

What Chewing Gum Manufacturers Don't Want You To Know

By George E. Meinig,
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It is strange that so little has been done to investigate the consequences that can occur to those Americans who spend some \$800 million a year on their chewing gum habit. This amounts to 200 sticks for every man, woman, and child.

Chewing gum manufacturers must be happy that no one has publicized the number of problems that may arise from the use of their products.

Among the factors that must be considered by gum users are gum as a cause of tooth decay; the role it plays as a contributor to Temporomandibular Joint disorders (TMJ); the excessive wear that can occur to tooth enamel; how the digestive enzymes of the pancreatic gland can be affected; its use as a tension and anxiety reliever; and last, the subconscious aspect of this habit, viewed as unattractive or socially unacceptable by many people.

Let's start with 16-year-old Jennifer Porter, who was shocked when she was informed that she had seven gum line cavities in her lower back teeth that developed just a few months after she began chewing gum.

The most profound demonstration dentists receive as to the role of sugar in the cause

of dental caries comes when a patient with a previously decayfree mouth develops a rampant number of cavities in a short period of time, after frequently chewing gum.

The sugar in gum isn't the only problem, although the half teaspoonful that is contained in every stick can wreak havoc with tooth enamel. It is not uncommon for people to chew gum all day. A stick once in a while doesn't hurt anybody, but because the sweet taste rapidly leaves the gum, people tend to chew new pieces quite frequently. Some manage to keep sugar present in their mouths almost continuously by chewing a half stick at a time.

This is common with smokers and others who become concerned about their breath. The effect is the same as mouthwashes or gargles: The freshness is only momentary.

Bathing the teeth repeatedly with sugar, whether from gum, candy, or food, provides bacteria nourishment. And the acid byproducts of bacteria cause hard tooth enamel to dissolve.

Most people are aware of the relationship between sugar and tooth decay, but few realize that it also affects bones and other tissues. Sugar is one of the key factors in the causes of osteoporosis, arthritis, and a host of other degenerative diseases.

While it is true that sugar substitutes in gum have been

shown to cause less tooth decay than sugared gum, the possible side effects of the other ingredients contained in chewing gum ought to give users some concern.

The so-called sugarless gums, with slight variations among them, contain sweeteners such as sorbitol, manitol, xylitol, phenylalanine, saccharin, and hydrogenated glucose syrup (a sugar). Added to these are artificial coloring, and natural and artificial flavors. Why is it that users of sugarless gum seem to ignore the labels on the gum pack that contain the warning that saccharin has caused cancer in laboratory animals? All the extra chewing this habit involves can, in a few years, produce a noticeable wearing down of tooth enamel.

Actually, the wear that teeth receive by the mastication of food is almost nonexistent unless the teeth are in abnormal positions or a high amount of abrasives are present in foods, as is found in food consumed by people living in desert areas such as Saudi Arabia.

Gum chewers and individuals who have crooked teeth or jaws that are misaligned sometimes develop what is known as TMJ. This condition is marked by combinations of symptoms: popping and clicking, and severe pain in the back of the neck and of the face. When the jaws have been under abnormal amounts of stress for some time, these incapacitating symptoms can arise from biting into a hard roll, an apple, or other tough-to-chew foods, and from the overuse of the teeth and jaws, as in gum chewing.

Patients more easily comprehend the pain problem when I inform them that they have a sprained jaw. Unlike a sprained ankle that can be taped, put in a cast, or aided by the use of crutches, treatment of TMJ is fraught with complications. Just picture the task of trying to put an ailing jaw at rest in order

(Continued on page 10) - Chewing Gum

(Continued from page 9) - *Chewing Gum*
to speed healing, when it is almost constantly moving during eating, talking, and swallowing.

It is well-known that chewing food stimulates the salivary glands' production of the digestive enzyme ptyalin. What isn't known is that chewing anything also sends a message to the pancreas, by way of sensory impulses in the mouth, telling it to secrete its important digestive enzymes. The person who chews gum day in and day out overworks the pancreas. It is not uncommon for people to be short of pancreatic enzymes as they get older. The result is incomplete digestion of the food they eat. This, in turn, is responsible for a number of illnesses.

For the most part, when one is chewing gum he or she is unaware of the gymnastics the jaws, lips, tongue, and facial muscles are performing because the effort easily becomes a subconscious one. To visualize your own chewing patterns, it is revealing to watch others and observe the antics they go through.

Another subconscious factor that becomes part of the reasons for liking to chew gum is the relief it provides in countering anxiety and tension.

Is there any good achieved by chewing gum? Yes, if it is done only briefly, right after eating. The increased flow of saliva that is created, along with the agitation of the gum against the teeth, does help to clean away some of the food particles.

Dr. Meinig is a Board of Director member of the Price-Pottenger Nutrition Foundation. For 17 years his "Nutritionally Speaking" column has appeared weekly in the *Ojai*

Valley News. His book "NEW-Trition - How to Achieve Optimum Health" was a finalist for the Benjamin Franklin Book Award.

Chewing Gum Danger

Dear Editor:

Thank you for publishing my article "What Chewing Gum Manufactures Don't Want You To Know" (May 1991).

Last evening while reading *The Lancet* (May 30, 1991), the leading British medical journal, I was surprised to see that it contained a short article condemning the use of chewing gum.

Because the article brought out some facts that I was unaware of, I thought your readers would like to be apprised of the objections to its use.

It seems that chewing gum contains not only gum, but also is composed of 50 percent paraffin. In as much as children and some adults are prone to swallowing gum, an accumulation of a mass of paraffin in the intestine may be dangerous to the user by possibly causing malabsorption of nutrients.

For this reason, the article strongly recommended that the sale of chewing gum be prohibited.

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(Continued from page 8) - *Travel Tips*
defrosted slowly in refrigerator but can be defrosted in toaster oven. These muffins are dense. For lighter texture, experiment with baking soda (I do not recommend this).

Variations - try adding: 1/2 cup raisins or dates; 1/4 tsp. ginger or allspice; 1 cup nuts &/or seeds; 2 hpg. TBSP. carob powder (this will require adding a little more liquid) Substitute Buckwheat flour for soy. Substitute Sesame Oil for the others and add 1/3 cup Raw Sesame Seeds. Send us YOUR ideas on other substitutions, etc.

*Organic produce has a far superior taste and sweetness and usually has many more beneficial nutrients.

Grate extra carrots and make a carrot salad while muffins bake. Many variations are possible. Makes an excellent 'traveling companion'!

Quality and freshness of oils, nuts and seeds (used for edible purposes) is extremely important. They can become rancid so easily and this not only spoils the flavor, it produces free radicals to burden your system. I have all my oils shipped by people who produce the oils, and I purchase nuts and seeds as soon after harvest as possible, from the people who grow them. Whether in shell or out, I then freeze them, thereby insuring "fresh-frozen" nuts and seeds until next harvest.

To increase their nutrient value for a good "instant" breakfast, spread with a nut butter.

As a quick dessert: Halve, apply slices of fresh fruit and add dollop of freshly whipped raw cream. Or make a "sauce" by mashing fresh fruit such as banana, peach, berries, etc. ☐