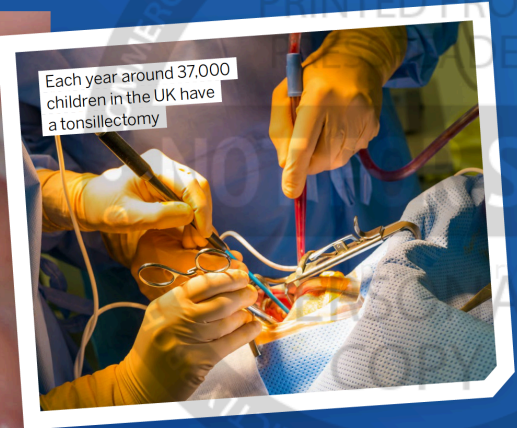


- Lymphatic system

SCIENCE



WHAT ARE YOUR TONSILS FOR?

You might not pay them much attention until you get sick, but these lymph nodes at the back of the mouth can shield you from illness

WORDS AILSA HARVEY

If you stand in front of a mirror and open your mouth wide, at the back of your throat you should be able to see two pink lumps of tissue poking out from the flesh at the sides. These are your tonsils, which are vital tools of the immune system. Tonsils work to defend the body from infection by trapping, detecting and fighting bacteria, viruses and other harmful intruders. The trapping of these infection-causing cells is assisted by the structure of the organs, as they are covered in crevices called crypts. When bacteria and viruses enter the mouth or nose, they are likely to come into contact with the tonsils.

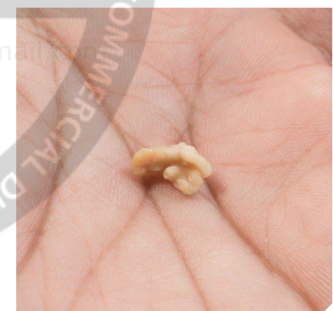
Immune cells called lymphocytes are activated in the tonsils, launching an attack before an infection can take hold. When the

tonsils fail to destroy the bacteria or viruses they come into contact with before they can multiply, the tonsils become red and inflamed with infection. This infection is called tonsillitis and causes a sore throat, difficulty swallowing and swollen glands in the neck. Sometimes you can see white specks on the tonsils. This is a sign that the tonsils are fighting back. The white spots are usually pus that has accumulated as white blood cells undergo their immune response. Some people are much more prone to tonsillitis than others, and if the infection is serious enough, it's possible to remove the tonsils in a procedure called a tonsillectomy. Doctors will only suggest this surgery if they believe the tonsils are creating more infections in the body than they are reducing.

Did you know?
Swollen tonsils can cause snoring

PRODUCING STONES

When food, mucus and dead cells get trapped around the tonsils, calcium from saliva in the mouth can be deposited and hardens around it. This calcification of the debris is what produces tonsil stones. Usually, these aren't much larger than a grain of rice, but in some instances they can grow to the size of a grape and can obstruct breathing or eating. These stones are quite common, but if they're a relatively rare occurrence in an individual they don't pose much risk to health. However, they can have a strong smell and aren't the most pleasant items to discover in your mouth. To prevent lingering debris around the tonsils, make sure you stay hydrated, gargle water and mouthwash and brush your teeth regularly. However, this doesn't completely eliminate the possibility of finding these stones. Some people are simply more prone to producing them, even with exceptional oral hygiene.



Tonsil stones usually fall out themselves without needing treatment

DID YOU KNOW? Tonsils in adults grow to be about 2.5 centimetres long, 2.1 centimetres wide and 1.2 centimetres thick

TONSIL ANATOMY

Take a look behind the tongue to explore your tonsils' structure

1 LINGUAL TONSILS

These tonsils at the base of the tongue contain white blood cells that are activated when harmful bacteria arise.

2 PALATINE TONSILS

Palatine tonsils are the ones most people know about, which noticeably swell when you have tonsillitis. It is this type that can be fully removed during a tonsillectomy.

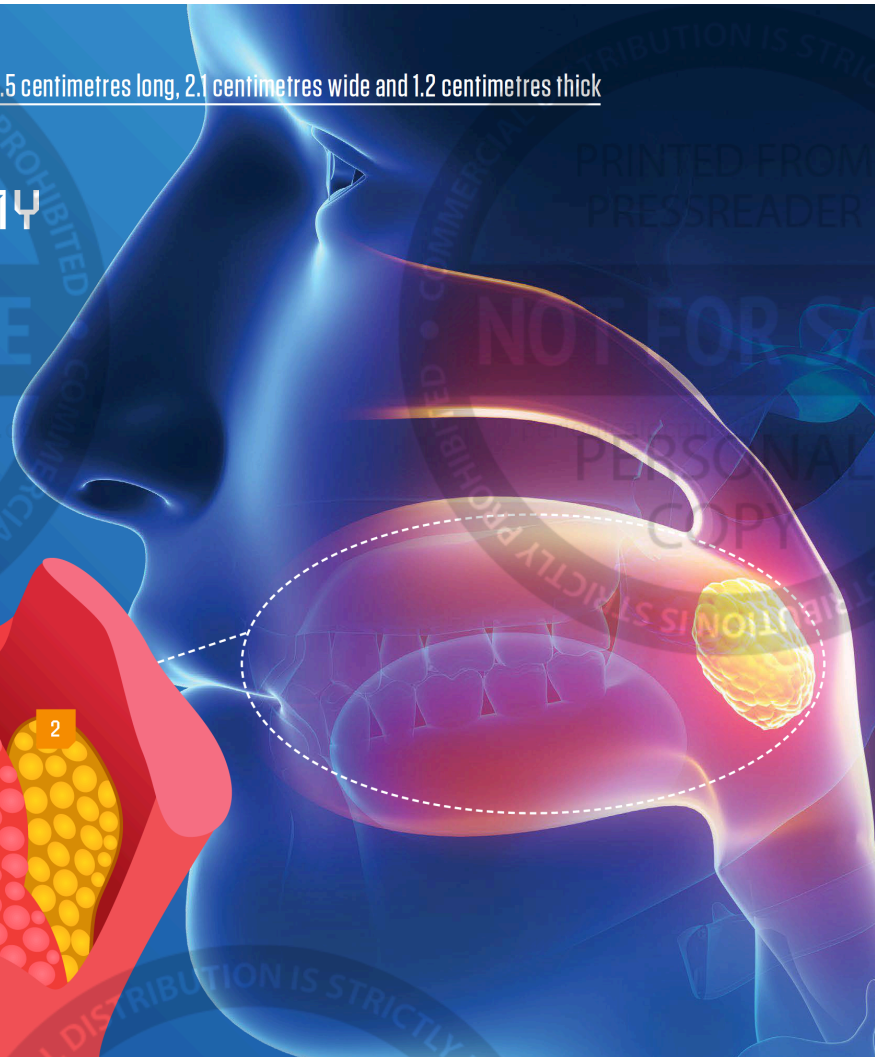


3 EPIGLOTTIS

This elastic cartilage assists in swallowing food. Being in a similar position to the tonsils, inflammation of this tissue causes similar pain to tonsillitis.

4 PHARYNGEAL TONSIL

This tonsil is located in the top part of your throat, called the pharynx. It releases lymph fluid to flush away infections.



5 FACTS

REASONS FOR A TONSILLECTOMY

1 ENLARGED TONSILS

After numerous infections, tonsils can swell in size. This can make it difficult to breathe during the day and night. When sleeping, enlarged tonsils can cause sleep apnea and snoring.

2 RETURNING INFECTION

Tonsil removal may be recommended to a patient who suffers from recurrent and severe throat infections – if tonsillitis significantly impacts their life and they suffer from it at least seven times a year.

3 PERSISTENT TONSILLITIS

Also called chronic tonsillitis, this form of the infection is more severe and difficult to treat, causing tonsil stones. It can be prevented by performing a tonsillectomy.

4 BAD BREATH

Some people suffer from halitosis, a condition caused by debris building up in the tonsils' crevices. One main symptom is bad-smelling breath, which can cause insecurities in daily life.

5 ABSCESS ISSUES

People who experience regular abscesses of the tonsils can get their tonsils removed. Pus builds up near the tonsils and can make the area more of a threat to the body.