SYMPTOM

Smelly urine

Smelly urine is urine with an unusually strong or different odor.

WHAT IT FEELS LIKE
Urine smells stronger or different than usual

WHERE IT IS FELT
Urine passed from the bladder

MOST COMMON CAUSES
Concentrated urine, certain foods, vitamins or medicines

WHEN IT IS URGENT
Fever, back pain, vomiting, confusion, or pregnancy with urinary symptoms

USUALLY LASTS
Hours to days after food or dehydration; longer with illness

SEE A DOCTOR IF
Persistent unexplained odor or pain, burning, or frequent urination

Overview

Urine naturally has an odor, and that odor can change from day to day. Smelly urine often happens when urine becomes concentrated because you have not had enough fluid. Foods, drinks, vitamins, and medicines can also change its smell.

Odor alone usually does not mean you have an illness. However, a new smell accompanied by burning, frequent urination, fever, pain, or other symptoms may need medical assessment.

Descriptions such as "sweet," "fishy," or "ammonia-like" are not enough to identify a cause. Different people may describe the same smell differently, so other symptoms and urine testing are often more useful.

What it may feel or look like

You may notice a stronger smell when you urinate or when urine has remained in the toilet or a container. Concentrated urine is often dark yellow and may smell like ammonia.

Other changes can include cloudy urine, blood, or an unusual color. Some causes also produce symptoms such as:

Vaginal discharge, menstrual blood, semen, sweat, or products used around the genitals can sometimes seem like a change in urine odor.

- Burning or stinging when urinating
- Needing to urinate more often or urgently
- Lower abdominal discomfort
- Pain in the side or back
- Increased thirst or passing unusually large amounts of urine

Common causes

Common causes

Not drinking enough fluid makes urine more concentrated and stronger smelling. This can happen after exercise, during hot weather, after vomiting or diarrhea, or first thing in the morning.

Asparagus, coffee, garlic, and some strongly flavored foods may temporarily change urine odor. Vitamins, supplements, and some medicines can do the same.

A urinary tract infection, or UTI, can cause strong-smelling or cloudy urine. It is more likely when odor occurs with burning, frequent or urgent urination, lower abdominal pain, or blood in the urine. Odor alone cannot confirm a UTI.

Less common causes

High blood glucose can cause sweet-smelling urine, increased thirst, tiredness, and frequent urination. Ketones, chemicals produced when the body cannot use glucose normally, may cause a fruity smell.

Kidney stones, difficulty emptying the bladder, or an abnormal connection between the bowel and urinary tract can occasionally affect odor. Liver disease and inherited conditions that change how the body processes certain substances are uncommon causes.

Potentially urgent causes

A kidney infection may cause urinary symptoms along with fever, chills, nausea, vomiting, or pain in the back or side beneath the ribs.

Diabetic ketoacidosis is a dangerous buildup of ketones, usually in someone with diabetes. Symptoms can include vomiting, abdominal pain, deep or rapid breathing, marked thirst, drowsiness, confusion, and fruity-smelling breath.

When to seek medical care

Arrange a routine appointment if the odor lasts for several days despite drinking enough fluid and avoiding a suspected food trigger. You should also book an appointment if it keeps returning or occurs with burning, urgency, frequent urination, unusual discharge, or increased thirst.

Seek same-day medical advice if you have smelly urine with:

Get urgent medical help now if you become confused, are difficult to wake, have trouble breathing, or have symptoms suggesting diabetic ketoacidosis. If you have diabetes, follow your sick-day or ketone-testing plan while arranging help, if you have been given one.

- Fever, chills, or feeling significantly unwell
- Pain in your side or back beneath the ribs
- Vomiting or difficulty keeping fluids down
- Visible blood in your urine
- Urinary symptoms during pregnancy

How the cause is found

A healthcare professional may ask when the odor began, how much you drink, and whether you recently changed your diet, vitamins, supplements, or medicines. Mention pain, fever, discharge, thirst, changes in urination, and any possibility of pregnancy.

A urine sample may be checked for blood, white blood cells, glucose, ketones, and other changes. A urine culture can look for bacteria if infection is suspected.

Depending on your symptoms, you may need blood glucose testing, kidney or liver blood tests, a pregnancy test, or imaging such as an ultrasound. These tests are not needed for every episode.

Treatment and self-care

If you may be mildly dehydrated, drink regularly until your urine is a pale yellow. Do not increase fluids beyond your medical plan if you have been told to limit them because of heart, kidney, or another condition.

Think about recent foods, supplements, and medicines. Do not stop prescribed medicine

without advice, but ask a pharmacist or prescriber whether it could affect urine odor.

Wash the external genital area gently with water or an unscented cleanser. Avoid douches, deodorant sprays, and strongly perfumed products, which can irritate sensitive skin and may hide rather than solve the problem.

A bacterial UTI may need antibiotics like amoxicillin or doxycycline after assessment. Other treatment depends on the cause. Do not use leftover antibiotics or someone else's medicine.

What to expect

Odor caused by food or concentrated urine often improves within hours to a few days after the trigger passes or hydration improves.

If an infection or another medical condition is responsible, the smell usually settles as that condition is treated. Return for medical advice if symptoms worsen, do not improve as expected, or come back repeatedly.

Common questions

Does smelly urine always mean a UTI?

No. Dehydration, food, vitamins, and medicines are common explanations. A UTI is more likely if you also have burning, urgency, frequent urination, cloudy urine, pain, or fever.

Can urine smell sweet?

Sweet-smelling urine can occur when glucose or ketones are present. If it is persistent, especially with thirst, frequent urination, weight loss, vomiting, or drowsiness, seek medical advice.

Why does urine smell stronger in the morning?

You usually drink less overnight, so urine becomes more concentrated. A strong morning smell that improves after drinking and causes no other symptoms is often not concerning.

Can asparagus really change urine odor?

Yes. The body breaks down asparagus into sulfur-containing substances that can produce a distinctive smell. Some people notice it more than others.

Sources

- NHS: Smelly urine - common causes, self-care, and signs requiring medical advice
- MedlinePlus Medical Encyclopedia: Urine odor - food, medicine, infection, and metabolic causes of urine odor
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- National Institute of Diabetes and Digestive and Kidney Diseases: Diagnosis of bladder infection in adults - urine testing and clinical assessment
- NHS: Diabetic ketoacidosis - symptoms and emergency advice for diabetic ketoacidosis