SYMPTOM

Urine odor

Urine odor is a noticeable change in how your urine smells.

WHAT IT FEELS LIKE
Urine smells stronger, unusual, sweet, or unpleasant

WHERE IT IS FELT
The nose during or soon after urination

MOST COMMON CAUSES
Dehydration, asparagus or coffee, vitamins and medicines

WHEN IT IS URGENT
Fever with side or back pain, or repeated vomiting

USUALLY LASTS
Hours to days, based on hydration, food, or illness

SEE A DOCTOR IF
Odor persists despite hydration or comes with urinary symptoms

Overview

Urine normally has a mild smell. Its odor may become stronger or different because of how concentrated it is, something you ate, a medicine, or an illness.

An odor change by itself is often temporary. It does not confirm a urinary tract infection, diabetes, or another diagnosis. Other symptoms, how long the change lasts, and test results matter more.

The smell may not always come from the urine. Vaginal discharge, sweat, underwear, the toilet, or urine left standing can affect what you notice.

What it may feel or look like

Urine odor is something you smell rather than feel. You may notice it while passing urine, on clothing, or when entering the bathroom.

The odor may be described as:

Concentrated urine is often darker yellow as well as stronger smelling. Cloudy urine can occur with dehydration, harmless crystals, or an infection, so appearance alone cannot identify the

cause.

Pay attention to symptoms such as pain or burning when urinating, needing to urinate more often, lower abdominal discomfort, fever, unusual discharge, blood in the urine, or pain in your side or back.

- Strong or ammonia-like
- Unpleasant or foul
- Sweet or fruity
- Similar to a recently eaten food

Common causes

Not drinking enough fluid. When you are dehydrated, your kidneys conserve water. This makes urine more concentrated and can produce a strong, ammonia-like odor. Thirst, a dry mouth, or dark yellow urine may occur too.

Food and drinks. Asparagus is well known for causing a sulfur-like smell. Coffee, some spices, and other strongly flavored foods may also change urine odor. Not everyone notices these changes because the body processes odor-producing substances differently.

Vitamins and medicines. Some supplements, especially B vitamins, and certain medicines can change urine odor. Check the information supplied with your product, and do not stop prescribed medicine solely because of an odor change.

Urinary tract infection. A bladder infection may cause strong-smelling urine, but odor alone is not enough to diagnose one. Burning, frequent or urgent urination, lower abdominal pain, or cloudy or bloody urine make an infection more likely.

A vaginal source. Vaginal discharge or an imbalance of vaginal bacteria can cause an odor that seems to come from urine. This may be more likely if there is discharge, itching, irritation, or an odor that remains between trips to the bathroom.

Less commonly, sweet-smelling urine may occur when glucose or ketones enter the urine. This can happen with poorly controlled diabetes. Kidney stones or problems that prevent the bladder from emptying may also contribute to infection and odor.

Rare inherited conditions can give urine a distinctive smell. These usually begin in infancy or childhood and cause other symptoms. An unusual odor in a baby who is feeding poorly, vomiting, or unusually sleepy needs prompt medical assessment.

When to seek medical care

Arrange a routine appointment if the odor keeps returning, does not improve after hydration and avoiding likely food triggers, or occurs with:

If you are pregnant and develop possible urinary infection symptoms, contact your maternity team or clinician promptly. Urinary infections during pregnancy need timely assessment.

Seek same-day medical care for fever with pain in your side or back, chills, or repeated vomiting. These symptoms can occur when an infection involves a kidney.

Go to an emergency department or call emergency services if you have confusion, fainting, severe difficulty breathing, or extreme drowsiness. If you have diabetes, fruity-smelling breath or urine together with vomiting, abdominal pain, or deep, rapid breathing can be a sign of diabetic ketoacidosis, a serious buildup of acids called ketones.

- Burning, pain, urgency, or frequent urination
- Vaginal or penile discharge
- Blood in the urine
- Unexplained thirst, frequent urination, or weight loss
- Difficulty emptying your bladder

How the cause is found

A clinician may ask when the odor began and whether it changes with food, drinks, medicines, or hydration. Mention urinary pain, fever, discharge, pregnancy, diabetes, recent sexual exposure, or trouble emptying your bladder.

A urine sample may be tested for blood, white blood cells, glucose, ketones, and signs of bacteria. A urine culture may be used when an infection is suspected; it checks whether bacteria grow and can help guide treatment.

Depending on your symptoms, you may be offered a blood glucose test, pregnancy test, examination, or testing for vaginal infections or sexually transmitted infections. Imaging is not usually needed for an isolated odor change, but it may be considered for stones, blockage, or repeated infections.

Treatment and self-care

Treatment depends on the cause. For a short-lived odor without other symptoms, simple steps

may be enough.

Drink fluids regularly so that your urine becomes pale yellow. Avoid forcing large amounts of water. If you have been told to limit fluids because of a heart, kidney, or liver condition, follow that advice instead.

Think about foods, drinks, vitamins, or medicines used during the previous day. If a non-essential food appears responsible, avoiding it briefly can help confirm the link.

Wash the outside genital area gently and change damp clothing. Avoid scented washes, vaginal douches, and deodorizing products, which can irritate sensitive tissue and may hide an important symptom.

A bacterial urinary infection may require antibiotics like amoxicillin or doxycycline after assessment. Do not use leftover antibiotics or someone else's prescription. Diabetes, stones, vaginal conditions, and bladder-emptying problems each need treatment directed at their cause.

What to expect

Odor caused by concentrated urine, food, or a supplement often improves within hours to a couple of days once the trigger passes. It may return whenever you have the same food or become dehydrated.

An infection-related odor should improve as the infection is treated, although smell is not a reliable way to judge whether treatment worked. Contact your clinician if symptoms worsen, return, or do not improve as expected.

Persistent odor is often treatable, but it may take more than one test to separate urinary causes from vaginal, dietary, or metabolic causes.

Common questions

Does strong-smelling urine always mean a urinary infection?

No. Dehydration, food, vitamins, and medicines are common explanations. An infection is more likely when odor occurs with burning, frequent urination, pain, fever, or blood in the urine.

Why does asparagus change urine odor?

Digestion breaks asparagus compounds into sulfur-containing chemicals that leave the body in urine. Some people produce more of these chemicals, while others are less able to smell them.

Can pregnancy change urine odor?

Pregnancy can make your sense of smell more sensitive. Vitamins, dehydration, and urinary infections may also change the odor. Report urinary pain, fever, or frequent urination promptly during pregnancy.

Can a sexually transmitted infection cause this symptom?

Some infections cause urethral or genital discharge that may alter the smell noticed during urination. Consider testing if you have discharge, genital pain, sores, bleeding, or a possible sexual exposure.

Sources

- MedlinePlus Medical Encyclopedia: Urine odor , U.S. National Library of Medicine
- NHS: Smelly urine , National Health Service
- NIDDK: Bladder Infection in Adults , National Institute of Diabetes and Digestive and Kidney Diseases
- CDC: Diabetic Ketoacidosis , Centers for Disease Control and Prevention
- NHS: Dehydration , National Health Service