
CENTRAL PA HEALTH CARE QUALITY UNIT NEWSLETTER FOR HEALTHY OUTCOMES

September 2011 - Volume 11, Issue 9

a monthly newsletter provided by the Central PA Health Care Quality Unit

M.C. 24-12,100 North Academy Avenue, Danville, Pa. 17822 Phone: (570) 271-7240 Fax: (570) 271-7241

Website: <http://www.geisinger.org/bcqu>

Preventing Blisters

From Berkeley Wellness Alert, July 26, 2011

Sometimes the reward of a long summer run or hike is a big, fat blister. Most blisters are minor, but some can be painful and even become infected.

Blisters form as a result of friction, when the top layers of skin separate from the bottom layer and the space fills with fluid. A common cause is ill-fitting shoes; moist and hot skin increases susceptibility.

To prevent a blister from developing, try to avoid rubbing or at least take action as soon as you feel a “hot spot,” as follows:

- Make sure your shoes are not too tight or too loose. When buying hiking shoes or boots, the store may have a sloped surface where you can test the fit. Padded insoles or arch supports may help prevent blisters caused by uneven pressure on your feet.
- Wear socks made from synthetics that wick away sweat—that is, move the moisture away from your skin. They should be seamless and snug enough so they move with your feet and don’t bunch up. Some wickable socks are promoted as “anti-blister” and may have a double-layer construction. Avoid 100 percent cotton or wool socks, which retain moisture.
- If your feet tend to sweat a lot, try applying an antiperspirant, especially one marketed for excessive sweating.
- As a preventive, apply moleskin or athletic tape on blister-prone areas, or at the first sign of a hot spot or blister. There are also many blister-pad products on the market, which typically contain gels that reduce friction and provide cushioning. You may prefer one type over another.

If you get a blister

Leave small blisters alone—just keep the area clean. You can put a donut-shaped pad over the blister (or cut a hole in an adhesive moleskin pad) to relieve pressure. Or try a blister-pad product, designed for both preventing and protecting blisters. Large or painful blisters should be lanced and drained: Wash the area with soap and water; then, with a sterile needle (pass it through a flame several times, then let it cool), puncture the blister at its edge. Gently press to release the fluid, then cover with a sterile bandage. Don’t remove the skin or “roof” of the blister—it provides a protective covering. If signs of infection develop, get medical advice. If a blister breaks on its own, simply wash and cover it with a bandage. It should heal quickly.

| INSIDE THIS ISSUE | |
|-------------------|---------------------|
| 1 | Preventing Blisters |
| 2 | Atherosclerosis |
| 3 | Exercising to Relax |
| 4 | Is Cheese Healthy? |

The information offered in this newsletter is to increase your awareness of health related conditions and situations and not intended to be a substitute for professional medical advice. If you believe you or someone you support has a condition, please seek the advice of a physician.

ATHEROSCLEROSIS: How it forms and how it's treated

From Harvard Health Publications – Issue 5

Atherosclerosis, the accumulation of fatty gunk in the arteries, is the underlying cause of most heart attacks. It's easy to think of it as a plumbing problem, where cholesterol-filled plaques stop up the "pipes" that bring blood to the heart (coronary arteries).

A flood of new findings show that it is time to trade in the plumbing analogy for a better one. The new view paints a picture of atherosclerosis as a chronic condition driven largely by inflammation. Blockages take a back seat to widespread damage to arteries in the heart and beyond, from those nourishing the brain, the feet, and everything in between. This new thinking explains how atherosclerosis advances steadily but can explode in an instant.

How arteries get 'sick'

The arteries of an active child who eats a healthful diet are smooth and supple. The inner lining is unblemished. The arteries respond instantly to the tissues' demand for oxygenated blood. But feed that child a typical Western diet and swap racing around the neighborhood playing hide-and-seek with playing video games, and this state of arterial innocence begins to fade. Whitish streaks begin staining the artery inner lining. If the teen, then young adult, then adult follows a typical Western lifestyle, these streaks gradually evolve into atherosclerotic plaque—patches of toxic muck that can lead to angina, heart attack, stroke, kidney disease, memory loss, sexual problems, leg pain, and other cardiovascular woes.

From healthy artery to heart attack

Inflammation triggered by damage or stress in the inner lining of an artery sets off the steady growth of atherosclerosis, which can suddenly erupt, causing a heart attack.

In the old view, plaque formed because a person ate too much cholesterol, or his or her liver made too much of it. That made sense, because fatty streaks and plaque are full of cholesterol. But we now know that inflammation helps trigger plaque's accumulation.

Atherosclerosis starts with an insult or injury to the delicate lining of the artery. Any of the following could do it:

- a localized infection
- high blood pressure or high blood sugar
- a barrage of inflammatory signals from excess body fat
- damage from turbulent blood flow
- noxious chemicals from cigarette smoke
- too much fat or cholesterol in the bloodstream.

This damage causes some cells in the artery lining to become sticky. Like flypaper, they snare passing white blood cells and entice them to burrow into the lining. It also attracts cholesterol-carrying low-density lipoprotein (LDL) particles circulating through the blood. This activity leads to gooey pools of plaque in the artery lining.

Shift in thinking, shift in treatment

The traditional view of coronary artery disease emphasizes blockages. Cardiologists look for them with stress tests and angiograms. If no blockage is found, people are often told they are "fine," sometimes in spite of chest pain and other symptoms. If a blockage is found, treatment usually focuses on squashing the offending plaque with a balloon and placing a stent to prop open the newly widened section of artery (called balloon angioplasty). Surgery to bypass the blockage is another option.

Almost all adults have some atherosclerosis. If you are at low risk for having a heart attack, a healthful diet and daily exercise are your key protectors. If you have heart disease or are at high risk for having a heart attack, you need to attack the disease on all fronts by exercising, eating healthy, controlling blood pressure and blood sugar, and cholesterol.

Exercising to relax

From Harvard Health Beat August 8, 2011

Rest and relaxation. The two don't always go together. It is true that you can regroup and recharge with a little rest and a break from your hectic life. But, perhaps surprisingly, physical activity and exercise can go a long way toward taking the edge off stress and anxiety and helping you relax.

How exercise relieves stress and anxiety

Regular aerobic exercise brings remarkable changes to your body, your metabolism, your heart, and your spirits. It can exhilarate and relax, provide stimulation and calm, counter depression, and dissipate stress. It's a common experience among endurance athletes and has been verified in clinical trials that have successfully used exercise to treat anxiety disorders and clinical depression.

How can exercise help with problems as difficult as anxiety and depression? There are several explanations, some chemical, others behavioral.

The mental benefits of aerobic exercise have a neurochemical basis. Exercise reduces levels of the body's stress hormones, such as adrenaline and cortisol. It also stimulates the production of endorphins, chemicals in the brain that are the body's natural painkillers and mood elevators. Endorphins are responsible for the "runner's high" and for the feelings of relaxation and optimism that accompany many hard workouts. Behavioral factors also contribute to the emotional benefits of exercise. As your waistline shrinks and your strength and stamina increase, your self-image will improve. You'll earn a sense of mastery and control, of pride and self-confidence.

Exercise and sports also provide opportunities to get away from it all and to either enjoy some solitude or to make friends and build networks. Exercise is play and recreation; when your body is busy, your mind will be distracted from the worries of daily life and will be free to think creatively.

Almost any type of exercise will help. Even a simple 20-minute stroll can clear the mind and reduce stress. But some people prefer vigorous workouts that burn stress along with calories. And the same stretching exercises that help relax your muscles after a hard workout will help relax your mind as well.

Adding relaxation to rest

Stressed muscles are tight, tense muscles. By learning to relax your muscles, you will be able to use your body to dissipate stress.

Muscle relaxation takes a bit longer to learn than deep breathing. It also takes more time. But even if this form of relaxation takes a little effort, it can be a useful part of your stress control program. Here's how it works: Progressive muscle relaxation is best performed in a quiet, secluded place. You should be comfortably seated or stretched out on a firm mattress or mat. Until you learn the routine, have a friend recite the directions or listen to them on a tape, which you can prerecord yourself. Progressive muscle relaxation focuses sequentially on the major muscle groups. Tighten each muscle and maintain the contraction 20 seconds before slowly releasing it. As the muscle relaxes, concentrate on the release of tension and the sensation of relaxation. Start with your facial muscles, then work down the body.

Forehead: Wrinkle your forehead and arch your eyebrows. Hold; then relax. **Eyes:** Close your eyes tightly. Hold; then relax. **Nose:** Wrinkle your nose and flare your nostrils. Hold; then relax. **Tongue:** Push your tongue firmly against the roof of your mouth. Hold; then relax. **Face:** Grimace. Hold; then relax. **Jaws:** Clench your jaws tightly. Hold; then relax. **Neck:** Tense your neck by pulling your chin down to your chest. Hold; then relax. **Back:** Arch your back. Hold; then relax. **Chest:** Breathe in as deeply as you can. Hold; then relax. **Stomach:** Tense your stomach muscles. Hold; then relax. **Buttocks and thighs:** Tense your buttocks and thigh muscles. Hold; then relax. **Arms:** Tense your biceps. Hold; then relax. **Forearms and hands:** Tense your arms and clench your fists. Hold; then relax. **Calves:** Press your feet down. Hold; then relax. **Ankles and feet:** Pull your toes up. Hold; then relax.

The entire routine should take 12 to 15 minutes. Practice it twice daily, expecting to master the technique and experience some relief of stress in about two weeks.

Is Cheese Healthy?

Berkeley Wellness, March 11, 2011

Cheese is high in calories, fat, and often sodium—but it also has some merits, including bone-building calcium. Here’s some healthy advice about cheese.

Americans are eating record amounts of cheese—more than 32 pounds a person per year, on average. With about 100 calories and 6 to 9 grams of fat per ounce, that adds up quickly. Still, small amounts can fit into most people’s diets.

Lately some researchers and marketers have been emphasizing the potentially healthy aspects of cheese. But generally the research is scanty or conflicting.

- **Calcium, plus.** Like all dairy foods, cheese provides calcium and protein, as well as some vitamin A, B12, riboflavin, zinc, and phosphorus. And it’s a source of conjugated linoleic acid (CLA), a fat that may have anti-cancer, weight-reducing, and heart-protective effects. But you’d have to eat a lot of cheese to get meaningful amounts of CLA, which means you’d also get a lot of unhealthy saturated fat and calories. Low-fat cheese contains less CLA; nonfat cheese contains none.
- **For cavity resistance?** It’s no replacement for your toothbrush, but cheese may help prevent cavities. In one study, people who ate cheese (just 1/3 ounce) after rinsing with a sugar solution had a rapid decrease in acidity, which lowers the risk of cavities. Older studies have found a similar protective acid-buffering effect.
- **For weight loss?** Whether dairy foods, including cheese, help in weight control is controversial. Research funded by the National Dairy Council has suggested that cheese and other dairy foods may help prevent weight gain after dieting; other research has found that regular cheese eaters gained less weight over time than those who ate cheese less often. But several other studies have found that people who eat more cheese tend to be more overweight.
- **Cancer connection?** Whether cheese has an effect, good or bad, on cancer risk is also debatable. A large study a few years ago found a link between cheese (at least 2 ounces a day) and reduced risk of colorectal cancer in women. Other studies have not found this benefit. A few have even linked dairy products, including cheese, to increased prostate and ovarian cancer—though others have found no such link.
- **Heart disease?** Cheese may not be especially good for your heart—but some research suggests that it may not be so bad for it either, at least when it’s part of an overall healthy diet. In fact, the Mediterranean diet, which is associated with many health benefits including a lowered risk of cardiovascular disease, allows for moderate amounts of cheese. And dairy foods, including cheese, are an important part of the anti-hypertension DASH diet.

Cheesy tips

Think of cheese as a flavor enhancer—a supporting player in a meal. A thin slice with fruit makes a nice dessert. An ounce or two of cheese, even daily, is reasonable—as long as you can afford the calories and your diet is not otherwise high in saturated fat.



To make wiser cheese choices, compare the calories, fat, and sodium on labels. Reduced-fat, low-fat, and nonfat cheeses can be good choices if you eat more than an ounce a day or if a recipe calls for large amounts of cheese. Strong or savory cheeses have more flavor, so you don’t need as much.