
Tooth Erosion

› Causes of tooth erosion

Tooth erosion is caused by acidic foods and drinks that “dissolve” away the surface of the teeth. The more acid in the mouth, the more vulnerable the teeth are to erosion. The acidity can come from internal sources: bulimia, gastroesophageal reflux disease (GERD). Or the acidity can come from external sources: food and drink.

› In case of GERD or bulimia

Your dental health professional has identified signs of possible erosion of your teeth. Conditions of GERD or bulimia should be discussed with your medical professional as well as your dental professional.

› Prevention and restorative treatment

At the early stages of tooth erosion, prevention of further damage is the best treatment. If you also grind your teeth, a night guard is often recommended. If erosion and wear of the teeth is moderate to severe, your dentist may recommend restorative treatment (e.g. fillings, crowns, onlays, etc.)

› Considerations about your diet

If you suspect the erosion may be due to your diet, consider limiting food and drinks that are highly acidic. Note, it is thought that erosion is becoming more common especially due to increased consumption of “fizzy” drinks. After eating or drinking highly acidic foods/drinks, avoid brushing your teeth for at least 30 minutes since teeth are especially prone to wear after an acidic “assault”. Rather, rinse well with water.

Here is a quick chemistry lesson: The more acidic the substance, the lower the pH. Enamel begins to dissolve at a pH of 5.2 therefore, any substance with a pH lower than 5.2 has the potential to erode teeth.

Please refer to the following table.

pH of Common Foods and Beverages

The lower the pH, the more acidic and the more erosive.

A PH LOWER THAN 5.2 MAY CONTRIBUTE TO TOOTH EROSION.

FRUITS

| | pH RANGE | | pH RANGE |
|------------|------------------|--------------------|------------------|
| Apples | 2.9 - 3.5 | Lemons/Limes/Juice | 1.8 - 2.4 |
| Apricots | 3.5 - 4.0 | Oranges/Juice | 2.8 - 4.0 |
| Grapes | 3.3 - 4.5 | Pineapple/juice | 3.3 - 4.1 |
| Peaches | 3.1 - 4.2 | Blueberries | 3.2 - 3.6 |
| Pears | 3.4 - 4.7 | Cherries | 3.2 - 4.7 |
| Plums | 2.8 - 4.6 | Strawberries | 3.0 - 4.2 |
| Grapefruit | 3.0 - 3.5 | Raspberries | 2.9 - 3.7 |

BEVERAGES

| | pH RANGE | | pH RANGE |
|------------------|------------------|--------------|------------------|
| Grapefruit juice | 2.9 - 3.4 | Coffee | 2.4 - 3.3 |
| 7-up | 3.5 | Black tea | 4.2 |
| Pepsi | 2.7 | Herbal tea | 3.15 |
| Beer | 4.0 - 5.0 | Coca-Cola | 2.7 |
| Wine | 2.3 - 3.8 | Root beer | 3.0 |
| Ginger ale | 2.0 - 4.0 | Orange Crush | 2.0 - 4.0 |
| Mountain Dew | 3.22 | Nestea | 3.04 |
| Gatorade | 2.95 | Red Bull | 3.32 |

CONDIMENTS

| | pH RANGE | | pH RANGE |
|----------------|------------------|-----------------|-----------------|
| Mayonnaise | 3.8 - 4.0 | Cranberry sauce | 2.3 |
| Vinegar | 2.4 - 3.4 | Relish | 3.0 |
| Mustard | 3.6 | Ketchup | 3.7 |
| Salad dressing | 3.3 | Sour cream | 4.4 |

OTHER

| | pH RANGE | | pH RANGE |
|--------------|------------------|-------------------|------------------|
| Yogurt | 3.8 - 4.2 | Tomatoes | 3.7 - 4.7 |
| Pickles | 2.5 - 3.0 | Fruit jam/jellies | 3.0 - 4.0 |
| Battery acid | 1.0 | Gastric refluxate | 1.6 - 1.9 |