Sugar Substitutes and their Role in Caries prevention

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Non-cariogenic sugar substitutes are widely used in medications, foods and confectionery, including gum, candy and drinks. Such substitutes include sorbitol, xylitol, saccharin, aspartame, sucralose and acesulfame K. The use of these sugar substitutes may have contributed in a limited way to the decline in the prevalence of dental caries in industrialized countries. In recent years, the potential of using specific non-cariogenic sugar substitutes in drinks and chewing gum, in order to promote remineralization of initial caries lesions, has been investigated. The anticariogenic effect of the sugar substitutes themselves has yet to be supported by evidenced-based data. However, enhancement of salivary flow when using chewing gum may have a caries-preventive effect.

FDI World Dental Federation supports the following generally accepted opinion on sugar substitutes:

- many sugar substitutes are non-cariogenic
- when sugars are replaced with non-cariogenic sugar substitutes in foods and drinks, the risk of dental caries is reduced
- non-cariogenic sugar substitutes, when used in products such as confectionary, chewing gum and drinks, reduce the risk of dental caries
- the regular use of chewing gum containing non-cariogenic sweeteners such as xylitol, has a role to play in preventing dental caries because of its noncariogenic nature and its salivary stimulatory effect

Bibliography

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