

FILA Coaches Conference Report –Madrid, Spain
By: Steve Fraser
January 3, 2007

The FILA International Coaches Conference held in Madrid, Spain this past December was very good. International wrestling experts, sports doctors and coaches discussed many training and development issues. Also discussed was the analysis of the 2006 Greco-Roman World Championships. Techniques and tactics used by the world champions were highlighted. The US squad was congratulated for very strong improvement over the previous year (bronze medal team finish) and we were commended for our intense, aggressive and well conditioned style of wrestling.

Networking among the many coaches in attendance was one of the huge benefits to the conference. Many international training camps were planned and mutual educational strategies were determined. Rules were discussed along with successful techniques, tactics and strategies used by the winners.

All in all, the conference was a great opportunity to expand everyone's knowledge in how to advance our great sport.

The following article was written by Dr. Eckart D. Diezemann, M.D. who is a member of the medical department of FILA. This article is the first of a series that I will report on. Some of the issues covered will be:

- *What should athletes do with respect to weight control and weight loss?
- *What is appropriate nutrition for the sport?
- *What is doping?
- *What possible injury prophylaxis is available to the athlete?
- *How can the athlete avoid other health problems?
- *At what age can the athlete begin strength training?

In this issue we will focus on what wrestlers should do in respect to weight control. Dr. Diezemann first gives a nice introduction to the origins of our great and historic sport.

Educative Program for Female or Male Wrestlers

**A Draft at the Request of the FILA by
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Introduction:

Wrestling as a classical two-person sport is probably the oldest sport in the world. It can be traced back to the early history of mankind. In ancient times, humans were dependent on the strength of their own bodies, in confronting both natural forces and other humans. There were only primitive weapons, as far as any existed. Wrestling was thus of primary importance in survival.

The oldest written evidence of wrestling as sport was found in Iraq. It dates from 2600 B.C. In the burial grounds of Beni Hassan in middle-Egypt, frescoes and vases have been found with image sequences which impressively show the dynamics of wrestling in various combat situations (2000 B.C.) In about 3000 B.C., a wrestling day was held in China. The Japanese sumo wrestling also has a tradition thousands of years old. In ancient Greece, wrestling experienced a Golden Age lasting centuries. Rules and descriptions of techniques were introduced. Wrestling as a sport has been part of the Olympic program since 708 B.C. The further development of wrestling was interrupted by the slow decline of the Greek culture and was largely lost during the days of the Roman Empire. Wrestling gained in reputation again in the Middle Ages and was counted among the so-called seven "Agile talents" of the knights. It was a continuation of combat without weapons. The reformer and gymnastic teacher Guts Muths, who lived in the 18th Century, wrote in his book *Gymnastics for Youth* "The entire science of physical exercise has not one which will as generally involve all muscles and limbs and not one which will involve now this, now that limb and muscle in rapid alternation as wrestling."

It would be impossible to more accurately describe the challenges faced by a modern competitive wrestler. The athletes need not only strength, but also technical-tactical training and abilities. In the first modern Olympic Games in 1896 in Athens, wrestling was without weight class divisions. In order to let athletes compete against others with about the same physical status, weight classes were introduced for the first time at the Olympic Games in St. Louis (USA) in 1904. These have been continuously refined and are still undergoing change.

It must be guaranteed by continual training starting in early youth that the athlete undergoes appropriate training to meet the athletic requirements. The responsibility is not borne only by trainers, but also by Sports Medicine. In order to prevent damage to health and injuries, as well as to avoid late-onset damage after the active career, Sports Medicine must cooperate with the responsible trainers to answer some very important questions, the first being:

What should the athlete do with respect to weight control and weight loss?

As mentioned above wrestling is divided into various weight classes. The object of this division is to let athletes compete with others who are about equal physically.

The result of the weight-class division is that athletes and their trainers often make decisions about the presumed weight for tactical reasons. The objective is to let the athlete compete in that weight class in which he and his trainer expect optimal success. Often the wishes of leagues or clubs have to be taken into account. Unfortunately important factors like constitution characteristics, physiological medical and training-methodical aspects are not taken adequately into account or are even ignored in these decisions. Meaningful weight reduction measures which do not endanger health or performance in advance of important competitions are exceptions in planning the year's training or even within an Olympic cycle. In order to achieve the desired weight it would be medically desirable if the aspects just mentioned were taken into account in conjunction with nutritional measures.

Everyday wrestling conditions are unfortunately not like that. Generally two weight-reduction methods are practiced: one long-term and one short-term method.

The long-term method is more of an exception. It takes the above aspects into consideration. These demand a great deal of discipline from the athlete in close cooperation with his trainer. In order to reduce body weight, a daily energy deficit must be consciously accepted. What foods are eaten appears to play a role. There are reports claiming that athletic performance is considerably better in a carbohydrate-rich reduction diet than in a carbohydrate-poor reduction diet. In this phase, it is important to maintain a low-salt diet.

The short-term methods consist of visits to the sauna (sometimes in air impermeable sweat suits), intensive physical exercise in warm training rooms in sweat suits, drastic limitation of food and fluid intake and impermissibly (doping) the use of diuretics and laxatives. When the weight is reached on the scale, it takes about 48 hours to completely reinstate normal physiological conditions from a medical point of view. According to

the current competition rules, it is thus not possible to reinstate normal physiological conditions after ca. 15 hours to the start of competition by nutrition alone. For this reason, attempts are repeatedly made to shorten this reinstating phase by means of infusions. However, this is a forbidden method under current doping regulations, even though the infusions do not contain any forbidden substances.

While the effects of regular weight loss on the general state of health are still controversial, we repeatedly observe psychological changes in the athletes during the weight-loss phase. States of exhaustion, rage, anxiety, feelings of isolation, depression and low self-esteem are observed. Nutrition physiologically, it makes little sense that a phase of "weight making" is often followed by excessive weight gain due to uncontrolled eating.

Based on international literature research, *Sandner* at the IAT (Institute for Applied Training Sciences at the University of Leipzig/BRD) recommends that a wrestler exceed his competition weight by maximum 5% during the training- and competition period and by maximum 7% during the training- and competition-free period. If the athletes would comply with this medically desirable weight limit, crash dietary plans coupled with crash weight-loss measures would not be necessary. All of the problems described in combination with reaching a certain weight would not occur. The athlete could enter competition under optimal physiological and psychological conditions.