If you are an adult (parent, guardian, or coach) dealing with a young female athlete, it is important to understand some health issues that could arise. Participating in sports (either team or individual) is good for your teenager’s mental and physical health and will give her the chance to have fun, make new friends, and become fit. However, you should seek help if she develops 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)

Female Athletic Triad

- Many competitive female athletes have eating disorders, amenorrhea, and osteoporosis (weak bones).
- If a young woman has gone 3 months or longer without a menstrual period, she should see a gynecologist. Because estrogen (a female hormone) is necessary for bone strength, taking oral contraceptive pills (birth control pills) or estrogen–progesterone pills may be recommended to protect her bones. Also, there may be other hormonal problems and a full evaluation may be necessary.
- If a young woman has heavy or irregular periods or is distressed about abnormal bleeding patterns, she should see a gynecologist. Taking birth control pills can regulate the bleeding and make it easier for her to concentrate on her activity and perform her 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.
- 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, may also be decreased.
- Using chemical substances to induce vomiting is dangerous and can cause direct damage to the 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 potentially 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 a person has or is likely to develop an eating disorder, visit the web site of Anorexia Nervosa and Related Eating Disorders, Inc (www.anred.com/slf_tst.html).

How can the female athlete be protected against injury?

- Make sure she warms up before competitions and stretches out after competitions.
- Heavy weight lifting is not recommended for developing teens. A teen should avoid it until fully physically developed (age 15–18 years) and be supervised to learn to use free weights or machines correctly.
- Active team sports should be played with teens of similar age and physical ability.
• Help the athlete to avoid the pressure to “win at all costs,” which is taught by many coaches.
• Adequate nutrition is important, especially to keep the bones strong and to minimize stress fractures. Also, performance is enhanced with proper nutrition. A nutritionist can help formulate the optimal diet for the athlete. A good multivitamin and calcium supplement, taken daily, can be of value.
• Encourage the athlete to wear the correct gear for protection and comfort, according to the sport:
  — A helmet should be worn when bicycling. Wearing cycling shorts with thick padding can help avoid vulvar pain and irritation.
  — Pads and helmet should be worn when in-line skating, snowboarding, skiing, and using scooters.
  — Mouth guards should be worn for contact sports.
  — Shoes with ankle support should be used in sports that involve a lot of running.
  — Bras with good breast support should be used. The bra should keep the breasts from actively moving while running.
  — Female soccer players are four times more likely than male soccer players to sustain 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 the athlete is exercising too much or “overdoing” it?

• Swelling of joints
• Weight loss
• Being really tired
• Getting injured a lot
• Obsession with exercise
• Problems with menstrual periods
• Being significantly upset when unable to exercise

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

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: (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

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

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