How To Avoid Tooth Abrasion and Tooth Erosion

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Tooth abrasion and tooth erosion refer to a loss of part of the tooth’s outer covering, the enamel, and sometimes deeper parts of the tooth. Dental erosion is defined as irreversible loss of dental hard tissue by a chemical process that does not involve bacteria.

Acids in the mouth can dissolve away tooth surfaces. Given the chance, teeth will repair themselves, using minerals from saliva. But if acid is in the mouth too often, teeth cannot repair themselves and the hard tooth surface (the enamel) becomes thinner – this is called «tooth erosion».

Dental erosion is increasingly common and can have long-term consequences for the general and dental health of affected individuals.

Causes of Tooth Erosion

Tooth erosion generally occurs as a result of chemicals, such as citrus fruits or other acidic foods, wearing away the tooth. Dental erosion also can be caused by gastrointestinal problems, such as acid reflux, in which stomach acids come up into the esophagus and mouth. Excessive vomiting that occurs with the eating disorder bulimia also can cause tooth erosion. Even the chlorine and other chemicals in a swimming pool can cause tooth erosion over time.

Tooth erosion is caused by acidic foods and drinks «dissolving» away the surface of the tooth. It is becoming increasingly more common, especially due to greater consumption of fizzy drinks – including «diet» brands.

While most people would be aware that sugary foods can cause tooth decay, research into tooth erosion has shown that even some common «healthy» foods with a high acidic content can erode teeth.

Chairman of the ADA’s Oral Health Education Committee, Dr Don Wilson said that a study on the erosiveness of foods and beverages conducted by the University of Adelaide had found that soft drinks, some cordials and some juices had a significantly higher potential to erode teeth than tap
water mixed with sugar.

Try and avoid consuming acidic food and/or drink too often during the day. Try to have them only at mealtimes. Drink acidic drinks quickly – don’t sip them. And don’t swish them round your mouth.

Sports drinks which are widely available today were initially made to help with hydration and nutrient balance. The body absorbs water and nutrients in the upper part of the small intestine. Nutrients such as glucose, which is cotransported with sodium, increase the intestine’s water absorption, but the main determinant of how rapidly water and nutrients are absorbed is gastric emptying, which is affected by the volume of fluid in the stomach.

During physical activity a large volume of fluid is lost which is hard to replace in one go by drinking. Sport supplement drinks now often contain additives that speed up their absorption in the digestive system. These drinks are an increasingly popular choice for athletes to help them maintain good hydration; but their use comes at a price: dental erosion.

**Tooth Abrasion Causes**

Tooth abrasion can be defined as the permanent loss of tooth structure that can occur on various tooth surfaces including the cutting surface, outer enamel layer and even exposed root surfaces.

The main cause of tooth abrasion can be due to brushing your teeth incorrectly. Brushing your teeth too hard, too fast or even using the wrong toothpaste can lead to serious tooth abrasion. As the tooth enamel layer demineralizes and becomes softened it becomes more susceptible to abrasion. That tooth can become visibly less white and older-looking.

Your [dentist](#) can examine your teeth to see if you have tooth abrasion or erosion. A diagnosis is often made after someone experiences sensitivity to temperature or sweet foods.

**Treatment for erosion and abrasion** depends on the severity of the damage. If you have a large defect that is very unsightly, you’ll likely want to have the tooth restored. But if there is little damage, and you’re not experiencing any problems with tooth sensitivity, you may not need any treatment.

Attrition, erosion, and abrasion result in alterations to the tooth and manifest as tooth wear. Each classification acts through a distinct process that is associated with unique clinical characteristics. Accurate prevalence data for each classification are not available since indices do not necessarily measure one specific etiology, or the study populations may be too diverse in age and characteristics. The treatment of teeth in each classification will depend on identifying the factors associated with each etiology. Some cases may require specific restorative procedures, while others will not require treatment. A review of the literature points to the interaction of the three entities in the initiation and progression of lesions that may act synchronously or sequentially, synergistically or additively, or in conjunction with other entities to mask the true nature of tooth wear, which appears to be multifactorial.

To help prevent **tooth abrasion and erosion** make sure your diet does not have too many acidic foods or drinks, do not press too hard when brushing your teeth. Use only a soft-bristled toothbrush and use dental floss and toothpicks properly.