him or the crowd is firing you up, if you know you are not as talented a striker, don't risk it. The goal of this analysis is to deliver a strategy that poses the least risk for the fighter and shows the most opportune path to victory. Rodrigo Gracie for example, has good hands, but much better ground. His understanding of this and his discipline have lead to being undefeated in his first 4 fights at Pride. Each fight is methodical and similar. Use the hands to set up the ground, and pound the opponent for the win. To deviate from this game plan would be ridiculous and lead to a risk of a loss.

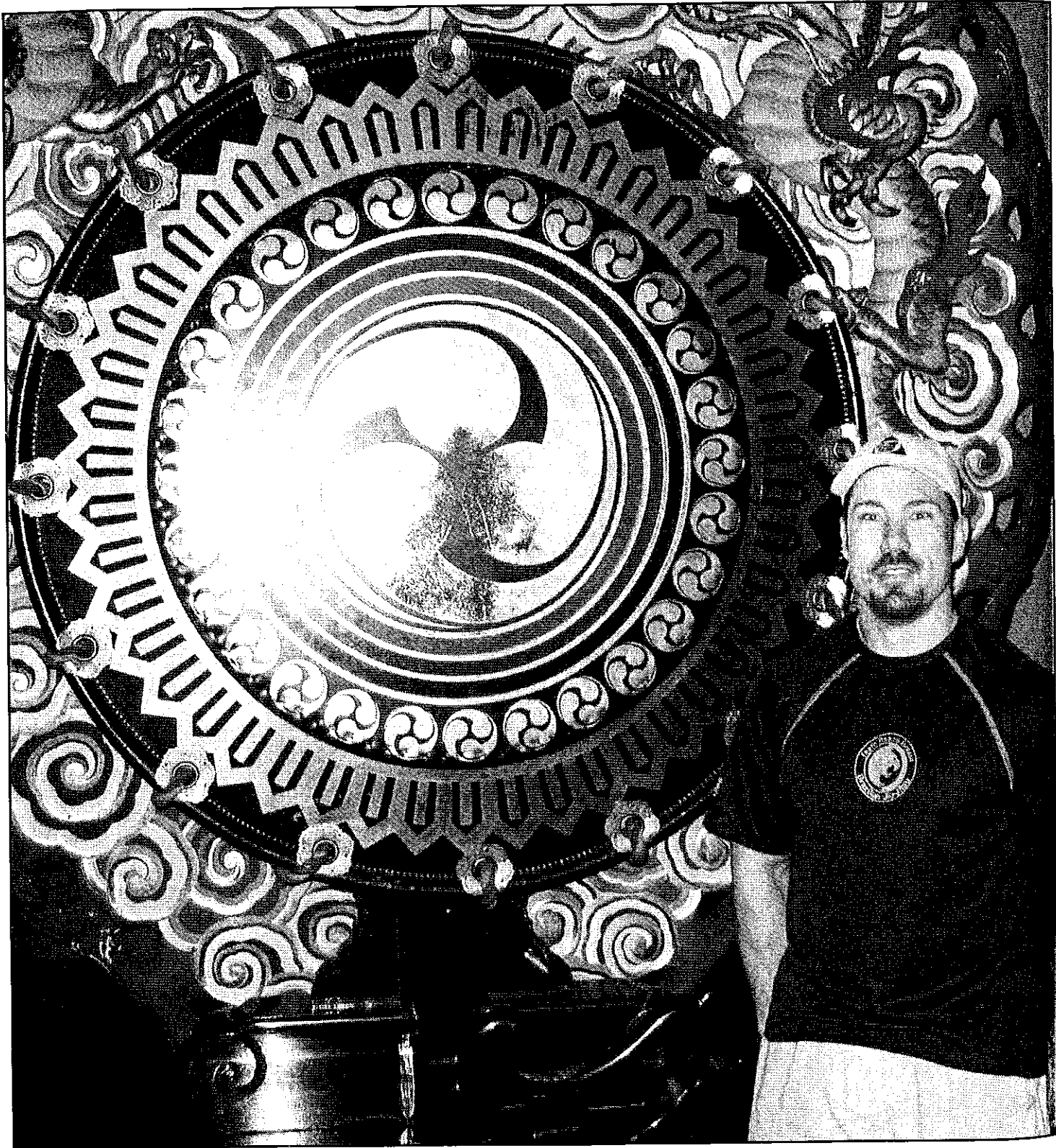
When looking at the opportunities and threats, you can further break down some of the areas. For instance, if you know your opponent is open for submission, figure out which ones would give you the chance for victory and work on them exclusively leading up to the fight. If you know you are threatened most by certain submissions, work on their defense and counters. If you think you can ground and pound the opponent, work on specific takedowns and ground and pound. It is not just going to happen by accident. As you should be seeing at this point, your training should change for every fight, because you are fighting a different opponent. If the training is not changing, you must definitely look closer at your opponent and methods.

I wrote this article for everyone because I don't think fighters are looking as deeply at their strategy development as they could. This article will also give non-fighters insight about their favorite fighters and predictions for upcoming bouts. For the fighters, don't let a catastrophic experience be the way you find out about strategy as well. Get film on your opponents. If there is no film, find out as much as you can about them. More importantly, find out about yourself. The better you know these two people, the more advantage you have before you ever step in the gym or the ring.

Remember, failing to plan, is planning to fail!



Martin doing some traction work and mental prep with Rodrigo.



Martin stops in at a Buddhist Temple to focus on the fights before the second Pride Bushido.



MMA Strategy Analysis

Strategy is an Art

One of my favorite texts is the ancient The Art of Strategy, by Sun Tzu. At this point you may be confused by the title or wonder if there is another great text Sun Tzu wrote beside The Art of War over 2000 years ago. These texts are one in the same. The translation I own, done by R.L. Wing, chooses the word strategy over war in the title, and I could not agree more with the choice. This classic work of Sun Tzu is not about war, but the strategy development that precedes it. This can be seen through the fact that the underlying message throughout the text is that complete victory can only occur when a calculated strategy is executed. He goes on to demonstrate that when this happens, the moment of triumph requires little effort. I can think of no better text to reference when creating a tactical analysis model for strategy of jiu jitsu. The following quote from Sun Tzu demonstrates his belief that before entering into any competition, it was essential to calculate a complete analysis of the situation.

Sun Tzu on Foretelling Triumph

*Those who triumph,
Compute at their academies
A great number of factors
Prior to a challenge.*

*Those who are defeated,
Compute at their academies
A small number of factors
Prior to a challenge.*

*Much computation brings triumph.
Little computation brings defeat.
How much more so with no computation at all!*

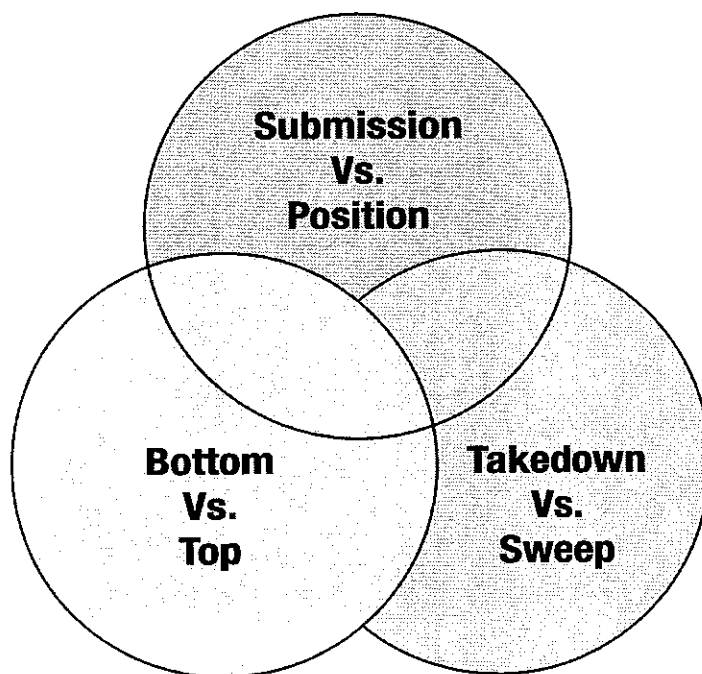
*By observing only this,
I can see triumph and defeat.*

As you should see by this ancient bit of wisdom, you must know yourself and your opponent. When you do this, you experience the Tactical Paradox: By observing every aspect of both you and your opponent, you can then see both your own triumph or defeat. To examine this paradox, one must first understand his "game" when it comes to his jiu jitsu, and also the "game" of his opponent. The following chart will help you to better classify your game into a general number of categories.

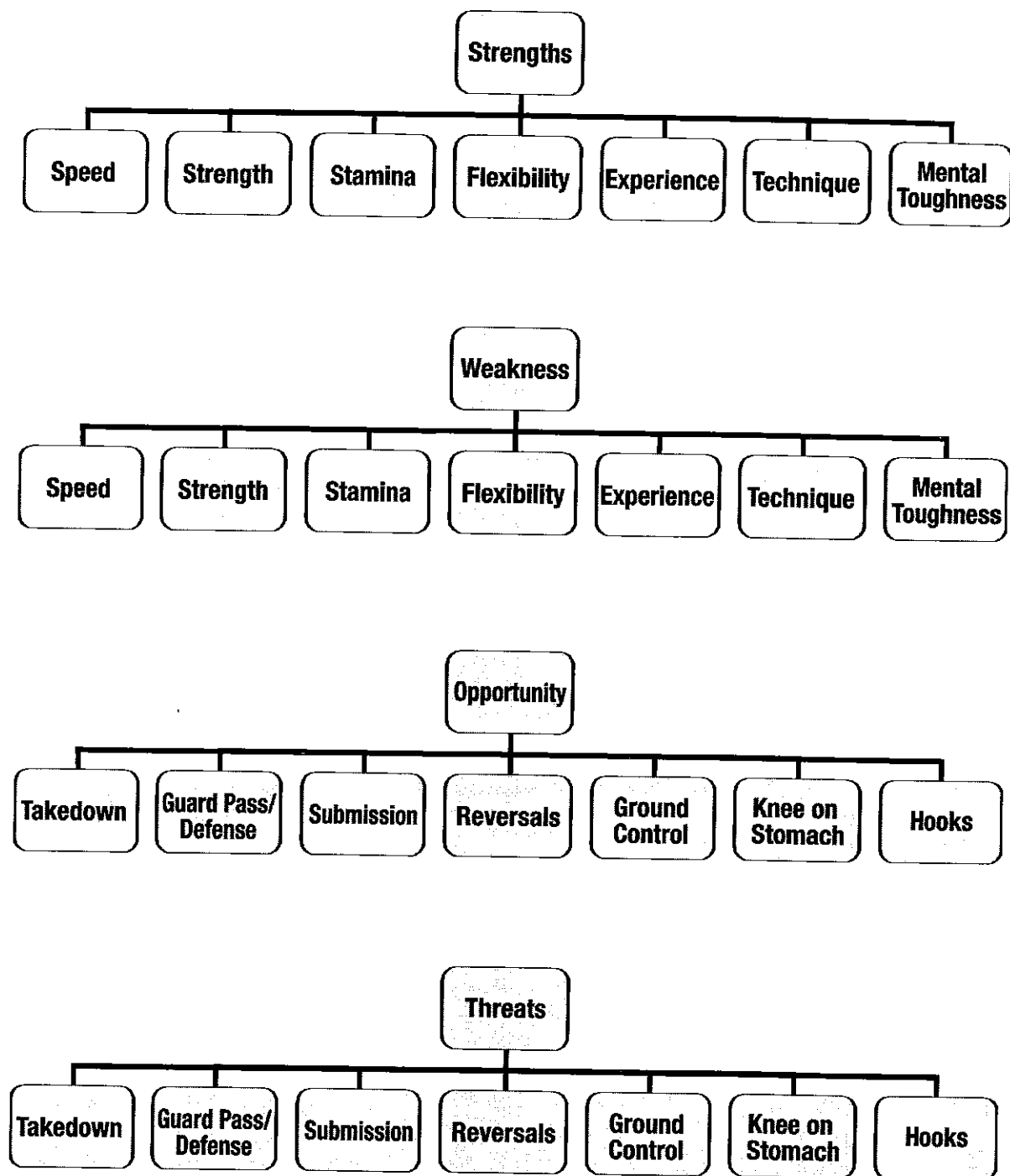


TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

This Chart should show that many of the aspects of a jiu jitsu player's game are interrelated. For instance, an athlete's game can involve submissions in which the athlete likes to work from the bottom and always pulls guard. Or an athlete's game can be a positional control game in which he likes to get takedowns and work from the top. There are a number of different possible combinations here, but the athlete must use this to gain a better understanding of his opponent and of himself. Once an athlete begins to understand this, already a strategy should begin to form for the match when facing any opponent as long as that opponent is understood. The strategy should be further crystallized with the S.W.O.T analysis of each jiu jitsu player.



S.W.O.T. stands for Strengths, Weaknesses, Opportunities and Threats. Using the chart below will help you to further develop your match strategy and close gaps that you are missing in your own game. From looking at these charts, a jiu jitsu player should be able to examine and calculate both his chances for success and his areas of greatest risk.





TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

This knowledge is critical when it comes to forming the fight plan and knowing what to expect during the match. Once you have formed the correct strategy, you have put yourself in the possible Position of No Error as described by Sun Tzu:

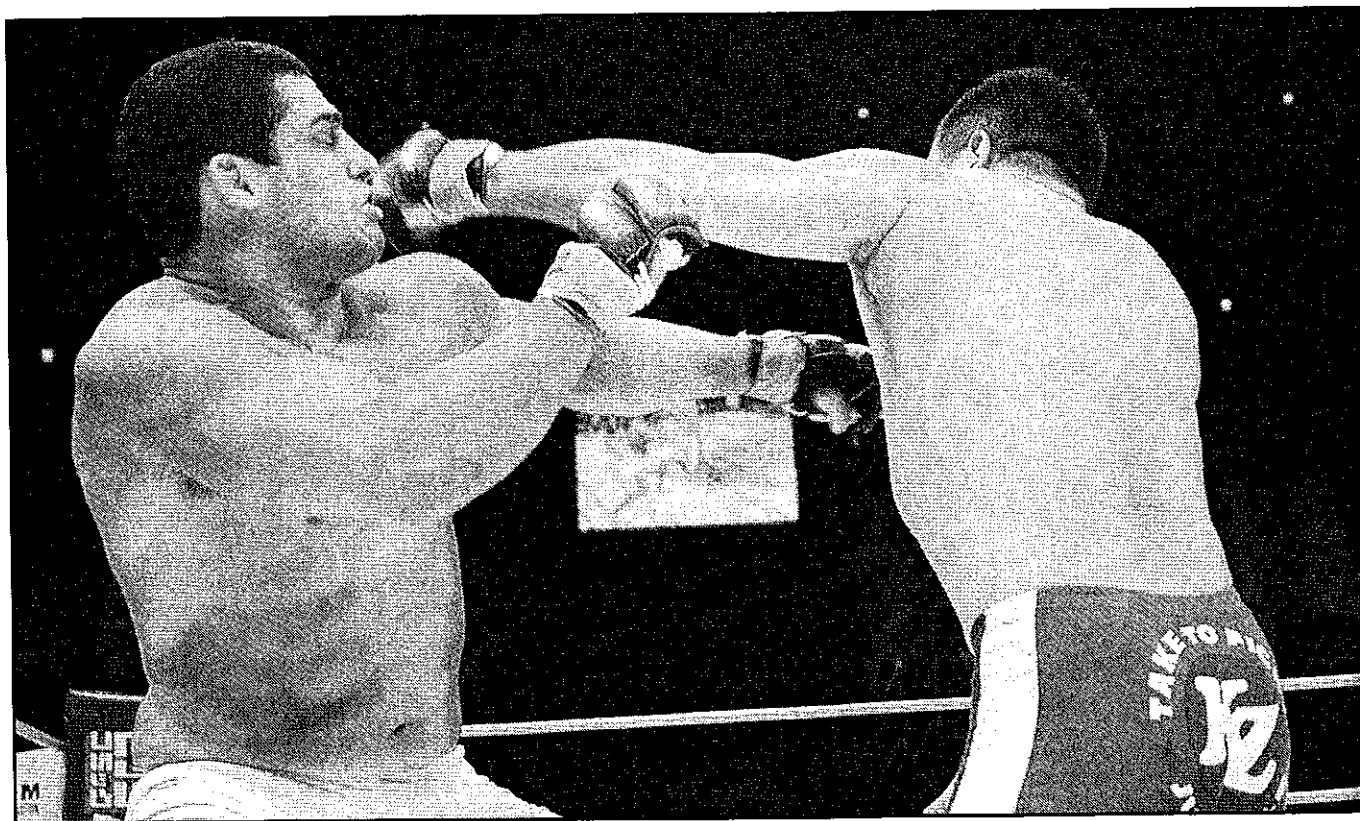
The Position of No Error

*Those who triumph because they are skilled in conflict
Are not honored for cleverness
Or credited for heroism*

They triumph because they have made no errors

*Those who are skilled in conflict
Establish a situation that cannot be defeated,
And miss no opportunity to defeat their opponent.*

At this point you may be wondering if there is a perfect strategy for every competition situation. There is not. Although great strategies can be developed to help deliver a fight plan, any experienced competitor knows that the plan is always subject to change. Great jiu jitsu artists must not only have the ability



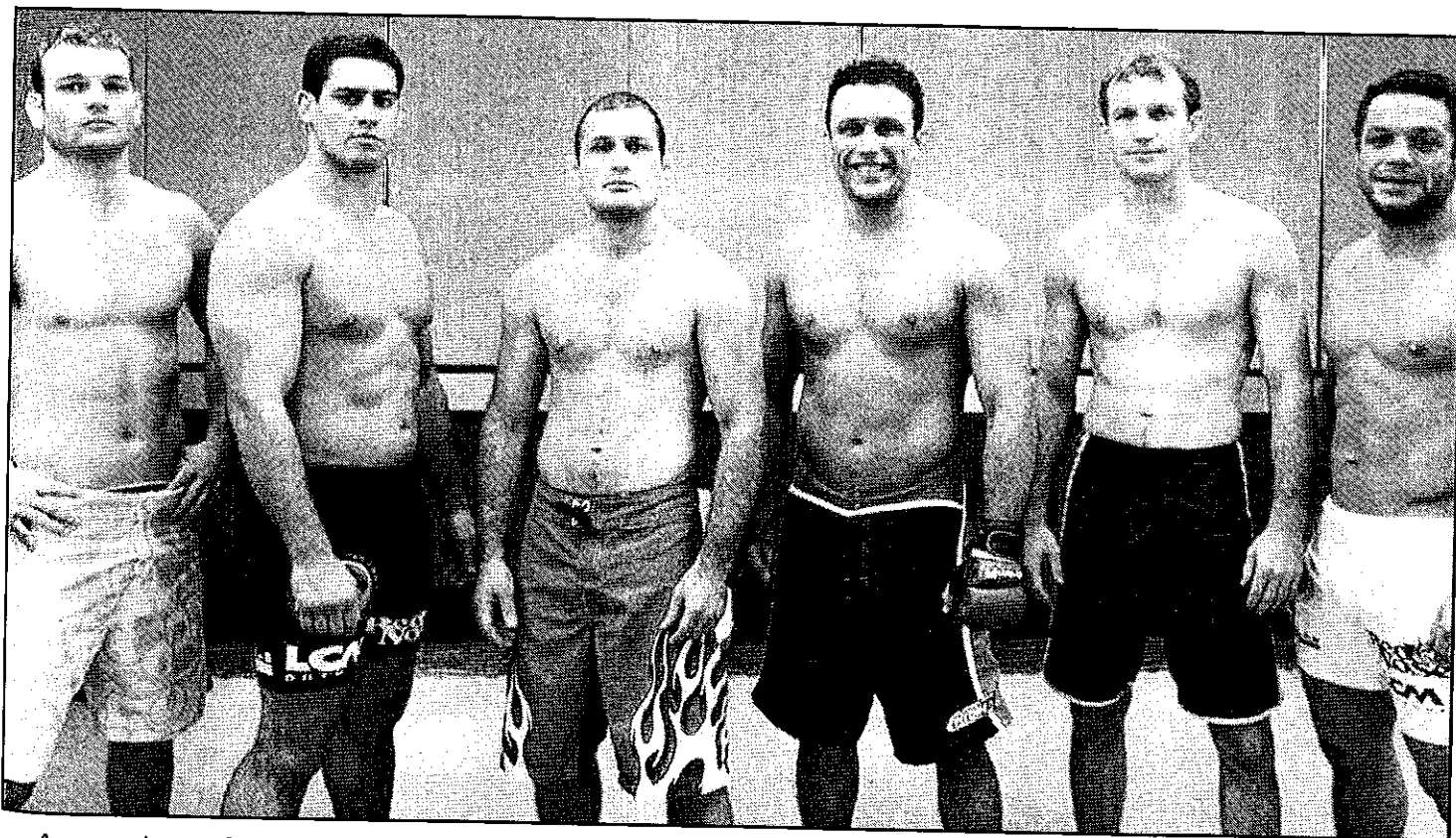
Daniel Gracie does battle at Pride Bushido I.



to recognize their opponent's disadvantages at that precise moment, but also be able to manipulate the strategy to capitalize on them in an instant. A jiu jitsu player's tactics can change along with the situation at hand. This is where experience and instincts come in. When a properly formed strategy is in place, however, less surprises are going to take place for sure.

I know that most jiu jitsu players enter in with little preformed strategy for many of their matches. Think back on your past victories and defeats, and I am sure the proper strategy played a huge role in the outcome. I write this section not to point fingers at what you may not have done, but as a shining example of what to do for future competitions. I hope the two sections of this book on strategy have opened your eyes to looking deeper into your own battles with both your self and your opponents. Remember that strategy development is not just for MMA, but for life. Once you begin to use this S.W.O.T. analysis carefully, you will see it can be applied to any conflict in your path. I conclude on the topic of strategy my favorite quote from Sun Tzu when it comes to strategy development:

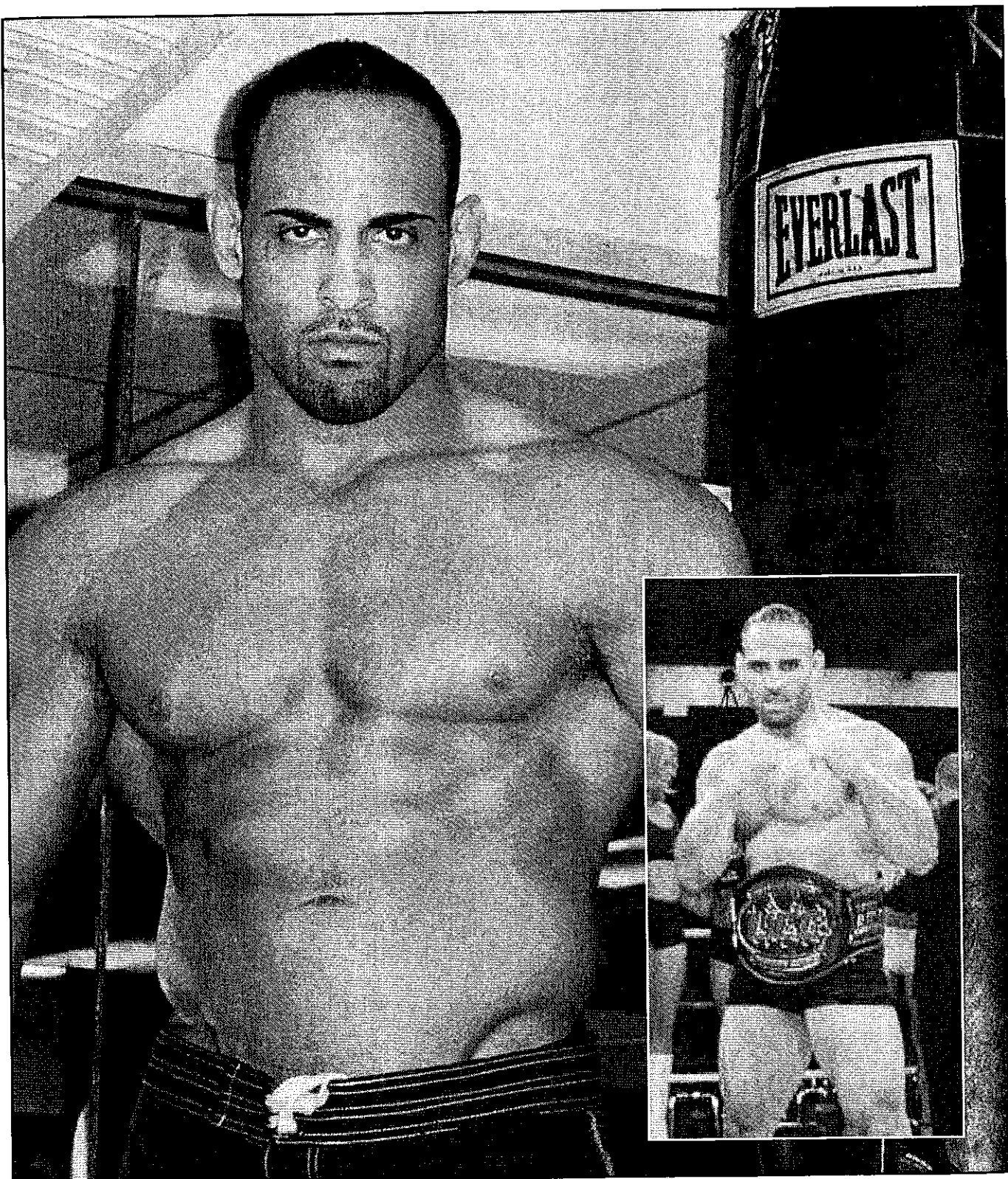
*"Know the other and know yourself:
One hundred challenges without danger;
Know not the other and yet know yourself:
One triumph for one defeat;
Know not the other and know not yourself:
Every challenge is certain peril."*



A rare photo of six Gracies training before Pride Bushido 1 in Japan. This photo demands one thing: RESPECT!



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



Sean Alvarez proves that not only does proper nutrition lead to a shredded physique, but also to the UCC Heavyweight Title.



Performance Nutrition for MMA

When you chose to be involved with Mixed Martial Arts, you separated yourself from the regular athletes that do not want to go the extra mile with their training. Most athletes thinking about getting into fighting want to be involved in the speed, strength, flexibility, and technical work believing that that will lead them to improved performance. This belief is true, but do not forget one important piece of training that cannot be left out if you are going to reach your potential. That piece is what we call Performance Nutrition.

You are first and foremost an athlete. This means you cannot feed your body with the same food that regular people use. You are special, and have special nutritional requirements if you are going to perform at your highest level. Your body is a high performance vehicle, and you need to fuel it as such. You, therefore, need to search out quality nutrition information that will help you to eat correctly for the rest of your life as an athlete.

Performance Nutrition is important for four major reasons to an athlete. First, you need the proper fuel to sustain your performance out in the ring or on the mat. Second, the correct fuel will also help you to build quality muscle and prevent injury. Third, eating correctly will minimize body fat levels which will allow you to be faster and improve your endurance. Fourth, following proper nutrition habits will prevent future health risks, lengthen your career, and lead to increased self esteem.

This chapter is not designed to be the be all and end all for your nutrition. The information will allow you to gain valuable information about how to eat as an athlete. I am not going to get too deep into the science, but give you the practical insight that you need to understand to be a successful athlete. As I commonly say during our training, "You can't put on your tie before you put on your shirt". Before you should even worry about whether you need supplements or not, first we want you to begin with the basics. All too often, athletes will jump to the extras, before they have done their ground work. Nutrition should first be seen as simple before you try to look at it as complex. For all of my fighters, I begin by asking them to start with the following six pieces of advice for their first month of training:

1. **Make sure you drink plenty of water throughout the day. (Avoid soda and high sugar juices).**
2. **Eat 5-6 smaller meals throughout the day instead of 2-3 larger ones.**
3. **Avoid products containing high amounts of sugar; high fructose corn syrup and fat.**
4. **Make sure that there is a balance of protein, carbohydrate and fat in every meal that you eat throughout the day.**
5. **Make sure that you have a high quality post workout meal immediately following exercise like a carb/protein shake.**
6. **Try to eat one hour before exercise or a training session.**

Although these six guidelines may seem simple to follow, I rarely see the athletes that have the discipline to stick to it. Challenge yourself with the following question: "What is more important? To be successful in MMA, or to eat poorly?" If you answered to be successful in MMA, then your decision has been made, now you need to stick to it.

I break Performance Nutrition concept into 4 basic areas.

1. **Basic Physiology: The 6 building blocks of life**



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I feel that physiology is the most important "ology" an athlete can know. I am talking about human physiology, which can be defined as the science of the functions of the human body and the chemical and physical processes involved. The better you understand how the body works, the better you are going to be able to train and feed it.

There are 6 building blocks of life. Simply put, if you are missing any of these components from your diet, you are going to die. This is stated not to scare you, but to help you remember. These 6 building blocks are water, carbohydrates, proteins, fats, vitamins and minerals. A basic understanding on the functions, sources and portions of each of these building blocks is essential for optimal performance. Without this knowledge, there is no basis for what you are eating.

A. Water

The body is 70% water. Your muscles are 80% water. You can go without food for some time without dying, but only a few days without water.

As an athlete, you are constantly losing water to the environment and it must be replaced. Most athletes do not do this at the correct rate, and most are, therefore, in a chronic state of mild dehydration. This has a huge effect on performance and injury. Just being dehydrated 2-3% can produce adverse affects in performance.

Our simple example is to picture a muscle cell of your body as a grape. Then picture a dehydrated muscle cell as a raisin. Now ask yourself which one you would like to use when you are staring at your opponent across the ring.

My Challenge to You: Drink nothing but water for a week, and drink a lot of it. Try to drink and once for every pound that you weigh, and see how you feel.

B. Carbohydrates

Carbohydrates are one of the important energy sources of the body used by an athlete. Carbohydrates are also the most abused food component in America and one of the biggest reasons for obesity, diabetes, and death in this country. Utilizing carbohydrates correctly is critical for the performance of a MMA athlete.

Now don't let me scare you too much. There are good and bad carbohydrates. The problem we already stated is that most people are eating the bad ones. Did you know that the average American eats 145 pounds of sugar per year? This table sugar or sucrose, has no nutritional value, and is fattening up our country and causing today's youth to develop diabetes at an alarming rate.

There are a few things I would like you to know about carbohydrates: there are simple and complex versions, and there are best choices of each that we would like you to select. The difference you need to know about simple and complex carbs is that the body digests and handles them differently. Simple carbohydrates like fructose and sucrose are immediately processed by the body, while the complex versions like starches and fibers take much more time. Great choices of simple carbohydrates would be fruits and vegetables. These are common choices that most people avoid. You must get beyond this and add fruits and vegetables to as many



meals as possible. Complex carbohydrates take a longer period of time to process. Great choices of complex carbohydrates would be oatmeal and potatoes. I know there are a lot of Atkin's dieters out there, but the carbs are essential for the athlete. I also know some people shun off rice, pasta, and bread, but for the athletes that are still eating it, please make the right choice. Choose the version that has color. What I mean here is to eat brown rice over white, wheat bread over white, and whole wheat pasta over regular. Just these simple choices can start to help.

A final note about the dangers of hidden carbs that aren't good for you. Just take a look at the ingredient label of many of the things you regularly eat. If high fructose corn syrup is a major ingredient you keep seeing over and over, throw that food out. It is no good for you. Then you will start to be shocked by how many things actually contain that substance.

C. Protein

This is the building block that every athlete wants to jump to. This is the component that no athlete seems to be able to get enough of. For my athletes, I want them to understand that protein is the building block of muscle and that it is essential for repair. Protein is something that should be contained at every meal in some portion, but many athletes focus too strongly on it and end up making expensive protein filled urine.

Great choices of protein are egg whites, chicken, fish and beef.

Your body can only process so much protein at one time (some sources say around 30-40 grams), and many athletes exceed that at certain meals of the day without the proper balance of the other building blocks. Don't eat too much at one serving. This is where having more meals throughout the day is going to make sure you are going to take in the protein that you need for the day. This is something that I am going to discuss later.

D. Fat

Here is the building block that everyone seems to think is the enemy. Yes, it is true if you eat too much fat, you will get fat. Somebody should tell that to all the people at McDonalds. What everyone must remember though is that fat is essential in our diet for insulation, our cell membranes, our nerve conduction, and it is an important energy source as well. Just like all of the building blocks, without fat, you are going to die.

There are a number of fats out there, and some that are essential for performance. Overall, there are three types of fats. Saturated fats can be described that as fats that are solid at room temperature. The fats found in a steak or butter are excellent examples of a saturated fat. There are also mono and polyunsaturated fats. Some of them are good for you, and some of them are cancer just waiting to happen. Numerous oils like olive oil, fish oils, canola oil, peanut oil, etc. are examples of these types of fats. Many oils are healthy, and some are only good for lubing up your car. Heating many of these is a big "no-no" as well. By heating up many oils you change the chemical makeup of the fat and your body cannot recognize or use it. This and the process of hydrogenation converts the fat into a trans fatty acid. Polyunsaturated oils should not be heated for this reason. When you look at the heart attack, stroke and cancer rates jumping through the roof in this country, these trans fatty acids are a great suspect. Trans fatty acids go into your cells and change the DNA inside because the body cannot assimilate the fat. Then the damaged cell replicates. This replication is also called cancer. The take



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home message is not to fry any of your food in any oils to be safe, and never fry or cook anything with margarine. And never, never, eat a bunch of French fries out of a fryer that has repeatedly cooked with the same oils. This converts the oil to a trans fatty acid. You might as well just dip your food in a vat of poison. The good news is that soon, trans fatty acid content will be included on the labels of everything that you eat (supposedly starting in 2005).

There are a number of fats to enjoy. There are a number of oils that are quality oils essential to health. Fish oils like Omega 3 fatty acid, flax seed oil, linoleic, oleic, and lenoliaic oils are all essential oils for the body that you need. You can also get fat from chicken and beef as well as almonds and other nuts. These fats can affect performance depending on when they are ingested as well.

The last piece to remember about fat is that it is not just what type you eat, but how much of it you eat as well. Fats are not always bad, but too much of certain fats is. Try to select the better fats I have listed above and keep them to about 30 percent of your diet.

E. Vitamins and Minerals

For what you need to know, vitamins and minerals are essential for the growth, normal metabolism and development of the human body. They are specifically seen as regulators of certain metabolic processes of the body, that without them, diseased states will occur.

If you are eating properly, and your food is nutrient dense, added vitamins and minerals to your diet may not be necessary. Since many athletes, however, do not eat well enough, and much of the food they eat is not nutrient dense, there may be a need for supplementation of certain vitamins and minerals. This will be covered in the supplement section of this chapter.

II. Thermodynamics

If you could be a car, what kind of car would you like to be? Most people say Ferrari or Lamborghini, but that still isn't the fastest, most specialized car for performance you could be. I would like you to think of a Dragster. You know, one of those cars with the giant back tires, the engine that is just pouring out of the front of the machine and the spoiler that makes sure it keeps this beast from being airborne. That is specialized for speed and power. When you think of that car, you realize that not only does it need fuel, but this fuel must be in the right amounts and have the right components, and it is very different from what other cars need. This is the philosophy behind Performance Nutrition. You are a specialized athlete that needs the right amounts and components of fuel for optimum performance.

One of the simplest areas to start when describing how much to eat is with Thermodynamics. When I describe thermodynamics to our athletes, I first ask them to simply picture a scale in their minds. One side of the scale is for "calories in" and one side is for "calories out". Whichever side



at the end of the day is heavier will decide if you gained or lost weight that day. Quite simply, if you take in more than you expend, you will gain weight. If you burn off more than you take in, you will lose weight. Period.

At this point, you should be asking yourself, "Well, then how many calories do I need a day?" If you cannot answer this question, everything else that you do with your diet is really guesswork. You could be eating all the right things, but if you take in too much or too little of it, you may not be getting the results you are after. A simple formula that we like to use to help determine how many calories you need for a non training day is $11-14 \times \text{Bodyweight in pounds}$. So, if you weigh 200 pounds, you should try to range your caloric intake from 2200 to 2800 calories per day. According to how active your job is and how intense you work out that day, you can also add more calories. For instance, if you are active at work, add another 30% more calories to this number. In addition to this add the amount of calories burned during training to get the training day expenditure. Monitor your weight during this, and if you are losing or gaining too much weight, alter the calories 100 at a time to find your optimal range for what you are looking to do. This should lead the athlete to the understanding that thermodynamics is about knowing how much fuel to put into the machine every day.

I. Shopping for food

Just like throwing a great punch, or executing a powerful throw, shopping for food takes training. You need to have the right information, and once you do, make the right moves. You may not know this, but right now there are marketing executives out there thinking up ways to get you to poison yourself and limit your career. They are paid big money to do this too. What do I mean? Well, if you have ever walked down any of the aisles in your supermarket, they have surely gotten you. The challenge is there for you to resist and make the right choices. It all starts with what I call "Shopping the Perimeter". If you look at every supermarket, the meats, fruits, vegetables, and eggs are all on the perimeter of the store. All of the poison is located on the inside of that perimeter. Think about it, the juice aisle, the soda aisle, the cookie aisle, the cereal aisle, the potato chip aisle, the frozen food aisle. You have seen them, and the marketing slogans, colors and commercials have gotten you. But you need to be strong and resist. You will be armed with one simple slogan for success. If you can't hunt it down, fish it out of the sea, pick it off a tree, or dig it out of the ground, then do not eat it. Stick with this, and you will be making good food choices. You may think it is hard to do, or impossible, but all of that food is waiting for you on the perimeter. Avoid canned, colored, processed and synthetically made junk at all costs. Your body is going to thank you for it with higher energy levels, faster recovery and improved performance. All of those attributes are critical to success in MMA.

II. Shopping for supplements

One of the most common topics my students want me to cover about nutrition is supplements. Why I think that is funny is that most of those athletes that are interested in getting involved with supplements have horrible diets! Remember, don't put on your tie before you put on your shirt. You must first fix your diet and then see what you need to add. Look at the term "supplement" itself. It means something to add that is missing. With a proper diet, there are not going to be many things that need to be supplemented, and there are many products out there that just plain don't work. What I am going to cover is what I feel are necessary supplements for the hard training, MMA athlete.



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Whenever most athletes are asked what is the most important meal of the day, most of them respond "breakfast" automatically. I feel this is incorrect. The most important meal to us is the post workout meal. I like this meal to be in liquid form to be easily digested. After the workout, your body is in catabolism and starving for the carbohydrates and protein that it needs to recover and repair. This meal can start the recovery process quicker and help insure progress. This meal should be taken immediately following the end of the workout. When most people think of a shake, most of them think of a protein shake. Protein is important to us here at the post workout meal, but you cannot forget about the carbohydrates. I like a 4-5 to 1 ratio of carbs to protein in our post workout shake. So, if the shake contains 20 grams of protein, my athletes will take in 80-100 grams of carbs afterward as well. Simple carbs and whey protein are great choices here. You can buy a pre made post workout shake like Endurox R4, Biotest Surge, Myoplex Mass, or you can even just mix in the right amount of whey protein with Gatorade. In addition to the basic carbs and protein here, I also recommend a good antioxidant vitamin (for its abilities to decrease the effects of free radicals that are produced by intense exercise), and possibly creatine or glutamine if you feel it is necessary once you read the description below. This meal is critical, and then you should eat again afterward in about one hour.

When I ask "what is the most important meal besides the post workout meal?", most athletes answer "breakfast" again. No, not yet. The pre workout meal comes next friends. What you ingest before the workout has a lot to do with how that workout will go and the catabolism that takes place. I like my athletes to eat 1-2 hours before the workout, and then have a small liquid mix of 30 grams of carbs and 10 grams of protein immediately before the workout.

Now it must be breakfast right? Well, yes and no. Every meal is very important to the specialized MMA athlete, so you want them all to be perfect. You are eating now for performance, so there is never a meal that doesn't count as much as another.

There are a few other supplements that I would recommend every MMA athlete pay attention to. The first is a good encapsulated Multi Vitamin. With the amount of stress you are putting your body through, and the poor air and other conditions that surround us every day, I believe a multivitamin is important. Even if you are getting most of what you need in your diet, you can never be too safe. The second supplement I would recommend is creatine. This is the most studied supplement in the history of supplements, and the research is overwhelming in terms of improved performance and recovery. Although there are some "myth" out there of cramping and pulls using this product, I have not seen those claims supported in the literature. I like my athletes taking 10 grams per day on training days and 5 grams on non training days for as long as they are training for upcoming bouts. The third supplement I would like to mention is L tyrosine. This is an essential amino acid that acts as a mild stimulant during workouts. It is linked to chemicals in the brain like serotonin, and many of my athletes enjoy improved workouts when taking the product prior to training. Experiment, but my athletes have found around 3000mg before the workout to improve training. A fourth supplement that I recommend for everyone is Udo's Choice Oil Blend. This is a combination of a number of essential fats in oil form. I believe that this is critical for health and recovery. Finally, L Glutamine is also another essential amino acid that I recommend to my athletes. This amino acid has been linked to improved recovery and immune response in athletes. I like my athletes taking anywhere from 5 to 10 grams before training and bed on training days.



III. Reading labels

Another important skill that I think MMA athletes have to have besides punching, wrestling and submissions is how to read a food label. The government, which may not always steer you in the right direction of what to eat, at least provides you with the ingredients and makeup of the food that you are eating. This skill is essential to the athlete to know how many calories he ingests in a day, as well as what the composition of those calories are.

After stating the importance of reading labels, I will first state that if you are reading a lot of labels, you may not be eating much of the right food. Last time I checked there is no label on an apple, or a chicken breast. Remember that most of the food you should be eating should follow the "if you cant hunt it, pick it, or dig it up..." rule. That being said, and coming back to most people's reality, you are going to eat things with labels on them so you should know what they mean.

The first misleading thing to pay attention to is what is considered a serving size according to you label. For instance, you may have a big bowl of cereal, or drink a 32 ounce Gatorade and think you only took in the certain number of calories listed on the box. If the serving size is one cup of cereal, or eight ounces of Gatorade, you may have just quadrupled the calories and everything else listed on the label without being aware of it.

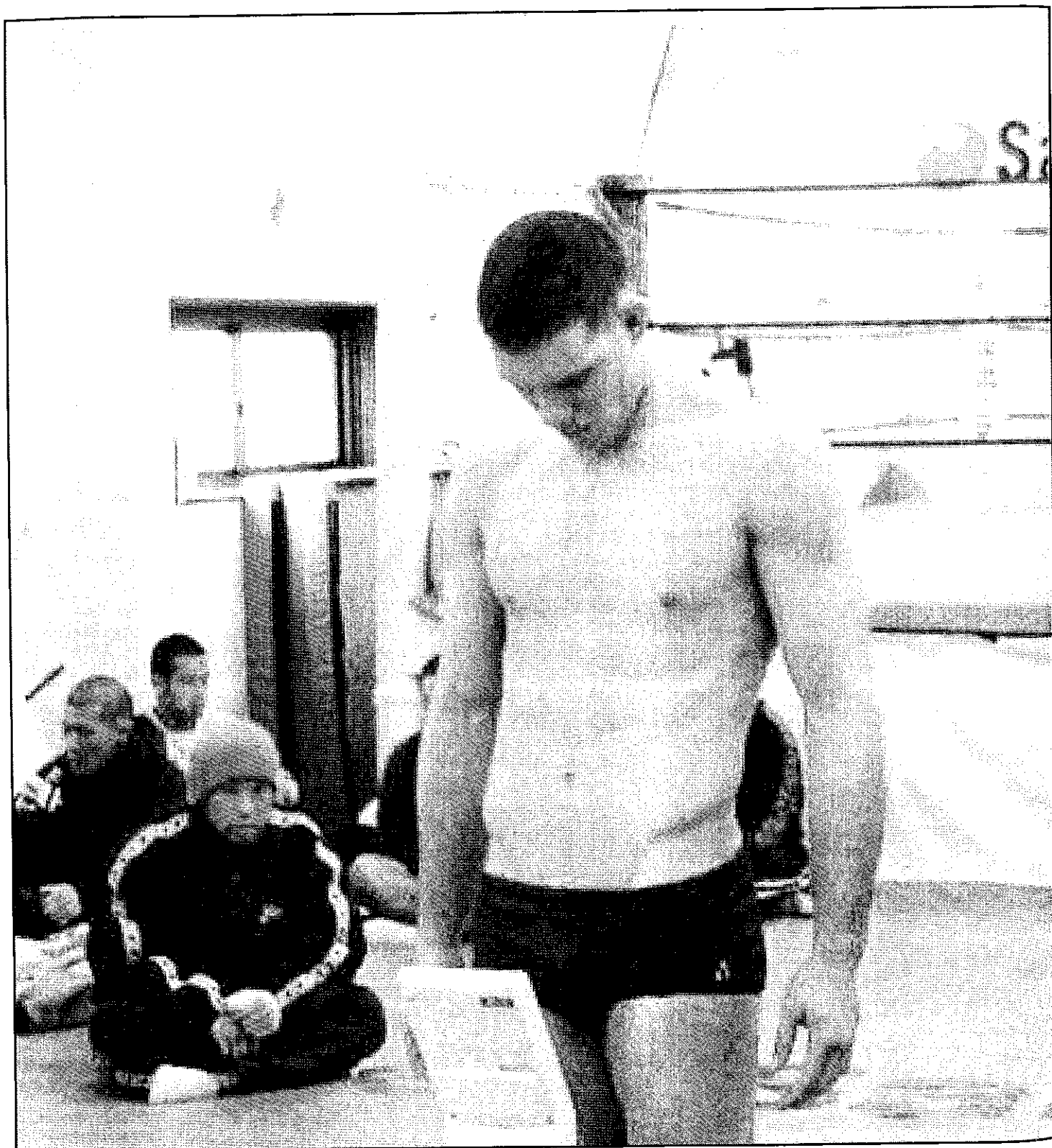
After you know the serving size (and try to stick close to it), you can look at the total number of calories and what proportion those calories are made up from protein, carbs and fat. The way to figure this out is to multiple the grams of protein and carbs in the serving by 4 and the grams of fat by 9. This will give the breakdown exactly of what you are eating to see how balanced your food really is.

The next thing that I think is most important is not the amount of sprayed on vitamins the product has (take your multi every day to be sure), but the ingredient list. The ingredients are listed in order of the amount of each substance that is in the product from the most to the least. So, if your cereal's first ingredient is corn and the second listed is high fructose corn syrup, you can be pretty sure you should throw out the cereal and eat the box, it's healthier for you.

Another important thing to do with the food label is to identify the amount of sugar and sodium that is in your food. Processed foods are packed with sugar and salt. These two ingredients are not only killers of performance, they are also killers of people. When you start to be aware of the facts of how much sugar and salt you are taking in every day, you will then have control.

A final piece that I like my athletes to note is the amount of fiber that is in the food they are eating. There are two types of fiber: soluble and insoluble. You cannot digest either of these, but fiber is still important to the athlete. All too often, many athletes are not getting enough fiber. Being aware of this will help you to get closer on track. Try to get in about 25-30 grams of fiber in your diet per day. Great choices here are dark leafy vegetables and whole grains.

Hopefully, this nutrition section gives you the simple tools you need to take your game to the next level. An important thing to note from all of this information is that your performance is not solely determined by what you eat, but also by when you eat. Make sure not only to follow the guidelines I have set above in terms of the types of food to ingest, but also the timing of those meals as well.



The plan comes together: Ricardo perfectly makes weight for his King of Pancrase title match.



Making the Weight in 2004

Have any of you ever watched a weight class fight in which one fighter looks far bigger and heavier than the other even though they weighed exactly the same amount the day before? Have you ever wondered how an athlete can lose 10-15 pounds in one day for a weigh in and then gain it all back for the fight with no ill effects? If you answered "yes" to the two questions above, then you are going to love this next section. I am going to cover the basics in the art of weight cutting for competition. If you follow the information correctly in this article, not only will your risk of complications be decreased, but your performance should go to the next level.

Over my last number of years training combat athletes, probably the biggest weakness in terms of knowledge about training had to do with their nutrition. Within the realm of this area was even less knowledge about body weight manipulation, or "cutting weight" for a fight or tournament. I categorize cutting weight under nutrition because of how closely the two are related, but I am not talking about changing diet here. I am talking about the rapid drop in body weight and rapid weight gain before and after a weigh in for a competition.

As I stated earlier, cutting weight is an art form. This means that it takes knowledge, skill and practice. I have seen athletes have horrendous performances by cutting too much weight, cutting weight too fast, cutting weight too slow, not rehydrating correctly, and eating incorrectly after their weigh in. By the end of this section, none of these mistakes should ever happen to you.

Why Cut Weight?

Many people not involved in combative sports do not understand why someone would subject himself to water and food restriction to cut weight in the first place. I usually explain this with the example of weight classes. What this means is that most combative sport competitions have weight limits for certain classes. Since the object of being in a certain weight class would be to be the strongest and heaviest person in that class, many athletes cut their weight down to a lower class only to add weight after the weigh in. In the athlete's mind, they are then heavier for the actual fight, and have the potential to be stronger than their opponent (as long as they don't do the exact same thing). The weigh ins are also usually the day before the fight. This gives the fighters 20-30 hours to reload their bodies following the weight cutting. For anyone that has ever seen Tito Ortiz or Matt Hughes fight, you should understand what I mean. Every time those two athletes fight anyone in the same weight class, they always look much bigger and stronger. The Tito Ortiz/Elvis Sinosic fight, where both fighters weighed in at 204 pounds comes to mind. At fight time, Tito looked 230 and Elvis looked 180. This should hammer home the fact that if things are done correctly, cutting weight has huge advantages. Don't Forget The Other Half!

Everyone can quickly think of some ways to cut weight. You could stop eating and drinking, you could exercise to sweat a lot in heavy clothes, or you could hop in the sauna for a half hour. All of these methods will be somewhat effective if done correctly to cut weight for a fight or competition. But what about properly putting the weight back on in a safe and timely manner to be ready for the fight? That is where people don't have as many answers. If you think you should just eat and drink to feel good, you are going to run into problems. Do not forget that the reconstitution of your body is as, if not more, important in the cutting weight and gaining it back cycle.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

Shedding the Pre Fight Pounds

This next section is going to cover the techniques for adequate weight loss. Before I begin though, I must remind everyone that their diet should be solid at this point, and you should always be within about 10-12 pounds of the weight you want to reach before the weight cutting begins. Any more than this value and things start to get very dangerous. This means that you should control your caloric intake long before the fight, and get to 10-12 pounds away from the desired weight. By doing this, you will have much less to worry about when the fight approaches.

Fluid Restriction:

The simplest and most effective way to begin the weight cutting process is to decrease or stop fluid intake. Your body is constantly losing fluid by breathing, sweating and urination. Every minute and hour that this goes by without replacing the fluid, you will lose weight. This process takes no extra energy from a fighter to complete, and you can lose up to 5-6 pounds in 24 hours without drinking. My athletes never go over 24 hours without fluid, and we usually start the fluid restriction exactly 24 hours before the weigh in. Before beginning the fluid restriction, there are some tricks to losing the maximum amount of fluid over that 24 hours.

For the fifth, fourth and third days before the weigh in, I have my athletes consume 2 gallons of water a day. They carry the gallon jug around with them so they know how much fluid they are taking in. At this time, the athlete also can be more liberal with sodium in his diet [we don't go heavy on the sodium, but a little increase can help later as you will see]. This increased water intake triggers hormones in the body to excrete more urine than usual. This response will be essential in losing fluid the day before the weigh in. Two days before the weigh in, the fighter cuts the fluid intake to one gallon of water, and cuts out the sodium from the diet. Finally, the last day before the weigh in, the fighter takes in no fluids, no sodium, and only food that I will describe later. This process is effortless, and only requires a little discipline and tolerance of a dry mouth.

Sweating:

The next most popular way to decrease weight before a weigh in is to sweat out fluid from the body. This can be done in a number of ways, and can take off 5-10 pounds of weight in a short period of time depending on the conditions. This is a great method because even if the athlete is already lean, there will still be fluid that can be lost. The limitations to this method are that it requires great amounts of energy expenditure, and can sap strength from the fight the next day. The goal for using this method would be to take off the weight you need to lose with the least amount of fatigue for the athlete.

The simplest way to use this method is to exercise. That can be as simple as running or jumping rope, to as complex as cardio fight circuits involving punching, kicks, takedowns and sprinting. Depending on how quickly you need to lose the weight and the temperature of the area you are in, you will get a feel for what style you need to use. In addition to the exercise, athletes commonly use plastic suits and heavy clothing to increase the body temperature and enhance the sweating response. Just remember not to overheat. Athletes have actually died from overheating using some of these methods. (I must repeat that the goal is to be within 10 pounds by the day before the weigh in so that any methods you use don't need to be drastic).

In addition to exercise, athletes can also use a sauna or hot bath or shower to lose fluid as well. A



dry sauna is the most powerful of the three for weight loss and this loss should be monitored. Time spent in the sauna or hot showers should be at small 15-30 minute intervals to check weight loss. This brings up a great point that it would be a good idea to travel with your own scale to monitor how much weight you are losing. The last thing you need to do is lose too much weight. We always travel with a scale to keep track of our weight status.

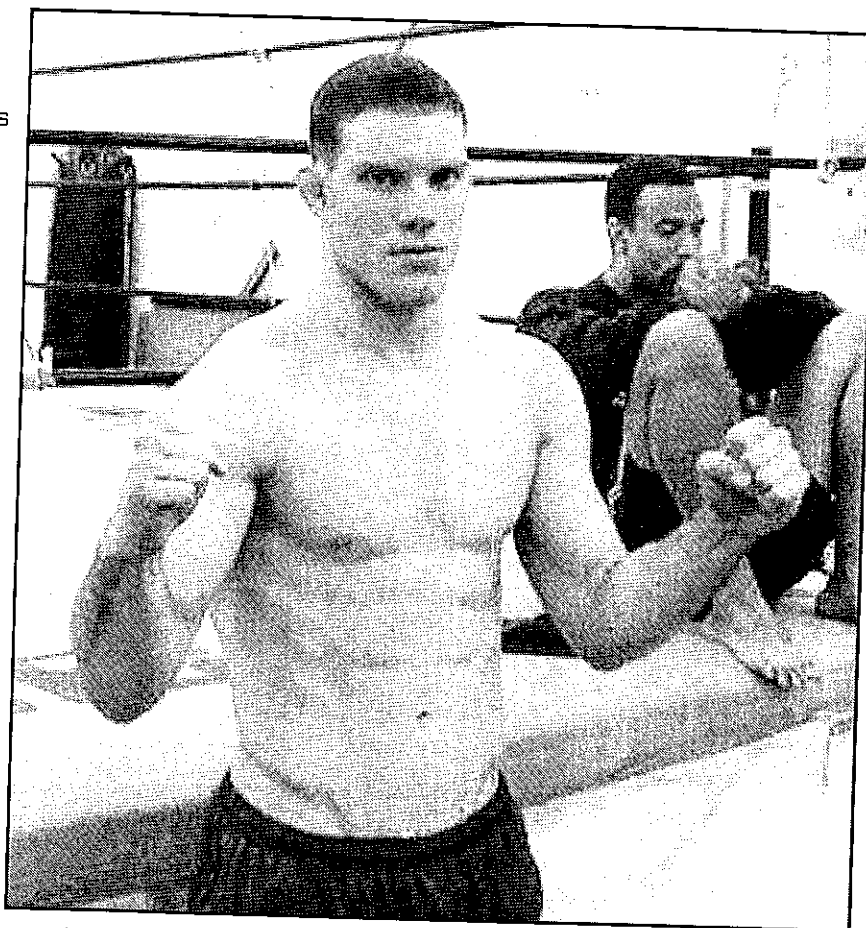
Bowel Emptying:

Another method to lose weight is to empty the bowels the day before the weigh in. This is another method that requires no effort and will not hurt performance if done correctly. Your bowels, or stomach and intestines, are up to 28 feet long and contain up to 5-7 pounds of material at all times. The food that has been ingested over the last 24 hours is all still contained along this set of tubes. This material does not help performance and is actually waste. By clearing out the bowels, an athlete can lose another 5 pounds without having to do anything. The secret is in the methods.

Two days before the weigh in, an athlete will already be eating less if he has to lose critical pounds. The day before the weigh in, he should not be eating much at all (to be discussed later). That material that is still in the gut from the day before, however, must be cleared. How we choose to do this is with a very gentle, all natural laxative. There are much more powerful drugs out there that do this, but you should not be using them. They can hurt your performance and leave you feeling horrible. By taking the gentle, natural laxative before you go to bed the night before the weigh in, you should wake and clear your bowels completely. Remember that you would only do this if you felt you were not going to make the weight with the methods listed above.

Diuretics:

I hate to even bring this method up, but I must because I have seen them used incorrectly by fighters in the past trying to cut the last few pounds. There are natural and drug diuretics out there that can help you to lose fluids up to or over 10 pounds. I must say, if you were at the right starting point and you followed the methods already outlined above, this should not be an area that you need to worry about. This method is more dangerous than the others, and can lead to electrolyte imbalances and decreased performance. An all natural, gentle diuretic I have used in the past is called Dandelion Root. If this is a must, this should be used the day before the weigh in, so not to have problems during the fight.



Lean and Mean: Ricardo follows a perfect plan and makes weight with no problem.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

Eating:

Yes, I did put eating as something to do while you are cutting weight. You must make sure that your blood sugar levels are normal during this process or you are going to feel horrible and have no energy for the exercise aspect of the weight cutting. The last thing you want to do is take in fluids with sugar or heavy foods at this point. That is why we use a simple Balance Bar to get the job done. The bar only weighs a few ounces, but it will give you some sugar and fuel that your body can use during the fluid and food fast.

You Made It, Now What to do Next?

Ok, you made the weight and you are feeling good. Now as soon as you get off the scale, you need to start refilling your body with everything you lost. As I said before, this piece of the process is as important as the weight reduction. Most people make big mistakes here that end up leading to disaster during the fight.

When you are cutting weight, your plasma blood volume decreases, and your blood pressure can increase as a result. In addition to this, your resting heart rate can go up, you can experience fatigue and feel psychologically weak. You need to make sure you reverse these processes not only as quickly as possible, but correctly and completely. Most people ram a bunch of food and water back into the system right after the weigh in, but they do not finish the job.

After the weigh in, you should eat small meals at regular 30 minute intervals. It is critical that you make sure you take in carbohydrates at this time to regain the proper blood sugar levels. Firing a ton of food down immediately after the weigh in is going to leave you feeling bloated and sick. Your body won't be able to use all the food at once anyway, and it will just sit there. Smaller meals will clear the stomach and you will be able to eat again shortly. We actually have our athletes continue to eat all the way up to a few hours before the fight the next day. Eat meals that you are comfortable with. Don't start to do anything different.

More importantly is getting the fluid balance back. You should immediately take in fluids following the weigh in and continue to drink at regular intervals. The ultimate goal for my fighters is to see a clear urine stream before we know we are back. This can take 3-5 gallons of fluid over the next day to replace the 10 or more pounds that has been lost. Don't rely on the thirst response because it will not be accurate. You need to keep drinking to make sure that the blood plasma, fluid space between the cells and the cells themselves are refilled. An I.V. is also a good option here, but it can and should only be performed by a skilled medical professional. There are many dangers involved in this procedure. This is usually used as a last resort or in a medical emergency. If everything, from the weight cutting to the weight regaining has been done correctly and you have 24 hours until the fight, there should be no need for intravenous fluids.

A Few Pieces of Advice

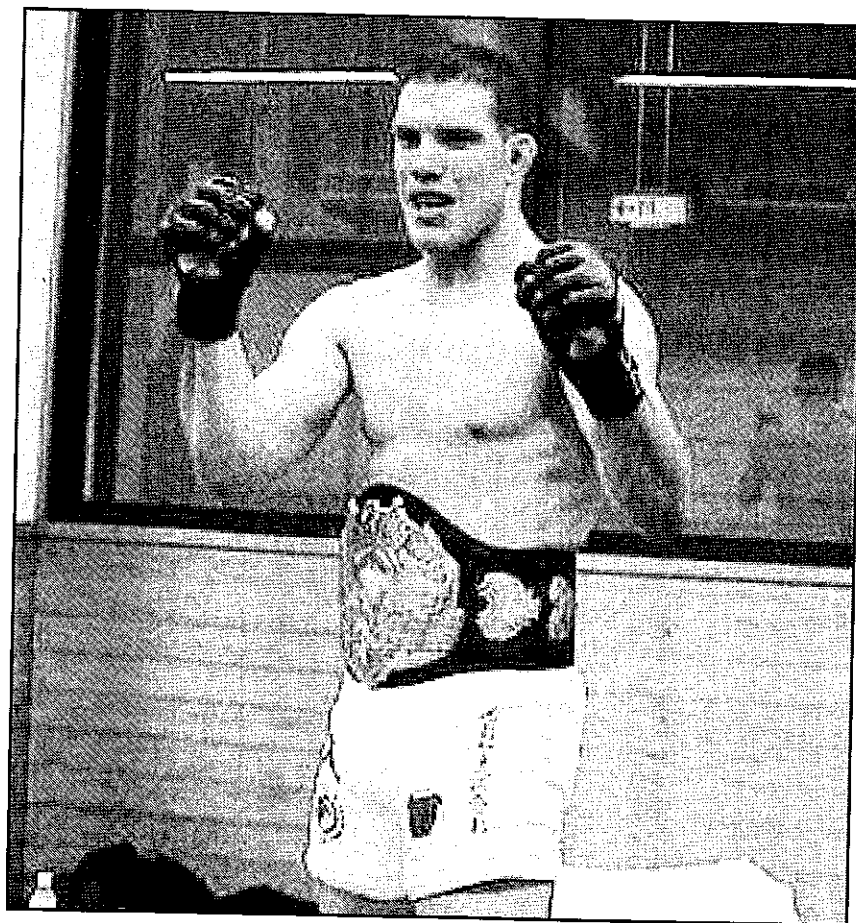
A main motto of mine is that you never try something new a week before the fight. This stands for new techniques, new foods, new equipment, and especially weight cutting. This is something that needs to be practiced just like ground or stand up techniques. You would never attempt a technique in a fight that you have never tried before. You must think the same way about cutting weight. You need to understand everything about it. You must know how to do it, how long it will take your body



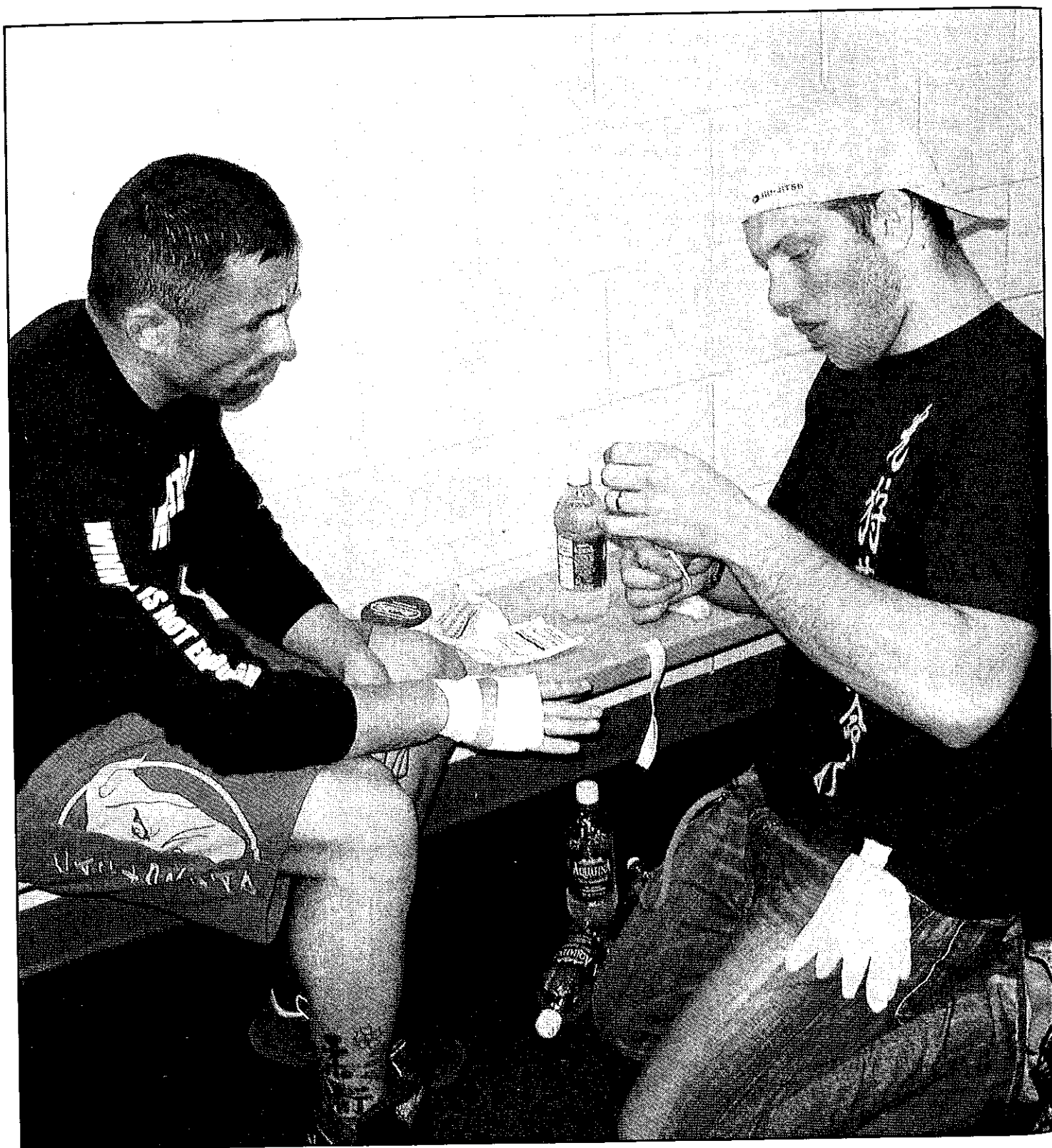
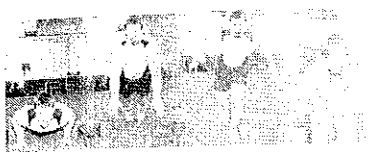
to lose the weight, and exactly how your body is going to feel. If you don't ever practice, you are looking to add stress and potential disaster to the plan. Practice, and the better you master the weight cutting, the easier it will be to perform when the time comes.

Another mistake I have also seen at weigh ins is that a fighter may think they made the weight and then still be too heavy. This occurs when a fighter only weighs himself on his scale and does not use the official scale for the event. Remember that you will have access to the official scale, and you should monitor your weight according to it. This is the only way to know if you have correctly made the weight or not. The last thing you need to be doing is frantically exercising trying to cut weight in the last few minutes. The less stress and adrenaline release, the better.

I really hope many fighters that read this have learned something from this section. Remember that weight cutting is an art and must be taken very seriously. When used correctly, it can be a powerful tool that can lead to victory. When used incorrectly, it can be a powerful obstacle that can lead to defeat. This, like any art, must be practiced a number of times in advance. Only then can you begin to truly understand its power.



*Our definition of luck: when opportunity meets preparation,
a new king is crowned.*



Ricardo meticulously tapes Mark Colangelo's hands before his fight to prevent injury.



Adding Info to Injury

If you are involved with MMA, you need to face two facts. You are going to get injured and you are going to have to learn to deal with pain. There are no "if's" here, just "when's". Injuries are a part of MMA just like they are a part of all sport. The 3 questions you need to be more concerned with are: What are the common injuries of MMA? What are the preventative measures I can take to help decrease the chance of injury? What are the measures I must take once an injury has happened? Most people view injuries as negative experiences, but injuries are actually lessons. They do, in fact, have so much to teach from the mode of injury and how to prevent it for the future to your own powers to face adversity head on. Some athletes often return from injury at a higher level than where they were pre injury due to the lessons that the particular injury had to teach them. Many athletes do not. I believe that how you view and respond to the injury at hand has a lot to do with that.

The fight was only a few weeks away, and training had been going right on schedule. His speed and strength were peaking, and his technique was crisp. Only a few more training sessions until the taper would begin to allow for the rest before the big show. He was working on some stand up boxing training when it happened. He threw a right hook and his opponent tried to duck under the punch. His hand landed right on the top of his opponent's head, and instantly he knew something was wrong. There was a distinct crunching sound, and numbness followed. The session was stopped and the gloves were pulled off. The swelling was instantaneous and we hoped it was just a sprain. We iced immediately, and waited to see how it would be the next day. When Ricardo came in that next morning, the signs were obvious. It had to be a boxer's fracture. (This is a fracture of the first metacarpal in the hand). We went right to an orthopedist that works with boxers and fighters. At first, he too thought it was a classic fracture, which would require a few weeks in a splint and rest. He decided to do x-rays just to be safe. That is when our worst fears were realized. The bone was badly broken and misaligned. Surgery was a must right away, or the bone would begin to heal in that position and easily be broken again and again. Surgery was the next morning, and a plate and screws were inserted to straighten the bone. The next few days were spent in a sling and icing machine, and then we returned right back to training. We ran and lifted legs. We focused on strategy and technical work. We crushed the core with high intensity training. Then as the hand healed we incorporated that back into the training until he was completely back, and actually better than he was pre-injury. He has been on a 5 fight win streak in Japan since, becoming the first Brazilian to win the King of Pancrase Title and won fight of the year at the Abu Dhabi World Submission Championships.

There are many lessons to be learned from the story above. The first is that if you are an athlete, injuries are going to happen. There is nothing that you can do to prevent every injury. The second is that how you deal with an injury can be the difference between being average or being a champion. The third is that every injury has something to teach you that can make you better in the future. The final lesson is that there are strategies for how to respond to an injury that can be implemented to work around that injury and move forward. This section is going to focus on these lessons and offer insight into how you can learn from every injury and make sure that one never holds you progress back again.

Think back on your fight career and on all of the injuries that have occurred along the way. Whenever fighters think about their past injuries, there is usually a long list of breaks, sprains, pulls, and tears.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

Along with this list, there is also an understanding of why that injury happened and how to best rehabilitate the situation. This demonstrates that there is a lot to learn from an injury for the future. A few pieces of advice about what to find out about the common injuries are to your sport before you ever even have them are as follows:

- 1. You should find out what the injury is called.**
- 2. Find out how it commonly occurs.**
- 3. Find out what the signs and symptoms of the injury are.**
- 4. Understand how to rehabilitate the injury**
- 5. Learn how to best prevent it from ever happening.**

This knowledge will not only help you in preventing the injury, but also recognizing the signs so you can speed up the healing process.

As a physical therapist, I spent many years around people with almost every injury you could imagine. Beside the physical pain and problems that these people experienced, there was a huge emotional toll as well. Many people responded to their injury with the following emotional responses:

- 1. Fear**
- 2. Anger**
- 3. Self pity**
- 4. Depression**
- 5. Anxiety**

These emotions always hampered the healing process as well as the future possible progress of the athlete. How an athlete feels about their injury is going to dictate how they respond to it. If they are scared and depressed, healing and future progress is going to be slow. If they understand the injury and use it as motivation, they can attain a higher level than where they began. Everything about properly healing from an injury is how it is viewed and dealt with by that athlete.

When I worked strictly as a therapist, my first goal was to educate the patient about their injury and what we were going to do. Not only did this give them a plan, but it more importantly gave them hope. As an athlete, you need to seek out professionals that deal with the common injuries that happen in your sport. They can give you all the information you need about injury prevention, and also a plan if an injury has already happened. This information is critical to putting an athlete at ease with an injury so that they can move forward. A professor I know once described hope as an acronym that stood for "Hold On, Possibilities Exist." I think that is a great way to sum up the injury process for an athlete. They should never give up, or feel down. They need to accept the injury, move on as quickly as possible, and know that everything is going to be ok. When this way of thinking is accepted by an athlete, the recovery process is always much faster.

One of the tools that I saw that athletes had versus everyday people that helped them to recover faster was goals. Athletes need to get back into the sport by a certain date. Athletes need to get back to a certain level of performance. A great example of this was with an athlete named Vaughn Sanders. Vaughn was the top running back at Hofstra University and only one game away from surely breaking



the all-time rushing record. With only less than 100 yards to go for the record, Vaughn suffered a terribly broken tibia and fibula that required surgery. In addition to now not being able to break the record, this was Vaughn's senior year, and he would only have two and a half months to prepare for a shot at the NFL. Running his fastest and jumping his highest were key goals that had to be achieved to ever make the NFL a possibility. Vaughn now had no time to sulk over the injury, he was driven to overcome it. The injury then became his motivation, not his collapse. When Vaughn started training he could barely walk without a limp. Over those 2 _ months, Vaughn increased his strength and speed beyond his pre-injury numbers and made it to the NFL. The moral is that regardless of what the goal is, there must be a goal in place to make sure that progress is as fast as possible. I have been told that a goal is a dream with a date attached to it. When someone believes in the goal strongly enough, even an injury can't completely slow them down.

Whenever I read anything about goal setting, I am always reminded of the S.M.A.R.T. acronym. The S stands for Specific, the M for measurable, the A for achievable, the R for realistic and the T is for time frame. When talking about injuries, all but one of the aspects for goal setting are easy to determine. The one area that I sometimes have challenges with my patients and athletes is if their goals are realistic at the time. One example is an unforgettable story. There was a top high school football player that was entering his senior year. His junior season was so successful that colleges were already interested and his future seemed bright. In a scrimmage before his senior season, however, a tragedy happened. This athlete's leg was broken so severely that metal rods had to be surgically inserted into the bones and the damage to the nerves was substantial. This young athlete was unable to accept the injury and set unrealistic goals for himself that he would play that season. Even when the doctors and I tried to give this athlete the right information, he was unable to accept it. He tried to rush his rehabilitation and was having constant setbacks. He did not play football that season, and obvious depression followed. This could have all been stopped with realistic goals and understanding the truth about his injury. The moral here is that you can be positive and try to rush your progress, but you cannot avoid the truth.

As you can probably see, this philosophy states that acceptance of the injury is the first step toward recovery. Although that sounds simple, many of the athletes I have dealt with in my career are in constant denial that they are injured at all. Like the old saying goes, these athletes think "Denial is only a river in Egypt." Many of these athletes, when they finally have to take a respite from their sport because the injury is now too painful, or is limiting their performance, had the tell-tale signs for a long period of time. Accepting the early signs of injury and addressing them can prevent many injuries. One of the techniques to use with athletes is to have them perform a daily Physical Personal Injury Assessment. This forces the athlete to do an inventory of their body. Have them start at the toes and work all the way to the top of the head. Any aches, pains, or pulls have to be recorded, as well as compared to the previous day's notes to make sure that nothing is getting any worse. The athletes can use a 0-10 pain scale for any injury as well as a description of the symptoms as well. This log will insure that an injury does not go unchecked as well as provides useful insight into problems for the future. The athlete can then curb their training around any possible injuries that exist as well as begin to rehabilitate the injury before it gets any worse.

Everything about being successful in sport revolves around having the best strategy. When it comes to recovering from an injury, usually athletes don't have any plan in mind. This is an offering of a few pieces of advice to make sure that you are doing all that you can when an injury happens. I have developed the following 10 item list over the last number of years working with athletes at every level:



The MMA Athlete's Strategy for Dealing with Injuries

- 1. Accept that the injury has occurred and move forward.**
- 2. Find out all you can about the injury and its rehabilitation**
- 3. Set appropriate rehabilitation goals**
- 4. Use every method of rehabilitation and specialist in the area that you can get your hands on**
- 5. Be consistent and thorough with your rehab**
- 6. Determine what training you can do around the injury**
- 7. Focus on areas that you needed to improve pre-injury (nutrition, mental training, certain body regions, etc.)**
- 8. Don't keep testing the injury over and over and reirritate it**
- 9. Develop a list of the things that the injury is trying to tell you**
- 10. Develop a list of what you learned from the injury for the future after it is rehabilitated**

In the simplest sense, proper training, technical work and nutrition are the easiest ways to prevent injuries from happening. By understanding your sport and the training that surrounds it, injuries can be kept at a minimum. Injury prevention should be a key of every training session. An injured fighter is a fighter that is often not making progress, but thinking about other career choices. Keeping old injuries at bay and new injuries prevented must take precedence in your training.

By making the choice to get involved in MMA, you are subjecting your body to punishment. You cannot run to the doctor after every training session, so you must get used to what certain levels of pain are. Using the following format, you should be able to limit your doctor's visits and still make sure you are not doing anything crazy. There are only a few reasons you should be visiting a doctor or emergency room immediately. They are as follows:

1. Are you bleeding?

Blood is stopped in less than 5 minutes. You are ok
Cut is not deep or jagged and is closed with steristrips. You are ok
Cut is deep, long, jagged and you need stitches. See Doctor

2. Do you think there is a broken bone?

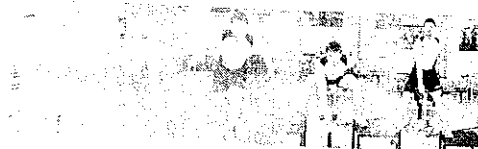
Is there any immediate swelling/bruising? Give it 48 hours.
Are you able to move the area? Give it 48 hours.
You cannot move the area. See Doctor
There is an obvious deformity. See Doctor and don't attempt to fix deformity
There was a cracking sound at the time of injury. See Doctor

3. A joint has been dislocated

The joint went back into place. Ice and wait a few days
The joint stays out of place. See Doctor

4. You have sprained your elbow/ankle/knee

The joint is swollen but movable. Ice and wait a few days
The joint is swollen and does not move. Deformity is present. See Doctor



Every injury is your body's way of telling you that whatever just occurred was too much for what your body was prepared for. Whether the injury is shin splints or a broken wrist, there is a lesson to be learned. An athlete's goal is to figure out what his or her body is trying to tell them, and to make sure it never happens again. Injuries are a part of every athlete's life. The purpose of this section was to make the athlete more aware of this and less fearful of that part.

This following paragraphs are going to contain the common injuries that we have seen in MMA. For each injury, we are going to describe the common mode of injury, the signs and symptoms, the rehabilitation measures to take as well as the preventative measures one can take to lessen the chance of this injury from happening. This chapter should not be viewed as the definitive text on what to do when an injury happens. Use this guide to get yourself to the proper health professional if one of these injuries is to occur and conservative rehab measures are not working.

There are two types of injuries that the mixed martial artist needs to be concerned about: overuse injuries and traumatic injuries. Overuse injuries are injuries that appear over time due to repetitive activities. An example of this would be decreased elbow extension from the years of sparring and bag work in the gym. Traumatic injuries are injuries that result immediately from an event. An example here using the elbow would be an elbow dislocation as a result of a fall, kimura, or arm lock. In both cases, there is going to be pain and rehabilitation measures to be taken. Both of these cases also have some level of prevention.

Common Overuse Injuries in MMA

1. Elbow Tendonitis

Mode of Injury: Overuse of gripping in grappling and wrestling. Overuse of elbow extension in boxing.

Signs and Symptoms: Pain and tenderness, usually on the lateral side of the elbow is caused with gripping or to the touch.

Rehab Measures/Prevention: Rest and Ice are critical in the acute phases. Proper flexibility work and muscle work (massage, A.R.T.) at the wrist, forearm and elbow can decrease likelihood of reoccurrence.

2. Shoulder rotator cuff syndrome

Mode of Injury: Overuse during grappling, wrestling and boxing training.

Signs and Symptoms: Pain in the posterior shoulder with any overhead or movements involving external rotation of the shoulder.

Rehab Measures/Prevention: Rest and Ice during the acute phases. Slowly return to exercise. Have muscle work (massage, A.R.T.) performed while beginning to restrengthen the area.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

3. Shoulder AC (acromioclavicular strain)

Mode of Injury: Overuse of the shoulder joint common during grappling and boxing.

Signs and Symptoms: Pain and tenderness over the AC joint, pain that is replicated with overhead movements, rotation, and pressing movements.

Rehab Measures/Prevention: Rest and Ice to the area. Can splint the area if necessary. Slowly return to exercise, regain any lost range of motion and strengthen the area.

4. Neck and Low Back disc herniation/ nerve pain/ nerve strain

Mode of Injury: Common in grappling and wrestling, when athlete is stacked up in the guard. Common from various neck cranks. Common when there is an inadequate warmup or attention paid to flexibility.

Signs and Symptoms: Pain or numbness and tingling can be local to the neck or back, or pain can radiate down into an arm or leg. If there is radiation that takes place and the symptoms do not improve over a period of rest, please consult a physician.

Rehab Measures/Prevention: Rest and ice to the area. Maintain good postures while sitting, lying down and standing. Extension positions may improve the symptoms. If this is true, perform lying and standing back bends throughout the day. Slowly return to activity and gradually develop flexibility.

5. Patellar tendonitis

Mode of Injury: Overuse injury common from running, jumping, wrestling and boxing training.

Signs and Symptoms: Pain and tenderness along the front of the knee below or above the patella (kneecap)

Rehab Measures/Prevention: Rest and Ice to the area. Massage and body work on the quadriceps and hamstrings can help. Make sure there is adequate calf flexibility and slowly build lower leg strength.

6. Shin splints

Mode of Injury: Overuse injury common from running, boxing training without gradually adding training. Common at the beginning of a training season, or after a period of layoff.

Signs and Symptoms: Pain and tenderness along the medial lower leg. This pain is worse with higher impact on the feet.

Rehab Measures/Prevention: This is a tough problem to deal with once it is apparent. Athlete must force rest and ice to decrease symptoms. Once pain is gone, gradually add exercise so body can adapt.



7. Plantar fascitis

Mode of Injury: Overuse injury of the foot around the area of the heel.

Signs and Symptoms: Pain and tenderness to the sole of the foot around the heel area. Pain with walking and landing on the heel. Pain with stretching the calf and foot.

Rehab Measures/Prevention: An athlete must first look at shoe wear. Make sure the shoes are proper for the task at hand. Rest and ice. An athlete must also strengthen the intrinsic muscles of the feet. Once the pain is down, begin to perform exercises in bare feet. Continue to work on the flexibility of the calf complex.

Common Traumatic Injuries in MMA

1. Concussion

Mode of Injury: Blow to the head from either a punch, kick, elbow, headbutt, or body slam.

Signs and Symptoms: Common signs are unconsciousness, confusion, and decrease in alertness. Look for differences in pupil size and or vomiting. There may also be abnormally deep sleep.

Rehab Measures/Prevention: Any serious blow to the head is a cause for concern due to the possibility of brain damage. Most injuries can usually be solved with self care. Observation for 72 hours after injury are critical due to the possibility of slow bleeding. Make sure to ice the area and rest for at least 72 hours. Any sudden changes should result in a visit to the doctor. Proper head gear, gloves and a mouth piece can help in the prevention.

2. Laceration

Mode of Injury: Any cut sustained from a punch, kick, headbutt, or slam.

Signs and Symptoms: A cut that is bleeding profusely. The bleeding may stop in a few minutes, but the athlete must make a game time decision whether or not to get stitches.

Rehab Measures/Prevention: If the cut is over an inch long, deep, or has jagged edges, stitches are probably in order. See the doctor within eight hours of the injury for the best results.

3. Nose Bleeds/Broken Nose

Mode of Injury: Broken ethmoid bones that is a result of a punch, kick, headbutt or slam.

Signs and Symptoms: Blood is present as a result of trauma to the nose. In the case of a broken nose, a deformity in the profile of the nose may be present.

Rehab Measures/Prevention: If there is an obvious deformity, or the bleeding is heavy and will not stop, call your doctor. If the bleeding is minor, keep the head level (not tilted back) and apply pressure for 10 minutes. Ice can also be used across the nose to prevent swelling.



4. Shoulder Separation

Mode of Injury: Separation of the AC joint usually caused by a slam on the top of the shoulder.

Signs and Symptoms: Pain and tenderness over the AC joint. There can be an obvious "step" deformity present where the lateral aspect of the AC joint is lower than the medial.

Rehab Measures/Prevention: Depending on the extent of the injury, the time of rehab will be determined. For athletes that have a major separation with ligament injury, the athlete may need to splint the arm for 2-4 weeks. For less of an injury, ice and rest are prescribed for a few days with a slow return to activity.

5. Broken Collarbone

Mode of Injury: A broken clavicle bone is often produced by a high velocity body slam.

Signs and Symptoms: Pain and tenderness is found over the clavicular area with deformity of the underlying bone. Athlete is holding the arm with the other hand to prevent motion.

Rehab Measures/ Prevention: If this is suspected the athlete must see the doctor to make sure that the bone ends are aligned.

6. Dislocated Shoulder or Elbow

Mode of Injury: Can occur from a number of moves that are designed to dislocate joints (shoulder locks, kimuras), but this injury is also common from being slammed on an outstretched arm or shoulder.

Signs and Symptoms: Obvious deformity of the shoulder or elbow joint which the athlete is unable to move. Pain and numbness may be present, and the athlete may be in shock.

Rehab Measures/Prevention: If the joint did not immediately relocate, do not attempt to do so. Support the affected limb and get the athlete to the emergency room for immediate attention.

7. Broken fingers and toes

Mode of Injury: Common injury from all fight styles of boxing, wrestling and grappling. A common break is the Boxer's fracture. This affects the head of the Fifth metacarpal and is common with punching.

Signs and Symptoms: Pain and tenderness over the affected area. Swelling and bruising are also common.

Rehab Measures/Prevention: If there is an obvious deformity and the area is no longer moving, see your doctor. If the area is sore but moving immediately ice and splint the finger or toe along with another. Soreness can last anywhere from 2-4 weeks and reinjury is common if the area is not protected with taping and support during future training sessions.



8. "Popped" elbow or ankle

Mode of Injury: This injury is sustained from any elbow or ankle locks that are designed to damage the joint, ligaments and tendons.

Signs and Symptoms: A common sign of the ankle or elbow being damaged in a lock is a "popping" sensation in which the capsule and ligaments are stretched. Usually there is immediate swelling present and there can be discoloration as well.

Rehab Measures/Prevention: Training with partners that know when to release a lock and you knowing when to tap are essential to decreasing the extent of the lock injury. The athlete should immediately ice, rest and elevate the injured limb and watch it for a few days. If there is obvious deformity, the joint doesn't move, or the pain is not improved after a few days, see your doctor.

9. Medial Collateral Ligament (MCL)/ Lateral Collateral (LCL) knee strain

Mode of Injury: Common injury to MCL is sustained during groundwork in which the hip is internally rotated from control at the ankle. This places the stress along the medial portion of the knee joint. Common injury to LCL is during groundwork in which hip is externally rotated at the hip from the ankle.

Signs and Symptoms: May have a popping sensation that occurs. Pain will be worse the next day following immobilization. There will be pain to the touch along the ligament area and possible swelling and bruising.

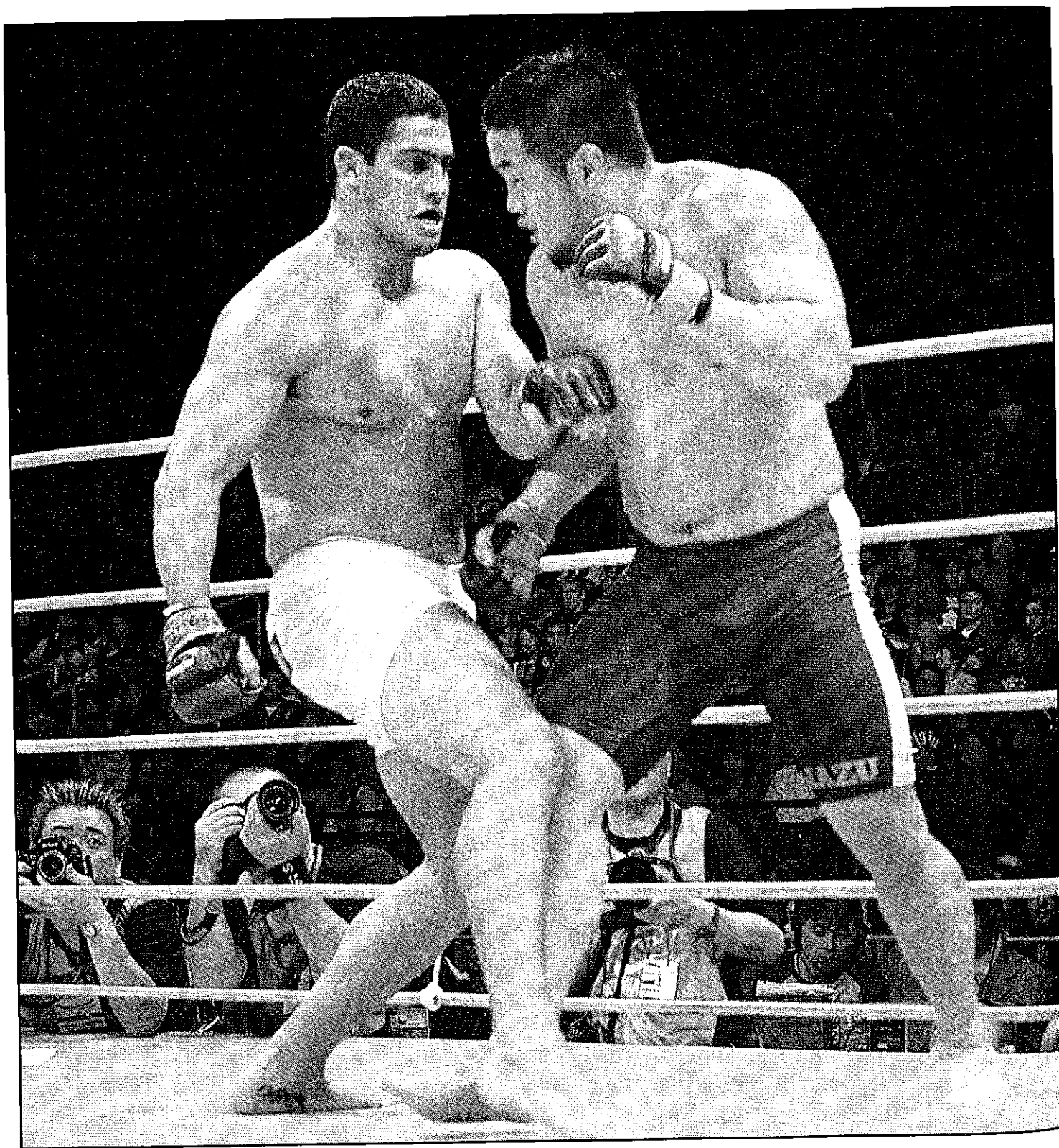
Rehab Measures/Prevention:
Easiest prevention is warming up well before rolling. Rehab should consist of ice, anti-inflammatories and rest for a few days. The ligament, depending on the damage may take a number of weeks to heal, but these ligaments rarely require surgery. If there is constant instability, a locking of the knee or an inability to walk on the leg after a few days, check with your doctor for further tests.



Royce Gracie and Gordinho look on as Martin makes sure Rodrigo's Pride gloves fit correctly.



TRAINING SECRETS
THAT EVERY FIGHTER NEEDS TO WIN



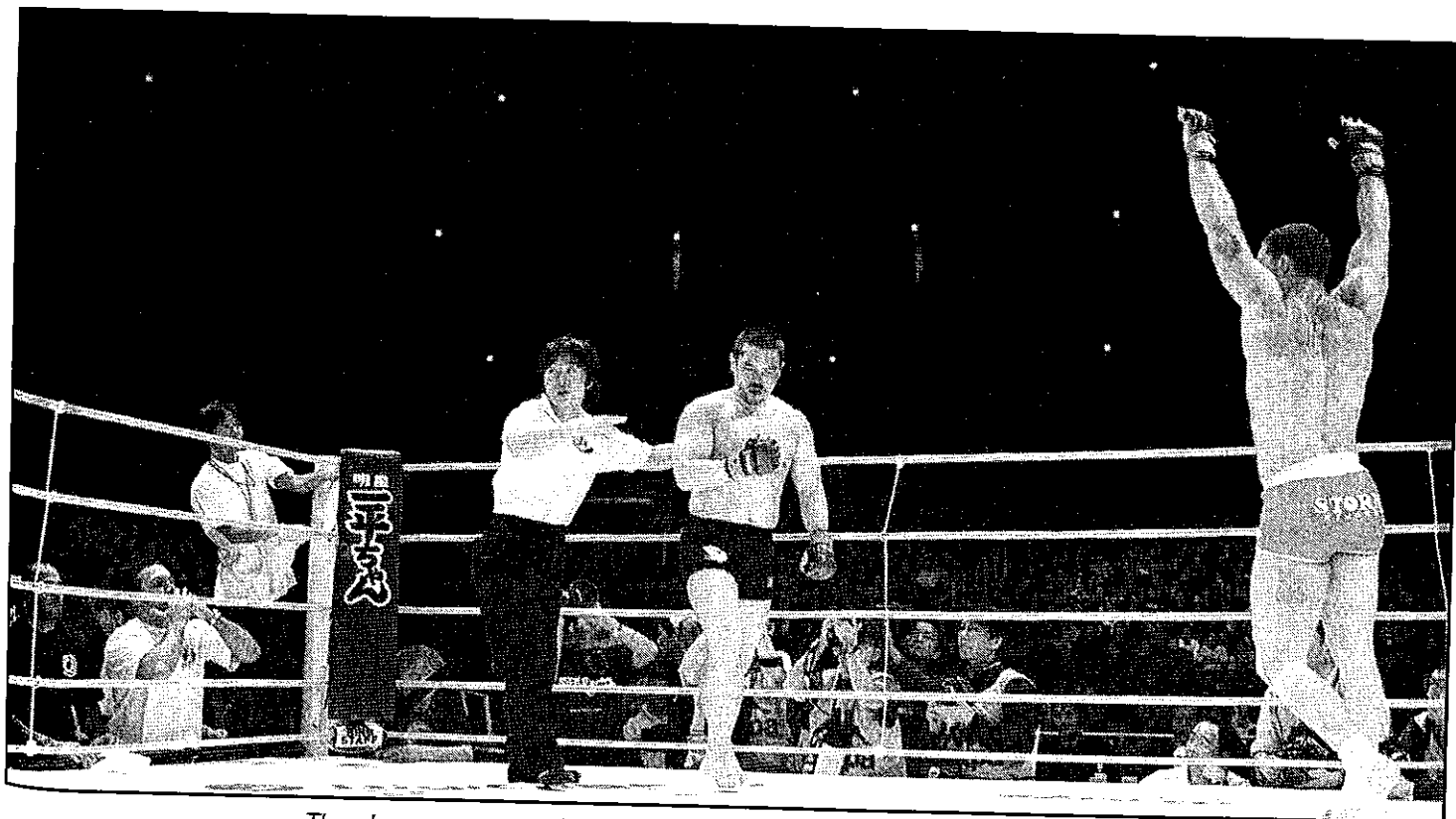
Daniel Gracie unloads during his war at Pride Bushido I.



Prepared to Punish and for Punishment

One of the most perplexing things in the fight game is to see a fighter get hit and be obviously shocked and or surprised by how much it hurt. Recently, I saw a couple of top fighters get hit in the face and grimace in pain as if they had never been hit before. The same goes for watching a fighter absorb a leg kick that changes that fighter's entire game plan and movements the rest of the fight because of the pain he just experienced. This is confusing because you will then see other top fighters that take punishment as if it were another day at the office. You watch them take shots to the face, body and legs like it is their job. The interesting part of that statement is that taking punishment is part of the job. Knowing this, it is something that you must do in your training, not only to get your body used to it, but to improve at it as well.

If you have ever watched a Muai Thai fight, you have to had asked yourself, "How the hell can those guys take such punishment to the shins, thighs and body?" As their legs connect with the force and sound of a baseball bat cracking into those areas, you can only cringe with the imagination of what that feels like. Are they just inhuman? No, they are trained to take the punishment because it is part of their training. As I have said throughout this book, you are going to fight exactly how you train for that fight. If you are sparring, but never getting hit or absorbing punishment, you are not really sparring, and you are doing yourself an injustice. Now I am not saying to voluntarily get your butt kicked too close to the fight, but your body must be prepared for the inevitable. If you fight, you are going to get punched, kicked, kneed or elbowed and your body needs to be prepared as well as your mind for how to react and defend.



The Japanese crowd is as stunned as Shoji as Almeida dominates!

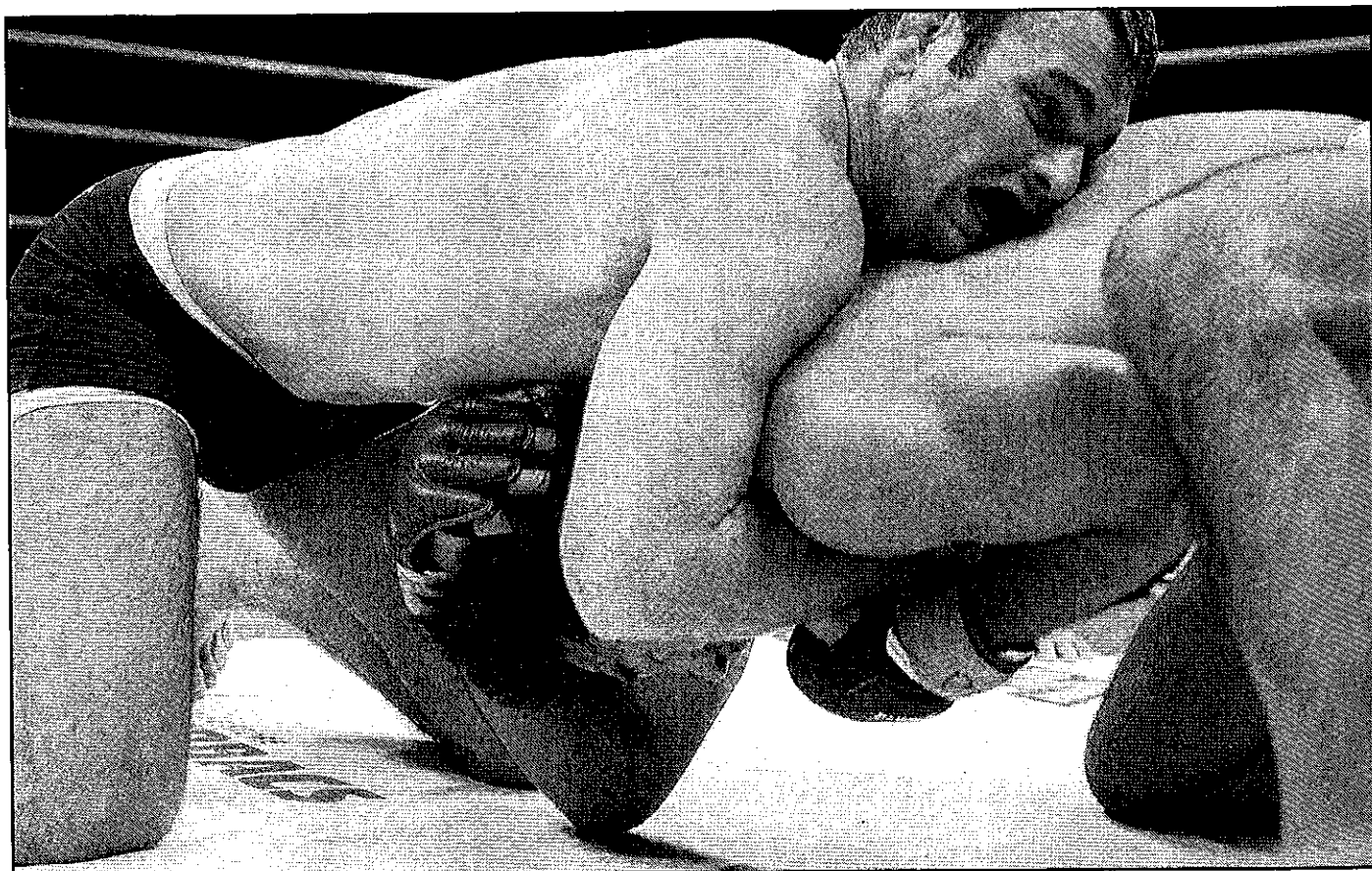


TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

Aside from the impact of punches and kicks, the body must also be prepared for landings from take-downs and slams. Anyone that has taken some time off and then gone live with some takedowns knows the soreness your body experiences the next day. There is a lot of force that is absorbed and the body can get torn up. What they will notice, however, is that after a period of training, that soreness is gone. This demonstrates that the body has a knack for getting used to what you put it through.

As for those Muai Thai fighters, the nerves, bones, and tissue of their shins, thighs and forearms physically change as a result of their training. This allows their body to be prepared for the beating they are going to take, and have less chance of injury. If there was no impact in their training, however, none of these changes would take place, and the fighter would be in for a huge shock when he got in the ring.

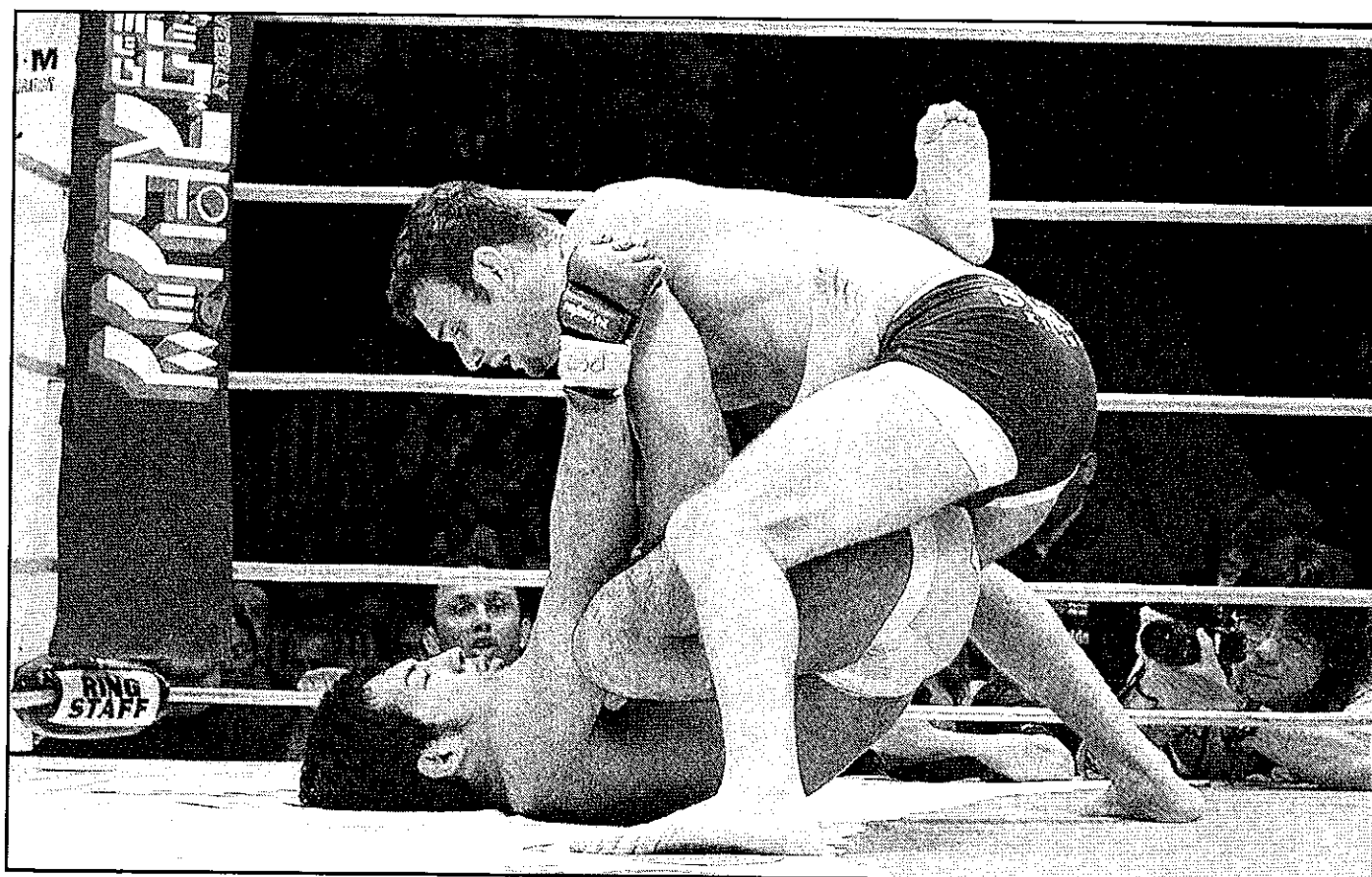
Aside from live sparring with impacts from punches, kicks and takedowns, there are ways to help prepare the body for contact in the gym. Your coaches should be teaching you the best way to absorb and deliver forces in the ring and on the mat. From properly checking kicks and punches to how to land properly on the mat, there are ways to help deaden forces directed on you to help prevent damage and injury. This should be something you are working on with your coaches in the gym at all times. Here, I want to go over how to help the process in the gym.



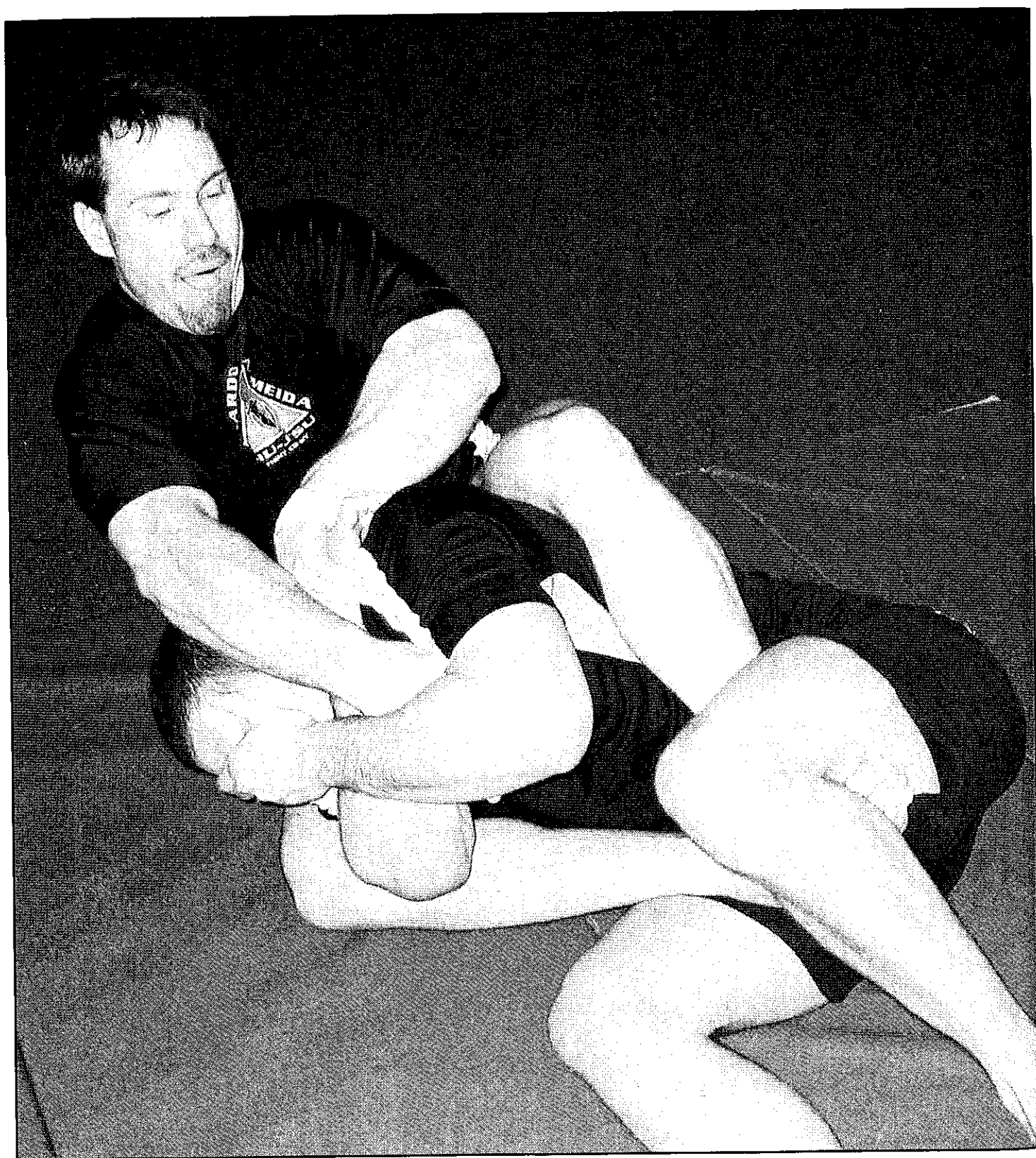
A bloodied Sasaki tries to ward off the constant attack of Rodrigo.

A medicine ball is a great tool for impact preparation leading up to a fight. There is less chance for injury using a med ball than live sparring, and it can help get the body ready for impacts. You can perform forward repetitive arm throws to get the arms use to impact, as well as catch the ball against the body either standing or lying down. This can be used to help teach the athlete how to breathe correctly when absorbing force and to stay relaxed while doing so.

Other drills that are excellent are Up Downs where the fighter jumps down onto the outstretched arms, lands on his stomach and jumps back up. You can do this in a number of sprawl positions, so have your coach work on their favorite techniques here. This can help prepare the body for landings from take-downs on the upper body. You can also do falls into the pushup position landing with your arms bent with the chest only 1-2 inches off of the floor. This will develop great stopping strength and the ability to absorb big forces with the upper body. Altitude landings can also be used for the lower body to improve the eccentric strength of the lower legs which is important in force reduction. These are described in the Deceleration Section of this text. Use of a punching bag is also instrumental in preparing the athlete for delivering and receiving force. As anyone that has been injured in either the hand, upper body, core or legs knows, when you hit that bag, there is also force that is transmitted back to you. Working with the bag correctly can also help you to prepare for what is coming during the fight. Remember that this is just the half of it, and that the bag is not going to hit back. You need to include those contacts as well to make sure you are ready for your upcoming bout.



Rodrigo Gracie in a familiar spot: on top of Takase and pounding.



Martin Rooney and a "Masked" fighter during some ground work at the Parisi Speed School.



Lessons of Competition

Over the last seven years, my life has always revolved in some way around jiu jitsu or mixed martial arts. The sport itself and the people involved with it are of my greatest interests. My involvement with the sport has allowed me to travel all over the world and even led me to writing for Gracie Magazine (which I love to do I might add). In all of that time helping others to get better, I was disappointed with my own participation in the sport. I started out hardcore at Renzo Gracie's NYC academy in 1998, but I never followed it through. I would only roll sporadically, and focused more on the behalf of the fighters I was training instead of my own skills. This was something that always bothered me. For me to help train an athlete and coach them in the event, I really believe I have to be able to perform it to completely understand it. Any coach that tells you different is crazy.

So, over the past few months, Ricardo Almeida, jiu jitsu black belt and karate expert Gene Dunn, and jiu jitsu purple belts Alan Teo and Kurt Pellegrino have all been working with me three to four times per week, and I have been rolling with anyone I can during that time. My goal was to get proficient enough to enter a grappling competition to get the experience of what a fighter is going through out there on the mat or in the ring. On February 21, 2004, after all of the years around the sport, I entered my first competition. Little did I know that this was going to be one of the greatest experiences in the sport in terms of what I would learn that day to make me a better athlete and coach.

The grappling tournaments in my home state of New Jersey are very popular and well attended. There are hundreds of competitors and even more spectators that pack the gymnasium. There are a number of academies that are represented, and the atmosphere is electric with both tension and excitement. I had been to so many of these to watch the athletes that I have trained compete, but I had not competed before. I have to say, it was a totally different experience.

The first difference was that the focus I had on my day took away my ability to enjoy the other matches. I was so lasered in on what I had to do that I didn't get to watch most of the day's events. I learned that this focus is good, so long as you don't waste too much adrenaline and energy while you are waiting to compete.

The second difference was the emotions that you experience when you are at the mercy of the competition schedule that day. As first it is excitement, then nervousness, then fear, then fatigue. I was excited when I got there to get going for my scheduled 2:00 pm bouts. I warmed up and was nervous trying to size up the other 10 fighters in my division. Fear set in a bit when there was a loud crack in the gym that made the arena go silent. Like a bamboo shaft exploding under pressure, a competitor in the advanced level of my weight class had his lower leg viciously broken with a heel hook. When the stretcher wheeled him out to the applause of the crowd, you start to wonder if the competing is really worth it. Then the last emotion was fatigue. My 2:00 pm start ended up being a 5:30 start. I was tired and hungry, and in some ways ready to go home, but finally, it was time to compete.

The third and most powerful difference was that as a competitor, there is going to be pressure that you are going to have to properly deal with. Not only were all of the fighters I have trained going to be there to support me, but my wife, daughter and father were there as well. Writing for Gracie Magazine even adds some pressure when you have the editor emailing you that you had better kick some ass. Finally, when Fabio Leopoldo is one of the judges for your match and Igor, Rolles, and Gregor Gracie are sitting on the side of the mat in your corner, you really don't want to let anyone down.



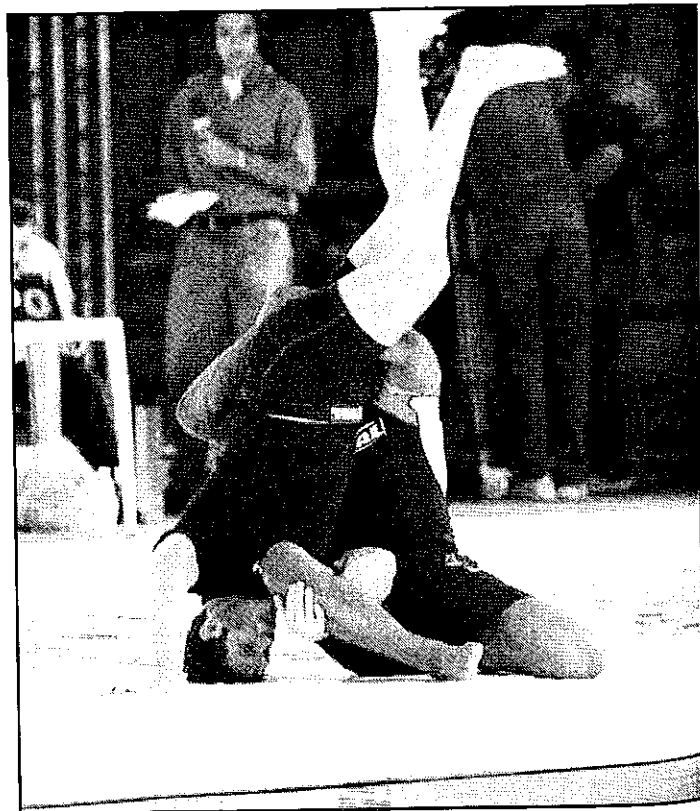
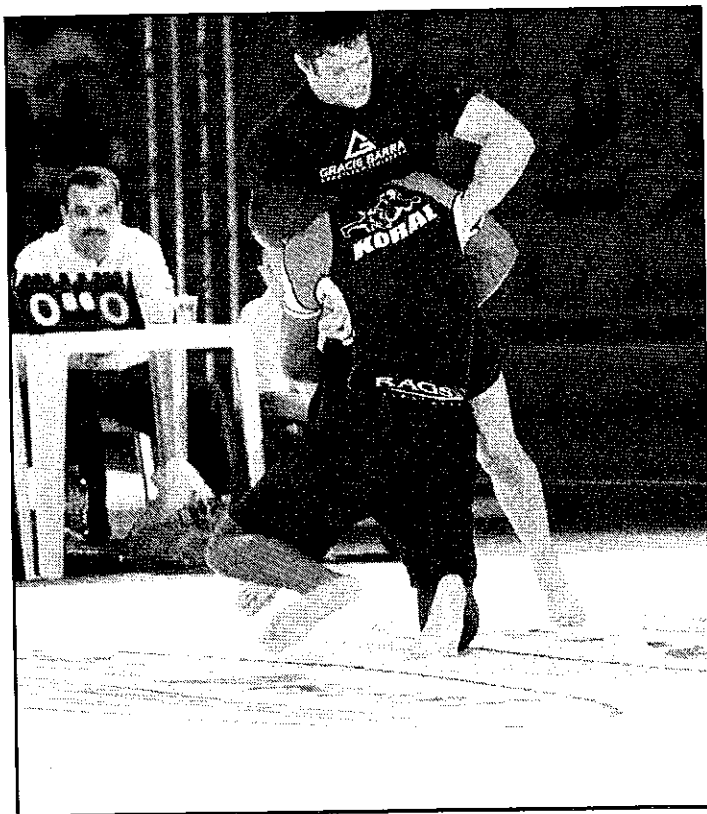
TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

The butterflies were ricocheting around in my stomach as my first match was about to begin. Just as the Brazilian ref was explaining the rules, he looks at me and says, "Hey, you're Martin, Ricardo's physical trainer. It is a pleasure to meet you". I was embarrassed because all I wanted to do was get it on with the guy facing me. Finally we began. I had three matches in the tournament and won two by submission (kimura and rear naked choke) and won another with takedowns and half guard sweeps I learned only a week before. I had won my first official tournament, and as I went to sleep that night, I reflected on all of the things that I had learned.

Most importantly, you must be prepared for anything. You must have a flexible mind to be successful in this sport. Not only can and will the schedule of events be late, you must also be prepared with enough food, water, clothes, tape and, of course, technical skills.

Next, is that you have to have the proper pre fight rituals. Whether you are in a small tournament like I was, or you are fighting in the main event in Pride, the warmup and preparation right before the fight is critical to performance.

Surrounding yourself with the right people is also critical to your success. As I have said, when birds go to sleep with bats, they wake up upside down. Having positive people around you is necessary during competitions.



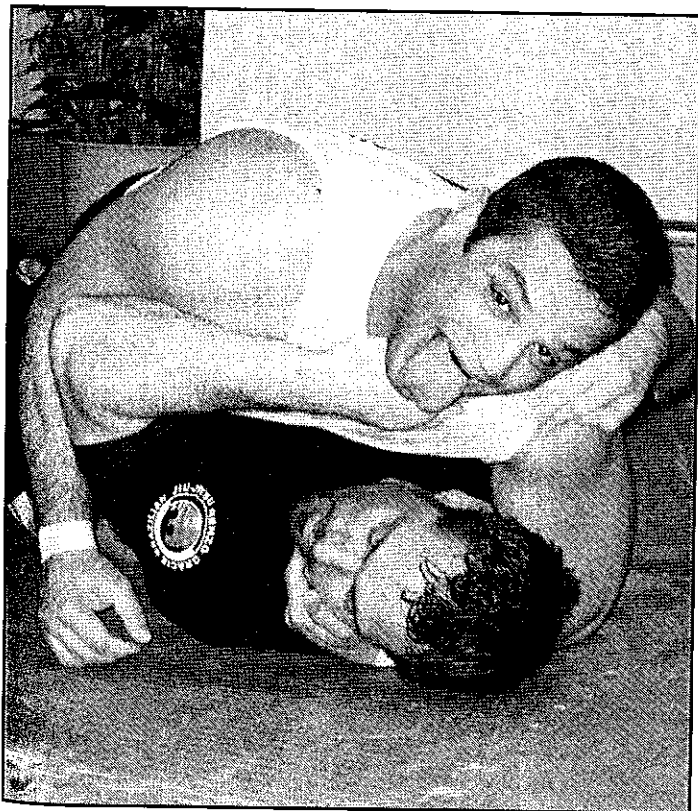
Ricardo and Jacare showing the world what it means to never give up during their ADCC "Fight of the Year".



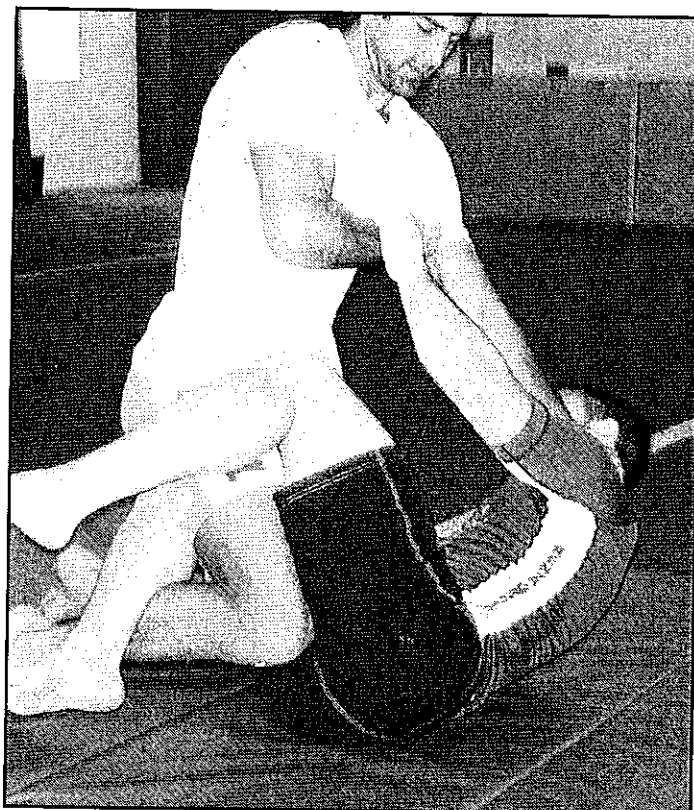
Mental toughness is also a critical characteristic of the successful fighter. As I have said before, mental toughness is simply the ability to control your emotions under any circumstance. This ability will keep your anxiety low, and preserve your energy stores for the competition. This characteristic is a skill not a gift. It must be practiced with relaxation techniques such as breathing, meditation and mental visualization. Only you can affect your emotions. Knowing this gives you the power to do it.

I also had a rule reinforced that I had learned long ago. I believe that if many people around you that care about you and are honest with you are all telling you the same thing, it is true. So, if your friends who are experienced in the event and care about you are telling you not to worry, don't worry. They know what they are talking about.

Finally, I experienced a few thoughts I have always professed to be true. You are going to fight exactly how you train. If you train a certain way technically leading up to a fight, that is how you are going to perform. So develop the right strategy. If you prepare yourself correctly in terms of strength and conditioning, you are going to have an advantage over your opponent. So don't just train hard, train smart. If you fail to have a plan, then you are planning to fail. So map out everything from the event backward to leave nothing to chance.



Ryan playfully teaches Martin a "lesson" before his Bushido II victory.



Half Guard extraordinaire Gordinho gives Martin a few pointers on the position.



Mental training plays a huge role in Celita Schutz's training. Celita executes a winning throw at the world championships.

Photo credit: Lou DiGesare



The Mental Predator

"The man who comes to control his body with hard training will have physical strength superior to others. If a man trains his mind in a similar fashion, he will then be mentally superior to others. If these are accomplished, he can never be defeated."

– Miyamoto Musashi

Over the last number of years, my training has focused on a number of different areas. As I continue to grow as a trainer, the art form of the training that I deliver evolves. In the beginning, I was solely concerned with the strength and speed of my MMA athletes. When my athletes reached the upper boundaries of these areas, I began to attack nutrition. After the fighters had their nutrition cleaned up, I started to explore the area of strategy development. Once all of my fighters were prepared in strategic analysis, I was led to mental training.

When I talk about the mental aspect of training, I am not talking about intelligence, but a combination of drive, desire, confidence, toughness, will power, focus and fear. What I am talking about is what I sum up as being a Mental Predator both in training and in the ring. At first, I thought that being a mental predator was just the will to win or the ability to endure more pain than another athlete. Now, after years of studying my athletes of all ages, I know see how sophomoric those original definitions were. Each year I gain more clarity when training my athletes. I am beginning to hone in on who will make it and who will not at an early stage in all of my athletes training. Yes, there are physical characteristics that help me to predict an athlete's level of success, but I consider the mental toughness of the athlete far more important.

A mental predator has the ability to control himself under any situation. Without the knowledge that you as an athlete control all of your emotions, or the ability to exert that control, you will be limited in higher levels of performance. I believe that mental predators are both nature and nurture. What I mean by this is that an athlete may have better gifts of self control in extreme situations, but all athletes have the ability to improve this area to increase performance.

I feel that MMA requires an incredible amount of mental predation at the higher levels of the sport. As I have walked out with my fighters at Pride in Japan in front of packed stadiums, I can only imagine the self control needed to stay relaxed and focused before a fight. Then try to imagine being on your back in front of that crowd with a stalker trying to pound your lights out or squeezing for a submission. It is here, and even following the fight where mental discipline is necessary to stay in control. I know that there have been many occasions in my own life that have held me back due to an underdeveloped mental game. This area can surely be nurtured, but the athlete has to be ready, and the teacher has to be there.

Both the shark and the lion are famed predators. When they attack, motivation is instinct, not something that they are forced to create. The desire to finish their opponent is pure, and there is no emotion or remorse. There is no anxiety or stress leading up to the event for the shark and the lion, it is simply part of their daily routine. There is, of course, risk of injury, but they do not allow fear to interfere. Their lack of abstract thought and the ability to question themselves is an advantage. With questioning comes indecision, with indecision comes anxiety, with anxiety comes mistakes, and with mistakes comes defeat.

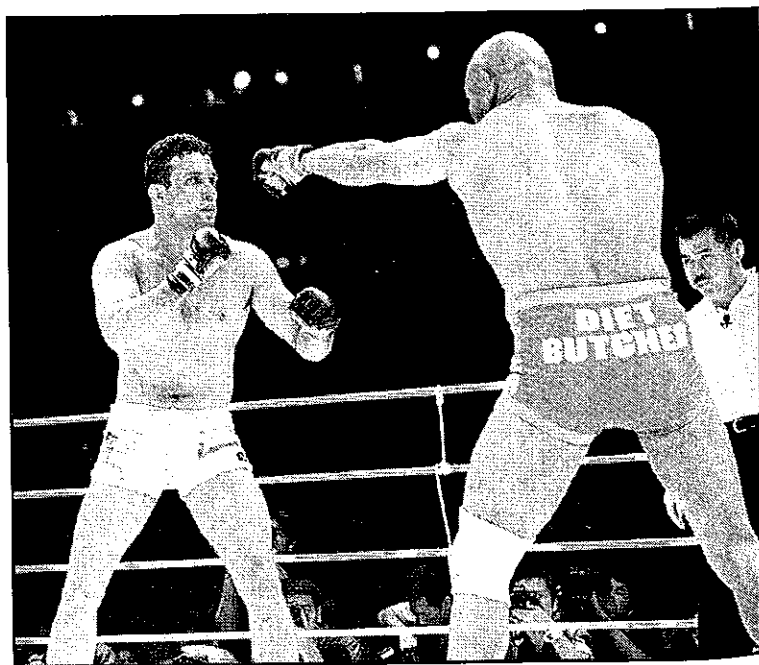
The shark and the lion have practiced and mastered their methods of attack. There is no fear that they are under prepared. There is no concern for what could have been done or what might be missing. This unconscious confidence is a huge edge, and predicts that the way things have been practiced are

the way things are going to be performed. The shark and the lion are master predators. That is what they do for a living. Don't get me wrong, they are not wild beasts with absolutely no plan. There are distinct strategies that they are using, so thinking does occur. This thinking is solely directed toward execution, not indecision. This proves, that with great predators, thinking does not hold them back. I have interestingly found with many of my athletes that this predatory zone is sometimes inversely related to actual experience and knowledge of the sport. Sometimes when there is less knowledge or skill present, and athlete will actually enter a battle with more confidence and abandon of a predator than a seasoned athlete that now questions himself. Many athletes go into such detail that their thinking becomes paralysis by analysis. The mental predator must remember to keep things simple and in perspective. No attack by the shark or the lion is ever bigger in their mind than any other. We as athletes often make the mistake that an event is too important. This self increased pressure on an event again adds to indecision, stress and opens the door for an opportunity for defeat.

The shark and the lion's motive for victory is a simple one: survival. The knowledge of the true meaning behind what you do is critical to not only high level performance, but also fulfillment. As an mental predator, it is essential that you know exactly why you are competing. There is no reason that is any more important than any other, you just need to know it. It is the core of who you are and what you do in sport. Without this knowledge, preparation will surely suffer, and eventually the quest will be all too easy to give up when the road suddenly gets rough.

I have heard other athletes call what I am talking about here as "being in the zone". This predatory zone can be seen as letting the subconscious take over and lead you to supernatural performance. This zone is for real, and the ability to get there can be learned. The first step on the trip to the zone is the removal of doubts and fears while letting performance happen. The shark and the lion are both going to age. As this occurs with the mental predator, he must be ready to adapt and overcome. With age, certain physical attributes are going to disappear. Great predators will figure out a way to maximize their current gifts and continue to be successful.

There are many top MMA athletes out there today that are what I would consider pure predators. Somewhere deep in their minds they know that victory is critical to the survival as who they are. Their confidence has allowed them to remove fear. In this state, they are relaxed and prepared to dominate their prey. Beware of this athlete as an opponent. Unless you are equally relaxed and prepared to engage in a war, he may be currently at a different mental level.



*The hunter and the hunted:
Renzo stalks Otsuka at Pride.*



Here is my quick list of 10 ways to increase your chances of becoming a mental predator:

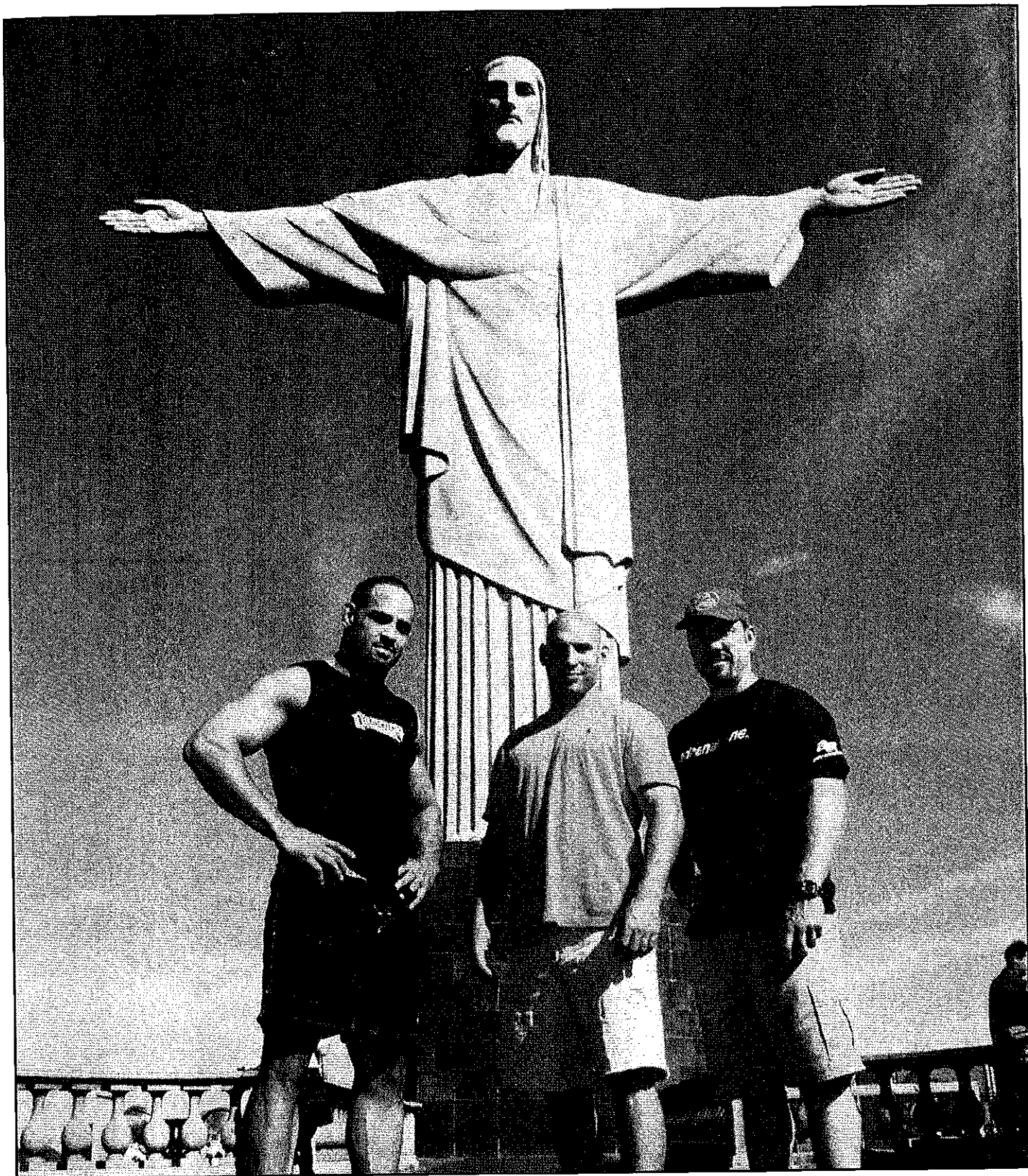
1. Monitor your daily self talk. Make sure that your comments to yourself are keep positive and supportive.
2. Surround yourself only with positive people that believe in you.
3. Develop defined goals and the reasons that you want to achieve them.
4. Develop the precise strategy for attaining your goals and follow it precisely.
5. Do not overemphasize the importance of any single event.
6. Stay busy. Do not linger over upcoming events.
7. Do not forget that nothing replaces practice and hard work.
8. Monitor your breathing. Make sure that you slow and control your breathing under times of stress.
9. Visualize success. Use mental imagery as a tool. Picture yourself at the event and everything that is going to happen. Be positive.
10. Research everything about your opponent and train under the exact conditions you expect for the fight.



Renzo keeps Team Gracie focused as they ride the bus to the arena for Pride Bushido II.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN



Sean Alvarez, Harrison and Martin take time from the ADCC to visit the most famous site in Rio de Janeiro, Brazil.



Motivation

Climbing Your Own Personal Everest

We all have our dreams, but it is rare for many of us to ever achieve them. Months ago, I was intrigued by an article written by the editor on the ADCC website about Royler Gracie's challenge to Gracie Barra. This challenge was to see who was the fastest up Pedra de Gavia, considered by many a great test of a fighter's overall physical fitness and mental willpower. I swore then that if I ever got to Rio, I was going to make the climb. Little did I know that I would be in Brazil not even a month later for the ADCC Grappling Championships, with the mountain fresh on my mind.

When I first saw the mountain by moonlight from Ricardo and Flavio Almeida's father's apartment, I was awed by its power. That feeling was only increased when I saw it by the daylight. My good friend and UFC and ADCC veteran Sean Alvarez arranged for us to make our climb with one of the most renowned climbers of the mountain, Nelson Monteiro. As I understood, not only was Nelson a start jiu jitsu black belt, but he was also one of the best climbers of the mountain and the first to reach the top in under 20 minutes. He stated that he still climbed the mountain a few times per week "just for fun".

As we got closer to the mountain the day of the climb, it only seemed to get bigger. Since no one really seemed to be worried, I was unprepared for what was about to come. Just the driving along the steep grade and tight turns up to the base was making me sick. Finally, we reached the ancient looking cobblestone starting point, and I set my watch fully confident that I was going to achieve a good time.

The path began relatively flat, and I was the joker of the group, trying to push the pace. I should have known that their experience was trying to tell me something. At 8 minutes in, things were getting much steeper and so was my heart rate. By 12 minutes, the others were passing me by. By 15 minutes, I was already broken cardiovascularly and mentally. The grade got unbelievable and footing was tough. I was amazed at the ease Nelson would go up to the others and shoot down to check on my slow progress. The heat and my heart were pounding. Finally, with the jeers from the others, I made it to the top. I did enjoy the view of the ocean, the waterfall afterward, and sharing the experience with my friends, but many things about that day left me disappointed.

On the plane ride home, this article was already crystallizing in my mind. The mountain taught me many things about myself, and I reflect on the experience often. I saw that my trip up that mountain is no different than anyone's path toward something they set out to achieve. The mountain is my illustration that can be used by all in everything that they do. Whether it is sports, work, school, or life, you will see that the insight contained in the next series of articles will help you to reach your peak performance. We all have our personal mountain to climb. There are just better ways than others to do it. Many times it is not just about reaching the peak, but also about enjoying the journey. The following articles contain my 7 Steps toward reaching your goals. The stories, examples and powerful insights contained in these steps will serve as guides up your own mountain toward personal success.



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Step 1. Define your mountain

Why choose to climb a hill when you can climb Everest?

My mountain was already defined for me in Brazil, but yours can be anything you desire. You are the only person that can define your mountain and its height. To do this, you must first develop a vision of what it is you want to do. You must be a visionary. Before you consider yourself a visionary, you must embrace the concept of what it means to be a visionary. A visionary is someone who pursues their dreams with a cast-iron conviction. Your vision is nothing more than a dream with a date attached to it. I challenge you that no dream is too high. The bigger your vision is, the more challenging, exciting and rewarding your climb to the peak will become. Vince Lombardi is renowned as one of the most motivating coaches of all time. His following challenge is a must on the wall of any man looking to define and achieve his vision: "A man can be as great as he wants to be. If you believe in yourself and have the courage, the determination, the dedication, the competitive drive and if you are willing to sacrifice the little things in life and pay the price for the things that are worthwhile, it can be done". If you accept this challenge and are prepared to make an assault on your peak, I guarantee the following pages are going to help you get there.

Your vision is nothing without goals

Now that you have a vision, you need checkpoints along the trip to make sure you are still headed in the right direction. These checkpoints to the top are specific goals that you will set to make sure continued and timely progress is occurring. Goals are one of the greatest things you can give yourself and others in your life. These are the tools that lead us to the greatest experiences of our lives. There are 4 simple rules that you must follow when setting your goals. Rule 1 states that your goals must be specific. You can't just say you are climbing a mountain, you need to say which exactly which mountain it is you are about to climb. Rule 2 states your goals must be measurable. How high do you plan to climb each day? How many steps do you need to take? Exact measurements will insure you can easily monitor your progress. Rule 3 states that your goals must be realistic. Make sure that your goal is possible. Rule 4 states that each goal must have a time frame to be completed. If you are going to climb Everest, you must have a specific goal of reaching the top in a specific time. Make sure your goals are also broken into long and short term goals. The long term goals should be aspects of the trip that you would like to complete in months or even years. The short term goals are goals which you should be able to complete in days or weeks. Success breeds success. My advice would be to small goals every day that you can attain that lead you on your path. Successfully completing these goals each day will keep you positive and hungry to take on more.

Don't ever worry what anyone else says

You may worry what other people may think of the mountain you would like to climb. Only you can choose if the dream is really worth it or not. Everyone thought that David was crazy to take on Goliath. They said, "How could you dare to fight him? Look at him, he is so big!" Instead of distracting him from his goal David said, "You're right, and I am going to have my slingshot and he is so big, how can I miss?" This should show you that many people are too quick to say that something is impossible, when it is really only difficult. All the peak performers that I have ever met get excited by challenges, not afraid. Your vision must make these other people's fear the fuel on the path of your destiny.



Pick out your dream and go for it. The dream is yours, and only you know why it is important. From the words of Sir Edmund Hillary, the first man to climb Everest, "Nobody climbs mountains for scientific reasons. Science is used to raise money for the expeditions, but you really climb for the hell of it."

The only risk is not taking one

There is an old saying a coach once told me that "You miss 100% of the shots that you never take." So I challenge you to make the mountain as high as you can imagine and shoot for the peak. As I was once told, "If you shoot for the moon and miss, you are still going to be among the stars." Research has told us that older people never regret the things that they did in life as much as they regret the things that they did not do. Knowing this, you must set your goals high and go for it. The great distance runner Steve Prefontaine once said, "to do anything less than your best is to sacrifice your gift." Every time I ride past a cemetery, this quote rings in my head. All I can think about is all the people there that would give anything to come back and give their best just once. Most of them probably died with the promise inside of them that they would someday climb their mountain, but never did.

Remember, if you don't climb the mountain, you cannot see the view!

Step 2. Define your preparatory work

The will to reach the peak is not as important as the will to prepare to reach the peak

I once heard the great wrestling coach Dan Gable say, "never let your physical or mental conditioning be the reason for your defeat." The way that he made sure that this never happened to his champion wrestlers was through thorough preparation. This preparation was exactly what I was lacking when I made my climb in Brazil. I did not do any research about the climb. I did not prepare my body physically or mentally for the demands that day. I did not have the proper equipment. It is no wonder that my results and experience were tarnished. Before you are to make the climb on your own personal quest, there is much preparation to be done. Without the proper steps taken, it is easy to slide right back to the bottom shortly after you have started.

If you have a big enough "Why", you will figure out "How"

You should now have a well defined goal that is important to you. Since it is so important it should be easy for you to tell someone why you want to achieve this goal. The stronger that this "why" is, the easier it will be to figure out exactly "how" to get there. There is famous story of two parents that had a child with a disease that doctors thought there was no cure. These two parents researched and developed the cure that everyone else thought was impossible. Today, the cure is known as Lorenzo's oil after their son. This discovery is one great example of how a big enough "why" will help you figure out "how".

Failing to plan is planning to fail

Defining your mountain is the first step toward forming your plan to reach the peak. Once the plan is set, you then need to develop the system to carry that plan out. The system is



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a group of strategies that are woven together to reach the peak. Each strategy is carried out through the proper execution of tactics during the trip. This means that your plan can be fine, but if your system, strategies and tactics are wrong, you are going to be in trouble.

Don't try to reinvent the wheel

Now you might be saying, "How am I going to figure out all the systems, strategies and tactics to get to the peak?" Don't worry, most of them have already been figured out long ago. The secret is to track down the people that have already created them. Success leaves clues, so they are going to be easy to find. Just look up the top people in the field you want to master, and find out the strategies they have used to get there. Leonardo DaVinci believed that a key component to being successful is to imitate what successful people have done to get there. We choose whom to imitate. DaVinci believed that throughout our lives we learn to choose the right models for the right circumstances and get rid of the ones that we outgrow. For example, if you want to become a better basketball player, study Michael Jordan. Study what the successful people do to find your path up the mountain. This will save you a lot of time and allow you to make many less mistakes along the journey.

It all must begin at the base

If you were to be dropped at the top of Mount Everest, you would not survive long. Your body would not be acclimated. Without the proper amount of time spent on the mountain, the peak is unattainable. Everyone must do their preparatory work and start at the bottom. Before you start the ascent for your peak, you must know what physical and mental equipment you are going to need. You must spend the right amount of time here to make sure everything is ready to begin. Find out the baseline physical and mental condition you need to be in and get there. Find out what equipment you are going to need and get it. Read everything you can get your hands on about the topic before you take step number one. Do it once, Do it right!

Step 3. Use the power of teamwork

No one can do it alone

The first person that has to believe in the dream is you! Instead of trying to change your beliefs, there is one way to change your actions that will get the beliefs to follow. The way to do this is to monitor your daily self talk. The worst prejudice in the world is often the prejudice we have against ourselves. You must make sure that you talk to yourself positively, and not be so critical. Imagine for a second your friends talked to you like you talk to yourself. You probably wouldn't be friends with them for long. Start with affirmations about how great you really are, and all the things you have the potential to achieve. To quote Henry Ford, "Whether you think you can or think you can't, you are right".

Get a coach and use his hindsight as your foresight

One of the greatest things you can give yourself besides goals is a coach. I don't care who you are or what you do, everyone can benefit from a coach. My main job function is to make sure that my athletes don't make the same mistakes I made. I do this by picking out their strengths and weaknesses and by delivering information that I gained much later to them much earlier. This is something I love to do, and I have noticed the same thing about other coaches. People with the right information are out there, you just need to find them.



The best coach I ever had was my high school track coach, Bill Scarola. Before a big meet, I had a long wait before the javelin throw and I was hungry. I went to the stand and bought two hotdogs because I could not resist. My coach saw me and was so angry he took the food from me stating that it would only hurt my performance this close to the event. He went on to teach me the proper way to eat pre-competition. There are three things that I learned that day: the valuable lesson about eating close to an event (I went on to win), my support team really cared about me (they wanted me to win), and my coach likes mustard and ketchup on his hotdogs (he ate both with a smile).

When birds go to sleep with bats, they wake up upside down

There are going to be people around you that never reached their peak, and as a result they will try to stop you from reaching yours. You must surround yourself with people that have done what you want to achieve or want you to make it to the top. The best way to believe in your dream is to be around others that believe in you. In gold-medalist decathlete Bruce Jenner's biography, he remarked that every decision he made in his life leading up to the Olympics was based on "whether it could help me win a gold medal". By asking yourself whether someone is going to help or hurt you reaching your peak, decisions will become easy on who to keep and who to weed out of your life.

Remember that once you have assembled your team, the whole team is going to feed off of you. Be enthusiastic, because whether you are going to the top of the mountain or the bottom, they are going follow you. Only you set the tone of which direction you go.

Step 4. Start!

The biggest problem of the climb up your mountain of success is all the people at the bottom

I have found that it is the start that stops most people. The biggest obstacle that people have to overcome is the actual start of the process. If they could just get started, everything would begin to happen. Most people say that they find themselves procrastinating. This is just a term that means you are getting ready to get ready. I have heard that procrastination is opportunity's assassin and I believe it. Get your body moving and you will see that the mind will have no choice but to follow. The following saying is one that could not illustrate the point of starting any better: "Nature gave man two ends, one to sit on, and one to think with. Ever since then man's success or failure has been dependent on the one he used most."

I was with my father at the beach recently and as we were taking his boat out for a ride, I noticed a boat up on blocks on the shore. The name of the boat was "Momentum". I thought that this title was ironic. You cannot have momentum, if you are not moving! Time is the most valuable commodity you can spend. Now stop wasting this precious resource and get started!

Motivation is a myth

Most people think that they would get started if they could just get motivated. That is one of the most false beliefs of many of the athletes and people that I train. People think motivation is a feeling or a thought, but I believe motivation is really action. This means, therefore, that the only way to get motivated is to get going is to do it. Don't wait to get



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inspired to do great things. Your competition is not going to wait if you don't feel like it. Let your actions change your attitude and your movement change your mood. Don't wait for the perfect time to get started, get started and maybe it will be perfect.

If you know what to do, but don't do what you know, does it matter that you know it?

Many people are also confused about the relationship between decision and action. I often use this riddle to illustrate this point: if 3 men are standing on a riverbank and two decide to jump in, how many are in the river? If you said two, you need to correct yourself. Just because the two men decided something does not mean that they did anything yet. That means that all three are still standing on the riverbank. What you must learn is that it is not just about making a decision to do something, but it is also about the actual action of doing it! You are only moving in the right direction when your decision equals your action.

Sir Edmund Hillary took the risk, got the reward

Everyone will always remember the name of the first man to climb Everest. Some remember the names of the next few people. The rest of the people that made the climb live in relative obscurity. Don't wait until you think it is completely safe, take the risk and go for it! A ship in the harbor is safe. But that's not what ships are built for.

When thinking about heading to the top of your mountain, you need to remember three types of people: Explorers, Pioneers, and Settlers. Explorers are the people that go up to the peak first. They take all the risk and get all of the rewards. Pioneers are the next to head to the peak, now that the first path had been carved. They still take some risk going up to the top, so they too can enjoy in some rewards as well. Settlers only show up when the path is so well trodden that there is nothing to gain from the view. You have to ask yourself, "Who do I want to be?"

The following quote shows that Hillary knew the risks he needed to take on his mountain: "We started in deep snow and there was precious little belay for the ice-axe. It was altogether most unsatisfactory and whenever I felt feelings of fear I'd say to myself, "Forget it! This is Everest and you've got to take a few risks."

You can't swim if you are still holding on to the side of the pool

Plain and simple, to get to the top, you have to leave the bottom. Dr. Rob Gilbert, the greatest motivational coach I have ever known, gave me a great four step plan to make sure you get started and keep going.

- 1. Make the commitment**
- 2. Make it public**
- 3. Make it happen**
- 4. Make no exceptions**

If you follow these steps, you will be forced to move closer to your dream.

It is not what is happening around you, or happening to you, it is what is happening inside of you. This means you have the power of choice to get going. No matter what you want to be great, the first step is the same, you have to show up at the base of the hill.



Step 5. Fail Upward with Focus

Tough times don't last, tough people do

There are going to be tough times, and you have to be prepared for that. If you want to find people without any problems, head down to the cemetery. Then you will see that your problems aren't probably so bad. A setback is a setup for comeback. This means that along the journey up the mountain, you are going to have to fail upward, not downward. Are you going to let your circumstances dictate your attitude, or your attitude determine the circumstances? Only you can make that decision. You have to see every failure as a step toward success. When Thomas Edison was asked how he felt after failing over ten thousand times to make the lightbulb, he said, "I didn't fail ten thousand times, I found out ten thousand ways not to make the lightbulb". That is what I mean by failing upward on your quest. Don't get discouraged when tough times appear, get encouraged. As the philosopher, Seneca once said. "It is a rough road that leads to the heights of greatness".

Detours are allowed, stopping is not

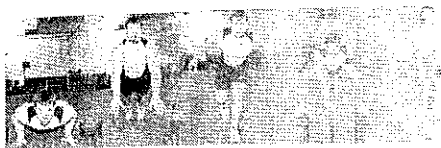
There are going to be mistakes. A coach once told me that if you are not making a number of mistakes a day, then you are not trying enough. So embrace your mistakes as lessons of what not to do, not as a reason to stop. A mistake may cause you to have to change course or even take a step backward, but there is not ever a reason to stop or quit. Mistakes are a gift. They allow you to reflect on what you have done, and give you a chance to make your strategy better. If you always do this on your journey, any step downward will always lead to two steps up.

Do what works, don't do what doesn't, and always see if there is something better out there. Your climb to the top is not an issue of try, try again, but try another way if something is not working. As the great conqueror Hannibal once said, "We must either find a way or make one". That is the way you are going to keep failing upward.

The most important thing is to make the most important thing the most important thing

You can't get to the top of the mountain if you can't ever decide which path to stay on. To get to the top, you are going to need focus. Thomas Edison was once asked if he thought he was a genius. Edison replied, "I am not a genius, I just have a great ability to focus. Most people focus on many things each day, and I only focus on one". "Genius is one percent inspiration and ninety-nine percent perspiration". So now you need to understand that it is not about your intelligence, it is about your diligence. Work on it. The ability to focus will help you to avoid distraction and keep you from losing sight of the goal. This next story will help you to see the importance of focus in terms of reaching your goal.

There was once a swimmer that was trying to swim a channel in record time. Since it was foggy that day, the swimmer was unable to see the coast and lost sight of her goal. This caused her to focus on her pain and fatigue which caused her to give up with little distance to go. A year later, she came back, and with renewed focus, broke the record. Remember that if you try to chase two rabbits, you are not going to catch either one!



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Step 6. Stay the Course

You are going to get one of two things on your trip

You will either get reasons or results. I get very tired of hearing all the reasons why people did not reach their goals. You would be surprised how many people will rattle off all of their shortcomings without ever seeing that they never made it where they wanted to go. Instead of focusing on all the reasons why something didn't work out for you, you need to get back to the climb. A secret to getting back on your quest is to get pumped up when things get difficult. Most people get turned off and quit. Great athletes are turned on by great opponents, and great people are excited by great challenges.

Remember that you are the only one that can stop you.

What is your Comfort Zone?

To reach the peak, you need to be comfortable where others are uncomfortable. This is an ability all of the most successful people in any field possess. This is not an innate ability, but something that you can develop over time. The harder you push your comfort zone, the easier things will become, and the further you can go up the mountain. Tour de France champion Lance Armstrong said that his secret in climbing the mountains is that "he is willing to endure more pain than anyone else." If you are willing to do what it takes, you can get what you want. You just need to know that it is not going to be easy or comfortable. Whenever you think that things are tough and you want to quit before the goal, remember the following story:

In the 1976 Olympics in Montreal, the Soviets and Japanese were in a tight race for the team gold medal. Japanese gymnast Shun Fujimoto broke his kneecap while performing in the floor exercise. On the following day, Fujimoto chose to continue to compete in his strongest event, the rings. In order for Japan to strike gold, Fujimoto had to have a great performance. With no pain medicine, Fujimoto began his routine. It all went well on the rings, but the dismount would decide the outcome. Without holding back, Fujimoto ended the routine with a twisting, triple somersault. He landed with tremendous impact on his wounded knee and barely stumbled slightly. Then came the thundering applause from the crowd to salute the courageous performance. Later, reporters asked about that moment and he replied, "The pain shot through me like a knife. It brought tears to my eyes. But now I have a gold medal and the pain is gone." The Japanese team won its 5th consecutive gold medal.

That is a comfort zone not many have gone into before. Now ask yourself what level are you prepared to go to?

An experienced climber takes one step at a time

Many people have trouble reaching their goal because all they can see is how far away the peak is. This often stops people before they even start. How does a veteran climber make his mountain seem like an ant hill? He takes on the mountain one step at a time! Divide your journey into smaller pieces and take them on one at a time. You should be focused on the next small step toward your goal, not just the end result. If there is an obstacle in the way of the next small step, get rid of it and take that step. Each time you take another step forward, that little success will make it easier to keep going. Any time you are ready to think that you can't do something, just add the word "yet" to the end of it.



Your trip to the peak is a journey, not a quick trip. Don't look for the shortcuts.

Stay the course. When you begin to lose focus and think about giving up, use this historic quote from legendary boxer, Jim Corbett to get you back on track:

"Fight one more round. When your arms are so tired that you can hardly lift your hands to come on guard, fight one more round. When your nose is bleeding and your eyes are black and you are so tired that you wish your opponent would crack you one on the jaw and put you to sleep, fight one more round – remembering that the man who always fights one more round is never whipped."

The little things make a big difference

When I look back at all of the great people that I have worked with over the years, the most successful ones all had something in common: they all paid attention to the "little things". I describe the little things as tasks throughout a person's day that are simple to do. Unfortunately, I also describe the little things as tasks throughout a person's day that are simple not to do. For instance, it is as simple to eat well every day as it is to eat poorly. It is as simple to get the right amount of sleep every night as it is to lose sleep. It is as simple to be on time and thorough with your training as it is to be late and half-hearted. These instructions sum up this entire concept: Do the little things right and the big things will take care of themselves. As the Hall of Fame basketball coach John Wooden once said, "It's the little details that are vital. Little things make big things happen".

Momentary pleasure only lasts a moment

Many people often stop along the way because they settle for what they want now instead of what they want most. The most successful people choose most over now. Don't lose sight of your goals for something that is not going to be worth it. This is going to require diligence and persistence. As the author Ralph Waldo Emerson once said, "By persisting in your path, though you forfeit the little, you gain the great".

One thing that won't fail you on your trip to the top is your persistence. The wise past President Calvin Coolidge gave what I believe is the best description of persistence that history has known:

"Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent."

The tennis great, Bjorn Borg, stated a similar quote that also demonstrates the power of staying the course:

"My greatest point is my persistence. I never give up in a match. However down I am, I fight until the last ball. My list of matches shows that I have turned a great many so-called irretrievable defeats into victories".



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One phrase to avoid during your climb

"I can't" is one of the worst things that a person attempting to reach the top can say. Using that phrase is usually an excuse. Rarely is this phrase used to describe something that is truly impossible. When someone utters "I can't", they usually mean "I don't want to" or "I don't know how to". This demonstrates that many people's lack of high level performance is simply a lack of desire or knowledge. Don't make weak excuses. You have to be honest with yourself whether you want to reach the peak or not. If you really do, develop the desire or acquire the knowledge and figure out how to get there.

A great strategy while you are finding that knowledge is to put a "yet" on the end of every sentence that ever begins with "I can't". Then you will find yourself making progress, not excuses.

Step 7. Reach the peak

To finish first, you first must finish

Before you can worry about being the first to the peak, you have to make sure you reach the peak at all. As I said earlier, starting is the hardest part of the climb. The next most troublesome area for most people is to finish. Making sure you complete your journey is oftentimes as important as being the first one to finish. The following story is one of my favorites and demonstrates the power of finishing.

The winner of the 1968 Olympic marathon had been declared over an hour earlier, and the night was cold and dark. Only a few watchers remained when John Steven Ahkwari of Tanzania entered the stadium, hobbling painfully. His leg was bloody and bandaged, but he kept on running. The spectators began a slow clapping and as he crossed the finish line, they roared appreciation for the determined Tanzanian.

A reporter asked Ahkwari why he had not stopped running since he had no chance of winning. All he said was, "My country did not send me to 10,000 miles to Mexico City to start the race. They sent me to finish".

On the day of victory, no one is tired

There is an interesting paradox between reaching your peak and just missing it slightly. This small difference can lead to euphoria or distress. People that reach the top can become energized like never before, and the people that narrowly miss the peak often appear exhausted. An example of this sticks out in my mind. When Rulon Gardner defeated favored Alexander Karelin for the gold medal in Greco Roman wrestling at the 2000 Olympics in overtime, Karelin walked off the mat completely drained while Gardner was doing cartwheels on the mat. For every athlete that takes a victory lap, there seems to always be another lying exhausted on the ground in defeat. Use this knowledge to your advantage. The trip to the top is going to be tough, but I am sure everyone states that the hardship was worth it when they get there. To quote William A. Ward, "Adversity cause some men to break; others to break records". Champions don't break, and neither should you.



Be here, Now!

If you followed the steps in these articles, you should someday reach your peak performance. You must be able to do two things at that point. Recognize that you are there and enjoy the moment. So many athletes I have known regret that they did not do either of these things when they had their peak performance. To look back on the moment at a later date just doesn't have the same feeling. Just like reaching the summit of Everest, no one can stay at the top forever. The key is to Be There when you Are There. That is where the reflection on the journey makes the moment even sweeter.

Don't get content until you are ready to come back down

I have seen so many athletes quickly fall from the peak that they worked so hard to achieve. Ex-Heavyweight Champion of the World Buster Douglas in his pitiful loss to Evander Holyfield after his stunning defeat of Mike Tyson is just one of many examples that instantly come to mind. Many are unable to stay at the top long because when they get to the top they lose their commitment. Don't get content or complacent until you are prepared to lose your place at the top of the heap. Remember that with all the hard work that it took to get up the mountain, it is very easy to coast right back down.

Leave yourself breadcrumbs to remember the trip

Many people are unable to stay at their peak for long, but they often need to get back there more than once in their lifetime. I believe it is much easier to return to the top than it is to get there the first time. You have already made the journey once, now you just need to remember the way. To help make a future return trip much quicker, I recommend recording everything along the way. Not only will this make the next trip more nostalgic, it will also make the next trip easier. You will be surprised all the things you think you would remember that you will surely forget. These records should be precise to show you exactly what worked best and when. The things that get rewarded are the things that get repeated. If nothing else, these records will help another person trying to climb the same mountain if they ever look to you as a coach when your climbing days are done.

I hope you have enjoyed the 7 Steps Toward Personal Success as much as I have researching and writing them. Use the powerful truths contained in the previous few articles and you are sure to increase your chance of success. Now get out there and go after your dreams!

I will end with my two favorite Hillary quotes, which illustrate my true meaning behind these articles:

"You don't have to be a fantastic hero to do certain things – to compete. You can be just an ordinary chap, sufficiently motivated to reach challenging goals."

"It's not the mountain we conquer, but ourselves."



To Train or not to Train, that is the Question!

If there is one discipline of study that I really appreciate, it is mathematics. Think about it, math is really black and white. There is only a correct or incorrect answer, there is no gray in between. Math in many ways is an exact science.

When you examine physical training, on the other hand, almost all of the discipline takes place in that gray area. You will see so many people doing so many different things, and many of them are getting good results whether it be in physical conditioning, or victories. This gray area leads to many different factions of people saying what they do is the best and other styles of training are incorrect. This gray area leads to inevitable questioning and uncertainty.

Training is, in many ways like religion. There are many different schools of thought worldwide, you must have faith in what you are doing to remove uncertainty, none can be conclusively ruled better than any other, and most of the schools of thought follow the same principles and ideals. When I first read all of the questions, I realized there were similarities between many of them. Most of the similarities revolved around problems with the principles behind the training, not the training itself. Before I begin answering the questions, I am going to deliver three concepts that should lead to progress for every athlete.

1. Show Up

Many of the questions seem to revolve around the fact that there are many periods of the year that training may not be happening. Training is not something to do just a few weeks before a fight, it is a consistent commitment to being a professional athlete. Train all year, and many of the issues like overtraining and injuries are not going to occur. Remember, there are no shortcuts to becoming the best in the world. Success has the strongest scent of sweat to it.

2. Pay Attention

There needs to be a focus of every training session. Every set, every rep, every thing you eat and drink should be a step toward progress. If you get to the gym or the mat without this in mind, progress will be limited and injuries are waiting to happen. Ask yourself at the end of that day how exactly you got better or closer to your goal that day. Remember, failing to plan is planning to fail.

Your body is an incredible informant. Listen to your body. If you are tired, rest. If you are hungry, eat. If you are injured, rehab. Failing to pay attention here is asking for trouble.

3. Ask questions

Each of these athletes is showing their commitment to improvement by asking questions. Each training day is an adventure. By finding out more about training and nutrition, an athlete is moving closer to their goal. If you are not seeking to improve, your chances for success are dying. Seek out the top professionals in your area and get the answers you need.

I am excited to write this section because I am answering the questions of who I consider to be some of the best athletes in the world. I am excited because I know my answers can possibly lead each one to be even greater than they currently are right now. This performance enhancement is a physical trainer's dream.



The Questions

1. **Ricardo Arona:** *"How can I prolong my career after so many injuries? How can I improve my body and my physical conditioning as Randy Couture, who is a champion over 40 years old?"*

Ricardo, injuries in the sport of MMA are inevitable. Many injuries, however, are also preventable with proper training and planning. I, as well as so many MMA fans, was disappointed when you were injured so close to the Pride Grand Prix as well as with the amount of time you have missed in your career due to injury.

Whenever I see athletes get injured so close to an event, that tells me either the training sessions are not correctly planned out, or the athlete is cramming because they have not been training consistently. Proper planning of the training and consistency is a key to injury free training. Training is not just beating yourself up, but recovering properly as well. When any problem is beginning to show up, you must also make sure to get rid of it with rest and rehab before it turns into something worse.

I know the trainer of Randy and his training methods. They are well planned out and he is always training. I know you have his desire and the will to win, now you must make sure that you have even one more important thing, the will to prepare to win. Remember that Randy has been training like this as long as you have been alive, so be patient. Stay consistent and you will be a force in MMA for years to come.

2. **Fernando Terere:** *"How can I know if I am overtraining? What is overtraining and what are the symptoms?"*

Fernando, this is a great question that has a simple, and also a very complex answer. The simple version is that overtraining is training too much, too soon, for too long with not enough recovery. This often leads to poor performance. Since I know you are one of the top athletes in BJJ right now, I know you are doing many of the right things like training all year and developing your strategy. I also know if you are overtrained, it is not for long.

Now for the long version. Since there is a lot of science behind it, I will make the answer as simple as possible.

There are two types of overtraining that are defined by their effects on the nervous system and endocrine (hormonal) system. These are Addisonic and Basedowic overtraining. Addisonic overtraining is commonly a result of too much aerobic activity, monotonous activity, or chronic work that exhausts the energy systems of the body and leads to an excitation of the parasympathetic nervous system. This form is more common among older, advanced athletes that are involved with endurance sports. This form of overtraining is harder to diagnose because many of the patterns of the body like appetite and sleep are normal. What is usually seen here is that the athlete easily fatigues during their sport, and that they just can't push hard during their sport. If they do, nothing happens. This form of overtraining takes much longer to get rid of.

Basedowic overtraining is more commonly seen in fighters. This type of overtraining is due to too high of an intensity of anaerobic stimuli and great mental concentration without the proper baseline volume of work or too much psychoemotional stress. In this type of overtraining, the



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sympathetic nervous system is overactive and the symptoms are much more easily seen. Common symptoms of Basedowic overtraining are: sleep disturbances, fatiguing easily, reduced appetite, loss of weight, increased heart rate in the morning, increased blood pressure, extended time to recover, muscle pains and stiffness, decreased coordination, mental fatigue, increased irritability or aggression.

3. Ze Mario Sperry: "How can I recover myself from overtraining?"

Ze Mario, as I stated in the previous question, overtraining is the result of adding too much training when the body is not properly prepared. The first planning step in training is to plan out the recovery periods, then add the training workouts. Add training loads gradually with the right amount of rest in between especially after periods of not training. This is where I commonly see fighters going wrong. If you do this correctly, overtraining will never happen in the first place.

If you do see some of the symptoms above and feel that you are overtrained, the way to recover is to reduce the training loads and volume, and or just completely rest. Some active rest like gentle swimming can help. Warm baths and massages can also speed up the recovery process as well. Proper nutrition is also critical here. You should also make sure that there are no vitamin deficiencies. Magnesium is commonly low in high level athletes and can lead to symptoms. The less time you have been overtraining, the less time you will need to recover back to training. The good news is that after a short period of rest, you should be able get back to full capacity.

4. Vitor Shaolin: "My legs and low back are the first parts of my body to get tired during a fight. Is this normal? If it is a problem, is it physiological or psychological?"

Vitor, first I must congratulate you on your new Shooto belt and your undefeated MMA career. This is a reflection of your hard work and preparation. I think this is an interesting question, not just because this is something that happens with fighters, but that you recognized that there are physiological and psychological reasons.

The first thing I question with many fighters is their pre fight warmup. Often in the locker rooms I see fighters warming up for way too long and expending too much energy that should be used later in the fight. This, coupled with the fact that you may be losing weight to get down to your fighting weight may lead you slightly dehydrated and at risk for the fatigue you describe. Both of these possibilities are physiological, but there are psychological reasons as well. I have seen fighters display incredible endurance during training only to gas out during a fight. I believe that their nervousness and anxiety before the fight causes a fight or flight adrenaline response that steals energy from them at the time of the fight. As you gain even more MMA experience, you will relax more and conserve your energy expenditure. I hope this answer opens up a possibility to improve.

5. Alexandre Cacareco: "I am always lifting heavy people in my fights and during my training. Can this injure my health for the future?"

Cacareco, congratulations on all of your recent submission fighting success. I saw you in ADCC and you looked freaky strong and fit. It is understandable to be worried about your body for the future, but you must accept certain risks when you get into this game. If your back is bothering



you lifting heavy people, I would suggest either training with fighters closer to your weight, or changing your strategy for the heavier fighters in training. For instance, if the fighter is much heavier in training, instead of going for lifts, use your game of powerful takedowns and crush them with your infamous kimura. I have to say, I am much more worried about the health of the people you are fighting than your own.

You have all the tools to be the best that there is in this game. Your concern tells me that the last area that may need to be polished is your confidence. Do the right things in your training and you will have nothing to be worried about for the future except getting a bigger room to house all of your trophies and winnings.

6. **Jorge Patino Macaco:** *"I've never had a time and a place to swim. I am a good runner, but I never swim. How can it affect my performance in the ring? Is it true that all fighters need to swim?"*

Macaco, I think that all fighters need to swim only if they are trying to win the gold medal in swimming. Although I know many fighters in Brazil use swimming as a training medium, it is not essential to being a great fighter. I have spoken with a number of fighters that like swimming for the exercise and the breathing techniques that it teaches, but I know more fighters who don't swim than those who do.

Running, depending on how you are doing it, may not be the best training either.

I know you are an explosive fighter, but you tend to fatigue at the end of the fight. You may think that swimming or running may give you the endurance that you need. The fact is, however, that distance work develops a different energy system than what is used during the fight. We do high intensity sprint work at my training facility with short rest periods and repeat for the duration of an upcoming fight. This repeated explosion and recovery is what your body needs. The swimming can actually take that away from you. Look at your physique. Do you look like a Olympic swimmer or Sprinter? Follow the training of how you were designed and you will continue to knock guys out early.

7. **Walid Ismail:** *"How many days before a championship should I stop lifting weights?"*

Walid, great to hear from you. I know when we spoke at Coco beach, you like to train hard and are focused in on your training. The hardest part of the training process for a fighter like you is to actually take the right amount of rest before a fight to completely recover. All of the training at our facility is precisely planned to have the athlete peak for a fight and remain injury free leading up to the event. All of my athletes train year round, so they are always close to their peak and don't need to push hard at the end of training. They actually get to relax and concentrate on the strategy for the fight. I have a saying with my athletes at the facility, "Lifting days before the fight is not going to make you any stronger for the fight, but it sure can make you weaker". What I mean by this is that without the proper recovery, a fighter can actually be worse up to the event.

I like to stop lifting my athletes 7 days before a fight. Science shows that an athlete can actually go 10-14 days without strength training and not lose any strength. Lifting too close, however, can steal precious energy from the fight and create soreness that is not going to help a fighter relax.



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8. **Jose Pele Landi:** *"How does a fighter know if he is in top physical condition? On average, how long does a professional fighter need to be in his top physical condition?"*

Pele, I have to say that when athletes ask me this, they are usually the athletes that are not constantly training in the gym, and looking for a "quick fix" to get ready for an upcoming fight. I believe that a professional fighter should be striving for his top physical conditioning from the day he decides to be a pro until the day he retires. I know that sounds idealistic, but that is my definition of a professional: someone who is always striving for his best no matter how he feels. Many athletes feel they are a professional for getting paid for what they do. I believe a man is a professional when they are so great at every aspect of what they do (training included) that then they are paid.

An athlete's top physical condition can only be determined after years of continuous training. This will allow the athlete and coach to determine the highest level that athlete has reached in speed, strength, power, endurance, and flexibility when they match current scores against previous bests. This comparison demands constant work and a search for excellence. When an athlete has done this often enough for years, they know when they are at their best.

I know an athlete can not be at the peak of their performance all year, but the goal is to stay at the highest level to make it easier to reach the peak again when a fight comes up. We all know how crazy some of the matchmaking is with fights being on and off at a moments notice. The better prepared the fighter is at all times, the better chance for victory.

9. **Pedro Rizzo:** *"In a training program of 12 weeks prior to a fight, in what moment should I start Plyometric exercises?"*

Pedro, this is a question that I asked from coaches and athletes all the time. I think that plyometrics are the most misunderstood and abused training media besides warming up correctly and proper nutrition. Athletes and coaches love to throw plyometrics into training and usually it is used at the wrong time and for the wrong reasons.

Simply put, plyometrics are anything that forces the body to rapidly return a force once it has been applied to the body. So, sprinting and jumping rope are plyometrics. Using a medicine ball chest pass can be a plyometric for the upper body. Plyometrics are not just explosive jumps up on boxes.

This being said, we use plyometrics at all times during our training. After my fighters are at the right strength and speed levels, I use something called Pendulum Training. Just like a pendulum swings side to side, we alternate different forms of training into every workout. So, there will be strength (lifting), power (plyometrics), and endurance (running, fight training) during every workout. I am not such a fan of the classic periodization model of adding different components at different times.

My concern for you would be that at your weight, plyometrics, if done too intense, may actually wear you down and set you up for injury. Make sure you are using them correctly and not over-shocking your system.

10. **Wanderlei Silva:** *"How can the fighter determine the pain limit during a training program? When should the fatigue stop my training?"*



Wanderlei, Congratulations on the Pride GP victory and the last number of years of bringing fantastic fights to the fans of which I am one of the biggest.

Before I answer, there is an old saying a coach once told me, "Don't fix what isn't broken, just make it better". What I mean by this is that you are very successful right now, but you must continue to challenge yourself and improve to evolve ahead of the competition.

It is interesting that you ask about the pain during training. I have seen you train in Japan and have watched others from Chute Boxe train there as well. A memory that sticks out in my mind was watching Rudimar take a kick in warm-ups from Assurio Silva that almost took his leg clean off. I know one of your team's strengths is your tolerance for pain.

Here I am talking about physical pain, and I do believe that there needs to be a certain amount to prepare a fighter for what is going to occur in the ring. Going past the point to injury may not be the best idea. That is where you need to decide how far to go to make sure that injuries are not occurring during training.

As for fatigue, this is an area we are really examining at our facility. We have entire sessions now based on the physical and mental fatigue that takes place during training. I like training through fatigue in the gym to go to mental levels you have not reached before. In the actual fight technical training, however, I like the athletes to be fresh and conduct their training at full speed. What I mean is to develop your tolerance for fatigue in the gym, but develop your muay thai skills at full speed and force. If you are always training in the ring fatigued, that can alter your style.

I believe that a fighter is going to fight how he trains. I have seen your intensity in the gym, and it matches the ring. Continue to expand your training with that intensity and you will continue to be unstoppable.

I want to thank all of the fighters for their questions and let them all know I am honored to be able to offer advice. I hope the answers stimulate new thoughts about training and take everyone's game to the next level in 2004.

Your Own Questions and Answers

The following pages are some of the MMA questions I have answered over the years on elitefitnesssystems.com

I thank all of the athletes and coaches out there that helped to improve my game by posing such great questions.

Martin

Curious how much strength endurance work is done in the weightroom for your wrestlers or mma athletes. Do you think that they get enough conditioning work in their practices or do you add some more within their weight room workouts. I understand that it depends mostly upon individual needs, but on average, what type of training is prioritized in the weight room for these athletes. Thanks.



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John,

Great question. Although many programs are different out there, most of the wrestlers are worked pretty hard at practice.

Depending on the individual strengths and weaknesses, you need to then address what they need most.

If the athlete is weak, hit a little more strength work first in addition to the endurance.

Our workouts here are a strong combo of both. Now that the guys are really strong for their weight, we are killing the anaerobic endurance. I think this has added a ton to their confidence.

I hope this helps

Martin,

In an earlier question you answered a question about the numbers of mma competitors and wrote about technical and functional strength. I was wondering how someone would gain such a strength? thank you and hope your book comes out soon.

Frankie,

Thanks for the support. Interestingly, I get to roll with 3 black belts and 2 purple belts in a private setting 4 times per week.

I am stronger than everyone of them in terms of weightlifting and faster than everyone of them in terms of linear or lateral running.

Yet, when I am training with them, they feel physically stronger and destroy me (got my trachea crushed last night and am having a hard time drinking or eating).

This strength is their ability to concertedly use their muscles together to execute perfect technique. Remember that jiu jitsu was created to allow a weaker man to dominate a stronger, less technical one.

So, take home message is B.O.M. Butt On Mat. That is where you are going to gain the technique that will lead to the strength we are discussing.

Hi Martin,

It's been some time since I last e-mailed you but I follow your posts regularly. I'm currently working with a MMA fighter with a blue belt in jiu jitsu who has also won 2 golden gloves and competed at the national level in the Ring mag. National Championships. He is currently preparing for a jiu jitsu tournament. He has good strength (he won two bench press contests with benches of 210 @btw of 132 and 245 @btw of 142 both raw) for a 19 year old. My question is this, I have him on a training program that is geared more towards all around and core conditioning. He does some band work and I have been keeping him away from heavy work. We noticed he had some tightening in his low back with heavy squatting and it was detrimental in his jiu jitsu. I have him doing lunges and ham/glute's with occasional reverse hypers for legs and back, body weight work with some light (no more then 55-70% of max) free weight work for the upper body. Can you suggest some ideas for exercises that are more sport specific to rolling and fighting sports. With the training being done no more then two to three times per week for not more then 45-to-60 min. max. I'm very aware of the over training issue and with his spending about 8 to 10 hours a week just training jiu jitsu not counting additional cardio and boxing, I want to be very efficient when it comes to his strength training. Thank you for your consideration and time.



Mike,

Great to hear from you and glad to hear you are prepping an up and coming fighter.

Sounds like his strength is fine. As a blue belt, jiu jitsu needs to be his focus now and just maintain his strength and improve his cardio for the tourney.

Max strength is not the key here, he already has enough especially from his light weight and good numbers. He can have the biggest bench and still get choked out if his techniques and endurance are poor.

Make sure you are blasting him with great anaerobic workouts 2 times per week that can also have weight circuits to maintain his strength in prep for the tourney.

Good luck.

Martin,

I had a question about conditioning for a fighter or the organization of cond. within the rest of the training to be more exact. I have recently switched from fighting K-1 style to MMA due to difficulty finding fights in the States. When I was just fighting K-1 my cond. consisted mainly of running work. I am now trying to add in more LA tolerance w/ weights, sled, bands, etc. My question is how do you work in your extra cond. outside of fight training. I try to lift 2-3 times a week prior to MA training. Should I mix cond. work in w/ lifting or try to do it on other days. I know that this can be a very individual thing, but was jst wondering what you have found to be effective with your fighters.

Thanks Again, Bryce

Bryce,

Great to hear from you again.

I guess the answer is more simple than you might expect.

If you don't not have any glaring weaknesses, then you can work the strength and conditioning at the same time. This is what we are doing now when there are only 3 training sessions a week.

You can do the weight and band work and intersperse in sprints, sled pulls, etc. to get the heart rate up.

You will maintain your strength with this and improve the conditioning as well.

Martin,

In a recent post you stated that for your high caliber fighters, strength is no longer the deciding factor.

I, however, feel that this is a subjective topic. Meaning, I feel that the MMA world, with few exceptions, has yet to see a fighter with excellent technical skills who is also extremely strong.

I recently spoke with Dean Lister about assisting him with his strength training, and one of the first things I plan on doing with him (if we end up working together) is jacking up his strength levels while maintaining his current bodyweight.

I feel that there are numerous fighters who posses a high level of technical skill/conditioning, yet are really lacking in the strength department.



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If I may be so bold (knowing that we can play the 'what if' game all day long) if we took an elite level powerlifter and gave him the technical/skill level/conditioning of an elite MMA fighter, we would have a new champion.

Granted, it is not reasonable to suggest that an athlete is able to achieve elite lifting totals, while simultaneously competing (at a high level) in MMA, however, I hold to my statement that in many fighters, strength is an under developed motor quality.

I welcome your thoughts as I feel that you are one of the best in the biz. James Smith

James,

Great to hear from you. This is a stimulating topic and I knew my statement about conditioning was going to draw attention.

Playing the "what if" game is fun, my friend, but not realistic.

I am going to try to cover this topic and be as blunt as possible.

First, there are many exceptions to what you say doesn't exist (technique and strength: Have you heard of Mark Coleman, Vanderlei Silva, Mark Kerr, Matt Hughes, Randy Couture, Minotauro, Fujita, Sean Alvarez, Dan Henderson, etc. etc. etc.?

These guys are all technical and very strong (As you will see, strength is not just what a man does on weights). I have had the opportunity to see these guys train and know fighters that have fought them and they are all said to have grips of steel and when they wrap up with you, you feel strength you will never develop on the powerlifting platform. (I will get into why they are different)

Have you heard of Bob Sapp? Super strong, getting technical, and loses due to conditioning as well as not being used to getting cracked in the face (another thing not on the platform and not related to strength)

Tank Abbott? Lots of experience, questionable technique, super strong (upright row 315#, bench 600) gets his butt kicked all the time. Cabbage beat him recently. Tank was stronger, same technique, gassed out.

Interestingly, all of the mentioned fighters all have losses. Shows even strength and technique doesn't mean you are a champion.

Dean Lister: Great technician, super physique, lost his last fight to Jeremy Horn (Great fighter) and conditioning was a question. Dean was surely stronger than him, and as technical. Dean has been beaten by Ricardo Almeida twice and Lister was surely the stronger fighter and just as technical. (Strategy and preparation are also keys you cant get on the platform)

Just get him stronger and you may make him worse my friend.

I agree many of the fighters could be stronger, and of course it could help. But you are where I was 5 years ago. Then I started working with a lot of guys. Experience will help you. There are a number of strengths you need, and maximal is not the biggest. Starting strength, strength endurance, eccentric strength, core and rotational strength are keys. Powerlifting isn't going to give you that.

Matt Lindland: Doesn't look strong, will rip anyone down, Silver medal (2nd best on planet)

Why? All strength works in unison. Didn't develop it on a platform. Must train everything together.



There is so much that goes into fighting in addition to strength. I see limitations in nutrition, quality of technical work in addition to strength.

I am just trying to show you it is a piece of the puzzle but not the biggest.

In the what if game, even a guy that is the strongest most technical can lose.

But I have to say, it is fun to play it.

I hope this rant helps.

My advice, let Dean put his hands on you and see how weak you think he is. After the broken bones heal, tell him which lifts he should start doing to cure all his weaknesses:)

Martin,

I appreciate your response to my post on the strength issue with fighters.

After further review of my initial post I realize that my lack of specificity, in my statement, earned me the smackdown that you gave me in your reply.

I agree completely with your response. Allow me to reiterate my statement on the topic of strength. I do believe that all the components of strength (starting, reactive, relative, limit, explosive, endurance, etc...) are a vital and often under developed motor quality in many fighters.

I do acknowledge the fighters that you mentioned (Couture, Coleman, Vanderlei, etc...) however the strength/skills of these fighters is certainly not (in my opinion) commonplace in the MMA community. And point well taken, with respect to the fighters who do possess great limit strength (Tank, Sapp, etc.) yet continually get beaten.

I also recognize the difference between the type of strength exhibited on the platform vs the octagon. Once again I recognize the ambiguity of my initial post to you.

And I DID NOT intend to imply that Dean is weak in any way. Incidentally (I am sure he would hem me up, but at 6'1" 235, with some experience of my own, outside the ring, I'd like to believe that I wouldn't be the only one bleeding) What I did intend to imply is that after speaking with him I realized that more attention could be given to his strength/conditioning program.

Once again, I appreciate the smackdown (that's what I get for not communicating clearly). You are absolutely right in your statement, and I am absolutely the junior, with respect to time/experience in the MMA field, when compared to you.

If Dean and I begin working together I hope to bounce ideas off of you if I run into any roadblocks.

Thanks for your time. James Smith

James,

You are the Man! Don't think of it as a smackdown at all. One of my favorite things is talking about this stuff, and that was what was just coming out. Reading these posts is all perception. Now, instead of reading it as a smackdown, read it as if two friends were talking and having fun with it. I can't wait to hear how Dean's training goes, and am always here to help.

Have a great New Year.



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Martin,

Your last post might be the greatest post in the history of bjj/mma conditioning history. I couldn't agree with you more. There are so many guys that are so strong on the mat and not real strong in the weight gym. I call this dad strength. Funny you mention Minotauro, he was my teacher for a while and I can tell you first hand that his grip strength is beyond amazing and not developed with weights. I don't know if you can be too strong, but I do know some people that are so strong, I feel it hinders their technique. Instead of the word strength, we use the word pressure. There are a lot of guys that are not real big and strong that put a lot of pressure during training. When I think of my conditioning, I want to develop strength, but more important have no weaknesses. Right now I feel my core is weak and I'm trying to correct it. The main reason I listen to your opinion so much is because you actually know what the "pressure" is and how to train for it. This topic could go on forever.

Anthony,

Thanks for your support. I know you know what I am talking about. Dad strength, man strength, farmer's strength, you name it, but it is real.

Pressure is a great term man. I have had 150 pound guys crush me where it felt like they weighed 400! Rodrigo Gracie is one of those guys. Feels like a thousand pound boa wrapping you up, yet weights are not his forte.

We are doing a lot of work now to try to develop this contractile strength. The new methods are going to be in the book.

Having Mino for a teacher must have been something else. He is a great guy and an unreal fighter. You are lucky.

Keep training the core.

Martin,

I have read every question in regards to MMA and weight/strength training in the Q&A. I have been training MMA for a little over a month now and you were right, I can't possibly handle any more than 2 days per week of strength training along with vale tudo, BJJ, submission grappling, boxing, and all the open mat time as well! I still love the westside template and have dropped speed work for now as my joints just can't handle it, also my hip flexors are constantly sore from working the guard. When I am accustomed to the MMA I will probably rotate the WSB template on MWF rotation, leaving out one of the days per week and picking it up on the following Monday and so on. You were right I am beat all to hell constantly, bruised ribs, fractured toes, and "forearm splints" just to name a few. Well on to my question, I was in hopes you could write a generic version of what you have your guys do in their 2 weight sessions per week when they are far from a fight, I just want an idea of the number of exercises you use as well as what you have found to work best. I know you have a book coming out, but I can't wait, thanks bro...

Jared,

Welcome to MMA my man!

I am glad you agree with cutting back on the weights. There is no way that template is going to work with the other training.

As for the sample workouts, I will give you an overview of what you need to work. This is because every fighter is different and has different strengths and weaknesses. Since I don't know yours I don't want to give you exs that are not the best for you now.



1. Conditioning. It is the key. Yes, I said it. If you don't have it, all the strength and speed in the world is not going to mean anything.

How to get it: Actual training first and foremost, then we do interval sprints with med ball work and long duration sled pulls.

2. Strength. You need many types here. Explosive, isometric, eccentric and concentric. Work all of these in terms of what is weak and where you are in the fight.

How to get it: We rotate so many things in from chins, to squats to deads to bench to speed work to Olympic lifts.

In terms of number of sets, it varies for the workout, but the workouts are no longer than 1.5 hours. If you are doing more, you are wasting time. There is so much other training to do and recovery is critical.

I am sorry this is still generic, but I hope it gives you a little direction.

Martin,

Cant wait to see big dogs fight. should get it in about a week. i saw a post a few down about the hamstrings. i feel i need to get them stronger for triangles and armlocks. what exercises do you do for them and what kind of rep ranges. thanxx

Anthony,

You will get to see me too. I come out with Ricardo and carry him around the ring after the fight on my shoulders. I am wearing the red Bad Boy hat (can now put a face with the writing). You are going to see complete dominance on a grand scale.

As for the hammies, they are crucial especially for arm bars, knee bars as well as takedowns and takedown defense (sprawls).

Now remember, hammies are not just knee flexion, but hip extension as well. Contrary to popular belief these days, you still need good knee flexion for a ground game. Just think of a good guard and sweeps and you will see what I mean.

But you must also work the glutes with the hammies. I like squats, deads and lunges here for the base work. Heavy sprint work is good to develop the area explosively and we do a lot of sled work ranging from heavy pulls for short distances to lighter pulls for 20 min straight.

Rep ranges should stick with conventional wisdom. Slightly higher reps (8-10) for hypertrophy, 4-6 and for strength, 1-3 for max strength.

Martin,

Being a fighter and wrestler I was wondering if you have your fighters doing glute-ham raises? Also how important do you feel hamstring strength is in the fight game? Also when are you going to come out with a video for fight training and the combine events? Thanks for all you do and keep it up.

Mike,

Great to hear from you and great choice in your sporting events.

As for the Hammies, they are essential man!!

Without a strong posterior chain (including the glutes, low back, and core too) You will be missing a huge element of your game.

For instance, if your hammies are weak, your takedowns will be slow and takedown defense will be a sieve. Without strong hammies, your guard and leg and arm locks will be limited.



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Finally, you need the strong posterior chain to throw big punches and kicks.

They are a must and a huge part of our emphasis in training. Most guys lack strength here.

As for videos and such, it is in the works, it just takes time when you are working 12 hours a day and trying not to have your own wife and kid choke you out.

It's coming soon my friend.

Martin,

Its anthony from ATT. i want to give congrats to big dog and your team for winning the KOP. I cant wait to see the fight.

I had a question on the diet you guys use, what kind of protein numbers and how many meals a day are you using? right now im at 6 meals a day and about 190 gms(im 190 lbs) of protein a day. im thinking about changing my diet a little and just looking for some other ideas. congrats again. anthony

Anthony,

Thanks for the support. The fight was the team's greatest masterpiece to date. It exemplified the knowledge we have gained in terms of training and fight strategy and the hard work we put in on training and diet.

When you see it, you are going to be shocked by the complete dominance of the fight.

Ricardo has been invited to fight at Pride as a result and Hayato Sakurai just backed out of a Dec. 31st fight with him. They are waiting to get another opponent.

As for diet, it is a huge part of our training, from making weight to recovery to performance. It is a huge piece most athletes do not spend enough or sometimes any time on.

You are on the right track with the increased meals and the protein, but that is just the beginning.

Ricardo takes in 8 meals on average, but there can be more or less depending on the training schedule that day.

He eats not only according to the balance of carbs, proteins and fats, but also on how those influence the pH (acid/base) balance of his blood.

Don't leave out the carbs, they are as critical as protein. Most athletes don't respect them enough.

Other advice, read labels. If high fructose corn syrup or sugar are in the top 5 ingredients of what you are going to eat, don't eat it!

Drink water and that's it.

Take a multivitamin and an antioxidant.

Martin,

What's your opinion on a weighted vest for BJJ training? Drills, bodyweight exercises or wear it while I'm at work (Automaker)..

Tommy,

A vest is an ok tool, but only when used correctly. We do use weighted vests or belts here during our running, plyos and lifting, but only in low weight ranges.

For instance, we may use a 10 -15 pound belt for sprints or plyo work.



For dips, chins, pull ups and other body weight exs, we may go as high as 120 pounds of added weight.

I do not think walking around at work is going to be the key. It may actually set you up for an overuse injury. Use it during training if you like, but not all day. Your postural muscles would end up hating you for it, especially if you have to get in weird positions while making cars.

I hope that helps

Martin,

Coach X and EFS staff, how important is strength endurance for a BJJ fighter? If it is important how can I train to develop it? Would DE training be considered strength endurance?

Luis,

Good to hear from you again and great question as usual.

I just got back from Japan and Ricardo just won the King of Pancrase title.

He used a guillotine to finish his opponent and had to hold it for almost a minute. This prolonged static hold is definitely a form of strength endurance you need to have.

Also if you have ever done repeated takedowns on fresh opponents for 20 minutes, great strength endurance is a must here too.

We work on this with, of course, actual training, but also do prolonged sled work, interval sprint training, and med ball and different weight training circuits as a fight gets closer to build this endurance up.

As for the results, they just spoke for themselves. You can see the pics on mma.tv under the pancrase 11/30 thread.

I especially like the core training I did while carrying him around the ring on my shoulders.

Keep training

Martin,

You have addressed rotational work for the core on more than one occassion. I corresponded with Charles Poliquin, on the issue of rotational work for the core, and his response was the following:

he spends very little time (six weeks a year tops) addressing specific rotational exercises for the core, for any athlete, because there is very little potential for strength increases.

I believe this suggests training the muscles responsible for trunk rotation in the sagittal and frontal planes of movement because there is far greater potential for strength gains as compared to the core work executed in the transverse plane.

I am curious what your response is to this concept. Thanks for your time. James

James,

Great to hear from you. I have been including rotational work in my training with my athletes and had excellent results with pro football players, baseball players, ultimate fighters, and more.

Interestingly, all of their numbers on the rotational lifts we are doing are steadily increasing. Seems to me there are some strength gains going on here.

I also perform everything before I ever use it with my athletes. The soreness I experienced was different than anything I get from sagittal or frontal plane work. If you look at the obliques (internal and external) as well as the multifidus and erector spinae, they are all related to rotational movements.



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Running, throwing, punching, kicking, tackling, checking etc. all involve rotation movements and control. Watch some slow mo film of an athlete with their shirt off and you will see what I mean.

Everyone is entitled to their opinion. I really like to experiment first before I make decisions based just on what someone tells me.

Also remember, we do tons of sagittal and frontal heavy work as well. The rotational component is just one piece of our core training.

As Charles would always challenge anyone that asked him a question, "Who have you trained?" I can say that I have had many high level guys on the program and the results justify my use of the exercises.

Hey Martin,

How have you been? our team and renzos will be at it again in naga in a couple weeks. looks like it turning into a healthy rivalry. anyways, i was wondering your opinions on eating the day of competition. these events are typically not run well. you weigh in at around 10am and could wait all day to compete. is there a good snack to eat while your waiting or a good sample breakfast you might recomend? any help would be appreciated. thanx again..

Anthony,

Great to hear from you again and that you are always looking to get better. As for the eating, first thing to remember is not to do things any different than usual. Some guys often eat nothing or something different on game day. This does not work especially knowing how long the days go.

Prepare by having a number of small meals with you. Better to have too much than find yourself eating a 5 day old hot dog cause you are starving.

You should have some carb drinks Like gatorade and some bars with you. These help keep sugar levels up and don't overstuff you.

Depending on your breaks you could have a little sandwich or something too. Make sure you are getting enough water as well.

Eat a good breakfast with a good combo of protein and carbs if you are sure you'll make weight. Fruit is always ok to bring as well.

Martin,

Training MMA and a full time job are oxymorons! Because of this I bought a recumbent bike so I can roll out of bed and get a jump start on my training. I usually ride 4 mornings a week for a half hour. Or, in the evening to replace a training session should I be "banged up". My question: Can you reccommend a training table as it relates to my heart rate? I'm 25, 230lbs, 11%bf.

*Typically: *I warmup for 5 mins and get the HR up to 140*

**Next 5 mins I up the work load to 160*

**For the remaining 20 mins I may stay at 160 or I will run the HR up to 175-180 and let it drop down to 160-165 (usually 60 seconds up 60 seconds to recover)*

**(5 minute cool down)*

Any advice?

Thanks, as always! Mike



Mike,

I agree with you completely my friend. I keep getting questions about how you can work, do a full westside template and train MMA 6 days per week! It just doesn't work.

Funny you talked about the bike at home. I just got off one getting my 45 min 4 times a week in.

Actually, I have to say, according to your weight and age, the training HR range you are in is great. You are not only going to see improvements out on the mat, but you are doing great circulatory improvements on yourself.

Also, if you hit the bike before you eat, it is a great way to shed a little extra fat. Wait about 20 min after the bike to eat (shower first) and you will keep burning it as well.

Martin,

What type of exercises and rep ranges should a grappler do? I compete with and without the gi. How many days a week should I lift weights if I train BJJ 4 times?

Luis,

Great to hear from you again. Unfortunately, as you probably are finding out, there is no black and white answer to this.

Depending on where you are in the competitive season as well as technically and injury wise, a lot of your training is going to be dictated by how you feel.

We get in at least 2 strength days per week with the high level guys, but that may take a backseat to conditioning and strategy development as a fight gets closer.

I am rapidly being convinced that strength is not the determining factor in who wins matches. It helps, but technique and conditioning are more important as long as your base is built. Added strength of course can't hurt, but it should not be gained at the expense of the other two.

If you feel your strength levels are good, get 2 times a week to maintain and slightly improve. If you feel weak in certain areas, focus there and bring them to the level you like.

Martin,

I am starting MMA training within the next week...I currently train WSB method 5 times/week focusing on speed days and strength days...I train very intense and often have to back off a little as overtraining is always just a rep/set away...but it works and works well...as a natural I am a solid 250 @ 10-12 % BF and 6'2...extremely good balance and athleticism so I'm gonna give er a try...I have the opp to train up to 6x's a week mma with some days more intense than others, ie...three days technique, one day open mat and boxing, one day takedowns and two days open mat...my question is how do you guys balance the weights with the mma/ma without overtraining? I have trouble holding back as I trained HIT for years and usually go too hard when I shouldn't...I was thinking of training weights in the am and giving at least 6 hrs rest before training mma...on my speed days I can focus on reps/pump for accessory excs...reps in the 12-25 range and NOT to failure...then on my max effort days I could focus on, well maximum effort heavy and hard...BTW I can also take advantage of contrast showers in between to help the cns recovery...also I am currently bulking...approx 4200-4500 cal/day and going up as I gain lean mass...thanks all for your advice/help...



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Jared,

You sound huge man! As I have said before in other posts, if you are really serious about giving MMA a shot, you are not going to be able to do both (lifting too) at the level you describe unless either your supplementation is suspicious or you have a big S on your chest. Even then it is going to be tough.

I don't know of any top level fighters that are doing what you describe if that helps at all.

You have to get the priorities in order. If you want to be a lifter, lose the mma. If you want to give mma a shot, focus on the techniques for the next year at least and see where it goes. You will still be able to train, but it will be day to day as with the all new aches, pains, bruises, breaks, sprains are going to hold you back.

I don't want to discourage you, but the investment in the fight game is unreal if you want to aspire to greatness. The weights and the ME and DE days will always be there. A chance to fight will not.

Martin,

In a post you said that light cardio (bike riding) 30 min 4-5 days won't hurt you strength. Is the same true for speed training, will light cardio hurt your speed? If not, would you consider a nordic trek as light cardio? Thanks for the help.

John,

Good to hear from you. Now remember, when I said it wouldn't hurt it, I mean when you are still doing your other types of training. If you stop speed or strength work and add cardio, then performance will be lost. But light cardio is not going to hurt either speed and strength.

Personally, I think the Nordic Trac is the most boring piece of equipment ever invented. We had one at the Physical Therapy center I worked at, and no one could stand it for more than 2 minutes. A piece that is not too functional (unless you want to be a Nordic skier) that makes you feel like an idiot on it is not a recipe for a popular piece. It does make a nice rack for your coat or laundry though.

Martin,

There has been a lot of talk about Randy Couture's alkaline diet lately. I was wondering if you could briefly describe this type of diet. Also could you give an example of the diet(s) that you put your fighters on. Thanks again

Bryce and everyone else!!!!

Here it is, the first installment on the theories behind an alkaline diet.

I know everyone is dying to hear about this. I got over 20 questions on the topic.

This diet has actually been out there for a while on the mainstream and is something we have been using with the fighters for the last year.

I actually first heard about it from my mother. She has a company that works with cancer victims and is a big proponent of the diet, so she gave me a lot of insight into how it may work.

First off, we must remember that the body is 70% water. This water should be at the right pH level to support optimum functioning. This pH level can be affected by what we eat and drink as well as the toxins that we put into our body.

Our fighters use an optimized water system that brings the pH of the water to that of the cerebrospinal fluid. This also helps to alkaline the blood.

Now you might be thinking, why would I want to do that. Well, there are a number of reasons that people try to avoid an acidic environment.



An alkaline system cleans the toxins from your system, allows your blood to carry more oxygen, helps prevent sickness, and improves recovery.

Besides the proper fluids, dark leafy greens (especially spinach) are great ways to influence the pH of the blood. So Popeye was on to something!

Now remember, too alkaline is not too good either.

Interestingly, proteins have been found to add to the acidity of the blood.

This doesn't mean don't eat proteins, but athletes on this diet watch the amounts. We have found you have to watch you don't lose too much mass.

Even Randy in his fight with Lidell looked slightly less muscular with all the weight drop.

I hope this helps a little and gets everyone thinking.

I just got back from helping the Gracie's in Japan and I am jet lagged out.

I am going to see Coach H tomorrow and will be back Monday.

Keep up the questions guys!!

Martin,

I know that technique and mat time is the most important aspect of mma training. But its the right combo of strength and conditioning that differentiates the elite fighters from the very good fighters. If I understand you correctly, you basically do strength training with your fighters 2-3 times per week and focus on mainly full body lifts. I would also assume you somehow incorporate bodyweight exercises and maybe circuit training into this program. As for conditioning, I read many times you say that the best conditioning is mat work, which I agree with. So I think this would mean you probably only do some sort of lactic acid training maybe 2-3 times per week as well. Let me know if I'm on the right track. Thanks!

Chris,

You are on the right track, but since training a high level fighter is an art, it is never so cut and dry. With all of their other training, oftentimes the strength and conditioning work gets puts to the side. Being banged up also holds back training.

I am also unsure if the right combo is really what differentiates good from elite fighters. It is a great theory, but not what I have seen. Many fighters train with less than optimal methodology and are very successful. And ever one of them uses a different approach. Many times, it is the man and the techniques.

If you figure out that optimal combo, write it in to me cause I am still trying to figure it out.

As for your description of my training, yes, you are on the right track, but due to the before mentioned limitations, it is never written in stone.

I know this is vague, but I don't want to give anyone the wrong idea.

Martin,

I wouldn't think you would use a typical westside protocol for training your mma fighters. Do you focus more on strength-endurance, max strength or both? I'm sure it varies from fighter to fighter, but what are the main aspects you focus on in regards to the strength training of a mma fighter? Thanks.



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Chris,

You are right, I don't use a westside protocol at all. I do not think that it is conducive to mma training if you are working with serious mma fighters.

Every fighter I train is different and every one of them is on a different schedule in terms of weekly workouts and when their next fights are.

Strength is important, but it is not the only key. Bench is not related to your success in the Pride ring or the UFC octagon.

I train with most of the fighters 2-3 days per week here at the facility, but they know what to do outside of here.

Over the last 3 years working with the highest level guys, I have learned a lot. At first I tried to do everything here from strength work to punching/kicking/grappling training. Not only did that wear them out for their other workouts, it was not my expertise.

Now I work on their general abilities that they can then use with their training. (ie. strength, cardio, flexibility, nutrition, speed, etc.) We also do a lot of strategy development and mental training as well.

As I answer this, it forces me to see that I think differently than a few years ago, and we have enjoyed more success over that time. If I had to describe the training overall, we fix the holes and make the fighters more well rounded athletes. If you look at the game today, it has evolved into Olympic level athletes that also fight. Look at Couture destroying Tito, Mirko Crocop destroying everyone. These guys are studs and it is not just their weight program that is getting them there.

Martin,

I'm a fighter. For the past twelve weeks I have trained Westside style in an attempt to bring up my speed-strength (my strength-speed is pretty solid as a result of two years W.S. powerlifting training). I actually spoke with Louie and he gave me some awesome ideas and training concepts that he used with Randleman, and I've implemented into my program over the last twelve weeks. During that time I had de-emphasized my skills training to allow my body to adapt and recover. Needless to say, it worked...BIG TIME! I start full fight training next week.

M- boxing 1.5 hours

(two hour break)

ju jitsu 1.5 hours

T- Greco & Freestyle & Submission wrestling 2 hours

W- Muay Thai sparring & pad work 2 hours

Th- Greco & Freestyle & Submission wrestling 2 hours

F- swing day - boxing/or vale tudo/ or OFF (depending on recovery needs)

Sat- conditioning (45 min early morning/stairs/interval sprints etc.)

Sun- off

I fight in 8 weeks. Should I lay off the weights until after I fight?

I follow the metabolic diet and I feel great. Body fat is falling off but my weight is staying right around 220.

I take: multi-vit/vit-C/ZMA/Echinecea/Glutamine/Flax Oil/ Fish Oils

I get 10 hours of sleep a day (at least).

As always, thanks Martin! Mike

Mike,

I makes me feel good to see fighters really starting to embrace the science behind their training and nutrition. Not only is it rare to see, but you will find that the best out there are also doing the little extra things as well. I have to tell you, even though athleticism and strength is a huge part of the fight game today, you cannot deemphasize the technical work. Most of the big time guys I work with even say that they will get rusty after a few weeks away from the technique, so I really like your plan for the next 8 weeks. As for the lifting, yes, you must fit in some strength work. If not, you will lose a little as well as the mental confidence that comes with knowing you are still string going into the fight. I would just hit some general lifts, i.e. squat or dead, bench and chin at least, with the emphasis on speed, not max effort. This will prep your body for the explosiveness you will need to exert, and still put the muscles through adequate tensions to maintain strength as well as limiting the post workout soreness. Other advice would be to listen to your body. If there is soreness or injury, don't push it. You still must recover and there should be a taper of about a week at least to be at your freshest for the fight. Write back and let me know what tips Louie gave you too.

Martin,

I was wondering if there is a certain height, weight, body fat, etc, that I should shoot for now that I've started bjj training. A little info. I'm 20 years old, at 6'2" 210lb and pretty lean with about 10%bf or less (hard for me to put on weight). My maxes are Bench 350, Squat 515, and DL 550, these are gym maxes or course and I know I need to work on the squat. I also just ran a 4.68 forty. I just don't know what I need to do in order to maximize my potential, though I'm just a newbie to bjj. Should I work on putting on weight, max strength, speed, plyos for my core and explosion, or all of the above??? I do know now that I'm going to have to really work on my fight conditioning. And I just thought I was in good shape.

Thank you for your time Trevor

Trevor,

For all your numbers, you sound like a freak that is about to jump on the MMA scene if you can learn to box, sprawl, grapple and kick. You don't need to improve any numbers my friend, you need only 3 letters to get good: B.O.M. Stands for Butt On Mat.

You will be shocked how smaller weaker guys will rip you up using only technique at first.

You must learn this, and keep what you have.

Your body mass numbers sound great and leaves you will a good long physique for BJJ.

It is not about the weights. Your numbers are probably ahead of most of the best fighters out there, but their technique and experience will get you.

Hit the mats and try your best to train when you really start grappling. It will be hard, cause as I tell everyone, you are going to get banged up.

Martin,

I'm thinking about buying one of those grappling dummies for drilling my BJJ techniques at home. But man is this thing expensive! Have you or any won of the mma guys you train used one?



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Tommy,

Great to hear from you. Most of the guys I work with have entire schools of people to throw around instead of the dummies.

I have seen some of my friends use the dummies for throws, but none of them do actual grappling. I would only suggest the purchase if you really have no one else to train with. They are so pricy, and I am not sure how much you will really use them in the end.

If you get really creative, you could make some heavy sandbags like we did and get a good bit of work out of them.

Martin,

Thanks for your last reply to my post. It helped me realize that I am on the right track. I have a question concerning prehab and rehab movements for my hip flexors. After sparring(BJJ) for two days in a row my hip flexors are usually very sore. I am a small guy so I usually end up on the bottom with my opponent in my guard. The excessive guard work has been killing my hip flexors. My question is what exercises and/or stretches can I do before and after training to aid in the recovery of this area? Thanks.

Luis,

Strengthening the hip flexors is definitely a must for your game, but I think you may also have to look at your technique and mindset while training. When you watch the best fighters train and when I get a chance to roll with the black belts here (Ricardo, Renzo, Rodrigo, Roger, Sean Alvarez) they all want you to stay relaxed. If you are getting sore, you may be using way too much strength and tension. If this is not the case, rolling will be the best specific way to improve this, but hip flexor ankle drags with the sled is another great ex, as well as really uping your core and abdominal work. We use an exercise with the bands where we lie on our backs, hook the band around each ankle and pull the knees up and out as if we are pulling guard. These are tough as hell but really specific.

Martin,

The more and more I watch the fighter I train the more I realize that lunges are a key for him. How much volume (sparring 3-5 sessions weekly) and what different types(front, back, side, plyometric/russian lunge,isometric holds, resisted(sled, uphill) would be the most appropriate/ have the most crossover, or are there any variations you can recommend? Thanks. Stick and Move, Dan

Dan,

First off, how did you make the assessment that these are the must for him versus other exs? Is it weakness, poor form, etc. I would like to hear how you are checking it.

As for the lunges, which are one of my favorite exs, remember that they are stressful and do lead to some pretty extensive glute soreness which can hamper MMA training.

We use forward and lateral lunge work when we are out a couple of months from a fight, but when the fight approaches, they are removed because of the soreness.

If your fighter is weak, still building a base, and not fighting at a high level yet, keep the lunge work up to continue to build his strength of the legs and core.

Martin,

Could you give an example of the endurance type training that you mentioned on 6/24 for ufc tournament fighting.thanks



Mike,

Endurance as I said before, is a key piece to a UFC fighters arsenal. You can be strong, fast and technical, but if you run out of gas, you are in big trouble.

We do a number of different things per week to work on endurance, and we constantly change it up to make sure the athletes are constantly evolving.

Some of the work is as simple as interval sprints at the track(10 100's with jogging 100's in between each), to stadium stair sprints for 3-5 X 5 min rounds, to 50 yard bear crawls in all directions, and more.

Remember that the best work is the actual training itself. You would be surprised to see how unorganized most fighter's training sessions are until they really structure them.

For instance, just rolling around with no focus not only doesnt get you better, you risk injury. This was a topic in my seminar in Brazil for the Gracie Barra team.

Just like technique work must be specific in training, so must endurance.

The guys now structure their boxing, wrestling, grappling, and vale tudo work with this in mind and we have had great results. I know I am rambling, but it works.

Martin,

I'm going to be training a guy that competes in UFC tournaments and also teaches Ju-Jitsu during the week. He would like me to help him peak for one of his fights (not sure when the date is - I can get back to you on that).

Any basic suggestions on what I should test him on in the beginning to find his weaknesses? Any help is greatly appreciated.

Thanks, Nate

Nate,

Great to hear you are getting a fighter ready. Of all of the athletes I have prepared in so many different sports, there is nothing like the feel that night of the fight when your guy is in there. It is a rush even bigger than when you played sports yourself.

Some advice here would go like this. First you must find out the beginning and end points. What I mean is where is his current level of ability, and when is the fight. This two points are crucial to help define where you will go in your training.

Traditionally, the jiu jitsu guys have not worked legs or core. This may get them by in jiu jitsu, but it is critical to be strong here in MMA. This is a big area to assess and develop.

Specific endurance for the fight is also critical. Too many times you watch a guy run out of gas and then get his ass kicked. We have a philosophy here that you will never be defeated by your own condition. Develop a program that sticks to that.

When you talk about peaking, it all depends on where the athlete starts. If his overall condition is not that high, there may be a lot of base work that needs to take place before he can peak at levels he expects. Don't skip the base work. For instance, if the athlete's conditioning is low level, peaking at a still low level is not going to help much.

Finally, I will advise you to be patient. Training these athletes is a long process and there are ups and downs. Their other training will lead to occasional injuries, so you must expect that. The extensive other training like muay thai, jiu jitsu, boxing, wrestling will also make them prone to overtraining so fit in what you can judiciously.



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The fighters need to compete to test themselves and gain valuable ring experience, but your goal is to have them in better physical condition than the time before it.

Never be satisfied, comfort is the enemy of progress.

Martin,

I'm train MMA. What muscles are involved in knee strikes? Abs i'm sure but what else? What are some good excersizes to use to develepe powerful knees? thanks.

WB,

Good to hear you are training in what will soon be recognized as the toughest sport out there.

As for your question, yes, the abs are involved, but the hip flexors (psoas, rectus femoris) on the kneeling leg as well as the glutes, hamstrings of the leg on the ground contribute to power.

The low back and torso rotators are also critical (obliques).

Don't forget your lats and wrist flexors to hold the guy's head down when you are taking out his teeth with your patella.

The best exercise of course is to work over your friends with knees to the padded gut and head.

To build general strength to help with the technique, lunges, squats, hip flexor pulls and overhead pullovers or pull ups are great choices. I would also recommend getting a competent muay thai coach to work technique. That is a huge piece of getting it all right.

Martin,

I read all the questions on boxing conditioning, and I still have a question. Besides lifting and specific boxing movements, is it better to do sprints, intervals, long distance running or even a combination through out the week for conditioning a boxer? Thanks.

Craig,

Glad you are reading the Q and A and enhancing your mind.

As for your question, I do like a combo of both. For a long period of time I was not a fan of road work and focused more on intervals. Many of the fighters I work with missed the morning road-work and have added it back in.

We have enjoyed such success with it, that I cant argue against it.

Still the boxing technical work and sparring is a bigger piece though. You cannot underestimate the intricacies of the "sweet science". Keep punching

Martin,

What's up? I had a question regarding cond. work for a fighter. I read an article recently where Mo Smith talked about setting up two treadmills side by side, one at 6mph and one t 10mph then switching mills every 10-15 sec. for the duration of an upcoming fight. I know that you use LA runs on treadmills as well. Charlie Francis has made comments on his site about treadmill training resulting in quad/ham strength imbalances and thus knee injuries. I am interested in trying LA work on the treadmill but have already had knee injuries. Do you think that treadmill training does cause strength imbalances and how can I compensate for that. Thanks again.

Bryce,

I think we are talking about two different things here.



You have input from a world class fighter that uses a certain method to get ready for a fight, and a sprint coach.

To begin, remember that this type of training would be for a short amount of time (anywhere from 4-6 weeks) only a few days a week leading up to a fight. The purpose is conditioning not strength work for the legs.

I think to really build up imbalances that are going to hurt you it would have to be more often and for a longer period. As for personal experience, I do not use the tread in such a way, but the speed interval work we do use has not resulted in any injuries.

I think what Maurice is describing sounds very taxing as well since fights can last twenty minutes in Japan. That would be hell. As far as compensation, keep working the hammies and posterior chain on off days. This should offset any problems and remember to start anything new slowly.

I would be more worried about shin splints here than knee problems.

Martin,

Thanks for taking the time to answer my previous question regarding training for MMA/NHB. I have a follow up. You advised that I focus on strength development far out from a fight. As a fight draws nearer, work more on power and speed. Are you suggesting that I do a periodization regime where I do less max effort work and more speed work close to a fight date? I am hesitant to drop max effort because I have learned from experience that my strength levels drop off quickly.

As a side note, most of the other guys I train BJJ and stand up with think that the Westside method is not good for fighting. They prefer more strength/endurance type training where they do multiple circuits of major movements, cleans, squats, push press, etc. I think that their training is certainly taxing, however, their maximal strength is very substandard.

Len,

The answer to your question all lies in what you really feel is important.

I have not seen the maximal strength in my fighters (Ricardo Almeida, Sean Alvarez, Rodrigo Gracie, etc.) drop off with the plan I suggested. On the contrary, when we test strength levels close to a fight they are right on.

Maximal strength is important, but remember that Max Strength is not the biggest predictor of victory in your field.

As for the circuits you described, I have seen a number of them as well. We work occasional circuits for specific endurance work. (Remember that max strength is great to a point, but a tired athlete no longer has the ability to show off that strength and gets finished) You must have it all and there is a place for it.

I hope that answers some things slightly.

Martin,

I compete in NHB fighting, and use Westside training methods to supplement. I have noticed that I am frequently too beat up during the week to perform well on speed day. I am wondering if it would be beneficial to drop separate speed workouts and add some speed work after my max effort work? If this is not a good idea, what do you recommend?



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

Len,

Great to hear from you. It is about time that there is a question that has validated so many answers I have given in the past.

Many people all ask how to fit in a strict Westside system because they are going to "pick up" MMA.

It just doesn't always work like that and you are experiencing what every one of my fighters has had.

As for the answer, I would use the max effort work at times when you want to improve absolute strength. This would be a time far out from a fight. Then as the fight approaches, add the speed work to convert the strength to speed.

Remember that the speed you reach in the gym will never approach the speed of a kick or punch.

The strength work is used to build the general ability of strength so you can add it to your fight technique.

Hopefully, with that way of thinking, you will be better able to design a program.

Martin,

I've recently started doing BJJ and was wondering how I would best adapt Westside methods to make me a stronger BJJ player. Can you give me an example?

Thanks, Ben

Ben,

I have answered similar questions a number of times. If you are just starting out, see how your body adapts first. BJJ can beat you up, and that can throw a wrench into your other training.

Once you are acclimated, the Westside system works well if that is what you like best.

Don't forget your endurance work as well.

Good luck and tap someone out.

Martin,

I thank you for all of your previous answers about overall athletic training and WSB. I have decided to go ahead and train primarily WSB, and I'm also starting with Brazilian Ju-Jitsu next week.

I really plan on doing both powerlifting and BJJ at the same time. I was wondering if I should do any sort of modification to the WSB principles? I need to gain weight for lifting and still be in shape for fighting.

I will be fighting two and sometimes 3 times a week Tuesday, Thursday, and Saturday nights on top of the four day a week WSB schedule. Is this enough/too much? I just want to be able to perform my best in each one of these pursuits. Thank you for your time. Trevor

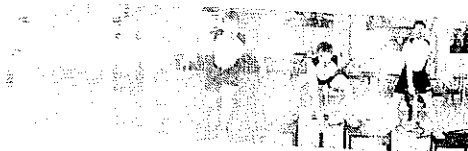
Trevor,

Unfortunately, if you have never done too much jiu jitsu training, you are in for some soreness.

What I mean by that is that your shoulders, elbows, knees, neck, fingers and toes are in for some toughening up.

This period can take some time if you are training three times per week.

This can also slow your plan of the lifting.



My advice would be to try to do what you are thinking, but remember that the plan is going to have to be flexible.

You may have to miss lifting or jiu jitsu days secondary to soreness or possible injury.

Start slow and monitor how it goes. Who knows, maybe everything will be fine.

Good Luck

Martin,

Early fall of 2002, we spoke briefly on my transition from a Super Heavy Powerlifter to a MMA fighter. Seven months later and as many injuries and I've dropped down from 276 lbs to 225lbs with 18%bf. I currently wrestle, strike, and RG-JJ(NYC) twice a week each. My skills are really coming together. Now my focus needs to be on achieving superior conditioning while settling into the 205lbs. class.

My question to you is...how can I reach the next level in conditioning?

The JJ guys told me to stop lifting keep rolling.

The boxers say train alot of plyo's and bands.

The wrestlers say hit the weights and run mixed interval sprints.

If you would, any direction you could offer will be most appreciated. Your advice will not go unheeded.

Thanks for everything, Mike

Mike,

Great to hear that everything is going well. Sounds like your dedication is really paying off. You should be proud of the body comp changes you have been able to achieve. Most people in the world cant even do that, more less become a well rounded fighter as well.

As for the conditioning, I would recommend a mix of interval sprint work with a big dose of rolling. I have to agree with the jiu jitsu guys that not only will you be improving your skills on the mats, but your wind as well. Nothing is more specific to building ground conditioning than being on the ground.

Recently, some of the fighters I train, namely Ricardo Almeida, have had great results also adding some road work. See about losing that extra weight and improving your skills before you worry about that though.

Remember, the more efficient your skills, the less energy you expend.

Martin,

I was wondering about the level of c.n.s. activity when doing thai pad and focus mitt drills. It seems to me that rounds on the pads would tax the c.n.s. to a large degree. The reason I ask is that I have always done pads/skill work one m-w-f and speed/strength work on th-sun. If my assumption is right this would add up to 5 days a week of heavy c.n.s. stimulation. This would be way to much in light of career and family concerns. I cannot separate skill work from pads due to availability of training partners. Would I be better off to perform speed/strength work on the same day as skill/pads with a couple hour break in between or perform 2-3 weeks of heavy c.n.s. stimulation followed by 1 week of easy training

Bryce,

First off, the level of CNS stim is going to be related to the level of intensity you perform the kick and mitt work at. If you are really blasting every workout, yes, there is a high level of activity and you will need more rest.



TRAINING SECRETS THAT EVERY FIGHTER NEEDS TO WIN

If you are going through the motions or counting rounds, you may not be stimulating yourself as much as you think (ie. conditioning work)

You can add the kick work and mitts on a lifting day to add more rest or you can vary your intensity of mitt and kick work.

Really ask yourself what the purpose of your kick and mitt work is. If it is to improve your technique, become more explosive, or work on stamina, that will determine how to break up the training.

Martin,

Working with some boxers heading out to Colorado to compete. Given the altitude change is there anything that will help them acclimate better to the change. I understand that it can take some time to get used to the thinner air.

Mike,

Excellent question. This is something that is asked of me by either coaches or athletes from time to time.

As for altitude change, first you need to find out how much change there really is going to be above sea level.

If it is 700m or much higher which could be the case, how long they are there before they compete is going to be the issue.

Usually performance does not depreciate much over the first 2-3 days, but the next 10 or 12 can show a reduction in performance. Then after the 2-3 week mark, athlete are acclimated to the new altitude. These changes can help performance once an athlete returns back to sea level.

This is why you see so many of those boxers training at camps above sea level before fights.

So unfortunately, I don't know if there is much to do but make sure the proper time is allotted for if this is a major competition.

Martin,

Could you list some hamstring exercises that could be done after karate practice that might strengthen and protect them without using weights, possibly bands? thanks in advance, mike

Mike,

There are a number of exercises you can do. And without weights too. I am unsure why you want to do these exercises after karate and without weights, but here are a few suggestions.

First get a bench, chair or box. Lay on the floor on your back with your butt a foot or two away from the box. Place your heels up on the box and then bridge your hips as high as possible. Hold there for a second to contract the hammies and then repeat. For a harder exercise, do one leg at a time for 5-6 reps. To increase even further, you can hold a weight on your stomach.

A second similar exercise would be on a swiss ball. Set up the same way, but when you bridge up, roll the ball toward you.

Another change to the exercises is where you place your butt in relation to the bench/ball.



The further away, you hit more glute and low back. The closer you are really hits the hammy.

A more advanced exercise would again involve a box, but it would need to be a little higher. What you do is now stand by the box, and place one heel up on the box. Stand away from the box as if you were doing a hammy stretch. From there, pop up using the foot on the floor and the opposite hammy to pull yourself up onto the box. As you get stronger the box/bench gets higher.

Try these out.

Martin,

Could you please look over my workout and give me any feedback. Just a brief background on myself, I am a small heavyweight muay thai fighter. I am trying to increase my sport speed and add about 10 lbs in the process. I do not have any fights coming up for a while so I thought I would cut my skill practice to about 3 times a week. I was going to lift weights 2 times a week, pulling on one day and pushing/squatting on the other. Prior to lifting I was going to jumprope and do agility ladders and/or cones. Prior to muay thai practice I want to employ tumbling drills and jumprope for agility. For g.p.p. I am going to perform 5 sessions a week using sled work the 2 days after lifting sessions and John Davies non-weighted g.p.p. for the other 3 sessions. I also want to add med ball work after the muay thai sessions for additional g.p.p. I will employ the conjugate method and wave the volume up and down over an 8 week cycle. Following the first cycle I will cut the volume of weight training from 4-6 moves per workout to 2-4 moves per workout and add one day of sub max and one day of max sprint work. I hope I explained that clearly enough. Any thoughts?

Bryce,

Clearly enough, I think you went into more detail than most, my friend.

I think you are onto something here, but depending on your training level, I think you could be doing a little too much. You are lifting twice and muay thai thrice per week, and also doing GPP work 5 days a week too and the med ball etc, as well as the preworkout warm-ups are tough too.

The training sounds great as long as you can tolerate it. You must monitor your progress and it will help.

Stick with it, but stay flexible depending on how you progress. Good luck, and remember, to some, there is no such thing as a "small heavyweight".

About the Author

Martin Rooney is a Performance Enhancement Specialist with a Master of Health Science and Bachelor of Physical Therapy from the Medical University of South Carolina. He also holds a Bachelor of Arts in Exercise Science from Furman University.

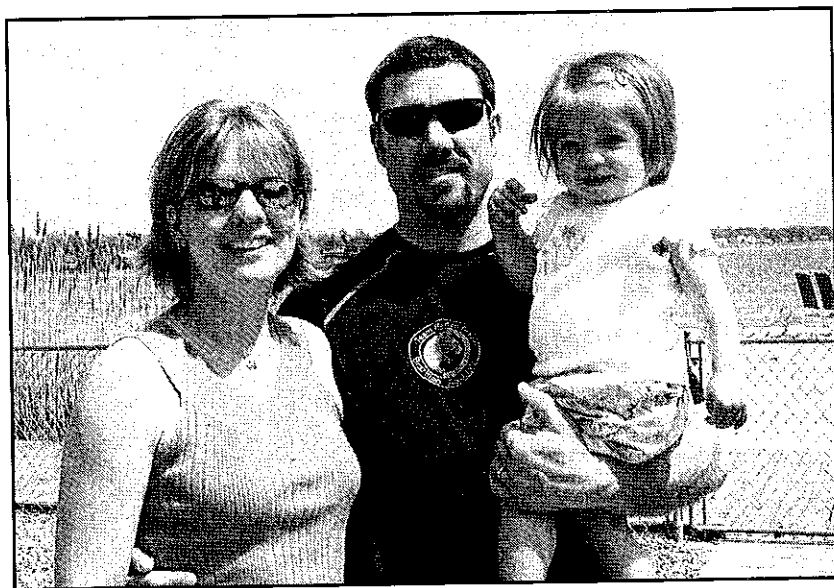
Martin was a member of the United States Bobsled team from 1995-1997, 2000 and a four-time All Conference, MVP performer in Track and Field at Furman. Martin is currently a blue belt in Brazilian Jiu Jitsu under Ricardo Almeida.

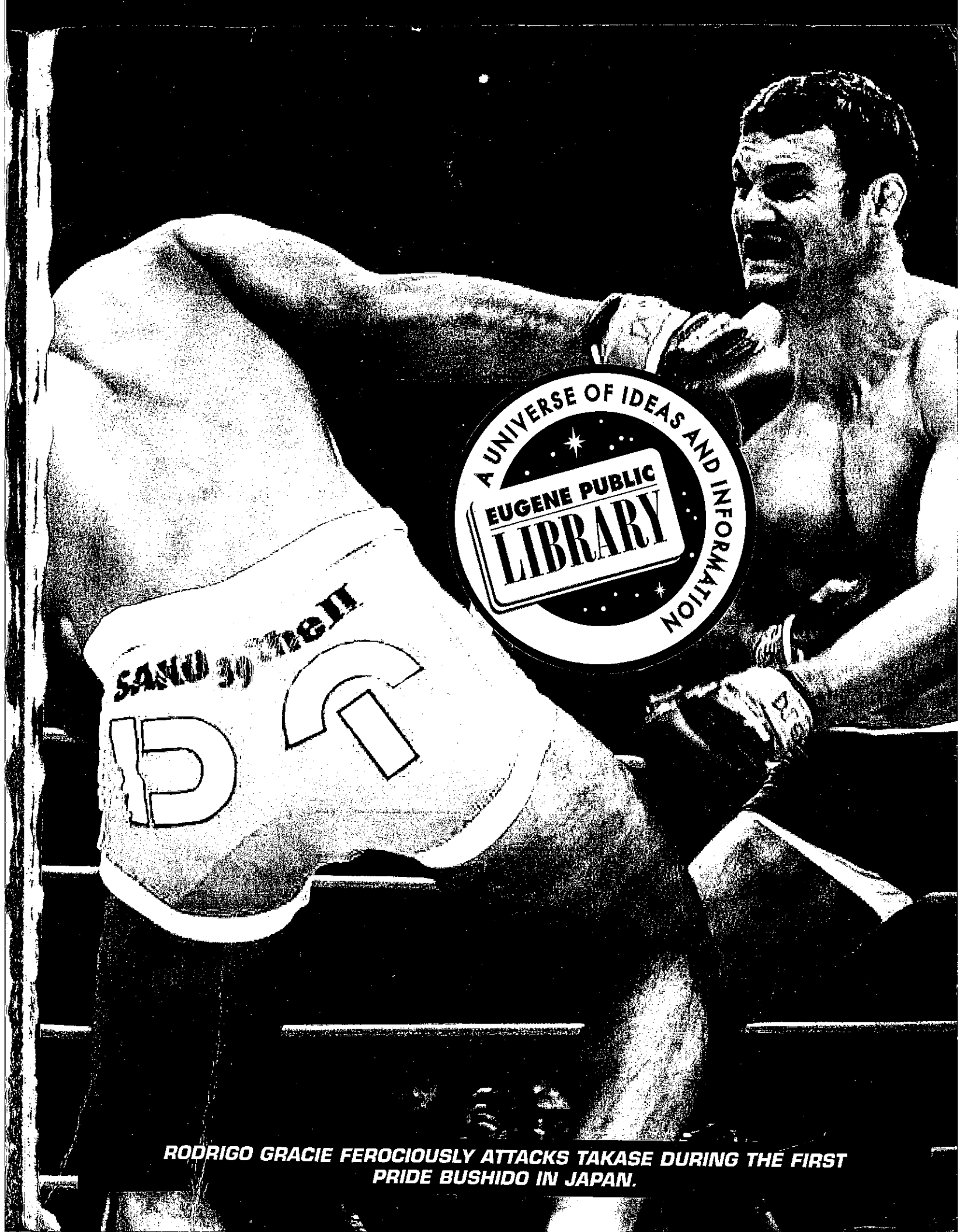
Martin is a Certified Strength and Conditioning Specialist under NSCA and a member of the Society of Weight Training Injury Specialists. He is also a certified in Active Release Technique for the upper extremity and certified in the lower extremity by the Institute of Flexibility Sciences. He also currently writes for the Elite Fitness Systems Website and is a columnist on the editorial counsel for Brazil's Gracie Magazine.

Martin has lectured for the American College of Sports Medicine, Gracie Barra, and has been commissioned by Nike to run speed testing camps at a number of major universities. He has written a training text called "Train to Win", and also coauthored two other books on the forty yard dash and the vertical jump. He has traveled as far as Brazil, Japan and the Middle East to train and help prepare fighters. Currently, Martin is the director of the Parisi Speed School. In addition to training many world champion martial artists, Martin has also been a speed consultant to the New York Giants as well as other athletes from the NFL, MLB, NBA, WNBA and numerous top Division I colleges across the country. He has also trained Olympians including one gold, and one silver medalist.

Over the last few years Martin has helped to develop one of the top NFL Combine training programs in the country producing the fastest athlete at the 2001 and 2004 NFL Combine and first place finishers at nine different positions, including three all-time records.

Martin is married and lives in Fair Lawn, NJ with his wife Amanda and their daughter Sofia.





RODRIGO GRACIE FEROCIOUSLY ATTACKS TAKASE DURING THE FIRST PRIDE BUSHIDO IN JAPAN.

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Design and Layout by:

MILLERDESIGN
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ISBN 0-9725104-1-5



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