

Why Soft Drinks are Bad for Our Teeth?

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Commentary

Dental decay can happen due to improper oral hygiene, high sugar intake, and soft drinks intake [1, 2]. Soft drinks can have both sugar and acids that can damage dental enamel [2]. Soft drinks will etch enamel away by acid and/or chelation without bacterial effect. This erosion can in turns result in demineralization of tooth surface [2].

Many studies found relationship between the acidic food and the development of dental erosion [3]. A study found a relationship between acid intakes, low buffered saliva, using hard toothbrush and dental erosion progression over six years period [3]. Soft drinks are the most common source of acids that have higher cariogenic effect than milk and sugar. There is no clear relation whether regular soft drinks have more erosive effect than diet ones. Sugar free soft drinks can be more erosive than sugared soft drinks [1]. Another study found that diet soft drinks have less erosive effect than sugared soft drinks [4].

The severity of the erosion is connected to how long teeth have been in the acidic environment. Carbonated drinks are usually stayed in the mouth till all bubbles disappear, that make the contact time of carbonated drinks longer than non-carbonated drinks [2]. Many studies found an association between carbonated drinks and dental erosion, dental decay, and tooth loss. The acidity of soft drinks, duration of having drink in the mouth, duration of consumption can affect the severity of dental erosion [4].

Carbonated soft drinks are a risk factor for dental decay in primary dentition. On the other side, consumption of milk, water or juice was less likely to be correlated with dental decay [5]. Dental decay was higher between workers in soft drink industries according to a study were done in South India [6]. A correlation between consuming soft drinks, being female and having low educational parents were risk factors for having dental caries [7]. Another study found a strong correlation between increased caries experience of teenagers and high levels of consumption of sugary drinks [8]. Both carbonated and non-carbonated beverages can cause dental erosion [9].

What is our rule as health care providers?

The role is not just limited to dentists; it should include physicians, physician assistants and nurses. We should educate patients to limit any soft drinks and switch to water. Patients with high caries risk and/or low fluoride exposure need guidance to maintain healthy diet that has low sugar intake [10].

Diet has a major effect on dental decay, dental erosion, and periodontal disease. Limiting sugar intake is necessarily to reduce the risk of dental decay. It is important to support diets that contain fruit, vegetables, and free sugar to protect dental and general health [7]. It is necessarily to educate clinicians about healthy lifestyle so they can provide instructions to their patients. Continuing education courses need to be provided to all health care providers about oral health.

Interventions should be held to educate public about the importance of Fluoride. Fluoride treatment allow for remineralisation of root dentine submitted to an erosive challenge in vitro, this can help to prevent and treat dental erosion [11]. Water Fluoridation is one of

the greatest public health triumphs as was considered by the Centers for Disease Control. All health care provides should emphases the importance of low refined carbohydrate diet [12].

Acknowledgement

None

Conflict of Interest

None

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Received: 23-Jan-2023, Manuscript No: JOHH-23-87678, **Editor assigned:** 25-Jan-2023, PreQC No: JOHH-23-87678(PQ), **Reviewed:** 08-Feb-2023, QC No: JOHH-23-87678, **Revised:** 13-Feb-2023, Manuscript No: JOHH-23-87678(R), **Published:** 20-Feb-2023, DOI: 10.4172/2332-0702.1000359

Citation: Mekled S (2023) Why Soft Drinks are Bad for Our Teeth? *J Oral Hyg Health* 11: 359.

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