

- Curiosities and wonders


SCIENCE

FOOD FACTS OR CULINARY CANARD?

The truth behind how food impacts our health

HONEY IS BETTER FOR YOU THAN SUGAR

MYTH Because of its natural appearance, honey is often touted as a healthy alternative to sugar. Both are carbohydrates that contain monosaccharides, also known as simple sugars, glucose and fructose. However, one isn't necessarily better for you than the other. Honey does have a slightly lower glycemic index than sugar. A glycemic index score relates to how quickly a certain food releases glucose into the blood. The higher the score, the faster the glucose release, but also the faster the 'sugar crash'. As a source of energy, glucose that's released gradually over time can help prevent a sudden crash in energy. There are several health benefits that honey can provide which sugar cannot, including being a source of vitamin B. In 2021, researchers uncovered how its antimicrobial properties can be used to help improve the symptoms of respiratory tract infections.



TURMERIC IS A NATURAL ANTI-INFLAMMATORY

FACT Inflammation is part of the body's natural immune response when it's infected by bacteria or when it's damaged, such as by a cut or impact. The response typically causes swelling, bruising and redness. However, some chronic conditions – such as rheumatoid arthritis – develop when this natural process goes awry and the body is attacked by its own immune system.

Turmeric contains an active ingredient called curcumin with anti-inflammatory properties. During periods of inflammation,

curcumin can block some of the inflammatory immune cells, such as cytokines and enzymes, thereby reducing the severity of the swelling. Like many herbal remedies, using turmeric isn't without side effects. Taking turmeric supplements, for example, can increase the risk of kidney stones, and large doses of the powdered root can lead to stomach irritation and other digestive issues. Consulting with a medical professional is advised before seeking out turmeric's anti-inflammatory abilities.



CARROTS CAN IMPROVE EYESIGHT

FACT Eating carrots can indeed help improve your eyesight thanks to a form of vitamin A called retinol. For decades, many have contemplated the merits of eating these orange vegetables. During World War II, the British military revealed to the press that its pilots were eating large amounts of carrots to improve their 'night sight', in a bid to convince German forces that the Royal Air Force was downing enemy planes with superior sight rather than a new top-secret technology: radar. However, carrots don't improve your night vision. What they can do is supply the body with retinol for the synthesis of a vital protein for vision called rhodopsin. Found in the rod photoreceptor cells within the eye,

rhodopsin converts light into an electrical signal that the brain interprets as sight. While eating carrots won't give you extra night vision, it will help maintain optimal optical health. If your vision is waning due to a lack of vitamin A, carrots can give your eyesight a boost.



DID YOU KNOW? Hot chillies can reduce the risk of cardiovascular disease



SPICY FOOD GIVES YOU STOMACH ULCERS

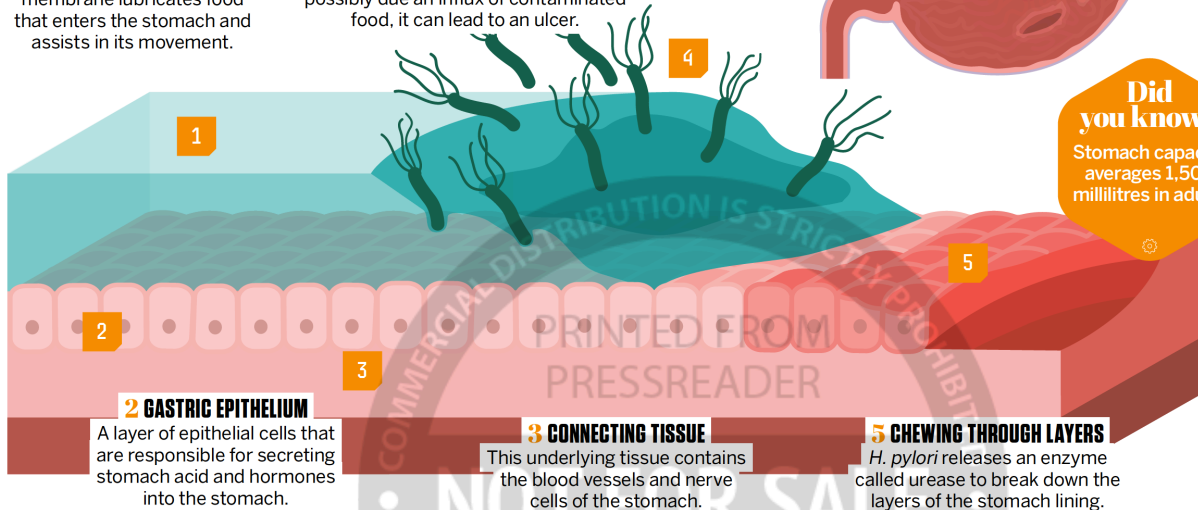
MYTH Spicy food is often blamed for the development of a sore stomach, despite this misconception being debunked in the 1980s. Stomach ulcers are open sores in the lining of the stomach caused primarily by bacteria called *Helicobacter pylori*, found in contaminated water and food. When ingested, it can damage the lining of the stomach and small intestine, creating an ulcer. Around ten per cent of people who ingest the bacteria develop an ulcer. Another common way people develop stomach ulcers is through the use of nonsteroidal anti-inflammatory drugs, which are over-the-counter medicines used to treat pain, such as aspirin and ibuprofen. Incorrect use of these medications can lead to damage to the mucus barrier of the stomach and the development of ulcers. Spicy food, however, has been found to have no such effect on the stomach and the creation of ulcers.

WHAT IS AN ULCER?

How these sores form within the stomach

1 MUCUS LAYER
Also known as gastric mucosa, this layer of mucus membrane lubricates food that enters the stomach and assists in its movement.

4 HELICOBACTER PYLORI
This bacteria is common in the gut. When its population becomes too high, possibly due an influx of contaminated food, it can lead to an ulcer.

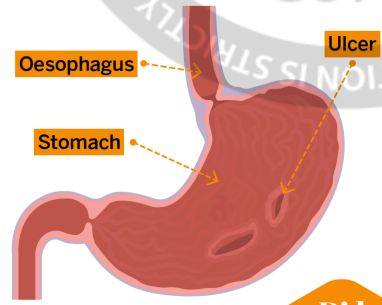


2 GASTRIC EPITHELIUM
A layer of epithelial cells that are responsible for secreting stomach acid and hormones into the stomach.

3 CONNECTING TISSUE
This underlying tissue contains the blood vessels and nerve cells of the stomach.

5 CHEWING THROUGH LAYERS
H. pylori releases an enzyme called urease to break down the layers of the stomach lining.

Did you know?
Stomach capacity averages 1,500 millilitres in adults



TURKEY MAKES YOU DROWSY

FACT+MYTH Nodding off on the sofa after a hearty turkey dinner is a common occurrence. But is the bird really to blame? Turkey meat is packed with an amino acid called tryptophan that triggers a chain reaction of hormone production, including melatonin, the sleep hormone. On its own, turkey's tryptophan isn't enough to cause its consumer to drift off. However, coupled with copious amounts of the accompanying carbohydrates and vegetables, which also contain tryptophan, people can experience something known as postprandial somnolence – more commonly referred to as a 'food coma'. There are also several other explanations as to why you might feel tired after eating a large turkey dinner, including a rapid increase in blood sugar causing sudden energy drops.



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