

WHAT ARE THE EFFECTS OF ALCOHOL ON THE BODY?

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You won't necessarily feel alcohol's impact on your body right away, but it starts from the moment you take your first sip.

If you drink, you've probably had some experience with alcohol's effects, from the warm buzz that kicks in quickly to the not-so-pleasant wine headache, or the hangover that shows up the next morning. Since those effects don't last long, you might not worry much about them, especially if you don't drink often.

Many people assume the occasional beer or glass of wine at mealtimes or special occasions doesn't pose much cause for concern. But drinking any amount of alcohol can potentially lead to unwanted health consequences.

People who binge drink or drink heavily may notice more health effects sooner, but alcohol also poses some risks for people who drink in moderation. What does it mean to drink in moderation?

Current guidelines from the Centers for Disease Control and Prevention (CDC) define moderate drinking as:

- 1 or fewer drinks each day for women
- 2 or fewer drinks each day for men

Past guidance around alcohol use generally suggests a daily drink poses little risk of negative health effects — and might even offer a few health benefits. But more recent research suggests there's really no "safe" amount of alcohol since even moderate drinking can negatively impact brain health. Alcohol use can begin to take a toll on anyone's physical and mental well-being over time. These effects may be more serious and more noticeable if you drink regularly and tend to have more than 1 or 2 drinks when you do.

Read on to get the details on how alcohol can affect your body, brain, and emotional health, plus a few tips on finding support if you're considering cutting back on drinking.

Short-term effects of alcohol

Temporary effects you might notice while drinking alcohol (or shortly after) can



include:

feelings of relaxation or drowsiness

a sense of euphoria or giddiness

changes in mood

lowered inhibitions

impulsive behavior

slowed or slurred speech

nausea and vomiting

diarrhea

head pain

changes in hearing, vision, and perception

loss of coordination

trouble focusing or making decisions

loss of consciousness or gaps in memory (often called a blackout)

Some of these effects, like a relaxed mood or lowered inhibitions, might show up quickly after just one drink. Others, like loss of consciousness or slurred speech, may develop after a few drinks.

Dehydration-related effects, like nausea, headache, and dizziness, might not appear for a few hours, and they can also depend on what you drink, how much you drink, and if you also drink water.

These effects might not last very long, but that doesn't make them insignificant.

Impulsiveness, loss of coordination, and changes in mood can affect your judgment and behavior and contribute to more far-reaching effects, including accidents, injuries, and decisions you later regret.

Long-term effects of alcohol

Alcohol use can also lead to more lasting concerns that extend beyond your own mood and health.

Some long-term effects of frequently drinking alcohol can include:

persistent changes in mood, including anxiety and irritability

insomnia and other sleep concerns

a weakened immune system, meaning you might get sick more often

changes in libido and sexual function

changes in appetite and weight

problems with memory and concentration

difficulty focusing on tasks

increased tension and conflict in romantic and family relationships



Alcohol's physical effects on the body

Here's a breakdown of alcohol's effects on your internal organs and body processes.

Digestive and endocrine glands

Drinking too much alcohol over time may cause inflammation of the pancreas, resulting in pancreatitis. Pancreatitis can activate the release of pancreatic digestive enzymes and cause abdominal pain.

Pancreatitis can become a long-term condition and cause serious complications.

Inflammatory damage

Your liver helps break down and remove toxins and harmful substances (including alcohol) from your body.

Long-term alcohol use interferes with this process. It also increases your risk for alcohol-related liver disease and chronic liver inflammation:

Alcohol-related liver disease is a potentially life threatening condition that leads to toxins and waste buildup in your body.

Chronic liver inflammation can cause scarring, or cirrhosis. When scar tissue forms, it may permanently damage your liver.

Sugar levels

The pancreas helps regulate how your body uses insulin and responds to glucose. If your pancreas and liver don't function properly due to pancreatitis or liver disease, you could experience low blood sugar, or hypoglycemia.

A damaged pancreas can also prevent your body from producing enough insulin to use sugar. This can lead to hyperglycemia, or too much sugar in the blood.

If your body can't manage and balance your blood sugar levels, you may experience greater complications and side effects related to diabetes.

Experts recommend avoiding excessive amounts of alcohol if you have diabetes or hypoglycemia.

Central nervous system

One major way to recognize alcohol's impact on your body? Understanding how it affects your central nervous system.

Slurred speech, a key sign of intoxication, happens because alcohol reduces communication between your brain and body. This makes speech and coordination — think reaction time and balance — more difficult. That's one major reason why you should never drive after drinking.

Over time, alcohol can cause damage to your central nervous system. You might notice numbness and tingling in your feet and hands.



Drinking can also affect your ability to:

create long-term memories

think clearly

make rational choices

regulate your emotions

Over time, drinking can also damage your frontal lobe, the part of the brain responsible for executive functions, like abstract reasoning, decision making, social behavior, and performance.

Chronic heavy drinking can also cause permanent brain damage, including Wernicke-Korsakoff syndrome, a brain disorder that affects memory.

Digestive system

The connection between alcohol consumption and your digestive system might not seem immediately clear. The side effects often only appear after the damage has happened. Continuing to drink can worsen these symptoms.

Drinking can damage the tissues in your digestive tract, preventing your intestines from digesting food and absorbing nutrients and vitamins properly. In time, this damage can cause malnutrition.

Heavy drinking can also lead to:

gas

bloating

feeling of fullness in your abdomen

ulcers or hemorrhoids (due to dehydration and constipation)

Ulcers can cause dangerous internal bleeding, which can sometimes be fatal without prompt diagnosis and treatment.

Circulatory system

Chronic drinking can affect your heart and lungs, raising your risk of developing heart-related health issues.

Circulatory system complications include:

high blood pressure

difficulty pumping blood through the body

heart attack

heart disease

heart failure

Difficulty absorbing vitamins and minerals from food can cause fatigue and anemia, a condition where you have a low red blood cell count.

Sexual and reproductive health



Drinking alcohol can lower your inhibitions, so you might assume alcohol can ramp up your fun in the bedroom.

In reality, though, heavy drinking can:

prevent sex hormone production

lower your libido

keep you from getting or maintaining an erection

make it difficult to achieve orgasm

Excessive drinking may affect your menstrual cycle and potentially increase your risk for infertility.

Alcohol use during pregnancy

No amount of alcohol is considered safe for pregnant people.

That's because drinking during pregnancy doesn't just affect your health. It can lead to miscarriage, stillbirth, or premature delivery.

Children exposed to alcohol in the womb may experience a range of complications after birth, including:

learning difficulties

increased emotional problems

developmental concerns

Long-term alcohol use can affect bone density, leading to thinner bones and increasing your risk of fractures if you fall. Weakened bones may also heal slower.

Drinking alcohol can also lead to muscle weakness, cramping, and eventually atrophy.

Immune system

Drinking heavily reduces your body's natural immune system. A weakened immune system has a harder time protecting you from germs and viruses.

People who drink heavily over a long period of time are also more likely to develop pneumonia or tuberculosis than the general population. The World Health Organization (WHO) links about 8.1 percent of all tuberculosis cases worldwide to alcohol consumption.

Drinking alcohol can also factor into your cancer risk:

Frequent drinking can increase your risk of developing mouth, throat, breast, esophagus, colon, or liver cancer.

Drinking and using tobacco together can further increase your risk of developing mouth or throat cancer.

Psychological effects

Long-term alcohol use can lead to changes in your brain that can affect your:



memory and concentration

impulse control

emotions, mood, and personality

Regular drinking can also affect overall mental health and well-being, in part because alcohol may worsen symptoms of certain mental health conditions, including anxiety, depression, and bipolar disorder.

You might also notice feelings of anxiety with a hangover.

Alcohol-induced mental health conditions

Alcohol use can factor into mental health symptoms that closely resemble those of other mental health conditions.

The latest edition of The Diagnostic and Statistical Manual of Mental Disorders (DSM-5), which mental health professionals use to diagnose mental health conditions, includes diagnostic criteria for:

alcohol-induced bipolar disorder

alcohol-induced psychotic disorder

alcohol-induced depressive disorder

alcohol-induced anxiety disorder

With these conditions, you'll only notice symptoms during alcohol intoxication or withdrawal. These symptoms typically improve quickly when alcohol use stops.

Dependence

Some people who drink eventually develop a tolerance to alcohol. As a result, they eventually need to drink more to notice the same effects they once did.

Drinking alcohol on a regular basis can also lead to dependence, which means your body and brain have grown used to alcohol's effects.

When you stop drinking, you might notice a range of physical, emotional, or mental health symptoms that ease as soon as you have a drink.

Tolerance and dependence can both happen as symptoms of alcohol use disorder, a mental health condition previously referred to as alcoholism, that happens when your body becomes dependent on alcohol. This condition can be mild, moderate, or severe, depending on the number of symptoms you have.

Key symptoms may include:

cravings

drinking more over time

inability to stop drinking when you try

continuing to drink alcohol even when it has a negative impact on your health or daily life

spending a lot of time on activities related to alcohol use

Learn more about the signs of alcohol use disorder.

Alcohol withdrawal

Alcohol withdrawal can be difficult and, in some cases, life threatening.

Depending on how often you drink and how much, you may need support from a healthcare professional if you want to stop drinking.

It's always best to connect with your doctor before quitting alcohol. The "cold turkey" approach might not always be safe.

Symptoms of alcohol withdrawal include:

anxiety

nausea

high blood pressure

irregular heartbeat

heavy sweating

Seizures, hallucinations, and delirium may occur in severe cases of withdrawal.

Medical detoxification can help you stop drinking safely. Your doctor may recommend treatment at a clinic or at home, depending on your risk for withdrawal symptoms.

Risk factors for alcohol use disorder

Certain factors may increase your chances of experiencing alcohol use disorder.

Some of these include:

heavy drinking

binge drinking

ongoing stress

having peers or family members who drink a lot of alcohol

having genes that affect your sensitivity to alcohol

having anxiety, depression, schizophrenia, or another mental health condition

having a close relative, especially a parent, with the condition

Finding treatment for alcohol use disorder

Thinking about cutting back on alcohol or quitting drinking completely?

You have plenty of options for support and treatment:

free recovery support groups, like Alcoholics Anonymous or SMART Recovery

online recovery platforms, like Tempest

therapy to help address reasons for drinking and learn helpful coping skills

medical treatment to address symptoms of alcohol use disorder and any related health concerns



medications that can help reduce cravings

Looking for mental health support near you? Here's how to find a therapist.

The Substance Abuse and Mental Health Services Administration offers a free helpline, available 24/7. Call 800-662-HELP (4357) or TTY 1-800-487-4889 to get guidance on local options for support and treatment.

Alcohol safety tips

There's no entirely safe way to consume alcohol, but if you choose to drink, these tips can help reduce some risks:

Make sure you eat. Avoid drinking on an empty stomach to avoid becoming intoxicated too fast.

Drink plenty of water. For every standard drink you consume, aim to have a glass of water.

Don't go too fast. Drink slowly to give your body plenty of time to process the alcohol. Your liver can process about 1 ounce of alcohol every hour.

Don't mix with other substances. Mixing alcohol with caffeine can hide the depressant effects of alcohol, making you drink more than you might otherwise.

Drinking coffee to "sober up" may make you feel more awake, but it may also make you more inclined to make the mistake of trying to drive while under the influence. Combining alcohol with other drugs can also have adverse effects.

Don't drink and drive. Never drive while intoxicated. Even if you feel like you've sobered up, you may still have alcohol in your system that can affect your reaction time.

