



BetterSafe

WELCOA'S ONLINE BULLETIN FOR YOUR FAMILY'S SAFETY

A LOOK INSIDE the BRAIN



Traumatic brain injury (TBI) can happen to anyone, at any age. Approximately 1.7 million people experience a TBI in the United States each year; about 53,000 die from TBI-related causes.

TBIs can occur during such ordinary activities as riding in a car, playing sports, or tripping over the rug at home. They can also occur in higher-risk settings, such as war zones and construction sites.

The NICHD is one of several National Institutes of Health (NIH) Institutes researching brain injuries, seeking ways to detect and treat these injuries and to rehabilitate those with TBI.

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Handheld Device Detects Brain Bleeding

Within the NICHD, the Program on Pediatric Imaging and Tissue Sciences (PPITS) conducts research on ways to detect and diagnose TBI using imaging technology.

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Dr. Amir Gandjbakhche and his team in the Section on Analytical and Functional Biophotonics—with collaborators from the Center for Neuroscience and Regenerative Medicine (CNRM), part of the Uniformed Services University of the Health Sciences—have developed a prototype device that could be used by battlefield medics, athletics coaches, emergency medical technicians, and others to detect subdural hematomas, or bleeding on the brain.

A subdural hematoma is often associated with mild TBI/ concussion. This bleeding can cause permanent brain damage unless treated. Outside of a hospital, there is currently no way to test for this type of bleeding. The new prototype device would allow detection of bleeding on the brain in the field and provide on-the-spot indication that the individual should be sent to the hospital for treatment.

Young children can have the same symptoms of a concussion as older children and adults. But sometimes it can be hard to tell if a small child has a concussion. Young children may also have symptoms like:

- Crying more than usual.
- Headache that does not go away.
- Changes in the way they play or act.
- Changes in the way they nurse, eat, or sleep.
- Being upset easily or having more tantrums.
- A sad mood.
- Lack of interest in their usual activities or favorite toys.
- Loss of balance and trouble walking.
- Not being able to pay attention.

What are the Symptoms of a Concussion?

Symptoms of a concussion fit into four main categories:

1. Thinking and remembering
 - Not thinking clearly
 - Feeling slowed down
 - Not being able to concentrate
 - Not being able to remember new information
2. Physical
 - Nausea and vomiting
 - Headache
 - Fuzzy or blurry vision
 - Dizziness
 - Sensitivity to light or noise
 - Balance problems
 - Feeling tired or having no energy
3. Emotional and mood
 - Easily upset or angered
 - Sad
 - Nervous or anxious
 - More emotional
4. Sleep
 - Sleeping more than usual
 - Sleeping less than usual
 - Having a hard time falling asleep



Day In Day Out

WELCOA'S ONLINE BULLETIN FOR YOUR LIFESTYLE

Changing your habits...

STEPS TO BETTER HEALTH

Are you thinking about being more active? Have you been trying to cut back on fattening foods? Are you starting to eat better and be more active but having a hard time sticking with these changes?

Old habits die hard. Changing your habits is a process involving several stages. Sometimes it takes a while before changes turn into new habits. You may face challenges along the way.

But adopting new, healthier habits may protect you from serious health problems, such as diabetes. New habits may also help you look better and feel more energetic. After a while, if you stick with these changes, they may become a part of your daily routine.

STEP UP TO HEALTHY HABITS

Get 150 to 300 minutes of moderately intense or vigorous physical activity each week. Brisk walks, tennis, swimming, soccer, basketball, hikes, hula hoops—do whatever you enjoy best.

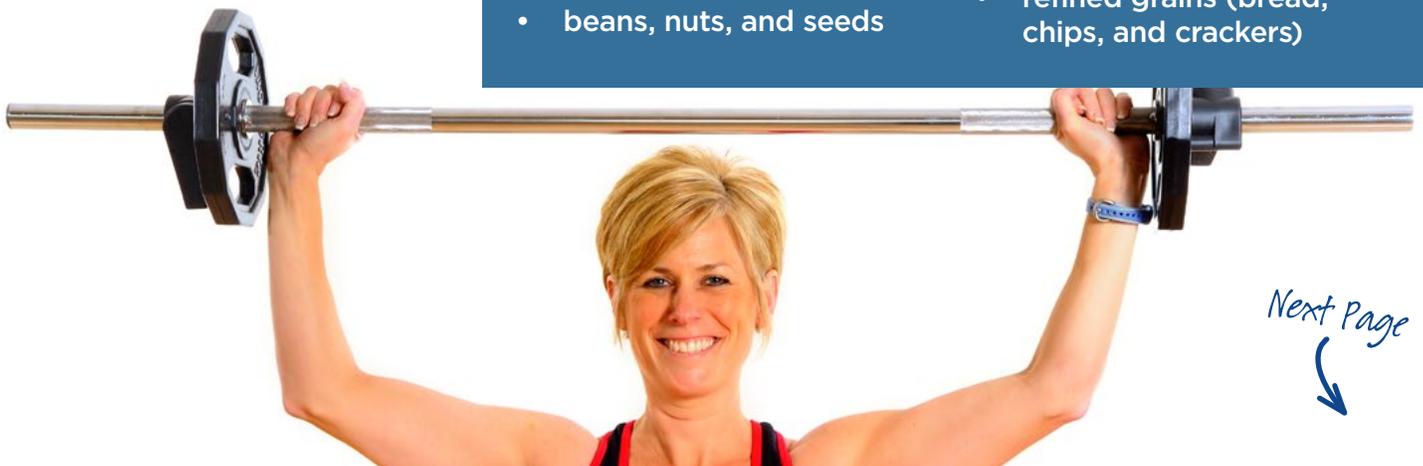
Strengthen your muscles at least twice a week. Do push-ups or pull-ups, lift weights, do heavy gardening, or work with rubber resistance bands.

Eat more of these foods:

- fruits and vegetables
- whole-grain breads and cereals
- fat-free or low-fat dairy
- seafood, lean meats, and eggs
- beans, nuts, and seeds

Limit these foods & drinks:

- sugar-sweetened drinks and desserts
- foods made with butter or other fats that are solid at room temperature
- refined grains (bread, chips, and crackers)



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Day In Day Out

WELCOA'S ONLINE BULLETIN FOR YOUR LIFESTYLE

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WHY DO PEOPLE BECOME OVERWEIGHT?

Over time, if you eat and drink more calories than your body uses or “burns off,” your body may store the extra energy, leading to weight gain. Many factors may play a part in weight gain.

The World around You

Communities, homes, and workplaces can all affect people’s health decisions. Foods high in fat, added sugar, and calories are easy to find. They also often cost less than healthier choices like fruits and vegetables. Also, many people lack access to safe places where they can be physically active. On top of that, many tools and devices, like remote controls and drive-in banks, make it easy to be inactive.

Families

Overweight and obesity tend to run in families. Research shows that genes can play a role in obesity. Families also share eating habits that can affect how, when, and what we eat.

Medicine

Some medicines, such as steroids (drugs used to reduce swelling) and some drugs for depression and other psychiatric disorders, may lead to weight gain. Ask your health care provider or pharmacist about the side effects of any medicines you are taking.

Emotions

Many people eat when they are bored, sad, angry, or stressed, even when they are not hungry.

Although you may not be able to control all the factors that lead to overweight, making small changes to your eating and physical activity habits may improve your health.



EASY SNACK IDEAS

- low-fat or fat-free yogurt
- fresh, canned, or dried fruit
- sliced vegetables or baby carrots

QUICK BREAKFAST IDEAS

- oatmeal with low-fat or fat-free milk or a soy-based drink, topped with walnuts and fresh or dried fruit
- a slice of whole-wheat toast with a thin piece of low-fat cheese
- fruit smoothie made with frozen fruit and low-fat yogurt
- high-fiber, low-sugar cereal with a soy-based beverage or fat-free milk



TakeCharge

WELCOA'S ONLINE SELF-CARE BULLETIN

BEATING THE COLD WEATHER

For a good portion of the country cold temperatures are right around the corner, if they're not here already! And did you know that cold weather can lower the temperature inside your body? This drop in body temperature is called hypothermia (hi-po-ther-mee-uh), and it can be deadly if not treated quickly. Hypothermia can happen anywhere—not just outside and not just in northern states. In fact, some people (especially older adults) can have a mild form of hypothermia if the temperature in their home is too cool.

What Are the Signs of Hypothermia?

When you think about being cold, you probably think of shivering. That is one way the body stays warm when it gets cold. But, shivering alone does not mean you have hypothermia.

How do you know if someone has hypothermia? Look for the “umbles”—stumbles, mumbles, fumbles, and grumbles—these show that the cold is a problem. Check for:

- Confusion or sleepiness
- Slowed, slurred speech, or shallow breathing
- Weak pulse
- Change in behavior or in the way a person looks
- A lot of shivering or no shivering; stiffness in the arms or legs
- Poor control over body movements or slow reactions

Taking Action

A normal body temperature is 98.6 °F. A few degrees lower, for example, 95 °F, can be dangerous. It may cause an irregular heartbeat leading to heart problems and death.

A BODY TEMP ONLY A FEW DEGREES LOWER THAN NORMAL CAN BE DANGEROUS AND MAY CAUSE AN IRREGULAR HEARTBEAT LEADING TO HEART PROBLEMS AND DEATH.

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TakeCharge

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If you think someone could have hypothermia, use a thermometer to take his or her temperature. Make sure you shake the thermometer so it starts below its lowest point. When you take the temperature, if the reading doesn't rise above 96 °F, call for emergency help. In many areas, that means calling 911.

While you are waiting for help to arrive, keep the person warm and dry. Try and move him or her to a warmer place. Wrap the person in blankets, towels, coats—whatever is handy. Even your own body warmth will help. Lie close, but be gentle. Give the person something warm to drink but stay away from alcohol or caffeinated drinks, like regular coffee.

Health Problems

Some illnesses may make it harder for your body to stay warm. These include problems with your body's hormone system such as low thyroid hormone (hypothyroidism), health problems that keep blood from flowing normally (like diabetes), and some skin problems where your body loses more heat than normal.

Some health problems may make it hard for you to put on more clothes, use a blanket, or get out of the cold. For example:

- Severe arthritis, Parkinson's disease, or other illnesses that make it tough to move around
- Stroke or other illnesses that can leave you paralyzed and may make clear thinking more difficult
- Memory loss
- A fall or other injury

How Do I Stay Safe?

- Pay attention to how cold it is where you are. Check the weather forecasts for windy and cold weather.
- Try to stay inside or in a warm place on cold and windy days. If you have to go out, wear warm clothes including a hat and gloves. A waterproof coat or jacket can help you stay warm if it's cold and snowy.
- Wear several layers of loose clothing when it's cold. The layers will trap warm air between them. Don't wear tight clothing because it can keep your blood from flowing freely. This can lead to loss of body heat.
- Don't make the mistake of thinking alcoholic drinks will keep you warm. Alcoholic drinks can make you lose body heat.

***DRINK ALCOHOL MODERATELY, IF AT ALL.
ALCOHOLIC DRINKS CAN MAKE YOU LOSE BODY HEAT.**



ToYourHealth

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

Open Wide!

A Look into Maintaining Your Oral Health

Oral health is an increasingly important part of overall health. According to the World Health Organization, 60 to 90 percent of school children worldwide and nearly 100 percent of adults have dental cavities. Many cannot access treatment or lack dental insurance. Severe periodontal (gum) disease, which may result in tooth loss, is found in 15 to 20 percent of adults 35 to 44 years old. Globally, about 30 percent of people 65 to 74 years old have no natural teeth, suggesting that the need for treatment and oral health education will increase as populations age.

Oral health issues include access to dental care, rural fluoride use, oral side effects of tobacco use, oral hygiene education, nutrition, and treatment of children with cleft palates. Oral health also has varied implications for numerous diseases and cancers. A range of oral issues are also often early indicators of HIV infection. Oral manifestations of some diseases can be life-saving if diagnosed and treated appropriately.

Check-ups can detect early signs of oral health problems and can lead to treatments that will prevent further damage...

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To Your Health

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

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What You Can Do to Maintain Good Oral Health

- **Drink fluoridated water and use a fluoride toothpaste.** Fluoride's protection against tooth decay works at all ages.
- **Take care of your teeth and gums.** Thorough tooth brushing and flossing to reduce dental plaque can prevent gingivitis—the mildest form of gum disease.
- **Avoid tobacco.** In addition to the general health risks posed by tobacco, smokers have 4 times the risk of developing gum

disease compared to non-smokers. Tobacco use in any form—cigarette, pipes, and smokeless (spit) tobacco—increases the risk for gum disease, oral and throat cancers, and oral fungal infection (candidiasis). Spit tobacco containing sugar increases the risk of tooth decay.

- **Limit alcohol.** Heavy use of alcohol is also a risk factor for oral and throat cancers. When used alone, alcohol and tobacco are risk factors for oral cancers, but when used in combination the effects of alcohol and tobacco are even greater.
- **Eat wisely.** Adults should avoid snacks full of sugars and starches. Limit the number of snacks eaten throughout the day. The recommended five-a-day helping of fiber-rich fruits and vegetables stimulates salivary flow to aid remineralization of tooth surfaces with early stages of tooth decay.
- **Visit the dentist regularly.** Check-ups can detect early signs of oral health problems and can lead to treatments that will prevent further damage, and in some cases, reverse the problem. Professional tooth cleaning (prophylaxis) also is important for preventing oral problems, especially when self-care is difficult.
- **Diabetic patients should work to maintain control of their disease.** This will help prevent the complications of diabetes, including an increased risk of gum disease.
- **If medications produce a dry mouth, ask your doctor if there are other drugs that can be substituted.** If dry mouth cannot be avoided, drink plenty of water, chew sugarless gum, and avoid tobacco and alcohol.
- **Have an oral health check-up before beginning cancer treatment.** Radiation to the head or neck and/or chemotherapy may cause problems for your teeth and gums. Treating existing oral health problems before cancer therapy may help prevent or limit oral complications or tissue damage.

Oral Diseases and Conditions

The most common oral diseases are dental cavities, periodontal (gum) disease, oral cancer, oral infectious diseases, trauma from injuries, and hereditary lesions.

DENTAL CAVITIES

Worldwide, 60–90% of school children and nearly 100% of adults have dental cavities, often leading to pain and discomfort.

PERIODONTAL DISEASE

Severe periodontal (gum) disease, which may result in tooth loss, is found in 15–20% of middle-aged (35–44 years) adults.

TOOTH LOSS

Dental cavities and periodontal disease are major causes of tooth loss. Complete loss of natural teeth is widespread and particularly affects older people. Globally, about 30% of people aged 65–74 have no natural teeth.

ORAL CANCER

The incidence of oral cancer ranges from one to 10 cases per 100,000 people in most countries. The prevalence of oral cancer is relatively higher in men, in older people, and among people of low education and low income. Tobacco and alcohol are major causal factors.