

GWell GOOD

EVERYDAY HEALTH AND WELLNESS TIPS TO HELP YOU LIVE A HEALTHIER LIFE

The antioxidants plus

The team

Vitamin A

While your mother was right to tell you to eat your carrots for better vision, Vitamin A does much more than help you see in the dark. It stimulates the production and activity of white blood cells, helps remodel bone, and regulates cell growth and division.

Vitamin C

Sometimes known as the wonder worker, it has been credited with being a key immune system nutrient and potent free-radical fighter. Humans cannot produce the vitamin C they need and must rely on diet and supplements. Vitamin C or ascorbic acid is a building block for our biochemical functioning. Vitamin C reaches every cell in the body and plays a role in the production and protection of connective tissue. It is a primary ingredient of collagen, the glue-like substance that binds cells together. Vitamin C supports the cardiovascular system by facilitating fat metabolism and the nervous system by converting certain amino acids into neurotransmitters.

Vitamin E

Vitamin E is a fat-soluble vitamin found in eight different forms. Alpha-tocopherol is the most active form of vitamin E in humans, and is a powerful biological antioxidant. Vitamin E helps protect against the damaging effects of free radicals, which may contribute to the development of chronic diseases. Vitamin E also may block the formation of nitrosamines, which are carcinogens formed in the stomach from nitrites consumed in the diet.

Beta Carotene

Beta carotene is one of more than 600 carotenoid compounds found in animals, plants, and microorganisms. Your body converts beta carotene into vitamin A, a fat-soluble vitamin essential for vision, growth, cell division, reproduction, and immunity.

Selenium

Selenium is an essential trace mineral and an important part of antioxidant enzymes that protect cells from free radicals. Selenium is also essential for normal functioning of the immune system and thyroid gland.



How can an *anti* anything be good for you?

Antioxidants provide a maintenance and disposal service for the body. While oxygen is necessary to maintain life, the by-products created when cells use oxygen, known as oxidation, can be harmful to cells. If you were a car, this process would be called rusting.

To become stable, oxidants steal electrons from other molecules and, in the process, damage cell proteins and genetic material. Antioxidants come to the rescue by binding with these unstable by-products, known as free radicals, transforming them into non-dangerous compounds.

"If free radicals are left to their own devices, they may cause heart damage, cancer, cataracts, and weaken your immune system," says Nicole Nisly, M.D., UI Health Care specialist in alternative medicine at the UI Family Care Center.

Antioxidants are organic substances that include vitamins C, E, and A, the mineral selenium, and carotenoids, including beta-carotene. Antioxidants can be found in the foods you eat or in enzymes made in your cells. They can also be found in pill forms.

For more information about antioxidants, call UI Health Access, 319-384-8442, ext. 104, or 800-777-8442, ext. 104.

What can antioxidants really do?

There is considerable evidence that antioxidants slow or possibly prevent the development of cancer.

It is estimated that 30 to 35 percent of all cancers may be associated with poor nutritional habits. Recently, research on certain vitamins and minerals indicates that diets high in foods containing antioxidants lead to lower rates of cancer.

Researchers believe antioxidants can stop the potentially harmful free radicals from attacking genetic information in cells.

Foods containing antioxidants include citrus fruits, tomatoes, peppers, strawberries, broccoli, peaches, and cabbage. Vitamins A, C, E, beta carotene, and the mineral selenium are being investigated for possible protective abilities against cancer. (See Clip and Save on page 3.)

Do you take large amounts of antioxidant supplements, like vitamins C and E, hoping they will improve your health? Scientists say there isn't evidence to support the use of some antioxidant supplements, especially in large doses, and it may even be harmful for certain individuals.

Supplements may also cause drug interactions if taken with some types of prescription medications. Children and the elderly are more likely to suffer adverse effects. If you take medications, have health problems, are pregnant or lactating, you should check with your doctor or pharmacist before taking supplements.

"The best way to put antioxidants into your life is to use the foods Mother Nature gives you," says Nicole Nisly, M.D., UI Health Care specialist in alternative medicine at the UI Family Care Center. Both men and women can benefit from the use of drugs prescribed by their physician.

Navigating your lymph

Your body is made up of many systems, each one taking care of a certain part of the body's everyday, life-sustaining needs. You know what the digestive system, the circulatory system, and the respiratory system do. But do you know what the lymphatic system does for you?

The lymphatic system is a complex system, composed of organs, lymph nodes, lymph ducts, and lymph vessels that transport lymph from tissues to the blood stream. Lymph is a transparent fluid containing white blood cells known as lymphocytes and antibodies that destroy foreign substances in the body and are a major part of the body's immune system.

Lymph vessels make up a network that covers every inch of your skin and surrounds each organ. The organs in the lymphatic system include the tonsils, adenoids, spleen, and thymus.

Eventually, all lymph vessels will drain into lymph nodes where the lymph is filtered. Lymph nodes are located in clusters in various parts of the body such as the neck, armpit, and groin. They produce lymphocytes, monocytes, and plasma cells.

The lymphatic system has been called the garbage disposal system of the body, transporting toxic substances to the blood stream for elimination. Lymph nodes filter the lymph fluid and remove foreign material, including cancer cells. Infection-fighting white blood cells in the lymph nodes trap, attack, and destroy bacteria. When the lymph nodes recognize foreign substances, they enlarge as they produce additional white blood cells to fight the infection.



Gestational diabetes

When you think of diabetes, you probably think of a lifetime of regular insulin shots and/or careful diet planning. But there is another kind that can develop in non-diabetic women—gestational diabetes. It affects between three to five percent of pregnant women. While it generally disappears after delivery, it may be a harbinger of adult-onset (Type 2) diabetes.



Gestational diabetes develops when the body's ability to use glucose (blood sugar) is impaired and the glucose accumulates in the blood. It often occurs without noticeable symptoms.

“Women with gestational diabetes can generally control blood sugar levels with diet, but when diet does not work, insulin may be required,” says Jerome Yankowitz, M.D., director, Division of Maternal-Fetal Medicine and Fetal Diagnosis and Treatment Unit, UI Obstetrics and Gynecology.

Are you at risk of having diabetes during a pregnancy?

- Have you had high blood sugar levels in previous pregnancies?
- Have you had a baby who weighed more than nine pounds at birth?
- Are you overweight?
- Do you have a close relative with diabetes?
- Do you have frequent yeast infections?

Gestational diabetes may:

- Cause birth defects
- Require a cesarean section birth because of the size of the baby
- Cause hypertension and convulsions
- Cause premature delivery or stillbirths

For more information about gestational diabetes, call UI Health Access, 319-384-8442, ext. 104, or 800-777-8442, ext. 104.

Head lice

Can I borrow your comb? Your hat? Your ear-phones? Your head lice?

Wait — head lice? Sharing such items is a great way to increase the likelihood of sharing head lice. The incidence of head lice increases when school children share these items.

Head lice are highly contagious, parasitic insects that live on human scalps. They lay their eggs, or nits, on hairs at the scalp which hatch about a 10 days later. In another 10 days those head lice reached maturity and are ready to repeat the cycle. “The nape of the neck is the most common place for lice and nits, but anywhere on the scalp can be involved and even eyelashes can sometimes be affected,” says Mary Stone, M.D., UI dermatologist.

Head lice cannot fly, jump, or hop. You can't get them from animals, grass, or trees, and you don't have to shave your head to get rid of them.

So how do you get rid of them? Anti-lice products such as NIX or RID are available from your local pharmacy and should be used as directed. Ask for the comb designed to comb the nits from the hair. Nit removal is very important because available medications are more effective on the lice than the nits. If the over the counter products are not effective, prescription products may be necessary.



Treating the infected head is not enough. You need to treat clothing, coats, hats, bedding, or anything that came in contact with the infected area.

For more information about head lice, call UI Health Access, 319-384-8442, ext. 104, or 800-777-8442, ext. 104.

Lymphatic system

Lymphedema – The story

Some malignant cells may “travel” through the lymph system. One of the functions of lymph nodes is to filter foreign matter—including cancer cells—from the body. The surgical removal of involved nodes may be used to limit the spread of the cancer.

Once the lymph nodes have been removed or destroyed, lymph fluid may build up in the tissues resulting in lymphedema. Lymphedema can result from surgery, radiation, infection, or trauma and is often related to cancer treatment.

“If untreated, lymphedema may cause tissue changes, increased rates of infection, decreased wound healing and ulceration,” says Carolyn Wadsworth, P.T., UI Department of Rehabilitation Therapies Certified Hand Therapist.

Lymphedema may cause:

- Burning or heat in the limb
- Increase in limb girth
- Heaviness of limb
- Pain, aching of limb
- Skin pitting
- Puffiness of skin
- Numbness or tingling in limb
- Decreased flexibility

Lymphedema is a serious condition. There is no cure and once developed, lymphedema is a chronic condition requiring daily treatment. Here’s what you can do:

- Avoid infections, burns, or injuries to the affected area.
- Keep the area clean and moisturized
- Use insect repellent and sunscreen to protect the area
- Wear protective gloves when working in the kitchen or garden
- Exercise regularly, but don’t fatigue the affected area. (Check with your physician before beginning any exercise program.)
- Wear loose-fitting clothes and jewelry
- Avoid heavy lifting and pulling
- Get shots or have blood drawn from unaffected areas
- If your leg is affected, wear well-fitting, closed toe shoes, don’t go barefoot, and avoid stockings with tight elastic bands

For information about treatment, contact the lymphedema management team in the Physical Therapy Division of the Department of Rehabilitation Therapies at 356-2663 or call UI Health Access, 319-384-8442, ext. 104, or 800-777-8442, ext. 104.

CLIP AND SAVE



UNIVERSITY of IOWA
HOSPITALS & CLINICS
University of Iowa Health Care

Color your diet

The more reds, oranges, greens, yellows, and blues you eat, the more health-promoting properties you get from your diet.

Reds

Reds and bright pink foods add lycopene, a powerful antioxidant, to your diet. Lycopene can be found in tomatoes, grapefruits, watermelon, papaya, and guava. Lycopene is being studied for its ability to fight heart disease and some cancers.

Greens

Green foods are rich in phytochemicals that help keep you healthy. Carotenoids lutein and zeaxanthin, found in spinach, kale, and broccoli, are being studied for their ability to keep your retina strong. Vegetables like cabbage, Brussels sprouts, cauliflower, and turnips may reduce the risk of cancerous tumors.

Oranges and yellows

Orange foods like sweet potatoes, mangoes, carrots, and apricots contain beta-carotene, a natural antioxidant being studied for its role in enhancing the immune system. Orange food is also rich in vitamin C and vitamin E. Yellow foods have many of the same benefits as orange foods.

Blues and purples

Anthocyanins, a photochemical responsible for the blue hues in foods like blueberries, is being studied for its role in defending the body against carcinogens.

Whites

White foods like onions, garlic, chives, and leeks contain the photochemical allicin which is being studied for its ability to lower cholesterol and blood pressure and increase the body’s ability to fight infections.

Winter chills

Winter weather can be nasty and two of the meanest winter culprits are hypothermia and frostbite.

Hypothermia—When your body is unable to maintain a core temperature of 95 degrees F, you begin to shiver, your speech slurs, your breathing slows, your skin is cold and pale, your coordination suffers, and you are lethargic and apathetic. Young children, the elderly, and the ill are the most vulnerable.

Wet, damp clothing, an uncovered head, and inadequate clothing can contribute to hypothermia. Other conditions that make an individual susceptible include excessive consumption of alcohol, cardiovascular disease, and an underactive thyroid.



To treat hypothermia, bring the person out of the cold. Remove wet clothing and replace it with warm, dry clothing. Wrap the person in blankets. Call 911 for emergency assistance. Provide a warm drink—do not give the person alcohol.

“Persons pulled from icy water should lay still, be dried and covered. Movement of the extremities can cause cold blood to return to the heart, resulting in a life-threatening change in cardiac rhythm,” says Eric W. Dickson, M.D., Director of the Emergency Medicine Program at UI Hospitals and Clinics.

Frostbite—Skin on fingers, toes, earlobes, cheeks, and noses are the most vulnerable to prolonged exposure to freezing temperatures, wet clothes, and forceful winds. Blood vessels near the surface of the skin constrict to preserve internal body heat, reducing blood flow to the skin. The result is frostbite. Frostbite ranges from white or yellowish skin accompanied by itching or burning sensations, numbness, and in the most severe cases, blistering.

To treat frostbite, bring the person out of the cold. Remove wet or constricting clothing, including jewelry. Call 911 for emergency assistance. DO NOT rub frostbitten areas or apply direct heat.

For more information about hypothermia and frostbite, or for help treating either one, call UI Health Access, 319-384-8442, ext. 104, or 800-777-8442, ext. 104.

Winter survival tips

Your home

In case of an extended power outage:

- Keep a supply of water, foods that need no cooking, and any needed medications
- Have an alternative heat source—kerosene heater or wood stove
- Have battery-powered radio, flashlight and clocks—and extra batteries

Your car

- Check the radiator system
- Replace windshield washer fluid with a wintertime mixture
- Replace worn tires
- Check the air pressure in the tires
- Keep the fuel tank near full to help avoid ice in the fuel lines
- Equip your car with:
 - Blankets
 - First aid kit
 - Booster cables
 - Bag of sand or cat litter (for traction on ice)
 - High-calorie canned or dried foods
 - Flashlight and extra batteries
 - Bottled water

University of Iowa Health Care introduces a new monthly electronic newsletter—*health-e-newsletter*—to give you the best in health and safety information from the experts at UI Hospitals and Clinics. All the information is written and reviewed by UI faculty and staff.

Health-e-newsletter, a free electronic publication, is available online at www.uihealthcare.com/health-e.

Visit the site and if you like what you see, click on the subscribe button and have *health-e-newsletter* automatically sent to your computer each month.

An archive is available if you want to check previous issues.

Do you have an interest in certain health and/or wellness topics?

Would you like to read more about them in *Well&Good*?

Please e-mail your questions and suggestions to WellandGood@uiowa.edu.

All e-mails will receive a response from *Well&Good*.

Well&Good is published by University of Iowa Hospitals and Clinics Joint Office for Marketing and Communications (JOMC) 200 Hawkins Drive E110 GH Iowa City, IA 52242-1009

DIRECTOR AND CEO, UNIVERSITY OF IOWA HOSPITALS AND CLINICS
Donna Katen-Bahensky

CO-DIRECTORS, JOMC
Diana Lundell
Stacy McGauvran-Hruby

EDITOR
Pat Badtke

DESIGN
Benson & Hepker Design
Iowa City, Iowa

The University of Iowa prohibits discrimination in employment and in its educational programs and activities on the basis of race, national origin, color, creed, religion, sex, age, disability, veteran status, sexual orientation, gender identity, or associational preference. The University also affirms its commitment to providing equal opportunities and equal access to University facilities. For additional information on nondiscrimination policies, contact the Coordinator of Title IX, Section 504, and the ADA Equal Opportunity and Diversity, 319-335-0705 (voice) or 319-335-0697 (text), The University of Iowa, 202 Jessup Hall, Iowa City, IA 52242-1316.

Copyright 2003, University of Iowa Health Care

♻️Printed on recycled paper

Winter skin

Feeling a little flaky? It's probably because your two or so yards of skin are telling you they need help to stay healthy in Iowa's cold, dry winter weather. And the older you are, the dryer your skin is.

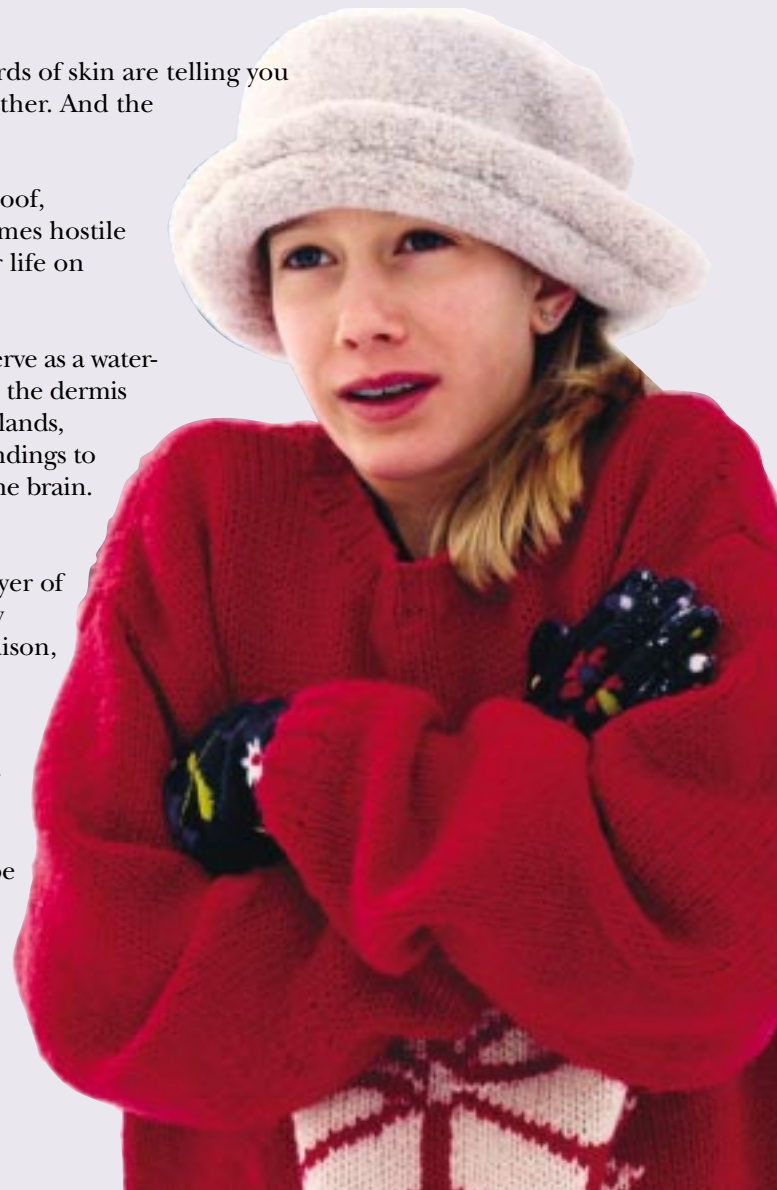
Your skin is an amazing piece of protective gear. It's waterproof, flexible, and provides a barrier between you and the sometimes hostile outside environment. Without this protective covering, your life on earth would be impossible.

The top layer of the epidermis is made up of dead cells that serve as a waterproof barrier to the environment. Underneath the epidermis, the dermis provides a tough, flexible foundation, housing sweat and oil glands, blood vessels to help regulate body temperature, and nerve endings to send the sensations of pain, itch, touch, and temperature to the brain. The fat layer provides insulation and helps store calories.

"During the dry winter environment, the water in the top layer of your skin evaporates more rapidly. As the skin dries out, tiny cracks develop and the itching commences," says Kathi Madison, M.D., UI Hospitals and Clinics dermatologist.

There are several ways to prevent dry skin:

- Humidify your home. The more moisture in the air, the slower the water evaporates from the skin.
- Moisturize your skin. Read labels carefully. If the main ingredient is water, the benefits of the moisturizer will be short lived. Creams and ointments are generally more effective than lotions. Avoid using alcohol, calamine lotion, or powder—all three can dry out your skin.
- Prevent chapped skin by wearing hats, gloves, scarves.
- Be careful when washing. The combination of hot water and soap can dry your skin. Use a mild soap or a soap-free cleanser and follow your bath with a healthy layer of moisturizer.



Year-round problems

Rosacea shouldn't be taken lightly. It is a chronic disease that affects the facial skin of adults between the ages of 30 and 60 and is most common in fair-skinned women.

Rosacea usually starts with a tendency to flush or blush easily, followed by a more persistent redness of the center of the face. As the disease worsens, enlarged blood vessels become visible and pimples develop in the reddened areas. Smoking, alcoholic drinks, caffeine or spicy foods, stress, excessive exposure to heat or cold, and sunlight are all possible rosacea triggers.

Treatment includes limiting time in the sunlight and protecting your face with a broad-brimmed hat and high SPF sunscreens and using prescribed topical and oral medications.

Eczema refers to a group of common skin diseases that are characterized by rough, red patches of skin that itch. Eczema can occur anywhere on the body, can start at any time of life, and is often worse in cold months.

One common type of eczema is atopic dermatitis, which tends to run in families that are affected by allergies, hay fever and/or asthma.

Eczema cannot be cured, but can be managed using a variety of topical medications. For more severe cases, ultraviolet light therapy and oral medicines can be used. It is also important to keep the skin well moisturized, take brief daily lukewarm baths or showers, use gentle soaps or non-soap cleansers.

Psoriasis is a chronic, non-contagious disease that causes the over production of skin cells. Normally, skin cells have a life cycle of 30 days. In psoriasis, the cycle is reduced to three or four days. Severity can range from a few dry, red patches with silvery scales numerous red, scaly patches covering most of the body.

Conditions that may cause flare-ups include skin injuries or infections, stress, changes in climate, certain medications, excessive alcohol consumption, strep throat, and being overweight. Psoriasis commonly worsens in the dry winter months.

Treatment is often individualized depending on age and may include creams containing cortisone, salicylic acid or a vitamin D-related compound, ultraviolet light, or oral medications.

Joint Office for Marketing and Communications
200 Hawkins Drive, E110 GH
Iowa City, IA 52242-1009



Nonprofit Organization
U.S. Postage
PAID
Permit # 45
Iowa City, Iowa

UI Health Access
384-8442
OR 800-777-8442

This seven-days-a-week, 24-hours-a-day service can match your health needs with the many resources available from University of Iowa Hospitals and Clinics.