

Health Problems in Wrestling
FILA Coaches Conference Report #3 –Madrid, Spain
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In the last two issues of WIN magazine I promised to share a series of reports I received from the FILA International Coaches Conference held in Madrid, Spain. This conference took place this past December-06 where many international wrestling experts, sports doctors and coaches discussed a variety of training and development issues for the sport of wrestling.

The following article was written by Dr. Eckart D. Diezemann, M.D. who is a member of the medical department of FILA. This is the third and final article of a series that I have reported on.

The topic this issue is about avoiding health problems and youth strength training in the sport of wrestling.

Educative Program for Female or Male Wrestlers

**A Draft at the Request of the FILA by
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How can the athlete avoid other health problems?

Even athletes are threatened by **infectious diseases** during the course of a lifetime. While mild to moderate physical exercise stimulates the immune system, greater stress on the order of high-performance sports leads to a strain on the immune system. This is why many athletes have greater susceptibility to infection.

General preventive health measures, such as good hygiene, prompt changing of sweaty sports clothing, and toughening measures like sauna or cold showers are therefore important. Moderation in the consumption of substances like coffee, alcohol and ban on smoking are among the general infection prophylaxes. A vitamin-rich, proper sports diet should be self-evident.

Moreover, the question of stimulation of the immune system as infection prophylaxis arises, especially upper respiratory tract infections. This can be attained

by taking immune stimulants (therapeutics of plant origin to support and activate the immune system) and the trace element zinc.

High-performance athletes who cannot afford to miss training should receive annual flu shots. The vaccination is the only means of preventing the outbreak of a serious infection for a season. If a serious infection occurs anyway, training must be interrupted until a cure is achieved.

Basic immunization against diphtheria, tetanus and poliomyelitis is absolutely necessary. In many countries, this basic immunization is performed in childhood and must be repeated every 10 years. Experience has shown that not all athletes have adequate immunization protection. Since the fall of the "iron curtain," for example, the incidence of diphtheria has increased again in middle and northern Europe.

Vaccinations against Hepatitis-A and Hepatitis-B are also to be highly recommended, since infection cannot be ruled out even with the greatest precautions. The risk areas are nearly identical for both infections. The risk is greatest in Southeast Asia, parts of Africa and South America. But these viruses occur much more often even around the southern Mediterranean, large parts of Eastern Europe than in Germany. The hepatitis A virus is extremely environment-resistant and spreads primarily through contaminated water, foods or smear infections.

Hepatitis B is much more dangerous, since the infections can become chronic in adults in about 10% of cases. Liver cirrhosis or liver cancer may develop after a period of years. The hepatitis B virus is 100 times more contagious than the feared AIDS pathogen. It is mainly transmitted in body fluids like blood, saliva, sperm or vaginal secretions. One of the most important routes of transmission is through mucosal tissue. For this reason, sexual transmission is by far the most common. Under certain circumstances, a "French kiss" is enough to enable the virus to enter the bloodstream. However, deficient hygienic conditions may also play a role. Vaccination provides protection lasting about 10 years for hepatitis A and hepatitis B. Vaccination against cholera, malaria and typhus are necessary only in countries where these are endemic.

Athletes often complain of **skin diseases**, especially due to fungi. Pathogens (bacteria, viruses, fungi) are found on all surfaces, including wrestling mats and especially in shower stalls and toilets. Healthy uninjured skin has effective defense mechanisms, so no infection can occur. But we know that superficial skin wounds may occur in wrestling. Moreover, there is not only direct skin contact with the opponent, but also intensive contact with the wrestling mat. Thus the risk of infection should not be neglected. The risk is greater if there is blood on the mat.

How can the wrestler protect himself against skin infections?

Wrestlers with suspected skin diseases must be rejected on weighing in, unless they can present a dermatological certificate showing that the skin disease is not contagious. The certificate must be no older than 8 days. If the athlete has a non-contagious long-term disease (such as psoriasis, neurodermitis), a permanent certificate is sufficient (German regulation).

The wrestling mat should be cleaned prior to training or the first bout with a normal, environmentally-sound household cleanser. The same applies for continuation of bouts after a break in competition. If the mat is contaminated during competition with material containing pathogens (blood, body secretions or even pus), the bout should be interrupted and the mat cleaned using an appropriate surface disinfectant. Routine disinfection with such cleansers is not necessary. A mat cleaned regularly with household cleansers does not represent an increased risk of infection.

Good body hygiene is necessary to prevent skin diseases. A lubricating shower lotion should be used when showering. Using too much shower gel or soap depletes the skin, destroys the normal skin flora and reduces the normal defense mechanisms. Then the skin offers the ideal entry point for pathogens and fungi. Bath shoes should be worn in the shower. It is important to dry the skin well after showering before getting dressed. Damp skin also offers a good point of entry for fungi. Sports clothing should be washed at 60°C with household detergent after each wearing. If the body's defenses are weakened (for example by a cold), the skin is also more susceptible to fungal infections. For this reason, participation in competition should be cancelled.

If a skin infection occurs despite these measures, a dermatologist should be consulted. The earlier treatment is begun, the easier it is to cure the disease and the interruption in training or competition can be kept as short as possible.

At what age can the athlete begin strength training?

Strength training is taken to mean targeted training of the strength capacity of the musculature. This is already attained in normal training on the mat with a partner. There are no age limits for this. The same applies to the use of various environmental conditions, like sand, snow and water in the training program.

The situation is different with regard to the use of strength training equipment. At the onset of puberty and the related excretion of sex-specific hormones, an increase in strength can be expected in girls at about age 11 and in boys at about age 13. It is thus clear that special strength training with equipment prior to puberty cannot result in an increase in muscle strength and therefore makes no sense medically.

Outlook

The bases for high-performance sport are talent and training. Before one even begins to consider an unnatural or forbidden support in training, one should make use of all possibilities of natural support in the everyday training situation. These include regular lifestyle, bed rest before midnight for the best possible recovery from training and competition stress, and most important, healthy diet. But it is not necessary to avoid eating everything that tastes good. It's simply a question of the frequency and the quantity.

Only those who enjoy training will handle the training stimuli optimally and notice a development in performance. Training should not be experienced as torture. That's the only way to achieve mental strength. But one should also recognize and accept his natural performance limits. Doping is not medically safe. The deaths of young high-performance athletes in the past years should make us think. We also know that the life expectancy in those disciplines particularly susceptible to doping is considerably shorter than that of the population at large and it has decreased even more in recent years.