# Your Teeth May Be Wearing Out!

## Written by: PROFESSOR ANDREW EDER

#### Background

Tooth wear is on the increase. In 1968, more than one-third of the UK population had no teeth. In the most recent Adult Dental Health Survey of 2009, this had fallen to 6%. This significant improvement in the UK's oral health relates to falling levels of tooth decay following the introduction of fluoride during the 1970s and our improved knowledge about caring for gum problems.

However, recent data from the Office for National Statistics suggests there will be a projected 89% increase in those over 75 years of age in the UK within 25 years. As we live longer and will be keeping our teeth for longer, they are at risk of simply wearing out with over three quarters of adults and over half of children showing signs of tooth wear.

#### So, how do teeth wear and how might this affect us?

Teeth become worn due to three main causes: **erosion** due to dietary acids such as sparkling drinks or alcohol, **attrition** due to grinding which normally takes place at night and **abrasion** often seen with coarse diets or very hard brushing. Whilst unravelling the causes and offering targeted advice is critical to any successful care strategy, tooth wear is normally multifactorial although data suggests that erosion is the third most prevalent oral health condition, affecting around 30% of European adults.

For example, someone may have a couple of cans of sparkling drinks a day, is aware of night grinding, complains of reflux when laying down at night and is also a vigorous tooth brusher. So, the acids soften the outer enamel tooth surface which is then rubbed away by the grinding or brushing exposing the deeper dentine resulting in teeth that may have become short and discoloured, sharp at the edges and sensitive as just a few of the many problems (Fig. 1).

Presenting the idea to patients that they may have tooth wear beyond what would normally expect to be seen in someone of their age may come as a shock to them, especially if they have what they think is a 'healthy' lifestyle. For example, drinking juices and smoothies, and eating foods such as protein bars and roasted nuts may be good for the body but not always for the teeth!



Figure 1: a 50-year-old male with advanced tooth wear as a result of and acidic diet and tooth grinding at night

#### What can we do about our worn teeth?

Thankfully, tooth wear is normally a slow process which should be picked up at routine dental visits. There are a number of simple steps that can be taken to help in preventing further damage and, in some cases, reverse the harm already caused.

These include:

- Avoiding acidic foods and drinks, such as fruit juices and sparkling drinks, where possible and having still water instead
- Using a recyclable straw positioned toward the back of the mouth when drinking acidic drinks
- Chewing sugar free gum or eating a piece of cheese after having acidic foods or drinks
- Waiting at least an hour to brush teeth after having acidic foods or drinks
- Using a highly fluoridated toothpaste and a non-abrasive toothbrush twice a day
- Using a fluoridated mouthwash every day at a different time to toothbrushing

Separate to this, an early diagnosis is important so that simpler care, including prevention and monitoring, can be provided wherever possible. Preventative advice is based on three areas: lifestyle, diet and one's oral hygiene regime at home. On occasion, and if teeth have become significantly worn, more complex treatments may be necessary to restore a pleasing appearance and satisfactory chewing function.

## Life can be stressful

Beyond everyday preventive measures, it has also been recognised that mental health issues are on the increase with lockdown having affected many people. In terms of oral health, this could present as an eating disorder such as bulimia leading to increased levels of acids in the mouth resulting in tooth wear. For someone with such an eating disorder, and there are over 700,000 people in the UK, they should avoid brushing immediately after vomiting and instead rinse with a fluoridated mouthwash and use chewing sugar-free, xylitol-sweetened gum to stimulate saliva flow.

A stressful lifestyle has been linked to teeth clenching and grinding at night, which can also cause tooth wear. Reducing any stress with some small lifestyle changes, such as reading, having a bath or relaxing before bed, can be incredibly helpful. Alternatively, a mouthguard worn overnight could help to protect against tooth wear.

#### We are here to help you



It remains as important as ever to visit your dentist and dental hygienist when you can. If you have any concerns about tooth wear or would simply like some advice, please contact <u>Professor</u> <u>Andrew Eder</u> for more information.

Professor Andrew Eder is a Specialist in Restorative Dentistry and Prosthodontics at the Harley Street Dental and Implant Clinic, a specialist private dental practice in central London. He is also Emeritus Professor and Honorary Consultant in Restorative Dentistry at the UCL Eastman Dental Institute.