



GUIDELINES FOR PARENTS, COACHES, AND ATHLETES FEMALE ATHLETE TRIAD

American Academy
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DEDICATED TO THE HEALTH OF ALL CHILDREN™

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The combination of 3 medical conditions — eating problems, menstrual problems, and weak bones — can cause female athletes to lose strength and endurance and develop season-ending injuries (such as stress fractures). It may even force young athletes to quit their sport. More importantly, these conditions can put young women at risk for lifelong problems with weak bones.

EATING PROBLEMS

- Taking in fewer calories than your body requires

This can lead to:

MENSTRUAL (PERIOD) PROBLEMS

- Periods that:
 1. Start at a late age or do not start by 16 years of age;
 2. Start, then stop for longer than 3 to 6 months; or
 3. Occur irregularly—longer than 35 days without periods or fewer than 9 per year.

This can lead to:

PROBLEMS WITH WEAK BONES

1. Moderately weakened bone (osteopenia) can affect young women and can cause them to have the bone strength of a 50- to 60-year-old woman! This weakness may **NOT** be completely reversible.
2. Severely weakened bone (osteoporosis) causes increased risk of stress fractures (breaks in bones from playing sports or performing arts) and trauma fractures (from falls or collisions).

GUIDELINES FOR PREVENTION

DIET

- Fad diets and food supplementation do not help you perform better and do not replace good balanced eating habits.
- It is important to eat enough food (calories) to build bone strength and muscle mass that will help you to perform your best.

CALCIUM

- Young female athletes need calcium for bone strength. About 1300 mg per day is needed and is best obtained through diet:

(1 cup) skim milk	300 mg
(1 oz) Swiss cheese	270 mg
(8 oz) yogurt	410 mg
(1 cup) broccoli	150 mg
(1 glass) calcium fortified orange juice	200-250 mg
(1 cup) cottage cheese	200 mg
- Excess intake of carbonated or caffeinated drinks (soda/pop or coffee) can lead to calcium loss and weaken bones. Instead, drink milk or calcium-fortified orange juice.

MENSTRUAL PERIODS

- Skipping periods is **NOT NORMAL** and is **NOT** a sign of good or advanced sports training.
- Tell your doctor or trainer about missed periods as soon as it occurs or at the time of your preseason physical.
- Skipping periods **DOES NOT** mean that you are not fertile or cannot get pregnant. In fact, it could be a sign that you **ARE** pregnant.
- Keep a calendar of your menstrual periods (**LISTEN** to your body).

STRESS FRACTURES

- Nagging, aching pain that occurs with activity and doesn't improve over time may signal a broken bone or crack known as a stress fracture.
- Stress fractures heal slowly with rest. They heal even more slowly when bones are weak, and you may need to stay away from your sport for a long time.

PREVENTION

- Athletes need to follow a healthy diet with adequate intake of calories and calcium to maintain and improve performance.
- Female athletes need to be aware of changes in their menstrual periods and report these to their physician.
- Worsening or persistent bone or joint pain that affects athletes in daily activities needs to be evaluated for the possibility of stress fractures.

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