

Female Athlete Triad

The female athlete triad is a syndrome that consists of three related conditions: disordered eating habits, irregular or absent menstrual periods, and osteopenia (thinning of the bone density). This syndrome occurs most commonly in sports where a lean physique is thought to provide a competitive advantage, such as cross-country running, gymnastics, figure skating, and dance. However, any female athlete with unhealthy eating habits is at risk for female athlete triad.

All athletes need a constant source of energy to perform at their best. This energy is provided by the calories found in the food they eat. When an athlete is training very hard (burning energy) and not eating enough calories, the body does not have enough energy to support normal body functions, such as the menstrual cycle. When menstrual cycles are disrupted, estrogen levels fall. Estrogen plays a key role in building bone density. Without sufficient estrogen, the body cannot absorb calcium from food. This causes the bones to become thin and susceptible to fractures.

Symptoms

Symptoms of the female athlete triad include:

- Changes in eating behaviors, (restricting food intake, fasting, or eliminating entire food groups, such as dairy products or meat)
- Vomiting or using laxatives, water pills or diet pills
- Insisting on exercising beyond what is required by her team
- Weight loss
- Irregular menstrual cycles (or no periods at all)
- Complaints of feeling cold, lightheaded or fatigued
- History of stress fractures

Diagnosis

A diagnosis is made based on the child's eating habits, menstrual cycles and attitude about weight and body image. There is no specific testing other than a bone-density test to evaluate osteopenia.

Treatment

The most effective treatment for the female athlete triad involves a team approach where the child and family will have regular meetings with a doctor, a nutritionist and a clinical psychologist. A nutritionist creates a plan with the child for healthy eating behaviors and a diet with an appropriate amount of calories to maintain normal body functions as well as exercise. A psychologist is helpful for athletes who are struggling with stressful circumstances in their lives or are feeling pressure to succeed, both of which may cause athletes to adopt disordered eating patterns in an attempt to relieve stress and maintain control.

The family can continue to offer a supportive environment for the child, encouraging her to adopt healthy eating behaviors and safe training practices to achieve her athletic goals. If the syndrome is left untreated, the child will be at risk for stress fractures and future infertility due to abnormal body mass and lack of menstrual cycles.