

Housecalls

Q

Are bee stings good for arthritis?

A. Maybe, if the arthritis sufferer is a dog. But most medical specialists warn humans against trying bee-venom therapy, calling it unproven and potentially dangerous.

Proponents say honeybee stings have been used to relieve arthritic pain and shrink swollen joints since the time of Hippocrates. And in recent years, there's been some research to support the practice. During the 1970s, for instance, researchers found that arthritic dogs were willing to walk longer distances after treatment with bee venom.

There's also a theoretical basis for thinking that bee stings could have some effect, at least in rheumatoid (inflammatory) arthritis. This disorder is thought to result from an attack on the joints launched by the body's own immune system. Arthritis researchers have found that bee venom triggers the release of a number of anti-inflammatory substances that might short-circuit this autoimmune process.

It's easy to find people who believe that bee stings have helped their arthritis. One leading proponent has been giving free bee-sting treatments for 60 years to as many as ten people a day. His clients are stung up to 50 times at each visit.

But the therapy doesn't impress arthritis specialists. For one thing, rheumatoid arthritis is relatively rare compared to other types of arthritis; the much more common osteoarthritis isn't believed to involve inflammation, so bee stings shouldn't affect that condition at all. And there's no convincing evidence that bee stings help rheumatoid arthritis sufferers, either. The good results some people have experienced could well be due to the placebo effect or to the normal ups and downs of the disorder, which are known to occur even without treatment.

What really worries researchers, though, is the risk that repeated stings might trigger an allergy to bee venom. If that happens, a subsequent sting could be dangerous—even deadly.



Q

Can you really catch anything from a toilet seat?

A. You *can't* catch the sexually transmitted diseases that generate motherly consternation about public rest rooms. The bacteria that cause syphilis and gonorrhea and the viruses that cause AIDS and genital herpes are so delicate that they die within seconds once outside the human body. Nevertheless, Mom is right in her belief that an unsanitary toilet seat has its hazards.

The key word is *unsanitary*, since not everyone is as fastidious as we'd like. Urine is generally free of germs, but fecal matter hosts plenty of bacteria and viruses that can survive for several hours, as long as they stay moist. Some of these microbes can be dangerous. The bacteria called *Salmonella typhi*, for instance, causes typhoid fever, a disease whose consequences can include intestinal hemorrhage and death. *Vibrio cholerae* causes cholera, and the hepatitis A virus produces liver inflammation. Other viruses present in feces can cause the less serious bouts of cramping and diarrhea that sufferers mistakenly call stomach flu.

Although these bacteria and viruses can't make their way through intact skin, they can infect a cut or open sore—a good argument for using disposable toilet seat covers. But the most common mode of transmission is when someone's soiled hands later touch food or mouth. Mom was right about this, too: You should always wash your hands after using the toilet.

Q

Are there more tastes than sweet, sour, salty, and bitter?

A

It's long been taken as gospel that the tongue registers just four tastes. But more and more researchers these days call the notion absurd. There are definitely more than four tastes, they say, although how many is still unknown.

Taste is just one part of what scientists call flavor—that is, the total impression made by food placed in the mouth. A pure taste is transmitted by the nerves of the mouth and tongue straight to the brain. In contrast, flavor also involves aromas, which travel up the back of the throat to the olfactory receptors in the nose, and tactile “feeling factors,” like spiciness or pungency.

It was a book published in Germany early this century that turned the four tastes into dogma. Author Hans Henning likened taste to a tetrahedron, that pyramid-like structure with four corners. Each corner represented a basic taste, he said; every other flavor had its spot between the tastes that combine to create it. Although Henning's book was more philosophy than science, his idea of four tastes stuck in the popular imagination.

But food researchers have always had their doubts, and studies bear them out. For one thing, potassium chloride, commonly used in salt substitute, is a pure taste: It travels straight from the tongue to the brain. Researchers describe its taste as mineral and somewhat salty and bitter. And the taste called *umami* has long been noted in the literature of Japan. *Umami* means “a deliciousness” and it is the taste of monosodium glutamate, which is present in abundance in the kelp that is frequently used in Japanese cooking. It, too, appears to be a pure taste.

To get a sense of *umami*'s unique quality, try a little MSG in water. The compound is sold in Asian markets as Aji-no-moto—and in every other market as Ac'cent. ■

Send questions to Housecalls, 301 Howard Street, Suite 1800, San Francisco, CA 94105.