

SUBMITTED BY DR. KATE C. GILSON

IN THE US, FLUORIDE HAS PLAYED a large part in cavity prevention for decades. However, it's been a source of some controversy lately. Thankfully, there's another mineral that has been performing equally, or even better, in the arena of tooth protection. The name of its competitor is hydroxyapatite. Hydroxyapatite is a mineral that's naturally occurring and an essential component of bone and teeth. It's responsible for giving teeth and bones rigidity. Since it's already a natural part of teeth and bones, we know that it's safe, non-toxic and biocompatible.

Similar to fluoride, hydroxyapatite can help counteract the negative effects on teeth that are caused by acidic food and beverages like sodas, sports drinks, energy drinks, etc. It does this by forming a protective layer on the enamel surface of the teeth. This layer protects the tooth from breaking down (demineralizing) and even helps rebuild enamel that may have already started to demineralize. It may also help reduce sensitivity, plague accumulation, and the buildup of bacteria that could lead to gum disease. Furthermore, there's evidence that it may even help teeth look whiter!

One major difference between fluoride and hydroxyapatite is that hydroxyapatite has the potential to reach down through the entire structure of the tooth and help rebuild it from the inside out. It can reach and benefit areas that fluoride can't. Each time you eat or drink something, the food debris feeds the bacteria in your mouth, producing acid byproducts. This is what starts the process of enamel demineralization. The more acidic your mouth is, the more susceptible it is to both enamel breakdown and gum disease.

While both fluoride and hydroxyapatite help kill bacteria, hydroxyapatite is more selective with which bacteria it chooses to destroy. Fluoride destroys both good and bad bacteria, while hydroxyapatite only binds to the harmful bacteria to help prevent them from settling onto the enamel surfaces of teeth.

Topical fluoride still deserves a place at the table regarding oral health. When used in the proper amounts, it's been helping keep teeth strong and healthy for decades and deserves much credit for that. However, some people choose to avoid fluoride. For those wishing for extra protection without using fluoride in their daily routines, hydroxyapatite is an excellent option.

There are several toothpastes and rinses on the market today that contain hydroxyapatite. Whichever option you choose, fluoride or hydroxyapatite, remember the most important thing you can do to keep your mouth healthy is to brush and floss daily, avoid sugary and acidic foods and beverages as much as possible, and see your dentist every six months for a routine cleaning and exam.

