# **TOOTHPASTE 101**

By Donna Paris

The possibilities are endless when you're choosing a toothpaste. Gels and pastes, whitening, fluoride free, good for sensitive teeth — the list goes on. Here's what our experts have to say

hoosing a toothpaste today can be overwhelming. It's not just a squeeze tube of white paste that's available now. There's a plethora of options, including minty gels, dentifrice for sensitive teeth or whitening effects, fluoride-free or even gum-detoxifying toothpastes!

So, how do you decide which is best for your oral health? The best place to start is the dental office, by asking your dentist. "Finding a toothpaste depends on exactly what it is you are trying to achieve — your goal," says Dr. Kim Hansen, an ODA Past-President, who maintains a dental practice in Prescott, Ont. "I go on a patient-by-patient basis as part of a checkup."

Let's take a look at why we brush to begin with. "For cleaning and removing plaque and food particles, the most important tools in the toolbox are the toothbrush and dental floss; the type of toothpaste is secondary," says Dr. David Stevenson, an Ontario Dental Association (ODA) Past-President, who maintains a dental practice in Carleton Place, Ont., near Ottawa. "Toothpastes do contain detergents and foaming agents to help, but there is very little evidence to determine a difference between them all in effectiveness." Toothpaste manufacturers make many claims, he adds, "but as consumers, we need to understand how effective a toothpaste is in actually achieving those claims."



But if the main reason to brush our teeth is to prevent cavities, then toothpaste does make a difference. For Dr. Stevenson, this part is a no-brainer. "You absolutely need a toothpaste with fluoride – period," he stresses. And "fluoride has been proven to be the most effective at doing the job." Ingredients like xylitol or triclosan help, he adds, "but they don't replace the benefits of fluoride, which are both immediate at the time of brushing and long-lasting in helping to repair the enamel." Toothpaste manufacturers realize this, too, he adds. "In my experience, toothpastes, including natural products, will not make the claim of 'cavity fighting' or 'anti-cavity' unless they contain fluoride – kudos to them." In fact, a toothpaste that Dr. Stevenson can champion is one for sensitive teeth. "Toothpastes containing ingredients to prevent sensitivity are quite effective in cases of mild sensitivity," he says. However, it's a good idea to speak to your dentist if you have sensitive teeth, so you can get to the root of the problem, adds Dr. Hansen. This way, the cause can be identified, and you can work together to find solutions to decrease or eliminate the problem.



And sometimes, choosing a toothpaste is just a matter of preference. "You get toothpastes that come in pastes, and ones that come in gels," says Dr. Hansen. "Take the gel: sometimes patients don't feel they get the same level of clean with a gel, but some like the 'feel' of a gel." Likewise, toothpastes that foam up quite a bit and get very bubbly, for example, aren't great for someone who gags easily, he adds.

"With some patients, you might suggest they have two different toothpastes, depending on their needs," says Dr. Hansen. Perhaps one with mouthwash if you're going out for the evening, and one for sensitive teeth, for instance. "Remineralizing toothpastes are used when you have breakdown of the enamel, and the use of these pastes is to help reverse the breakdown and avoid restorations to those surfaces," says Dr. Hansen. This includes people undergoing orthodontics, those on medications that cause gingival enlargement, those who have less-than-ideal oral hygiene and consume soft drinks and energy drinks that are highly acidic and soften the tooth structure. "If the breakdown has passed the irreversible stage, it may be that a restoration is required to eliminate the sensitivity," he says.

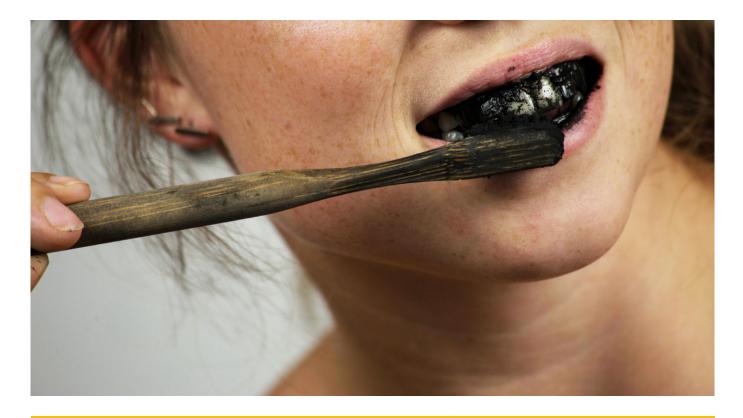
"For young children, an amount equal to the size of a grain of rice is all you need, and for the rest of us, all you need is a pea-sized amount." The kinds of toothpaste that Dr. Stevenson is skeptical about are those that claim to whiten teeth. "Although ingredients like hydrogen peroxide have proven effective at whitening teeth, [it's] not in the concentration found in toothpaste. This is not a false claim, [but] it is also not an effective one."

And beware of toothpastes that can be abrasive. "I don't see baking soda toothpastes used as often anymore. Patients need to evaluate the possible abrasive negative potential that will in the short term remove stains, but in the long term, can remove enamel and dentin, predisposing the tooth to future sensitivity and breakdown," says Dr. Hansen. As for kids, for very young children who insist on swallowing the toothpaste, you might want to avoid ones containing fluoride, as the concentration isn't intended for consumption, clarifies Dr. Stevenson. "But as soon as they're able to spit it out, fluoride will help."

A word of caution, however, about whichever toothpaste you're using: Don't use too much toothpaste. "For young children, an amount equal to the size of a grain of rice is all you need, and for the rest of us, all you need is a pea-sized amount," says Dr. Stevenson. "We are brushing our teeth, not pretending to eat ice cream!"



# What's Up with the Activated-Charcoal Craze?



Originally used in air and water filters, charcoal is everywhere now, from drinks and desserts to detox face masks and (yep!) toothpaste. We asked Dr. Allan Katchky, *Smile's* consulting editor and a dentist who maintains a practice in Scarborough, Ont., for answers to our questions.

## Q: What is the difference between charcoal and activated charcoal?

**A:** Charcoal is the carbon residue that remains after wood or vegetation is burned. Charcoal can be converted to "activated charcoal" by a chemical process called oxygenation. The result is a charcoal that is porous and has much more surface area available to trap or "soak up" other small particles.

#### Q: How did activated charcoal become a trend in toothpaste?

**A:** Activated charcoal has been used for many years in air and water filters. It's also widely known for its use in hospital emergency rooms, to absorb poisons that have been accidentally swallowed. In the last few years, activated charcoal began to appear in skin-care products. From there, it became trendy in a wide range of personal health and beauty products, including toothpastes.

## Q: Can activated charcoal whiten teeth and remove stains? Are there any risks?

**A:** Because activated charcoal is abrasive, it does remove surface stains from teeth, making them appear lighter in colour initially. However, the idea of using an abrasive on teeth day in and day out is probably more risky than it is beneficial. Abrasives leave the enamel rough and more prone to collecting surface stains, and this can cause a "rebound effect," where teeth actually stain more. Also, abrasives are known to increase sensitivity and receding of gums. It's important to note that, to this point, there is no research that proves either the effectiveness or safety of activated-charcoal toothpastes.

#### Q: Can activated charcoal lift away food particles and plaque that lead to bad breath?

**A:** In this case, there may be some benefit to activated charcoal, but, of course, with the risk of using an abrasive on teeth. Personally, I prefer using flossing and saltwater rinsing to eliminate bad breath and keep the mouth healthy.