

**Are You Balanced????**



# Are You Balanced

1. Biofilm and Plaque Control

2. Saliva PH

3. Dental Products

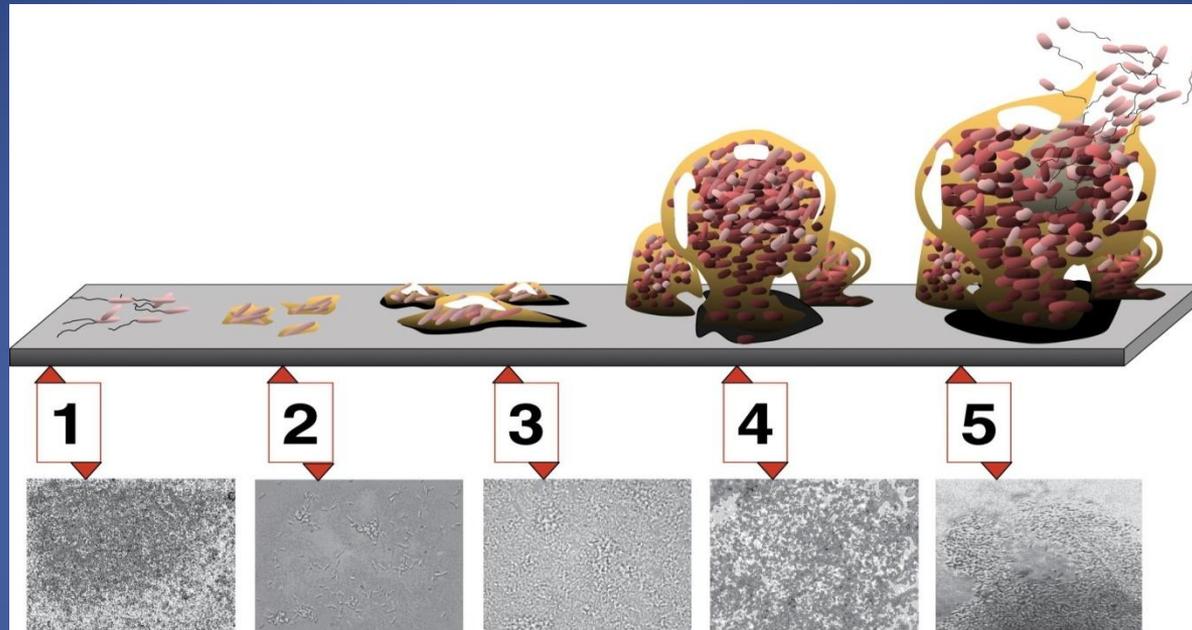


# 1. Biofilm and Plaque Control



- **EARLY** Collection of microorganisms, dead cells, and food particles which adhere to each other on a tooth surface
- These adherent cells are embedded within a matrix of extracellular polymeric substance (sticky adhesions-allowing for attachment)

# BIOFILM FORMATION



- 1- Initial attachment of free floating microorganisms to tooth surface  
(weak adhesive qualities with cellular adhesion)  
(easily removed)
- 2-Development  
(stronger, more permanent bond with cell adhesive pili)
- 3-Maturation  
(allows other cells to colonize due to better adhesive sites)
- 4-Continued maturation into plaque and calculus (tartar)
- 5-Dispersal

# 1. Biofilm and Plaque Control



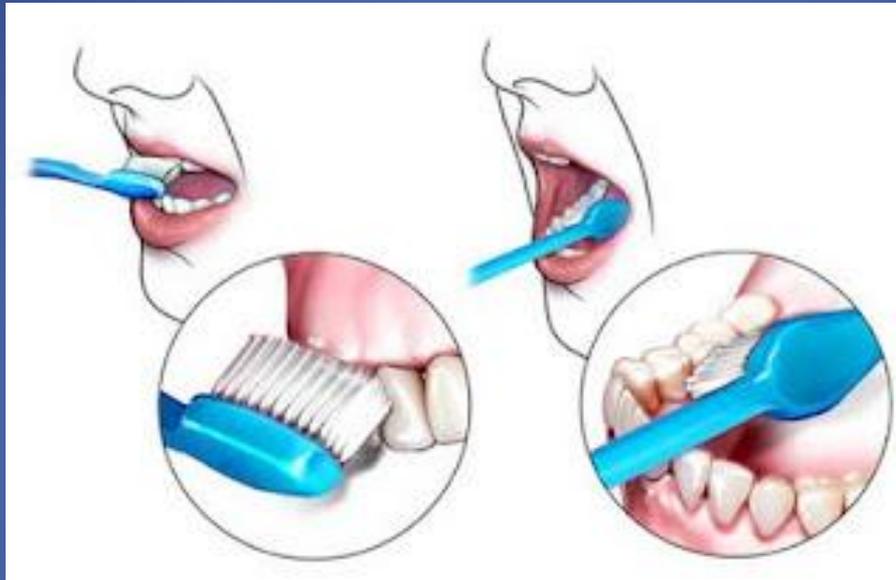
- ❖ Plaque is a mature form of biofilm
- ❖ Sticky film like appearance that can mature into a hard shell (tartar or calculus)

# 1. Biofilm and Plaque Control



- Must be removed daily to allow the enamel to recalcify

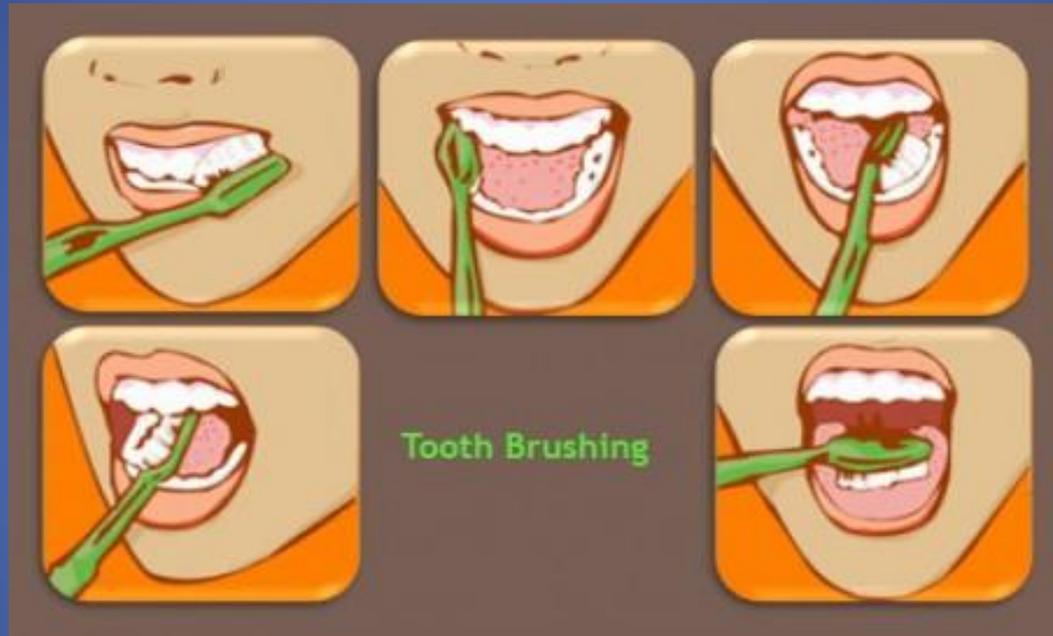
# 1. Biofilm and Plaque Control



The American Dental Association advises that brushing your teeth thoroughly be done twice per day. Overly vigorous or incorrect brushing can result in damage to the gum tissue and thinning of the enamel therefore this article will provide some basics on brushing.

# 1. Biofilm and Plaque Control

## Brushing



1. Use a soft toothbrush & brush gently to protect your gums and tooth enamel
2. Tilt the brush at a 45 degree angle, facing where your teeth and gums meet
3. Brush 2-3 teeth at a time with a gentle vibrating motion
4. Clean all of the surfaces of your teeth
5. Brush your tongue gently or clean it with a tongue scraper

# 1. Biofilm and Plaque Control



The American Dental Association advises that flossing your teeth thoroughly be done once per day. Overly vigorous or incorrect flossing can result in damage to the gum tissues therefore this article will provide some basics on flossing.



## What is flossing?

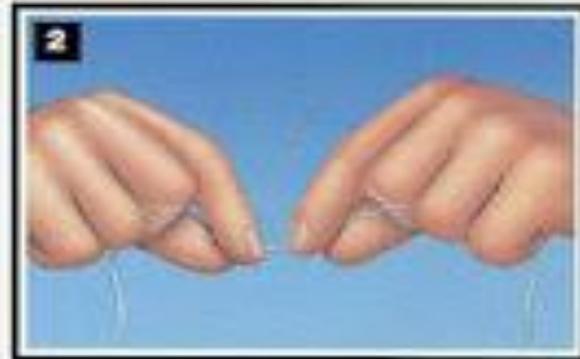
Dental floss is made of either a bundle of thin nylon filaments or a plastic that is indicated for plaque and debris removal in areas where teeth contact with each other. The floss is gently inserted between the teeth and scraped along the teeth sides, especially close to the gums. An alternative tool to achieve the same effect is the interdental brush, which is more helpful in areas where the gums have receded in between the teeth. The two frequently used dental flossing methods are the spool method and the circle, or loop, method. Control of the floss and ease of handling can be seen in both methods. Flossing of teeth is a complex skill, so until children develop adequate dexterity (which is usually around the age of 10 to 12 years), an adult should perform flossing on the child. Younger children whose teeth still exhibit primate spaces (where there is no contact between adjacent teeth) will not require flossing.

# What is flossing?

## The spool method



Wind 18" of floss around middle fingers of each hand. Pinch floss between thumbs and index fingers, leaving 1" - 2" length in between. Use thumbs to direct floss between upper teeth.



Keep a 1" - 2" length of floss taut between fingers. Use index fingers to guide floss between contacts of the lower teeth.



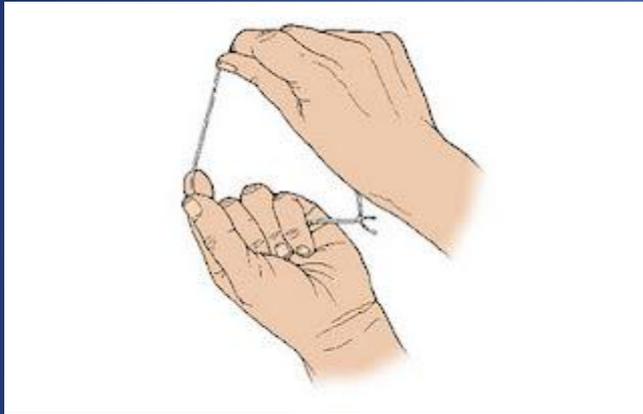
Gently guide floss between the teeth by using a zig-zag motion. **DO NOT SNAP FLOSS BETWEEN YOUR TEETH.** Contour floss around the side of the tooth.



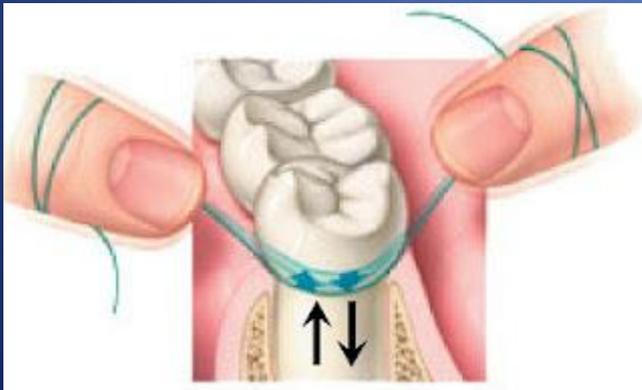
Slide floss up and down against the tooth surface and under the gumline. Floss each tooth thoroughly with a clean section of floss.

# What is flossing?

## The loop method



1. The loop method is suited for children as well as adults with less nimble hands or physical limitations caused by conditions such as poor muscular coordination or arthritis. For the loop method, the ends of the 18-inch piece of floss are tied in a knot. All of the fingers, but not the thumbs of the two hands are placed close to one another within the loop. Whether using the spool or the loop method of flossing, the same basic procedures are followed



The thumb and index finger of each hand are used in various combinations to guide the floss between the teeth. When inserting, floss, it is gently eased between the teeth with a seesaw motion at the contact point. The gentle seesaw motion flattens the floss, making it possible to ease through the contact point and prevent snapping it through, thus avoiding trauma to the gums in between the teeth. Once past the contact point between teeth, the floss is adapted to each approximating surface by creating a C-shape. The floss is then directed downwards towards the gum line and back to the contact area (up-and-down against the side of the tooth) several times or until the tooth surface is clean. The procedure is repeated on the adjacent tooth in the proximal area, using care to prevent damage to the gums in between while readapting to the adjacent tooth. A clean, unused portion should be used for each area between teeth.

# Are You Balanced

## 1. Saliva PH

How much pure water do you get a day? Chances are it is not enough to keep your body at full functionality. In fact, water makes up for more than half of the body's weight. Body water acts in many areas of the body including lubricating joints, removing wastes and toxins, transports nutrients and oxygen, controls heart rate and blood pressure, protects organs and tissues, and creates saliva.

The body loses water daily through sweat, breathing, defecation, and urination. Although every individual has a different level of hydration needs, the minimum is about 13 cups for men and about 9 cups for women of water daily. Water can be found in many different beverages, however, some of the beverages can act as much as a diuretic (stimulating additional urination) as they do a hydrator. Straight water is a much better option than any of the other types of beverages out there. Additionally, pH balanced water has additional benefits for those concerned about increasing all areas of their health. Did you know that even most bottle waters are slightly acidic?

# Are You Balanced

## 1. Saliva PH

Why does it matter what the pH of the water you're drinking is? Our bodies function better when our blood stream is at a neutral pH, however most of the things we are eating and drinking are considered acidic. When our bodies are acidic we do not have the ability to carry oxygen to all areas of the body, especially our brain. This causes us to feel fatigued and sluggish. We can also do harm to organs and tissues when we live in a state of chronic acidity. When the blood stream is acidic, the bones begin to release calcium in attempt to neutralize the blood stream. This causes the bones to demineralize and can lead to osteoporosis when left untreated.

Another reason it is a good idea to continually balance your body's pH is that it is our body's main source of expelling any waste or toxins. When the body is continually fed acidic foods and beverages, it builds up a lot of free radicals. Free radicals are negatively charged electrons floating around in the system and can contribute to tumor growth. When you continually hydrate with slightly alkaline water, the positively charged hydrogen atoms will bind with the free radicals and allow the body to remove them naturally. This is important for preventing many types of diseases including prevention of cancerous tumor growths. There are several types of foods that can have a similar effect.

# Are You Balanced

## 1. Saliva PH

The American Gastroenterological Association estimates that 33 percent of people in the United States have acid reflux disease. With associated costs approaching \$10-million a year, acid reflux disease is the most expensive chronic gastrointestinal disorder in the U.S. Acid reflux symptoms can include heartburn, excessive belching, sore throat, swallowing difficulties, hoarseness, chronic cough and mild regurgitation.

It can have serious effects in the mouth. CDHA officials urge the public to pay closer attention to the way this condition can affect the body as a whole. According to the American Academy of Otolaryngology, "When stomach acid touches the sensitive tissue lining the esophagus, it causes a reaction similar to squirting lemon juice in your eye."

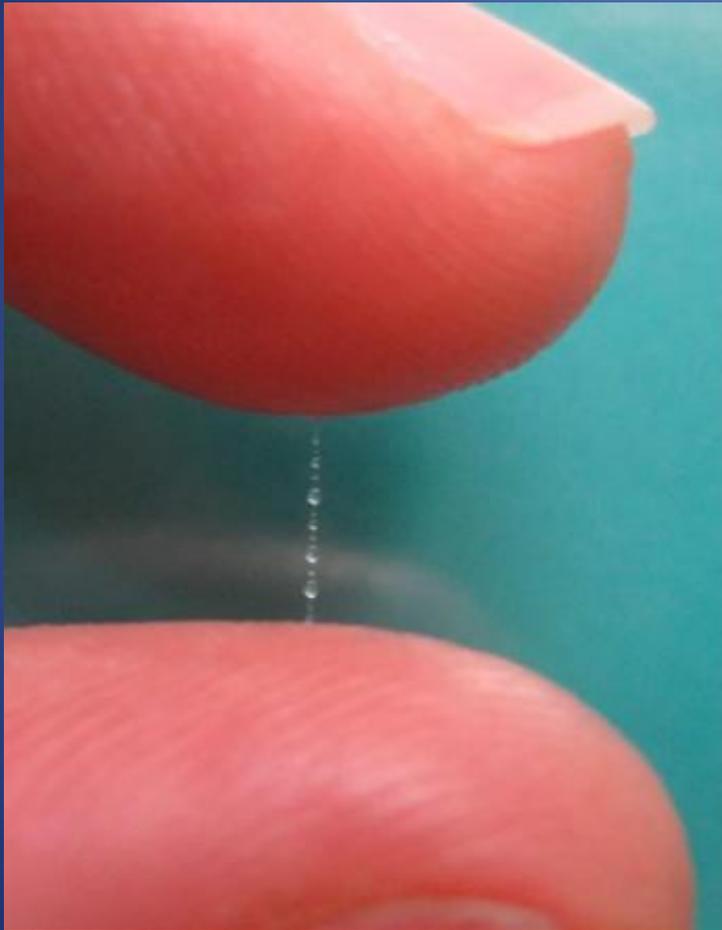
# Are You Balanced

## 1. Saliva PH

Damage will result from chronic acidic irritation as the stomach acid comes into contact with the tissue, according to CDHA. Even the hardest tissue in our body can not resist the acid and the enamel, or outer portion of our teeth, will soften and erode. Once gone, tooth enamel cannot be replaced.

Those suffering from acid reflux can lessen symptoms by:

- Never brushing teeth immediately after acid reflux because the enamel is softened and can slowly erode away.
- Asking their hygienist about fluoride and re-mineralization therapy to strengthen their teeth and request instruction on how to rinse with baking soda and water to neutralize the pH in the mouth after a reflux episode.
- Maintaining a healthy weight and exercising frequently.
- Reducing or eliminating the intake of alcohol and cigarettes.
- Limiting meal size, eating slower, and paying attention to diet: Spicy and fatty foods as well as carbonated drinks can agitate acid reflux



- ❖ Saliva should be “wet” like water. When it is thick and ropey it loses its alkalinity effect on the enamel.
- ❖ The surrounding biofilm becomes acidic. This causes the enamel to lose its calcium concentration (demineralization).
- ❖ Enamel demineralization weakens the tooth’s surface. This allows for tooth sensitivity, weakening of the tooth, and decay.



### Before Demineralization

Enamel is smooth, and has a shiny luster

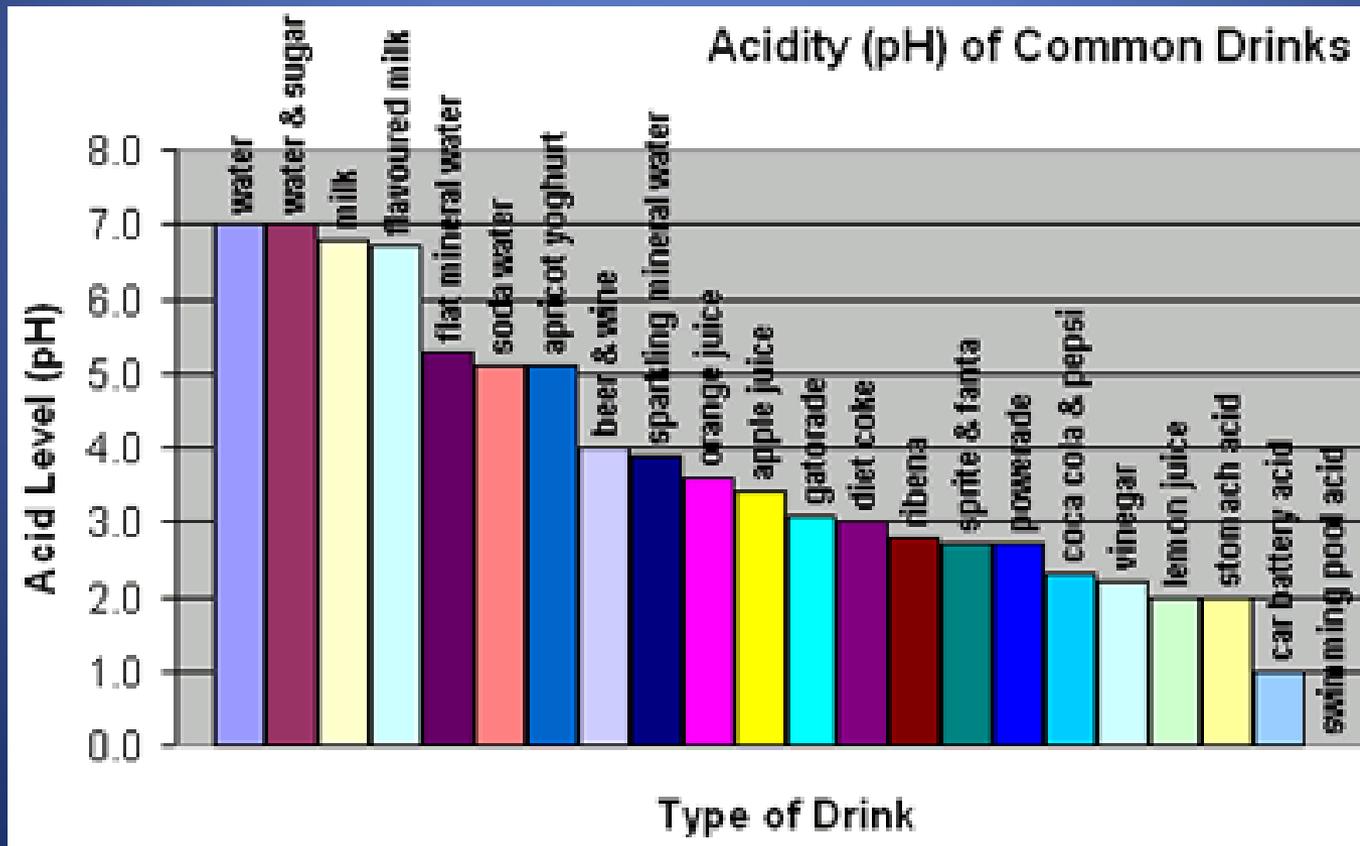


### After Demineralization

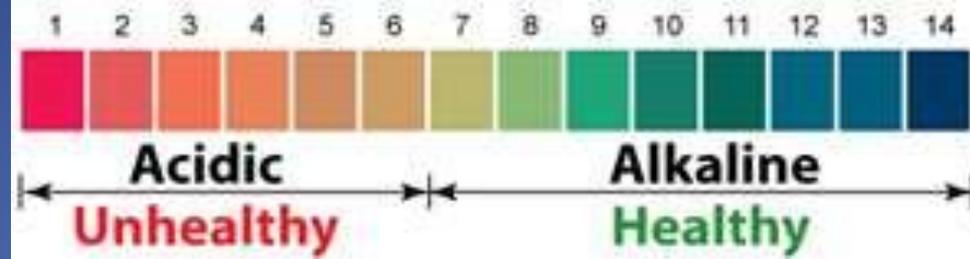
Enamel has a chalky dull appearance

# SALIVA AND PH

- Salivary PH Average (6.4)
- Fluctuates throughout the day
- Tooth structure undergoes demineralization and remineralization as the PH changes
- A PH of 6.4 is ideal for ionization principles to be carried out (mineral saturation)



# What colour is your pH strip?



Litmus Paper (PH testing tape) can be found at most health food stores or pool supply stores



1. Place litmus paper strip in slightly in mouth
2. Leave in mouth for a few seconds
3. Check color change of litmus paper with chart

# Are you balanced?

Any water will quench thirst, but Neutral PH water can do even more. With every bottle, Neutral PH water's natural alkalinity helps your body fight the acidity of today's diet and lifestyle. That means, while you're enjoying a delicious bottle of water, you're also helping to fight the effects of the highly acidic modern diet.

Increased dietary alkalinity reduces body fat and fatigue, protect bones, support the immune system, and achieve better overall health. Did you know...

...your body has a narrow window of "healthy" body pH levels?

Staying between 7.2 and 7.6 on the pH scale is critical, and Neutral PH water's natural alkalinity of 8.8 is a powerful tool to help keep you in the body pH sweet spot.

...daily maintenance through nutrition is the best way to regulate alkalinity? Health-promoting foods like leafy greens, seaweed, green tea or Neutral PH water can naturally help keep your body pH balance in check and are less toxic than using medications.

# Are you balanced?

## Recommended Products



# BIOTENE Products

❖ The ingredients in the **oral rinse** that helps prevent the mouth from drying out are aloe, peppermint oil, calcium lactate, zinc gluconate, sodium benzoate, propylene glycol, hydroxycellulose, hydrogenated starch, potassium, water, xylitol and benzoic acid. These ingredients also kill the germs in the mouth that cause cavities and gum disease.

❖ **Mouth Spray** refreshes and moistens instantly to keep your mouth feeling comfortable wherever you are. And it can help freshen your breath.

❖ **Oral Balance** provides fast and long-lasting relief to dry mouth symptoms. Specifically formulated for dry mouth symptom relief.

❖ **Gum** can help to stimulate saliva flow for relief of dry mouth. Chewing regularly can help freshen breath and leave your mouth feeling clean and fresh.

❖ **Tooth Paste** biofilm is the thin film of bacteria, as known as plaque, which builds up in the mouth and attacks the teeth and gums. It is one of the first **symptoms of dry mouth**, in which a lack of saliva leaves the mouth unprotected. With regular brushing, Biotene® PBF Toothpaste helps loosen Biofilm for a cleaner, fresher mouth.



# GC Tooth Mousse

- Milk derived protein
- Binds calcium and phosphate to tooth surfaces
- Restores oral mineral imbalances that cause demineralization



## Application of GC Tooth Mousse

After brushing your teeth, apply a generous amount to tooth surfaces using your finger or cotton tip, and leave undisturbed for 3 minutes. Then use your tongue to spread the mousse throughout your mouth. Wait another 2 minutes then you can spit out the excess. Do not rinse yet ( wait 30 minutes before you eat, drink or rinse ) .

# GC Tooth Mousse

- **Mechanism of action**
  - ~ acts as a reservoir of calcium phosphate
  - ~ buffers plaque PH
  - ~ maintains its concentration gradient in the lesion allowing for remineralization

