# BetterSafe

WELCOA'S ONLINE BULLETIN FOR YOUR FAMILY'S SAFETY

# When is it Too Much?

Alcohol-related problems — which result from drinking too much, too fast, or too often — are among the most significant public health issues in the United States.

Many people struggle with controlling their drinking at some time in their lives. Approximately 17 million adults ages 18 and older have an alcohol use disorder (AUD) and 1 in 10 children live in a home with a parent who has a drinking problem.

## Does Treatment Work?

The good news is that no matter how severe the problem may seem, most people with an alcohol use disorder can benefit from some form of treatment.

Research shows that about one-third of people who are treated for alcohol problems have no further symptoms 1 year later. Many others substantially reduce their drinking and report fewer alcohol-related problems.

## Signs of an Alcohol Problem

Alcohol use disorder (AUD) is a medical condition that doctors diagnose when a patient's drinking causes distress or harm. The condition can range from mild to severe and is diagnosed when a patient answers "yes" to two or more of the following questions.

In the past year, have you:

- Had times when you ended up drinking more, or longer than you intended?
- More than once wanted to cut down or stop drinking, or tried to, but couldn't?
- Spent a lot of time drinking? Or being sick or getting over the aftereffects?
- Experienced craving—a strong need, or urge, to drink?
- Found that drinking—or being sick from drinking —often interfered with taking care of your home or family? Or caused job troubles? Or school problems?
- Continued to drink even though it was causing trouble with your family or friends?
- Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?
- More than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?

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- Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?
- Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?
- Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such as trouble sleeping, shakiness, irritability, anxiety, depression, restlessness, nausea, or sweating? Or sensed things that were not there?

If you have any of these symptoms, your drinking may already be a cause for concern. The more symptoms you have, the more urgent the need for change. A health professional can conduct a formal assessment of your symptoms to see if an alcohol use disorder is present.

## Options for Treatment

When asked how alcohol problems are treated, people commonly think of 12-step programs or 28-day inpatient rehab, but may have difficulty naming other options. In fact, there are a variety of treatment methods currently available, thanks to significant advances in the field over the past 60 years.

Ultimately, there is no one-size-fits-all solution, and what may work for one person may not be a good fit for someone else. Simply understanding the different options can be an important first step.

## Types of Treatment

### Behavioral Treatments

Behavioral treatments are aimed at changing drinking behavior through counseling. They are led by health professionals and supported by studies showing they can be beneficial.

### Medications

Three medications are currently approved in the United States to help people stop or reduce their drinking and prevent relapse. They are prescribed by a primary care physician or other health professional and may be used alone or in combination with counseling.

### Mutual-Support Groups

Alcoholics Anonymous (AA) and other 12-step programs provide peer support for people quitting or cutting back on their drinking. Combined with treatment led by health professionals, mutual-support groups can offer a valuable added layer of support.

Due to the anonymous nature of mutual-support groups, it is difficult for researchers to determine their success rates compared with those led by health professionals.

## Starting With a Primary Care Doctor

For anyone thinking about treatment, talking to a primary care physician is an important first step—he or she can be a good source for treatment referrals and medications. A primary care physician can also:

- Evaluate whether a patient's drinking pattern is risky
- Help craft a treatment plan
- Evaluate overall health
- Assess if medications for alcohol may be appropriate

DayInDayOut
WELCOA'S ONLINE BULLETIN FOR YOUR LIFESTYLE

# Do You Know Enough About Dietary Supplements?

The majority of adults in the United States take one or more dietary supplements either every day or occasionally. Today's dietary supplements include vitamins, minerals, herbals and botanicals, amino acids, enzymes, and many other products. Dietary supplements come in a variety of forms: traditional tablets, capsules, and powders, as well as drinks and energy bars. Popular supplements include vitamins D and E; minerals like calcium and iron; herbs such as echinacea and garlic; and specialty products like glucosamine, probiotics, and fish oils.

## The Dietary Supplement Label

All products labeled as a dietary supplement carry a Supplement Facts panel that lists the contents, amount of active ingredients per serving, and other added ingredients (like fillers, binders, and flavorings). The manufacturer suggests the serving size, but you or your health care provider might decide that a different amount is more appropriate for you.

## Effectiveness

If you don't eat a nutritious variety of foods, some supplements might help you get adequate amounts of essential nutrients. However, supplements can't take the place of the variety of foods that are important to a healthy diet.

Scientific evidence shows that some dietary supplements are beneficial for overall health and for managing some health conditions. For example, calcium and vitamin D are important for keeping bones strong and reducing bone loss; folic acid decreases the risk of certain birth defects; and omega-3 fatty acids from fish oils might help some people with heart disease. Other supplements need more study to determine their value. The U.S. Food and Drug Administration (FDA) does not determine whether dietary supplements are effective before they are marketed.

## Safety and Risk

Many supplements contain active ingredients that can have strong effects in the body. Always be alert to the possibility of unexpected side effects, especially when taking a new product.

Supplements are most likely to cause side effects or harm when people take them instead of prescribed medicines or when people take many supplements in combination. Some supplements can increase the risk of bleeding or, if a person takes them before or after

BEFORE TAKING A DIETARY SUPPLEMENT, ASK YOURSELF THESE QUESTIONS:

- What are the potential health benefits of this dietary supplement product?
- What are its potential benefits for me? Does this product have any safety risks?
- What is the proper does to take? How, when, and for how long should I take it?

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# DayInDayOut

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surgery, they can affect the person's response to anesthesia. Dietary supplements can also interact with certain prescription drugs in ways that might cause problems.

## Quality

Dietary supplements are complex products. The FDA has established quality standards for dietary supplements to help ensure their identity, purity, strength, and composition. These standards are designed to prevent the inclusion of the wrong ingredient, the addition of too much or too little of an ingredient, the possibility of contamination, and the improper packaging and labeling of a product. The FDA periodically inspects facilities that manufacture dietary supplements.

In addition, several independent organizations offer quality testing and allow products that pass these tests to display their seals of approval. These seals of approval provide assurance that the product was properly manufactured, contains the ingredients listed on the label, and does not contain harmful levels of contaminants. These seals of approval do not guarantee that a product is safe or effective. Organizations that offer this quality testing include:

- U.S. Pharmacopeia
- ConsumerLab.com
- NSF International

## Keep in Mind

- Don't decide to take dietary supplements to treat a health condition that you have diagnosed yourself, without consulting a health care provider.
- Don't take supplements in place of, or in combination with, prescribed medications without your health care provider's approval.
- Check with your health care provider about the supplements you take if you are scheduled to have any type of surgical procedure.
- The term "natural" doesn't always mean safe. A supplement's safety depends on many things, such as its chemical makeup, how it works in the body, how it is prepared, and the dose used. Certain herbs (for example, comfrey and kava) can harm the liver.
- Before taking a dietary supplement, ask yourself these questions:
  - What are the potential health benefits of this dietary supplement product?
  - What are its potential benefits for me?
  - Does this product have any safety risks?
  - What is the proper dose to take?
  - How, when, and for how long should I take it?

If you don't know the answers to these questions, use the information sources listed in this brochure and talk to your health care providers.

# TakeCharge

WELCOA'S ONLINE SELF-CARE BULLETIN

# Galled by the Gallbladder?

## Your Tiny, Hard-Working Digestive Organ

Most of us give little thought to the gallbladder, a pear-sized organ that sits just under the liver and next to the pancreas. The gallbladder may not seem to do all that much. But if this small organ malfunctions, it can cause serious problems. Gallbladder disorders rank among the most common and costly of all digestive system diseases. By some estimates, up to 20 million Americans may have gallstones, the most common type of gallbladder disorder.

The gallbladder stores bile, a thick liquid that's produced by the liver to help us digest fat. When we eat, the gallbladder's thin, muscular lining squeezes bile into the small intestine through the main bile duct. The more fat we eat, the more bile the gallbladder injects into the digestive tract.

Bile has a delicate chemical balance. It's full of soluble cholesterol produced by the liver. This is a different type of cholesterol than the kind related to cardiovascular disease. If the chemical balance of bile gets slightly off, the cholesterol can crystalize and stick to the wall of the gallbladder. Over time, these crystals can combine and form gallstones.

Gallstones can range from the size of a grain of sand to that of a golf ball. When the gallbladder injects bile into the small intestine, the main bile duct can become blocked by these crystalline stones. That may cause pressure, pain, and nausea, especially after meals. Gallstones can cause sudden pain in the upper right abdomen, called a gallbladder attack (or biliary colic). In most cases, though, people with gallstones don't realize they have them.

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# TakeCharge

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## How do You Get Gallstones?

The causes of gallstones are unclear, but you're more likely to have gallstone problems if you have too much body fat, especially around your waist, or if you're losing weight very quickly. Women, people over age 40, people with a family history of gallstones, American Indians, and Mexican Americans are also at increased risk for gallstones.

"For the average person with an average case, the simplest way to diagnose a gallstone is by an ultrasound," says Dr. Dana Andersen, an NIH expert in digestive diseases.

If left untreated, a blocked main bile duct and gallbladder can become infected and lead to a life-threatening situation. Gallbladder removal, called a cholecystectomy, is the most common way to treat gallstones. The gallbladder isn't an essential organ, which means you can live normally without it.

Gallbladder removal can be done with a laparoscope, a thin, lighted tube that shows what's inside your abdomen. The surgeon makes small cuts in your abdomen to insert the surgical tools and take out the gallbladder. The surgery is done while you are under general anesthesia, asleep and pain-free. Most people go home on the same day or the next.

Researchers have long investigated medications that can prevent gallstones from forming, but these therapies are currently used only in special situations.

It's uncommon for the gallbladder to cause problems other than gallstones. Gallbladder cancer is often difficult to treat, as it's usually diagnosed at an advanced stage. But such cancers are relatively rare.

While the gallbladder may not be the star of the digestive system, it still plays an important role. Treat it well by maintaining a healthy diet and getting regular exercise, and the little bag of bile should do its job. Don't ignore pain or symptoms, and see your doctor if you're in discomfort, especially after eating.

### SYMPTOMS OF A GALLSTONE ATTACK

Talk with your doctor if you have:

- severe pain in the upper-right side of the abdomen that starts suddenly and lasts from 30 minutes to many hours.
- pain under the right shoulder or in the right shoulder blade.
- indigestion after eating foods high in fat or protein, including desserts and fried foods.

Seek help right away if you have these signs of a serious attack:

- abdominal pain that lasts more than 5 hours.
- nausea and vomiting.
- fever or chills.
- yellowish color of the skin or the whites of the eyes.
- dark urine or light-colored stools.

WELCOA
HEALTH BULLETINS

ToYourHealth

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

# Fixing Flawed Body Parts

## Engineering New Tissues and Organs

How can you mend a broken heart? Or repair a damaged liver, kidney, or knee? Scientists are exploring innovative ways to fix faulty organs and tissues or even grow new ones. This type of research is called tissue engineering. Exciting advances continue to emerge in this fast-moving field.

Tissue engineering could allow doctors to repair or replace worn-out tissues and organs with living, working parts. Most important, tissue engineering might help some of the 120,000 people on the waitlist to receive donated kidneys, livers, or other organs.

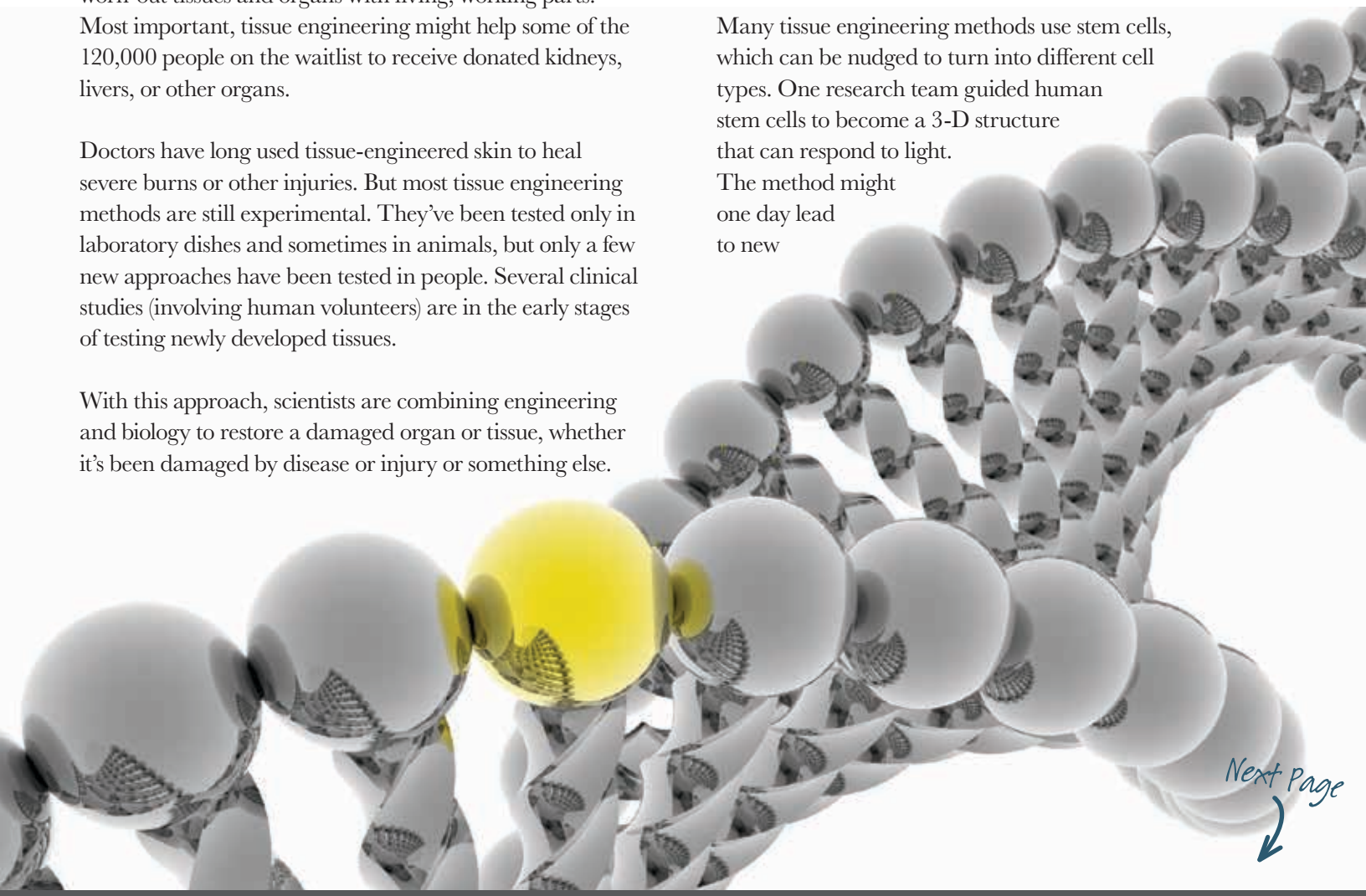
Doctors have long used tissue-engineered skin to heal severe burns or other injuries. But most tissue engineering methods are still experimental. They've been tested only in laboratory dishes and sometimes in animals, but only a few new approaches have been tested in people. Several clinical studies (involving human volunteers) are in the early stages of testing newly developed tissues.

With this approach, scientists are combining engineering and biology to restore a damaged organ or tissue, whether it's been damaged by disease or injury or something else.

Some scientists are creating special net-like structures, or scaffolds, in desired shapes and then coaxing cells to grow within them. Some use a mixture of natural substances called growth factors, which direct cells to grow and develop in certain ways.

### Engineering Methods

Many tissue engineering methods use stem cells, which can be nudged to turn into different cell types. One research team guided human stem cells to become a 3-D structure that can respond to light. The method might one day lead to new



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# To Your Health

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

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therapies for eye disorders. Other stem cell approaches may lead to improved treatment for spinal cord injuries, diabetes, and more.

Another approach, called decellularization, involves removing all the cells from an organ. What's left behind is a thin, pale framework that contains the organ's natural structural proteins, including the pathways for tiny blood vessels and nerves. By infusing new cells into this mesh-like matrix, some researchers have successfully created working animal kidneys, livers, hearts, lungs, and other organs.

The decellularization technique was used by Dr. Martin Yarmush and his colleagues to create a functional rat liver that included a network of working blood vessels. Yarmush is a biomedical engineer at Rutgers University and the Massachusetts General Hospital. The engineered livers his team created were kept alive in the laboratory for days and functioned for several hours after transplantation into rats. The researchers are now working to help those transplanted livers survive even longer. They're also scaling up the methods to create a decellularized human liver that can be repopulated with functional cells.

The new cells made their way into the damaged heart muscle and organized into muscle fibers in all of the treated monkeys. The infused stem cells replaced nearly half of the damaged heart tissue and began beating in sync with the heart. Still, the scientists note they need years of research before this type of therapy might be tried in people.

Some methods are already being tested in humans. Dr. Martha Murray, a surgeon at Boston Children's Hospital, is exploring new ways to heal a common knee injury known as a torn ACL. Athletes who do a lot of twisting and turning, as in basketball or soccer, are at risk for damaging the ACL.

After testing several biomaterials, Murray's team found that stitching a bioengineered sponge between the torn ends of an injured ACL allows blood to clot and collect around the damaged ligament. Because blood naturally contains stem cells and growth factors, the blood-soaked sponge acts as a "bridge" that encourages ACL healing. The sponge is made of some of the same proteins normally found in ligaments, and it dissolves after a few weeks.

## For Healthy Organs and Tissues

The kidney is the most transplanted organ in the U.S., followed by the liver, heart, and lungs. You can protect all of your body's organs through healthy behaviors:

- Eat a balanced diet.
- Stay physically active.
- Maintain a healthy weight.
- Limit alcohol.
- If you smoke, take steps to quit.
- Take medications only as directed.