



Acid Drinks Destroy Teeth

Drinks melt enamel and promote decay.

Sport and soft drinks are leading to unprecedented levels of decay and loss of tooth enamel for the new generation of youth and young adults.

The over-consumption of sugary, acidic drinks, such as boxed juice, sports drinks and soft drinks, is reversing more than 50 years of public health gains realized through preventive measures such as fluoridated water and dental sealants.

Acid, Sugar, Quantity and Timing

Acid

Soft drinks, sports drinks and juices pack a double dose of acid and sugar that may destroy teeth. Acid softens the enamel and chemically dissolves the outer layer. This is dental erosion. Softer enamel is more susceptible to decay.

Sugar

Sugar feeds the bacteria that lead to tooth decay. The drinks overwhelm the positive effect of fluoride and cause decay and erosion.

Quantity

Super sizing a drink increases the contact time and causes more damage. Sipping small amounts over time leads to cumulative destruction. The longer it takes to drink a sugar laden, acidic drink, the greater the damage.

Timing

Sports drinks have more acid than soft drinks. When one is dehydrated with no saliva, the acid in the sports drinks dissolves the enamel more quickly. Sipping a sugary, acidic drink all day while driving, studying or working dissolves enamel and promotes cavities.

Prevention

- ✓ Drink in moderation.
- ✓ Use a straw.
- ✓ Drink at one sitting or with food.
- ✓ Drink water to rehydrate.
- ✓ Wait one hour to brush after an acidic drink.
- ✓ Use fluoride and remineralizing products.
- ✓ Drink milk. Its neutral pH of 6.7 and 1 tsp of lactose (sugar) per 12 ounces are healthy for teeth.

Drinks Destroy Teeth
is a program of the
Indiana Dental Association



Sugar and Acidity or pH of common drinks

The pH scale measures the acidity or alkalinity of a solution with pure water in the middle at neutral pH 7. As the arrows below indicate, the lower the pH, the stronger the acid.

Drink or substance (12 oz. serving)	Acid pH	Tsp Sugar	BEST ▲
Water	(neutral) 7.0	0	▼ WORST
Milk	6.7	1	
Barq's Root Beer	4	11	
Minute Maid® Orange Juice	3.8	9	
Propel® Fitness Water	3.4	1	
Red Bull® Energy Drink	3.3	10	
Sprite®	3.3	10	
Mountain Dew	3.3	12	
Diet Coke	3.1	0	
Sierra Mist	3.1	10	
Full Throttle Energy Drink	3	11	
Diet Pepsi	3	0	
Gatorade®	2.9	5	
Sunkist® Orange Soda	2.9	13	
Dr. Pepper	2.9	10	
Vault™ Energy Soda	2.9	12	
Mountain Dew AMP ¹	2.8	11	
SoBe Energy Citrus	2.6	12	
Minute Maid® Lemonade	2.6	10	
Pepsi	2.5	11	
Diet Schweppes Tonic Water	2.5	0	
Coca Cola Classic ²	2.4	10	
Battery Acid ³	1	0	

¹ Now called AMP Energy.

² In some geographical areas of the U.S. and Canada known simply as "Coca-Cola."

³ Battery Acid is **NOT** a drink.

Test by Dr. John Ruby, University of Alabama, Birmingham School of Dentistry, 2007

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