

Why Toothpaste May Harm Both the Environment and People's Health?

A recent post on our website encourages readers to “DIY” their toothpaste, but why would they not buy it at the store?



Eva Tompson is brushing her teeth with homemade toothpaste.

By Haoning Zhu
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Eva Tompson is brushing her teeth in front of the mirror in her bathroom. Her toothpaste isn't a name brand in a tube that most people would recognize, because she made it herself. A regular reader of Heal the Ocean's blog, Eva was inspired to concoct her own toothpaste from natural household products. “This toothpaste actually works very well,” Eva thought. “I may not buy toothpaste at the store in the future.”

On August 3rd, we wrote a post named [“Tip Tuesday- DIY toothpaste”](#) to give the readers a recipe for natural toothpaste. By replacing store-bought toothpaste with homemade one, people can avoid purchasing the extra packaging and the unnecessary chemicals on the ingredient list of the toothpaste, which negatively affects the environment as well as human and dogs' health.

According to “[Critics See Toothpaste Boxes as Threat to Environment](#),” American consumers last year bought 423.5 million units of leading toothpaste brands whose products are sold in a paperboard box. According to the American Council for an Energy-Efficient Economy, the creation of paperboard contributes to deforestation, increased water consumption and higher greenhouse gas emissions. In the United States, pulp and paper production is the sixth-largest contributor to air, water and land contamination. More terribly, since landfills have already become the largest source of methane and the second most important greenhouse gas that adds to global warming after carbon dioxide, paper degradation in landfills perpetuates this problem.



The paperboard box of toothpaste is a big contributor to environmental pollution.

Regarding the serious problem brought by paperbox, people need to reduce waste through their consumption habits, according to Daria Scala, a policy analyst who evaluates potential environmental impacts of conservation policy at the federal Department of Agriculture’s National Resources Conservation Service. She thinks everything in modern life is tied to consumer habits and the solution “doesn’t come from switching, it comes from reducing.”

Besides the contamination contributed by toothpaste packaging, the toothpaste at the stores can negatively affect human and dogs’ health. According to “[Make Your Own Toothpaste](#),” some ingredients in the toothpaste have side effects and are potentially dangerous to the human body.

For example, saccharin is often regarded as an artificial sweetener, but it may have carcinogenic properties. Fluoride inhibits dental caries, but could be toxic in larger proportions. Propylene glycol acts as an emulsifier, but it may lead to irritation of the skin, eyes or lungs, and organ toxicity. Sodium lauryl sulfate (SLS) is highly addictive and may cause canker sores and an alteration in taste.

Not only are these ingredients harmful to humans, but some of them can even kill pet dogs in people's homes. According to "[Can You Use Human Toothpaste On Dogs? 3 Reasons Why The Answer is 'No'](#)," Fluoride ingestion may lead to a chronic toxin exposure for dogs when fluoride is used over the course of months to years. SLS could cause dogs' gastrointestinal upset if they swallowed it in sufficient quantities. Another ingredient, which gives the sweet taste to toothpaste, called Xylitol, is absolutely toxic for dogs. Xylitol can cause dogs' low blood sugar and irreversible damage to the liver, both of which can be fatal.



Toothpaste containing unnecessary chemicals at the stores can potentially kill pet dogs.

As toothpaste for sale can bring damage to both the environment as well as human and dogs' health, people can make their own toothpaste at home with much joy. "I had a lot of fun making my own toothpaste!" said Eva Tompson. "Although the procedures are tricky sometimes, I feel good about contributing to environmental protection while taking care of myself and my dog, which gives me a great sense of achievement. The HTO's blog is a good opportunity for me to

get the knowledge of the negative effects brought by toothpaste on both the environment and people's health, and I will remind people around me to be aware of the detriments.”