

Campus Emergencies.....	911
Appointments/Information.....	831-2226
Women's Health.....	831-8035
Sports Medicine.....	831-2482
Comment Line.....	831-4898

www.udel.edu/shs

Exercise good hydration

Summer will soon be upon us and a great deal of our activities will be outdoors. One of the most serious health concerns related to summer exercise is heat-related illness. Prevention is, of course, the best medicine. Most cases of heat-related illnesses are a direct consequence of dehydration. Proper hydration is extremely important when exercising in warm weather because our main cooling mechanism is sweating.

Many people think they should only drink when they are thirsty. This is not true because most people's thirst mechanism does not activate until they are 1–2% dehydrated. Waiting until you are this far dehydrated can be very dangerous since central nervous system changes begin at a 3–4% water deficit.

The best way to prevent dehydration is to drink water routinely throughout the day. When you are planning to exercise later in the day, you should superhydrate to prevent excessive water loss while exercising. A decrease of body weight greater than 1% with exercise is considered dehydrated. The following is an easy, reliable strategy to prehydrate by drinking cool, uncarbonated water:

- Two hours before exercising, drink 20 oz.
- A half-hour before exercising, drink 8–16 oz.
- Every fifteen minutes during exercise, drink 4–6 oz.
- In the first 1–2 hours after exercising if the activity was very strenuous or lasts longer than 40 minutes, you should drink another 32–48 oz.

Water is the best solution for hydration. Sports drinks can be used for some carbohydrate replacement during endurance events. Caffeinated or carbonated beverages should never be used for hydration. Have a safe and enjoyable summer.



UNIVERSITY OF
DELAWARE

A publication of the Student Health Advisory Council and the Student Health Service

Overdone in the sun

Although viewed as healthy, there is no such thing as a “healthy tan.” Some people tend to burn while others tan. Factors that increase the chance of sunburn include a light complexion, light colored hair, the time of day, amount of exposure and even altitude. Some medications such as oral contraceptives, antibiotics, tranquilizers, and topical products may cause a photosensitivity reaction.

Protective measures should be used. Apply sunscreen to exposed skin 30 minutes before exposure; reapply after swimming. Don't forget the nose, face, ears and shoulders. Use a sunscreen with an SPF (sun protective factor) of at least 15 or more. Some dermatologists recommend a minimum of 30. Use a sunscreen that is PABA free (para aminobenzoic acid) since this ingredient can irritate the skin. Try avoiding the time when the sunrays are the strongest—10 a.m. to 2 p.m. If you are in intense sun, use a total block such as zinc oxide. **Sunscreens** absorb certain UV rays, but **sunblocks** prevent the rays from penetrating the skin. Wear a hat and sunglasses in addition to your UV protection.

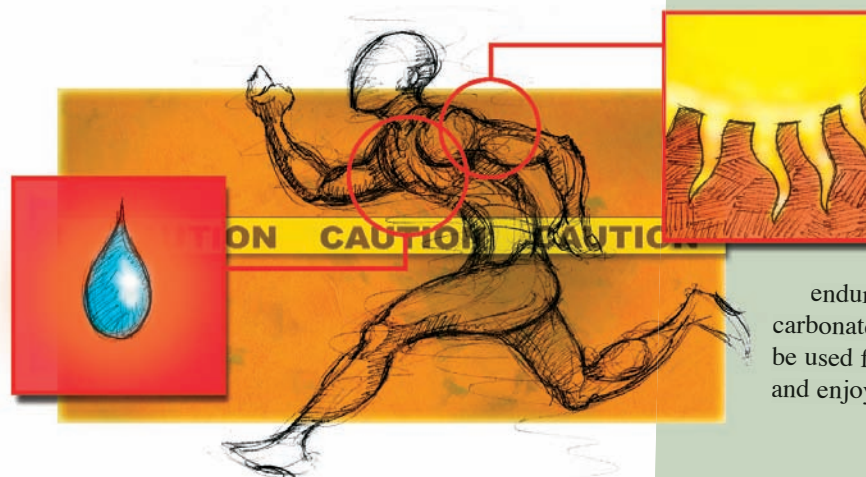
Although the sun feels good and the skin doesn't look red, hours later you may be surprised. The slightly pink skin may become bright red, painful and blistered within 24 hours. What to do if this happens? Cool compresses, baths several times a day, and the use of a pain reliever such as acetaminophen (Tylenol®) or ibuprofen (Advil®) may help. Avoid harsh or scented soaps; avoid petroleum jelly; and benzocaine products which can cause allergic reactions and, finally, don't pop any blisters. Consult a health care provider if you develop a headache, rash, nausea, vomiting or a fever.

What may happen to your skin after years of unprotected exposure? The skin develops brown

areas known as “liver spots” as well as thickens, sags, and wrinkles. The eyes may develop cataracts. With long-term exposure to the sun, the risk of cancer increases. The three main types of skin cancer are basal cell, squamous cell, and melanoma. Basal cell usually occurs in those with light hair and complexion; those who easily burn and don't tan. It appears as shiny, fleshy, slow-growing nodules. Squamous cell usually appears on the face, ears, lips, and mouth of fair-skinned people as red, scaly, patches. If detected early, both types have a high cure rate. Melanoma, the most dangerous form, usually appears as a dark brown or black mole with an irregular border. Lesions may become red, blue, or white. The most common sites for melanomas are the upper back in men and upper back, chest, and lower legs in women. Consult a clinician to examine suspicious lesions.

Tanning at a salon is not a healthy way to achieve a golden glow. Rays from tanning beds can penetrate deeper into the skin. As for “suntan accelerants,” the FDA warns against their use. Artificial tanning agents, which stain your skin, are generally safe.

Remember the sun's rays are everywhere so take precautions year-round whether skiing, hiking, sunbathing, in the car, or out for a walk.



Smooth Pedalling

Keeping the Ride Safe and Comfortable **Marc R. Silberman, M.D.**

Proper bike fit is essential for comfort, injury prevention and performance. There are three contact areas a rider makes with the bicycle: the pedals, the saddle, and the handlebars. By addressing these sites with simple rules of thumb, a rider may be set up properly.

A proper frame size is the first step. Most respectable bike shops will be able to properly fit you. Remember that the shoe-pedal interface should be set up such that the balls of your feet contact directly over the spindle of the pedal.

The saddle should be approximately parallel to the ground. Stand and shift your weight periodically to prevent prolonged pressure in the pubic arch. Set the saddle height so your knee is flexed 25 to 30 degrees with the pedal in the 6 o'clock position. If your saddle is properly positioned, you should have no numbness, pain, or discomfort. The saddle fore-aft position should be set so your kneecap is positioned directly over the pedal spindle when the cranks are horizontal to the ground.

Neck, shoulder, or back pain, may indicate improper handlebar position. The height difference between the top of the

saddle and handlebar should be about 1 to 4 inches, depending on your flexibility and upper torso length. The reach should be set so your torso is flexed 45 degrees and your elbows have a slight bend when holding the bars.

Most overuse injuries can be prevented with proper positioning. Knee pain is the most common complaint. Anterior knee pain may be a result of a saddle set too low or too far forward. Posterior knee pain may be the result of a saddle set too high or too far back.

Always wear a proper fitting helmet and follow the rules of the road. Spills can occur in the parking lot and at low speeds. These spills can result in a serious injury, such as a concussion or a clavicle fracture. Always be wary of cars. Assume they do not see you. If riding at night, which is not recommended, wear reflective gear, turn on your rear flashing lights, and headlights.

Cycling should be safe, pain free, and comfortable. If you have any questions, consult a sports medicine physician skilled in fitting cyclists.



Suggested reading: Burke, Edmund R. and Andrew L. Pruitt, "Body Positioning for Cycling," in *High-Tech Cycling*, Edmund R. Burke, ed., Human Kinetics Publishers: Champaign, Ill., 2003, pp. 69-92.

May is Melanoma/Skin Cancer Detection and Prevention Month

www.aad.org/public/index.html

Bumps & bruises

Many of our students will be going to summer jobs at the end of this semester. Some will participate in recreational activities or friendly competitions. Inevitably, someone will get a sprain or strain.

Here are some first aid tips for minor injuries.

- Protect from further injury.
- Relative rest.
- Ice for 20-minute intervals over the next 3 hours.

- Compress with an ace wrap or tight garment.
- Elevate the injury above your head.
- Safely return to normal activity.

If the injury is more serious, go to the local emergency room or your Primary Care Physician if you are away from campus. On campus, the Student Health Services can provide many levels of care for your injury. All of our medical staff are able to treat a minor injury.

FEELING THE BURN

What is heartburn? Heartburn, or acid indigestion, is a burning feeling that starts low behind your breastbone. This feeling might move up into your throat or may give you a sour taste in your mouth. Doctors call it gastroesophageal reflux disease or GERD.

What other symptoms can heartburn cause? You might spit up stomach acid, have chest pain, nausea, hoarseness, a cough, or shortness of breath.

What causes heartburn? Heartburn is what happens when stomach acid moves from your stomach up into your esophagus, the tube that connects your mouth to your stomach. Sometimes this happens because the muscle between the esophagus and the stomach is weak and can't stop the stomach acid from backing up.

What can trigger heartburn? Many things can trigger heartburn, and triggers are different for different people. They can include:

- Eating fried, spicy, and fatty foods or chocolate.
- Drinking carbonated beverages, citrus juices, peppermint, or coffee.
- Smoking.
- Being overweight.
- Taking certain medicines that affect the muscle between the esophagus and the stomach such as antibiotics, heart, and blood pressure medications.
- Lying down right after eating.
- Wearing tight-fitting clothes.
- Having a disease that weakens the muscle of the esophagus, such as diabetes mellitus.

How can I avoid heartburn? A few simple steps can help you avoid heartburn:

- Stop smoking.
- Stop drinking alcohol.
- Try not to lie down for at least 3 to 4 hours after eating.
- Maintain a healthy weight.
- Avoid the foods that trigger heartburn episodes.

How can I treat my heartburn? For immediate relief, you can take antacids like Mylanta, Maalox, Tums, and Roloids. You can also take over-the-counter beta-blockers like Pepcid AC or Zantac 75. If you have frequent symptoms and are using antacids regularly to control heartburn, you should see your physician.