



Photos by Natasha Kavanaugh

**Street Dance
Siletz Tribal Administration
Building Parking Lot
July 10, 2009**

Everyone seems to enjoy the limbo, one of several activities that took place during the evening, including Angel Oleman and Hayden Worman (left photo), Leslie Brown, Ryan Rilatos, Lexie Metcalf and Kyle Macrae (below left) and three youth community members (below right photo).

Right: Mandi and Kylee Mae Smith watch all the action.



Toothtalk – Plaque, Biofilm and Oral Sprawl, What is that on Your Teeth?

By Mary Ellen Volansky, RDH, MS

You wake up in the morning and rush to the bathroom to brush and floss your teeth. Homecare: always your first thought and action after your usual restful uninterrupted night of sleep.

You run your tongue over the no-longer-furry surfaces of your teeth, satisfied with the cleanliness and health of your mouth. What a way to start a day!

Are you with me so far? In thought at least?

A short time later, you check your teeth again and this time you have a smooth almost glossy feeling to your teeth. You think of how wonderful it is to have such clean teeth and you move on through the rest of your day.

Hey, wait a minute. Aren't my teeth supposed to feel like they did just after I brushed? What is that glossy feeling to my teeth? Is it bad for my teeth?

Well no ... or sort of. The glossy surface on your teeth is called pellicle, widely considered a protective film. Pellicle helps protect the tooth surfaces from the acids that bacteria excrete.

Bacteria eat the foods we eat, especially refined sugars/carbohydrates – white sugar, white flour, etc. Those special little critters then produce acids

or waste or excrement. Aren't those great words to use for inside our mouth? They are accurate if not attractive.

Now the "or sort of" portion of the answer. Pellicle "is the first step in plaque formation."¹ Pellicle-coated teeth allow for the attachment and growth of bacteria – streptococcus sanguis, actinomyces viscosus and streptococcus mutans (cavity-causing critters)². Ah, what a mouthful (remember these critters, their name will come up again) and gone is the glossiness.

How can a substance do two things that are opposite to each other? Researchers continue to look for an answer.

Researchers have placed pieces of teeth in people's mouths. While in the mouth the pieces grow pellicle. These mouths usually belong to dental students who "volunteer" to not brush or floss their teeth for three weeks. Yuck, aren't you glad dental professionals all wear facemasks?

In summation, the tooth pieces with pellicle that are exposed to acid (orange juice) did not show as much wear as those without pellicle that were exposed to orange juice. This is important because it's the acid of plaque that etches teeth.

Teeth with etched spots (engraved or cut) appear as white spots on our teeth. These white spots are the early stages of

decay. Did you ever think orange juice was an acid strong enough to etch teeth?

Here is where the "sort of" part comes in again. Researchers know that pellicle also helps the cavity-causing bacteria to grow. Go figure.

And in one to two days after pellicle grows and after streptococcus mutans and friends have settled in (remember them from before?), new critters sprawl onto the surfaces of our teeth.

These new bacteria land and grow because mutans and friends excrete substances that encourage them to land, grow and stay put. These new critters or germs have names like fusobacterium nucleatum or prevotella intermedia.

Remember those dental student volunteers? After two weeks of not brushing or flossing, more germs land and grow. Can you even imagine not brushing and flossing for that length of time?

These critters have names like campylobacter rectus, eikenella corrodens and (this tongue twister) actinobacillus actinomycetemcomitans.

All of these germs excrete (sorry, but I am making a brushing and flossing statement) chemicals that help each other grow stronger. In other words, these germs excrete chemicals that build plaque thicker

and chunkier. Now the plaque begins to cause not just cavities but gingivitis and eventually periodontitis – gum disease.

"It has been estimated that as many as 400 distinct species may be found in plaque."³

So much for that furry vs. glossy feeling on our teeth. Glossy is good initially and bad the longer we allow it to sprawl across our teeth.

Whether it's the first thing in the morning or the last before you rush out the door, brush and floss. Let's show those bacteria what we think of their excrement!

Or brush and floss the last thing before exhaustedly dropping off into an uninterrupted night of dreaming. Just keep those critters and their excrement (acids) from building a condo on your teeth.

Oh by the way, are you due to have your teeth cleaned? Give a call at 541-444-1030 or 800-648-0449.

1 *Microbiology of Dental Plaque*, Dr. Susan Kinder Haake, www.dent.ucla.edu/pic/members/microbio/mdphome.html.

2 *Role of Streptococcus Mutans in Human Dental Decay*, Walter J. Loesche, *Microbiological Reviews*, Dec. 1986, p. 353-380, American Society for Microbiology.

3 *Microbiology of Dental Plaque*, Dr. Susan Kinder Haake, page 1, www.dent.ucla.edu/pic/members/microbio/mdphome.html.