BetterSafe
WELCOA'S ONLINE BULLETIN FOR YOUR FAMILY'S SAFETY

Are You Storing Your Food Safely?

Whether putting food in the refrigerator, the freezer, or the cupboard, you have plenty of opportunities to prevent foodborne illnesses.

The goal is to keep yourself and others from being sickened by microorganisms such as *Salmonella, E. coli,* and *C. botulinum,* which causes botulism. Keeping foods chilled at proper temperatures is one of the best ways to prevent or slow the growth of these bacteria.

These food storage tips can help you steer clear of foodborne illnesses.

STORAGE BASICS

Refrigerate or freeze perishables right away. Foods that require refrigeration should be put in the refrigerator as soon as you get them home. Stick to the "two-hour rule" for leaving items needing refrigeration out at room temperature. Never allow meat, poultry, seafood, eggs, or produce or other foods that require refrigeration to sit at room temperature for more than two hours—one hour if the air temperature is above 90° F. This also applies to items such as leftovers, "doggie bags," and take-out foods. Also, when putting food away, don't crowd the refrigerator or freezer so tightly that air can't circulate.

Keep your appliances at the proper temperatures. Keep the refrigerator temperature at or below 40° F (4° C). The freezer temperature should be 0° F (–18° C). Check temperatures periodically. Appliance thermometers are the best way of knowing these temperatures and are generally inexpensive.

Check storage directions on labels. Many items other than meats, vegetables, and dairy products need to be kept cold. If you've neglected to properly refrigerate something, it's usually best to throw it out.

Use ready-to-eat foods as soon as possible. Refrigerated ready-to-eat foods such as luncheon meats should be used as soon as possible. The longer they're stored in the refrigerator, the more chance Listeria, a bacterium that causes foodborne illness, can grow, especially if the refrigerator temperature is above 40° F (4° C).

Be alert for spoiled food. Anything that looks or smells suspicious should be thrown out. Mold is a sign of spoilage. It can grow even under refrigeration. Mold is not a major health threat, but it can make food unappetizing. The safest practice is to discard food that is moldy.

Be aware that food can make you very sick even when it doesn't look, smell, or taste spoiled. That's because foodborne illnesses are caused by pathogenic bacteria, which are different from the spoilage bacteria that make foods "go bad." Many pathogenic organisms are present in raw or undercooked meat, poultry, seafood, milk, and eggs; unclean water; and on fruits and vegetables. Keeping these foods properly chilled will slow the growth of bacteria.

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IF YOU LOSE ELECTRICITY

If you lose electricity, keep refrigerator and freezer doors closed as much as possible. Your refrigerator will keep food cold for about four hours if it's unopened. A full freezer will keep an adequate temperature for about 48 hours if the door remains closed.

Once Power Is Restored...

You'll need to determine the safety of your food. Here's how:

- **If an appliance thermometer was kept in the freezer,** check the temperature when the power comes back on. If the freezer thermometer reads 40°F or below, the food is safe and may be refrozen.
- **If a thermometer has not been kept in the freezer,** check each package of food to determine its safety. You can't rely on appearance or odor. If the food still contains ice crystals or is 40 °F or below, it is safe to refreeze or cook.
- **Refrigerated food should be safe** as long as the power was not out for more than four hours and the refrigerator door was kept shut. Discard any perishable food (such as meat, poultry, fish, eggs or leftovers) that has been above 40°F for two hours or more.

Tips For Non-Refrigerated Items

- **Check canned goods for damage.** Can damage is shown by swelling, leakage, punctures, holes, fractures, extensive deep rusting, or crushing or denting severe enough to prevent normal stacking or opening with a manual, wheel-type can opener. Stickiness on the outside of cans may indicate a leak. Newly purchased cans that appear to be leaking should be returned to the store for a refund or exchange. Otherwise, throw the cans away.
- **Don't store food, such as potatoes and onions, under the sink.** Leakage from the pipes can damage the food. Store potatoes and onions in a cool, dry place.
- **Keep food away from poisons.** Don't store non-perishable foods near household cleaning products and chemicals.

DayInDayOut
WELCOA'S ONLINE BULLETIN FOR YOUR LIFESTYLE

Uncovering The Secrets Of... Circadian Rhythms

Circadian rhythms are physical, mental and behavioral changes that follow a roughly 24-hour cycle, responding primarily to light and darkness in an organism's environment. They are found in most living things, including animals, plants and many tiny microbes. The study of circadian rhythms is called chronobiology.

Are Circadian Rhythms The Same Thing As Biological Clocks?

No, but they are related. Our biological clocks drive our circadian rhythms. The biological clocks that control circadian rhythms are groupings of interacting molecules in cells throughout the body. A "master clock" in the brain coordinates all the body clocks so that they are in synch.

The "master clock" that controls circadian rhythms consists of a group of nerve cells in the brain called the suprachiasmatic nucleus, or SCN. The SCN contains about 20,000 nerve cells and is located in the hypothalamus, an area of the brain just above where the optic nerves from the eyes cross.

Do Circadian Rhythms Have A Genetic Component?

Yes. Researchers have already identified genes that direct circadian rhythms in people, fruit flies, mice, fungi and several other model organisms used for studying genetics.

Circadian rhythms are produced by natural factors within the body, but they are also affected by signals from the environment. Light is the main cue influencing circadian rhythms, turning on or turning off genes that control an organism's internal clocks.

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DayInDayOut

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How Do Circadian Rhythms Affect Body Function And Health?

Circadian rhythms can influence sleep-wake cycles, hormone release, body temperature and other important bodily functions. They have been linked to various sleep disorders, such as insomnia. Abnormal circadian rhythms have also been associated with obesity, diabetes, depression, bipolar disorder and seasonal affective disorder.

Circadian rhythms are important in determining human sleep patterns. The body's master clock, or SCN, controls the production of melatonin, a hormone that makes you sleepy. Since it is located just above the optic nerves, which relay information from the eyes to the brain, the SCN receives information about incoming light. When there is less light—like at night—the SCN tells the brain to make more melatonin so you get drowsy.

How Are Circadian Rhythms Related To Jet Lag?

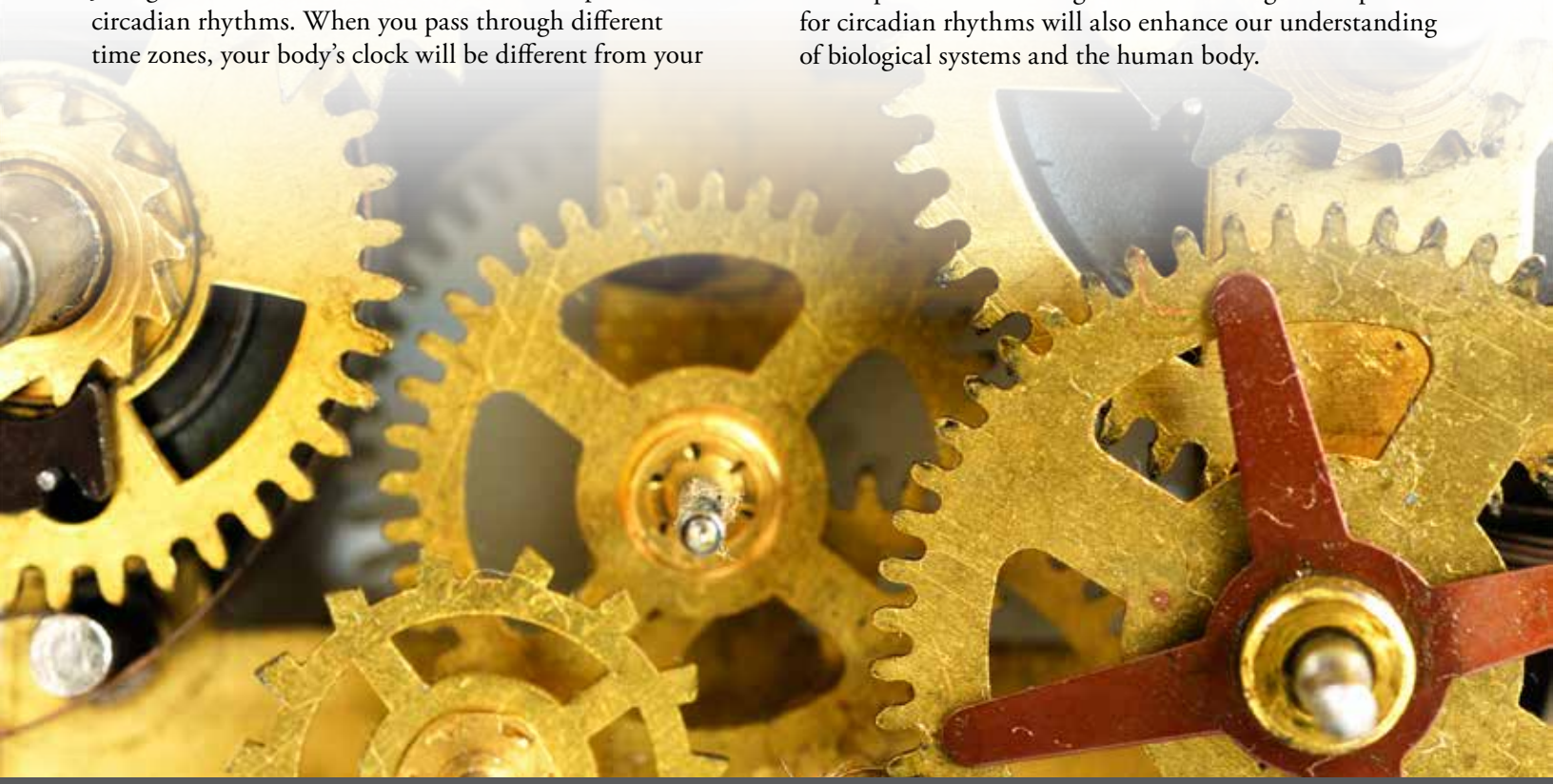
Jet lag occurs when travelers suffer from disrupted circadian rhythms. When you pass through different time zones, your body's clock will be different from your wristwatch. For example, if you fly in an airplane from California to New York, you "lose" 3 hours of time. So when you wake up at 7:00 a.m., your body still thinks it's 4:00 a.m., making you feel groggy and disoriented. Your body's clock will eventually reset itself, but this often takes a few days.

How Do Researchers Study Circadian Rhythms?

Scientists can learn about circadian rhythms by studying humans or by using model organisms that have similar "clock" genes. Basic researchers doing these experiments can control the subject's environment by altering light and dark periods and then look for changes in gene activity or other molecular signals.

How Does Circadian Rhythm Research Contribute To Human Health?

Understanding what makes biological clocks tick may lead researchers to treatments for sleep disorders, jet lag and other health problems. Learning more about the genes responsible for circadian rhythms will also enhance our understanding of biological systems and the human body.



TakeCharge

WELCOA'S ONLINE SELF-CARE BULLETIN

Why Is Cholesterol Important?

Your blood cholesterol level has a lot to do with your chances of getting heart disease. High blood cholesterol is one of the major risk factors for heart disease. A risk factor is a condition that increases your chance of getting a disease. In fact, the higher your blood cholesterol level, the greater your risk for developing heart disease or having a heart attack. Heart disease is the number one killer of women and men in the United States. Each year, more than a million Americans have heart attacks, and about a half million people die from heart disease.

How Does Cholesterol Cause Heart Disease?

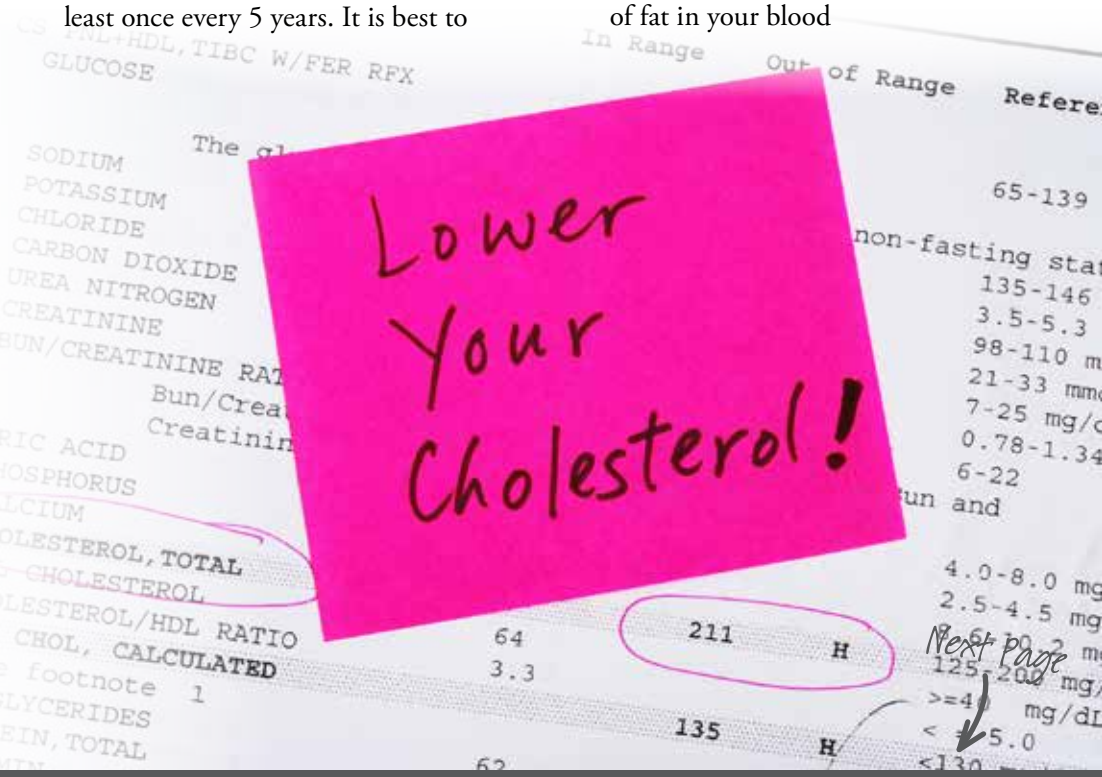
When there is too much cholesterol (a fat-like substance) in your blood, it builds up in the walls of your arteries. Over time, this buildup causes "hardening of the arteries" so that arteries become narrowed and blood flow to the heart is slowed down or blocked. The blood carries oxygen to the heart, and if enough blood and oxygen cannot reach your heart, you may suffer chest pain. If the blood supply to a portion of the heart is completely cut off by a blockage, the result is a heart attack.

High blood cholesterol itself does not cause symptoms, so many people are unaware that their cholesterol level is too high. It is important to find out what your cholesterol numbers are because lowering cholesterol levels that are too high lessens the risk for developing heart disease and reduces the chance of a heart attack or dying of heart disease, even if you already have it. Cholesterol lowering is important for everyone—younger, middle age, and older adults; women and men; and people with or without heart disease.

What Do Your Cholesterol Numbers Mean?

Everyone age 20 and older should have their cholesterol measured at least once every 5 years. It is best to have a blood test called a "lipoprotein profile" to find out your cholesterol numbers. This blood test is done after a 9- to 12-hour fast and gives information about your:

- **Total cholesterol**
- **LDL (bad) cholesterol—** the main source of cholesterol buildup and blockage in the arteries
- **HDL (good) cholesterol—** helps keep cholesterol from building up in the arteries
- **Triglycerides—**another form of fat in your blood



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If it is not possible to get a lipoprotein profile done, knowing your total cholesterol and HDL cholesterol can give you a general idea about your cholesterol levels. If your total cholesterol is 200 mg/dL* or more or if your HDL is less than 40 mg/dL, you will need to have a lipoprotein profile done. See how your cholesterol numbers compare to the tables below.

Total Cholesterol Level	Category
Less than 200 mg/dL	Desirable
200-239 mg/dL	Borderline High
240 mg/dL and above	High

*Cholesterol levels are measured in milligrams (mg) of cholesterol per deciliter (dL) of blood.

LDL Cholesterol Level	LDL-Cholesterol Category
Less than 100 mg/dL	Optimal
100-129 mg/dL	Near optimal/above optimal
130-159 mg/dL	Borderline high
160-189 mg/dL	High
190 mg/dL and above	Very high

HDL (good) cholesterol protects against heart disease, so for HDL, higher numbers are better. A level less than 40 mg/dL is low and is considered a major risk factor because it increases your risk for developing heart disease. HDL levels of 60 mg/dL or more help to lower your risk for heart disease.

Triglycerides can also raise heart disease risk. Levels that are borderline high (150-199 mg/dL) or high (200 mg/dL or more) may need treatment in some people.

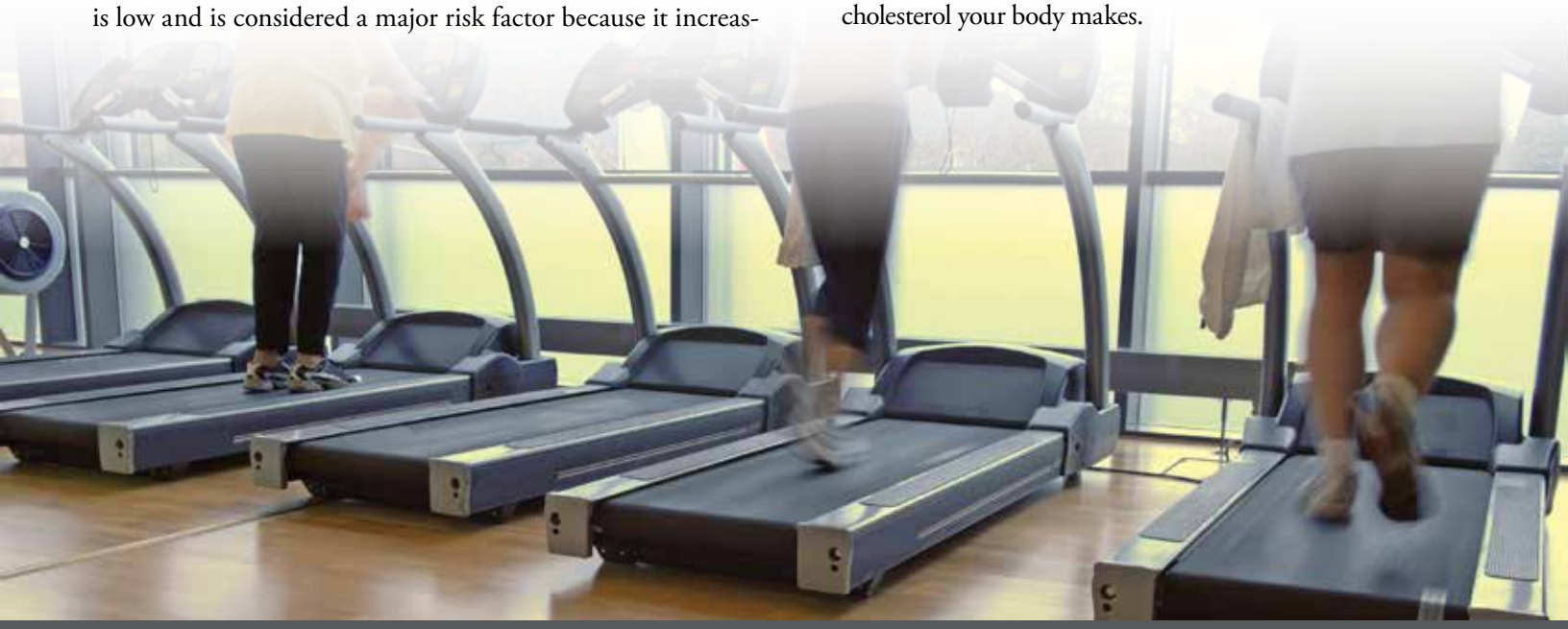
What Affects Cholesterol Levels?

A variety of things can affect cholesterol levels. These are things you can do something about:

- **Diet.** Saturated fat and cholesterol in the food you eat make your blood cholesterol level go up.
- **Weight.** Being overweight is a risk factor for heart disease.
- **Physical Activity.** Not being physically active is a risk factor for heart disease.

Things you cannot do anything about also can affect cholesterol levels. These include:

- **Age and Gender.** As women and men get older, their cholesterol levels rise.
- **Heredity.** Your genes partly determine how much cholesterol your body makes.



ToYourHealth
WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

What Is High Blood Pressure?

High blood pressure (HBP) is a serious condition that can lead to coronary heart disease, heart failure, stroke, kidney failure, and other health problems.

"Blood pressure" is the force of blood pushing against the walls of the arteries as the heart pumps blood. If this pressure rises and stays high over time, it can damage the body in many ways.

About 1 in 3 adults in the United States has HBP. The condition itself usually has no signs or symptoms. You can have it for years without knowing it. During this time, though, HBP can damage your heart, blood vessels, kidneys, and other parts of your body.

Knowing your blood pressure numbers is important, even when you're feeling fine. If your blood pressure is normal, you can work with your health care team to keep it that way. If your blood pressure is too high, treatment may help prevent damage to your body's organs.

By The Numbers

Blood pressure is measured as systolic (sis-TOL-ik) and diastolic (di-ah-STOL-ik) pressures. "Systolic" refers to blood pressure when the heart beats while pumping blood. "Diastolic" refers to blood pressure when the heart is at rest between beats.

You most often will see blood pressure numbers written with the systolic number above or before the diastolic number, such as 120/80 mmHg. (The mmHg is millimeters of mercury—the units used to measure blood pressure.)

The table on the right shows normal blood pressure numbers for adults. It also shows which numbers put you at greater risk for health problems.

Categories For Blood Pressure Levels In Adults

(measured in millimeters of mercury, or mmHg)

Blood Pressure Classification	Systolic (Top Number)		Diastolic (Bottom Number)
Normal	less than 120	and	less than 80
Prehypertension	120-139	or	80-89
High Blood Pressure (Hypertension) Stage 1	140-159	or	90-99
High Blood Pressure (Hypertension) Stage 2	160 or higher	or	100 or higher
Hypertensive Crisis (Emergency care needed)	Higher than 180	or	Higher than 110

The ranges in the table apply to most adults (aged 18 and older) who don't have short-term serious illnesses.

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Blood pressure doesn't stay the same all the time. It lowers as you sleep and rises when you wake up. Blood pressure also rises when you're excited, nervous, or active. If your numbers stay above normal most of the time, you're at risk for health problems. The risk grows as blood pressure numbers rise. "Prehypertension" means you may end up with HBP, unless you take steps to prevent it.

If you're being treated for HBP and have repeat readings in the normal range, your blood pressure is under control. However, you still have the condition. You should see your doctor and follow your treatment plan to keep your blood pressure under control.

Your systolic and diastolic numbers may not be in the same blood pressure category. In this case, the more severe category is the one you're in. For example, if your systolic number is 160 and your diastolic number is 80, you have stage 2 HBP. If your systolic number is 120 and your diastolic number is 95, you have stage 1 HBP.

If you have diabetes or chronic kidney disease, HBP is defined as 130/80 mmHg or higher. HBP numbers also differ for children and teens.

Prevention & Treatment

Blood pressure tends to rise with age. Following a healthy lifestyle helps some people delay or prevent this rise in blood pressure.

People who have HBP can take steps to control it and reduce their risk for related health problems. Key steps include following a healthy lifestyle, having ongoing medical care, and following your treatment plan.