

Melting Teeth

There are now more powerful ammunition in our diets threatening the health of our teeth than the old fashion sugar and pop and it is readily available every where you shop. Candy is not only sweet but it is also sour. Extreme or intense sour and fruity flavors have added another popular source of dietary acid and this is contributing to the prevalence of erosion or melting teeth.

Sour candy, sports drinks, fruit juices and soft drinks are dangerous since they have the potential to not only caused decay but to erode or melt teeth very fast. The common “sour” flavoring agent is citric acid. Citric acid is the most erosive component in foods and beverages because it removes calcium even in buffered saliva. Teeth loses calcium at a ph of 4, many of the available sour candy tested below 4 with some having a ph just above that of battery acid. The consistency of candy also has an effect as candy that is soft and chewy, in powdered and gel form, in sprays and also powder coated gums are more effective in damaging tooth structure. These forms tend to stick more to the chewing surfaces and slowly dissolve lowering the ph in the mouth for longer periods of time. Children are more susceptible to erosion or melting teeth as baby teeth have thinner enamel and newly erupted teeth are also quite sensitive to early damage. These low pH candies are heavily marketed towards children.

Brushing immediately after eating acid foods could be more detrimental since it can remove the soften enamel without the enamel being given a chance to re-calcified by saliva. Rinsing without brushing is safer. It can also help to chew sugar free gum. This stimulates saliva which has a buffering capacity to neutralize the acidic ph.

At the first sign of enamel loss to erosion tooth color restorations can be placed; however, if the habit of eating sour or intense candy continues, the restorations will not last long and will require replacement more often. When further damage to the teeth occurs and enamel is eroded away the tooth loses the ability to insulate itself. Crowns are then needed to fully insulate the tooth against sensitivity.

The following is a list which gives the pH values for Sour Candy. The pH at which teeth start to decalcify or melt is 4.0. The list is as follows Spree® 3.0, Sweetarts® 3.0, Big Stuff Pacifier® sucker 3.0, Sour Gummi Bears® 3.0, X-treme Airheads® 3.0, Sour Punch Straws® 2.5, Shockers® 2.5, Skittles® 2.5, Baby Bottle Pop® powder 2.5, Brach’s Gummi Bears® 2.5, Sqwigglies Gummi Worms® 2.5, Wonka Laffy Taffy® 2.5, Starbursts® 2.4, Sweet Tarts Shock® 2.4, Lemon Heads® 2.4, Mentos Fruit Chews® 2.4, War Heads® Sour Rip Rolls 2.3, Lollipop Paint Shop® 2.2, Zours® 2.2, Sour Skittles® 2.2, Airheads® cherry chew 2.0, Wonka Nerds® grape 2.0, Now and Later® cherry chew 1.9, Too Tart Extra Sour Goo® 1.9, Wonka Pixy Stix® 1.9, Altoids Mango Sours® 1.9, Wonka Fun Dip® powder 1.8, War Heads Sour Spray® 1.6 and finally BATTERY ACID 1.0. This list was generated by the School of Dentistry at The University of Alabama at Birmingham.

Some ways to prevent softening and enamel loss are chewing sugar free gum, brushing with a soft bristle brush, drinking water frequently, restricting acid foods consumption to main meals only, and regular dental check ups for ongoing assessment and prevention.

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