The Female Athlete Triad

What is the Female Athlete Triad?

The Female Athlete Triad refers to three interrelated health problems seen in females. These problems include: disordered eating habits, amenorrhea (loss of menstrual periods), and osteoporosis (weak bones).

Disordered Eating Habits/Eating Disorders
Disordered eating is usually the first step in developing the Triad. In an effort to improve performance, athletes often try to lose weight. With disordered eating, the method in which the athlete attempts to lose weight is unhealthy and may include mechanisms such as severely limiting food intake, constantly weighing and/or measuring foods, secretive eating, refusal to eat in front of others, counting calories and fat grams, and abuse of laxatives. These methods actually impede performance and result in dehydration, malnourishment, and unhealthy weight loss, as well as psychological difficulties such as food/weight obsession, depression, and anxiety.

Loss of Menstrual Periods (Amenorrhea)
The athlete is already probably more at risk for loss of menstruation than a non-athlete because of the physical demands of her sport. Disordered eating further increases that risk. If the athlete is not consuming enough calories to support the demands placed upon her body, her reproductive system may respond by producing less estrogen, which is a hormone needed to maintain normal monthly menstrual cycles. The athlete will experience infrequent menstruation or the loss of menstruation altogether (amenorrhea). For the athlete who has not started menstruation, disordered eating can delay the onset of menstruation due to inadequate nutrition and lower than normal body weight and fat levels.

Osteoporosis (Weak Bones)
Because of decreased hormone levels, the athlete's body will not be able to replace old bone cells with new healthy cells, and the athlete is at risk for bone density loss. Her poor eating habits will likely decrease the levels of calcium, vitamins, and minerals the athlete is consuming, thus further affecting bone density. The intense exercise and physical demands of her sport further increase her risk for stress fractures and other bone-related problems. Unfortunately, if her condition worsens to the point that she cannot train or compete, she may become depressed and/or eat even less to compensate for the lack of exercise.