Toothbrushes Grow on Trees

waking up in the morning, washing your face, and then putting a stick or straw-like sponge in your month instead of a toothbrush.

Aside from the somewhat bitter taste and the necessity to spit out splinters of wood, it can be a surprisingly good way to clean teeth.

Before toothbrushes and toothpaste, there were chewing sticks and chewing sponges. And, today, in most of rural Africa, much of Asia, and some areas of the Americas, people still rely on "nature's toothbrush" for cleaner, whiter teeth. More than a quarter of the world reaches for a chewing stick instead of a toothbrush.

They Grow on Trees

"They break off a pencil-size twig from a bush or tree, peel back the bark, and fray the end by gnawing by pounding it before vigorously moving it up and down their teeth," explained Dr. Memory Elvin-Lewis of Washington University's School of Dental Medicine, St. Louis.

"They've very, very fastidious about it and usually spend 15 or 20 minutes at it. In an African village, if you get up early, at 5 or 6 a.m., you see everybody out with their chewing sticks.'

Some African tribes have gone

WASHINGTON - Imagine one step further. "They've taken the vines of acacia trees, for example, stripped off the bark, pounded them with water and soaked them to make sponges,' she said. "Then they chew a piece of this fibrous material. It's very foamy.'

> actually toothbrush and toothpaste in one. They're inexpensive and disposable after each use. And some kinds are definitely preferred over others.

> Through trial and error over centuries, a few favorites have emerged from the roughly 200 known species used for chewing sticks. Often most popular are those that do the best job and wind up in the markets. But there are other preferences, too. Women like the softer, sweeter chewing sticks; men, the harder, more bitter tasting ones.

Nso kodua and tweapea are the sticks of choice in Ghana, where Dr. Elvin-Lewis did most of her research. With support from the National Geographic Society, she and her botanist husband, Dr. Walter H. Lewis, also of Washington University, are trying to determine whether chewing sticks contain substances that prevent cavities and even gum disease.

Chewing sticks or sponges are

Better Than Toothpaste?

The low tooth decay rate among Africans has generally been attributed to diet.

"Partially it's diet, but that's not the whole thing. When you start looking at it, the retention of teeth into adulthood among the populations that use some of these sticks is very high. So we're saying that they're possibly a good thing too," Dr. Elvin-Lewis said.

One Ghanaian woman, educated as a dietitian, told her, "When I'm ın a hurry, I use toothpaste and a toothbrush. When I really want to clean my teeth, I use a chewing stick."

The widespread use of chewing sticks in some parts of Africa, Asia, and the Middle East has its roots in Islam. The Prophet Mohammed was said to have urged his followers to clean their teeth before prayer as a means of praising Allah and to use the 'siwak" for the cleansing.

The Moslems never adopted the toothbrush invented by the Chinese because its bristles were pig hairs, a taboo animal. With the development of synthetic bristles, many modern Moslems have switched to toothbrushes. But ritualistic chewing stick use is still carried on in the mosques of Mandalay, Burma' fresh sticks are distributed before the services for use five times a day at prayers.

In India, chewing sticks from the popular neem tree are not just to clean teeth, but the tongue too. After the teeth cleaning, the stick is split in two, broken again in the middle to form a hinged V, and then stroked across the tongue. Extracts of neem are made into a chewing stick toothpaste. It's green and a little bitter, but Dr. Elvin-Lewis wouldn't use anything



Photo by Trish Williams

Almost as big as her owner, "Bunny-Girl" gets a bunny hug from Jennifer Stoltzfus, Ronks. Anyone else have pictures of children and their pets? If so, send them to us at P.O. Box 366, Lititz, Pa. 17543.

We're having a contest! The cool, fall weather will be here soon and to celebrate its coming we want you to make as many words as you can from the words "fall weather." Send a list of the words you created to Kids Korner and be eligible for a back-to-school prize. Don't forget to include your name, age and address. All entries must be received by Sept. 6. Mail them to Kids Korner, Lancaster Farming, P.O. Box 366, Lititz, Pa. 17543.

- ORANGE BLACK 16. LT. GREY GREEN 3. YELLOW LT.BROWN 8. LT. BLUE DK.GREY 9. BROWN 10. LT.GREEN
- **THE OPOSSUM** IS A SMALL PRIMITIVE ANIMAL RELAT-ED TO THE KANGAROO. IT HAS A FURRY BODY AND A RATLIKE FACE. ITS TAIL ISHAIRLESS, AND SCALY.IT IS USED AS AN AID IN CLIMBING. THE NEW BORN OPOSSUMS ARE THE SIZE OF A KIDNEY BEAN. A TEAS POON CAN HOLD IB NEWBORN. OUT OF THE MOTHERS POUCH THE YOUNG CLING TO THEIR MOTH-ER WITH THEIR TAILS

