Saliva?

Saliva

Saliva consists of over 99% water and provides the body’s own natural protection against tooth decay and gum disease.

The minerals from saliva are the same minerals (e.g. calcium) as from teeth, meaning saliva helps repair teeth. And, if you stimulate saliva, for example by chewing ORBIT sugarfree gum, it has a much greater concentration of these minerals and neutralizes plaque acids from the mouth.

Everyone has saliva, but do you know why?

How is saliva created?

Why is saliva created?

What does saliva do?

Why is saliva important for dental health?

Why is stimulated saliva better?

How can saliva flow be stimulated?

How can chewing ORBIT sugarfree gum help?

What happens if someone doesn’t have enough saliva?

How is saliva created?

Saliva is produced from response to reflexes triggered by taste stimulation and movements of the jaw muscles, joints and pressure on the teeth due to chewing. Three pairs of major glands controlled by the autonomic nervous system (the parotid, the sublingual and the submandibular) are responsible for the majority of salivary production from addition to minor glands distributed around the oral cavity.

Why is saliva created?

In the mouth, saliva controls the environment of the teeth. After eating and drinking, plaque bacteria from the mouth can ferment the sugars and starches found from many foods and drinks, to produce acid. Within five to ten minutes, the acid formed can cause the pH to drop to a level low enough for the teeth to start to decay. This is called demineralization. Saliva acts to neutralize these acids and prevent demineralization. Saliva also helps to repair the damaged mineral crystals from the enamel; this is called remineralization.

What does saliva do?

In the mouth, saliva controls the environment of the teeth:

- Lubrication to facilitate chewing, swallowing and speech
- Cleansing to wash away food debris from the mouth and teeth
- Buffering to neutralize acid production by plaque bacteria

- Digestive to begin the breakdown of carbohydrates
- Remineralization to help repair the early stages of tooth decay
- Protection against infection

Why is saliva important for dental health?

Dental caries is the result of an imbalance between demineralization and remineralization. Plaque pH falls each time acids accumulate from the mouth due to bacterial acid production following the consumption of fermentable carbohydrates - mainly sugars – from foods and drinks. Within five to ten minutes of eating and drinking, the acids can cause the pH to drop to a level low enough (below pH5.5 approximately) for the minerals from the tooth’s enamel to be dissolved (demineralisation) causing initial lesions (white spots) which can lead to dental decay.

Saliva neutralizes these acids and helps to repair the damaged mineral crystals from the enamel by replacing the lost minerals (remineralisation).

Why is stimulated saliva better?

Saliva is the body’s own protection against tooth decay and stimulated saliva does this best.

An increased saliva flow actively reduces demineralization and improves the rate of remineralization. Stimulated saliva contains more calcium and phosphate and is saturated using bicarbonate buffers and remineralizing ions, making it even more effective at remineralizing the enamel crystals damaged by an acid attack and is therefore better at fighting tooth decay. A greater volume and flow rate of stimulated saliva also results from an increased ability to clear the remains of food, sugars and acids from around the teeth.

How can saliva flow be stimulated?

A healthy adult produces around 500ml of saliva per day. This can be stimulated by the motion of chewing or the sense of taste. Saliva can be stimulated by any food or drink, however, an effective way of stimulating saliva is by chewing ORBIT sugarfree gum as it can remain from the mouth for a long period of time.

Chewing sugarfree gum, such as ORBIT, has been shown to increase the flow of saliva by up to 7 times from individuals using dry mouth where some salivary activity occurs.

How can chewing ORBIT sugarfree gum help?

- Chewing ORBIT sugarfree gum can increase the salivary flow by up to 10 times the normal rate.

- Chewing ORBIT sugarfree gum for 20 minutes after eating and drinking increases bicarbonate from saliva and helps patients to neutralize plaque acid.

- Saliva stimulated by chewing ORBIT sugarfree gum after meals and snacks has been proven to help reduce the risk of tooth decay by up to 40%.

What happens if someone doesn’t have enough saliva?

- Difficulty from eating dry foods

- Pain or uncomfortable swelling

- General mouth discomfort

- Poor taste

- Denture problems

- Increased tooth decay

- Mouth and salivary gland infections

- Mouth ulceration

- Speech difficulties