



THE FEMALE ATHLETE

If you are a female athlete, it is important to understand some health issues that could arise. Participating in sports (either team or individual) is good for your mental and physical health and will give you the chance to have fun, make new friends, and become fit. However, you should seek help if you develop the following conditions:

- “Female athletic triad”—three problems grouped together: 1) amenorrhea (stoppage of menstrual periods), 2) disordered eating patterns or anorexia nervosa (the failure to eat to maintain weight at minimal levels), and 3) bone loss
- Injuries (eg, knee injuries in soccer players)
- Issues such as painful breasts (runners) and vaginal or vulvar irritation (bikers)
- Extreme athletes may not eat or drink enough calcium to protect bone mass and to prevent fractures.
- If an athlete (such as a marathon runner, gymnast, or dancer) also is trying to decrease her body mass, then other minerals in her body, besides calcium, also may be decreased.
- Using chemical substances to induce vomiting is dangerous and can cause direct damage to your heart or lead to death because of chemical imbalances.
- Other athletes may develop anorexia nervosa in order to maintain a low weight.
- Anorexia nervosa has serious medical complications, such as osteoporosis (weak bones) and death.
- Patients with anorexia nervosa often have an abnormal perception that they are fat even though their body weight is below normal. Individuals with this disorder need urgent professional help.
- To help determine if you or someone you know may be developing an eating disorder, visit the web site of Anorexia Nervosa and Related Eating Disorders, Inc (www.anred.com/slf_tst.html).

Female Athletic Triad

- Many competitive female athletes have eating disorders, amenorrhea, and osteoporosis (weak bones).
- If you have gone for 3 months or longer without a menstrual period, you should see a gynecologist. Because estrogen (a female hormone) is necessary for bone strength, taking pills for birth control (birth control pills) or estrogen–progesterone pills may be recommended to protect your bones. Also, there may be other hormonal problems, and a full evaluation may be necessary.
- If you have heavy or irregular menstrual periods and are distressed, you should see a gynecologist. Taking birth control pills can regulate the bleeding and make it easier for you to concentrate on your activity and perform your best.

What should you know about eating disorders?

- Female athletes may have abnormal eating patterns. Many athletes who binge or purge (eat to excess and vomit, take laxatives, or exercise excessively) meet the criteria for bulimia nervosa. All should seek professional help.

How can you be protected against injury?

- Make sure you warm up before competitions and stretch out after competitions.
- Heavy weight lifting is not recommended for developing teens. You should avoid it until you are fully physically developed (age 15–18 years), and you should be supervised to learn to use free weights or machines correctly.
- You should play active team sports with teens of similar age and physical ability.
- Avoid the pressure to “win at all costs,” which is taught by many coaches.
- Adequate nutrition is important, especially to keep your bones strong and to cut down on risk for stress fractures (cracking of bones). Also, performance is enhanced with proper nutrition. A nutritionist can help design a balanced diet for you and may recommend taking a multivitamin or calcium supplement or both if necessary.





- You should use the correct gear for protection and comfort according to the sport:
 - Wear a helmet when bicycling. You should wear cycling shorts with thick padding to help avoid vulvar pain and irritation.
 - Wear pads and a helmet when in-line skating, snowboarding, skiing, and using scooters.
 - Wear a mouth guard for contact sports.
 - Wear shoes with ankle support if you participate in sports that involve a lot of running.
 - Wear bras with good breast support. The bra should keep the breasts from actively moving while running.
 - Female soccer players are four times more likely than male soccer players to get a knee injury. Knee protection to prevent ligament injuries might include maintaining a healthy weight, strengthening muscles, and practicing proper jumping and playing techniques. Shin guards should be used for extra protection.

What are the signs that you are exercising too much or “overdoing” it?

- Swelling of joints
- Weight loss
- Feeling really tired
- Getting injured a lot
- Obsession with exercise
- Problems with your menstrual periods
- Feeling really upset when you cannot exercise

Each of these problems could have medical consequences and should be discussed with your health care provider.

For More Information

We have provided information on the following organizations and web sites because they have information that may be of interest to our readers. The American College of Obstetricians and Gynecologists (ACOG) does not necessarily endorse the views expressed or the facts presented by these organizations or on these web sites. Further, ACOG does not endorse any commercial products that may be advertised or available from these organizations or on these web sites.

American Academy of Family Physicians
Telephone: (913) 906-6000 or (800) 274-2237
Web: www.aafp.org

American Academy of Pediatrics
Telephone: (847) 434-4000
Web: www.aap.org

American Alliance for Health, Physical Education, Recreation, and Dance
Telephone: (703) 476-3400 or (800) 213-7193
Web: www.aahperd.org/index.cfm

American College of Sports Medicine
Telephone: (317) 637-9200
Web: www.acsm.org

Centers for Disease Control and Prevention
Telephone: (800) 311-3435
Web: www.bam.gov/sub_yoursafety/index.html

National Association for Health & Fitness
Telephone: (716) 583-0521
Web: www.physicalfitness.org

National Eating Disorders Association
Telephone: (206) 382-3587
Toll-free Information and Referral Helpline: (800) 931-2237
Web: www.nationaleatingdisorders.org

National Youth Sports Safety Foundation
Telephone: (617) 367-6677
Web: www.nyssf.org