

Martin Sinai Rayman, D.D.S
 Ameneh Khorovani, D.D.S., M.S.
 Dentistry for Children

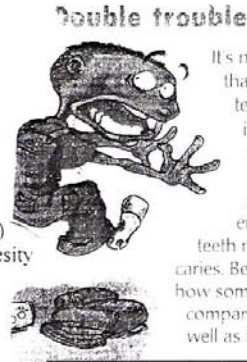
Guide for Parents Whose Children Have Dental Signs of GER (Gastroesophageal Reflux)

The effect of GER on the teeth:

When stomach acid rises into the mouth, the teeth can be affected. We have observed areas of dental corrosion in your child's teeth. This takes on the form of "reverse architecture" in that what were once cusp tips are now areas of moon cratering where parts of the teeth may appear scalloped out and be sensitive to cold foods and touch. These erosion areas can become quite deep and in some instances will cause fillings to be washed out or will erode into teeth exposing the nerve or make untreated cavities worse.

Some Symptoms known to result from GER:

- Child reports frequent "hot burps" or "baby vomit"
- Child has frequent belching after eating
- Child reports having burning in the area of the heart or stomach ache
- Child is irritable after meals
- Child reports bad taste (acidic, like vomit) taste in mouth upon awakening in the morning, and breath has an acid odor
- Child has chronic hoarseness/ laryngitis/ pharyngitis/coughing
- Parent hears continuous coughing during sleep (usually GERD not asthma)
- Associated with Asthma / Premature birth / ADHD / Cerebral Palsey / Obesity



It's not just sugar that's bad for the teeth, but the acids included in many popular drinks are said to eat away at the enamel and make teeth more prone to caries. Below is a look at how some soda pops compare to water, as well as to battery acid.

What to do now:

1. Suggested dietary changes to help reduce reflux:
 - Avoid juices (especially o.j. with pulp), carbonated and sports drinks
 - Chew gum flavored mainly with xylitol, a naturally occurring sugar substitute, e.g.: TRIDENT FOR KIDS®
 - Use hard cheese as a snack or snack chaser normal saliva pH >6..3
 - Avoid fried & spicy foods & pickles & vinegar after eat'g saliva pH ~3..5
 - Avoid overeating (supersizing) enamel demin'n begins @
 - Don't lie down immediately after eating about pH 5.5!
 - NO MINTS or SOUR CANDIES (Skittles, War Heads, Altoids...)
2. Elevate head of bed with a 2 x 4.
3. Water and rinse after a bad taste, DO NOT BRUSH!
4. Review resources for an in-depth understanding of GER:
 - Articles on the internet (type GER or GERD into the search engine)
 - Libraries
 - Bookstores
5. Work with your child to assist him/her to be able to accurately describe:
 - What it feels like when reflux occurs
 - How often reflux occurs
 - What time of day it occurs (bedtime, after meals, upon awakening, etc.)
 - Whether certain food seems to be related to refluxing (make a list)
 - How long has he/she been aware of refluxing

	ACID* Low = Bad	SUGAR** Per 12 Oz (1 can)
Pure water	7.00 (neutral)	0.0
Barg's	4.61	10.7 tsp.
Diet Coke	3.39	0.0
Mountain Dew	3.22	11.0 tsp.
Gatorade	2.95	3.3 tsp.
Coke Classic	2.53	9.3 tsp.
Pepsi	2.49	9.8 tsp.
Battery acid	1.00	0.0

*Laboratory tests, University of Minnesota School of Dentistry, 2000

**USDA - 4.2 grams = 1 teaspoon sugar

Source: Minnesota Dental Association

Once you have gathered all the information you can, kept a diary of symptoms and IF symptoms, in addition to dental erosion are present:

6. Contact your child's pediatrician for an evaluation of the need for diagnostic tests and/or medication.

Please keep me informed of the outcome of any tests and the effect of any medication that is prescribed for your child.

Long term medical and dental risks: If untreated, GE Reflux can predispose you to esophageal (throat) problems in adulthood. There is higher risk for tooth decay as saliva cannot neutralize the strong acid.

Revised 11/04

992 Grand Avenue, Suite 202, San Rafael, CA 94901-(415) 459-1444-FAX: (415)453-1320

openbigd@sac.com