# PATIENT EDUCATION BOOK

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## HEALTHY GUMS AND DENTITION



No bleeding or inflammation. Probing depths between 1-3mm.

# GINGIVITIS

Gingivitis is a bacterial infection that is limited to the gingiva around the cervical line of your teeth.

With proper oral hygiene care the tissue damage is reversible.

The stage of gingivitis may be acute (lasting for a short period) or chronic (lasting months – years).

## Signs of Gingivitis

- Red swollen gums
- Interdental papilla may appear bluish-red
- Bleeding gums with flossing and brushing
- Bleeding on probing
- Possible bad breath or taste
- No bone loss
- No tooth mobility
- Probing depth up to 4mm



## GINGIVITIS



# PERIODONTAL DISEASE

Bacterial infection on all parts of the periodontium (gingiva, PDL, Alveolar bone, cementum).

Untreated gingivitis progresses to periodontal disease.

**Signs & symptoms:** depends on the stage but may include red swollen gums, bleeding upon brushing and flossing, bleeding on probing, sensitivity, persistent bad breath, radiographic bone loss, tooth mobility, recession, & tooth loss.



### Irreversible tissue damage

STAGE 1	STAGE 2	STAGE 3	ADVANCED
<ul> <li>CAL 1-2 mm</li> <li>Bone Loss: Coronal third (&lt;15%)</li> <li>No tooth loss</li> <li>Maximum Probing depth: 4mm</li> <li>Mostly horizontal bone loss</li> </ul>	<ul> <li>CAL 3-4 mm</li> <li>Bone loss: Coronal third (15-33%)</li> <li>No tooth loss</li> <li>Maximum Probing depth: &lt;5mm</li> <li>Mostly horizontal bone loss</li> </ul>	<ul> <li>CAL &gt;5 mm</li> <li>Bone loss: Extending to mid-third of root and beyond</li> <li>Tooth loss: &lt;4 teeth</li> <li>Probing depth: &gt;6 mm</li> <li>Vertical bone loss: &gt;3 mm</li> <li>Furcation involvement: Class II or III</li> <li>Moderate ridge defects</li> </ul>	<ul> <li>CAL &gt; 5 mm</li> <li>Bone loss: Extending to mid-third of root and beyond</li> <li>Tooth loss: &gt; 5 teeth</li> <li>Need for complex rehabilitation due to masticatory dysfunction, secondary occlusal trauma, severe ridge defects, bite collapse, drifting, flaring, &lt;20 remaining teeth (10 opposing pairs)</li> </ul>

## STAGES OF PERIODONTAL DISEASE



## BIOFILM

### Also known as plaque

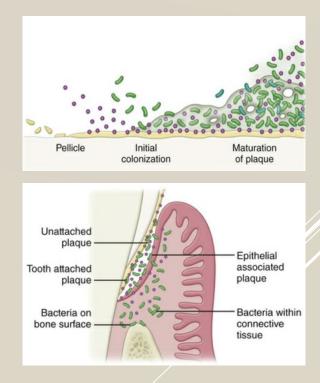
Communal arrangement of bacteria that sticks to a surface where moisture and nutrients are available.

Sticks to the surface of teeth, dental appliances, restorations, and oral mucosa.

Uses saliva as a means for colonization, nutrition, and transportation.

The sugar stored within oral biofilm give off a longer exposure to lactic acid which can lead to caries and periodontal infections.

In a healthy mouth, biofilm is mainly supragingival (above the gumline) but if left undisturbed it can spread subgingival (below the gumline) and lead to oral infection and inflammation.



# CALCULUS

Formation of calculus: Plaque mineralizes and becomes calculus. The formation of calculus due to undisturbed plaque can occur as quickly as 24-72 hours.

There are two types of calculus: 1. supragingival (above the gumline) 2. subgingival (below the gumline)

Plaque may be removed with routine oral hygiene care at home.

Calculus can only be removed by a professional dental hygienist as it is tough and difficult to remove with a toothbrush. Professional instrumentation is required to prevent the progression of disease and restore the oral cavity to healthy conditions.

Progression of Calculus



Slight Calculus



Moderate Calculus



Heavy Calculus



Heavy Calculus



**Cause:** The bacteria found in plaque convert the sugars in food into acids. Without routine dental care plaque will begin to accumulate and the sugars it alters will progressively damage your teeth over time.

**Progression of tooth decay:** Damage begins at the enamel surface and, if left untreated, can progressively move towards the dentin, and then the pulp, the innermost layer of the tooth. When caries reach the pulp, swelling occurs which puts pressure on the nerve surrounding the tooth and causes pain.

If still left untreated, an abscess will form which will require endodontic treatment or complete tooth removal. Without prompt attention, the abscess can spread to other areas of your body including areas of your head and neck.

Signs and Symptoms: staining, visible holes or pits, tooth sensitivity, pain on contact, and mild or sharp pain.



# SCALING, ROOT PLANING, & DEBRIDEMENT



**Scaling** removes plaque and tartar found below the gingiva

**Root planing** helps the gingiva reattach to the tooth by soothing out the root of the tooth. It eliminates rough surfaces that can lcause calculus to reform.

Required in the presence of:

- Supra and sub gingival calculus
- Swollen erythematous gums
- Periodontal pockets
- Halitosis

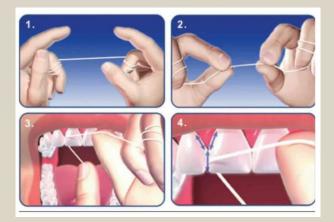


**Debridement** is the removal of supra gingival and subgingival calculus which interferes with the ability to perform an evaluation.

### Required in the presence of:

 Thick or dense deposits of plaque or calculus that cannot be removed by prophylaxis treatment

## **FLOSSING TECHNIQUE**



#### MAKE SURE TO MAKE A "C" SHAPED HUG AROUND TOOTH



### Adult:

Use 18 inch long piece of floss

Wrap around middle fingers

Leave ½ inch of floss between fingertips

Insert floss between teeth using gentle seesaw motion

Wrap the floss closely around each proximal surface (or side of tooth) (make C-shape)

Use up-down motion from the sulcus up to the contact (3 -4 strokes)

## Child:

Use 8 -10 inch piece of floss Tie the ends together in a knot Advance floss to new area by sliding floss away from knot.

## TYPES OF FLOSS



The type of floss used is personal preference.

Floss should fit appropriately between the contact of each tooth

Tufted floss (large yarn like floss that expands upon contact with saliva) is best used for areas with restorations such as implants, bridges, and some orthodontic appliances (i.e., lingual retainer), especially in areas with large embrasure spaces.

Floss Picks/Floss holders are great for people with larger hands who cannot comfortably floss with traditional floss.

Floss threaders are great for flossing under bridges or orthodontic wires.

A power flosser is a great alternative for persons with limited dexterity.

# **BRUSHING TECHNIQUE**

#### Directions:

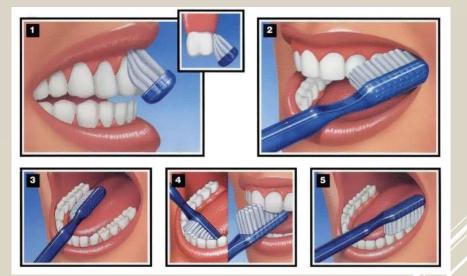
Use a soft bristled tooth brush

direct the bristles slightly into the sulcus at a 45 degree angle

vibrate the bristles in a short back and forth motion

#### BRUSHING SEQUENCE

OCCLUSAL BUCCAL/LINGUAL ANTERIOR LINGUAL TONGUE BRUSHING BRUSH 2-4 MINUTES AT LEAST 2X DAY



### Advantages:

- Provides good gingival stimulation which stimulates the blood flow to help get rid of bacteria
- Disrupts plaque biofilm found at and below the gingival margin
- Effective plaque control technique

## TYPES OF TOOTHBRUSHES



# POWER TOOTHBRUSHES

### Why get a power toothbrush?

High frequency and oscillating/rotating movement = more strokes per minute

More effective at removing plaque than a manual toothbrush

Multiple brushing modes

Brush head made to cup each tooth

Replaceable toothbrush heads

Built in 2-minute timer

Built in pressure indicator

Great alternative for persons with poor dexterity

Fun for everyone, especially kids.





## INTERDENTAL AIDS

Proxabrushes 





**Proxabrushes** are recommended for use between open spaces (i.e., fixed prosthesis, implants, space maintainers, & orthodontic appliances).

A dental **toothpick** is recommended only on facial surfaces to remove interdental plaque.

The **stimulator** is best used to remove plaque found just below the gingival margin.

The **Stim-U-Dent** is used to clean areas with missing interdental papilla.

**End-tuffed brush** is great for use between small spaces or hard to reach areas such as the distal surfaces of molars.

## TX FOR HYPERSENSITIVITY



**Sensodyne** is a therapeutic toothpastes that creates a protecting layer over the exposed dentin helping to relieve tooth sensitivity within three days. It also helps to prevent stains and protects against cavities. Treatment: Use 2x daily when brushing.

**Gluma** is a desensitizer that works to effectively seal the dentinal tubules to treat against hypersensitivity.

Treatment: applied locally to exposed dentin. Sensitivity relief lasts up to 18 months.

**MI Paste** helps treat sensitivity while re-mineralizing enamel. Treatment: Use 2x daily, once in the morning, once before bed. Leave on teeth for at least 3 minutes before rinsing.

# OTC & RX FLUORIDE



**ACT** – Use 1x day after brushing your teeth. Swish your teeth for 1 minute then spit it out. No eating or drinking for at least 30 minutes after rinsing. Available over the counter.



**Gel Kam** - Use after regular brushing and flossing. Cover bristles of toothbrush with gel and brush thoroughly. Keep gel on your teeth for one minute then spit out. Do not swallow. Do not rinse, eat, or drink for 30 minutes. Available over the counter.



**Prevident 5000 Plus** – Use 1x daily. Brush on gel using a toothbrush and mouthpiece tray. Use after regular brushing. Prescription required.



**5% Na Fluoride Varnish** - Performed after routine dental hygiene services. Varnish is painted on the teeth by clinician and patient is instructed to refrain from consuming any hot temperature, hard or crunchy foods for the following two hours. As well as no alcohol, alcohol based rinses, brushing or flossing for the following 2 hours after application. In office application.

# PROFESSIONAL FLUORIDE

Fluoride products help to remineralize the teeth and help in the prevention of dental caries.

**Gel** - 2% Na fluoride or 1.23% APF gel. Use of disposable mouth tray for application. Avoid swallowing during application as it can cause nausea and vomiting. If patient is high caries risk, recommended use is 3-6 month intervals.

**Varnish** – Topical fluoride that is painted on the teeth. The recommended use is 2-4x year. Substantially reduces the risk of caries and inhibits caries progression.

Foams (not ADA endorsed)

In office rinses (not FDA-approved)





## MOUTH RINSE



#### **Anticaries**

Vitis: Prevents dental caries, repairs, reinforces, remineralises enamel, and protects against dental erosion. Active ingredients: hydroxyapatite, xylitol, fluoride

#### Xerostomia

ACT Total Care: Alcohol Free, kills bad breath germs, strengthens teeth, and helps prevent cavities. Active ingredients: Sodium fluoride 0.05%

Biotene Dry Mouth: Provides immediate dry mouth symptom relief for up to four hours. Active ingredients: Water, glycerin, xylitol, sorbitol, propylene glycol, poloxamer 407, potassium sorbate, hydroxyethyl cellulose, flavor, sodium phosphate, cetylpyridinium, disodium phosphate

#### **Alcohol Free**

Listerine Zero Alcohol: Kills bad breath germs while providing an alcohol free soothing solution. Active ingredients: Eucalyptol 0.091% w/v, Menthol 0.042% w/v, Thymol 0.063% w/v

#### Antigingivitis

Listerine Gum Therapy: Provides protection against plaque and germs that cause gingivitis. Active ingredients: Eucalyptol 0.092%, Menthol 0.042%, Methyl Salicylate 0.060%, Thymol 0.064%

# XEROSTOMIA

### CAUSE

- medications (over 500 types)
- medical conditions/diseases
  - radiation therapy
  - Sjogren syndrome
  - diabetes mellitus
  - HIV/AIDS
  - mumps
  - parotid agenesis
  - diarrhea
  - vomiting
  - hemorrhage
  - calculi
  - reduced fluid intake
- Radiation therapy
- Chemotherapy
- Nerve damage

### SYMPTOMS

- Frictional irritation from denture
- Altered taste
- Cracked lips
- Fissured tongue
- Swallowing & speech difficulty
- Burning mouth syndrome

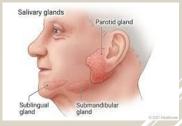
### THINGS TO HELP

- Artificial salivary substitutes
- Drugs that stimulate salivary flow
- oral hygiene products to help alleviate dry mouth
- Products with minerals and fluoride to help strengthen tooth enamel
- Frequent sips of water to keep the mouth lubricated

## THINGS TO AVOID

- Caffeine (coffee, tea, soft drinks)
- Alcohol and alcohol based mouthwash
- Acidic foods
- Dry/rough foods
- Tobacco products
- Sugary drinks







# SMOKING CESSATION

### Quitting smoking

The CDC says "While quitting earlier in life yields greater health benefits, quitting smoking is beneficial to health at any age. Even people who have smoked for many years or have smoked heavily will benefit from quitting. Quitting smoking is the single best way to protect family members, coworkers, friends, and others from the health risk associated with breathing secondhand smoke."

#### **Benefits of quitting**

- Reduced risk of: Cardiovascular disease, Premature death, Poor reproductive health outcomes, Chronic
   Obstructive Pulmonary Disease (COPD)
- Reduces the risk of 12 different types of cancer: acute myeloid leukemia, bladder cancer, lung cancer, cervical cancer, colon and rectal cancer, esophageal cancer, kidney cancer, liver cancer, mouth and throat cancer, pancreatic cancer, stomach cancer, and laryngeal cancer.
- · Overall health improvement and improved quality of life
- · Benefits the health of pregnant women and their unborn child
- Reduces financial burden

#### **Quit Smoking Products**

Nicotine replacement products: patches, gum, spray, inhaler, lozenges Medications: Bupropion & Varenicline (prescription required)

#### **Referral Information**

1-800-QUIT-NOW (1-800-784-8669) Web Support: CDC.gov How to Quit Smoking Text Messaging Programs: Smokefree.gov Smartphone Apps: QuitSTART App Cessation Support Programs: support groups or counseling (check within your local community)



## RESTORATIONS



Composite/Amalga m Filling



Onlay/Inlay



Implant & Crown



Fixed Implant Bridge



Porcelain, Stainless Steel, or Gold Crown



Three unit bridge



Veneer



Maryland Bridge



Space Maintainer



Partial Denture



Complete Denture



Implant Supported Denture

## **PROSTHESIS CARE**

### **Dentures & Partials**

### Home care:

Handle with care

Remove denture/partial and brush it daily using a toothbrush and non-abrasives

Clean your mouth after removing your prosthesis Soak your partial/denture in water when you are not wearing it New prosthesis must be worn all day for the first two weeks After the first two weeks, prosthesis must be removed at least 8 hours daily to allow the gums to rest and be cleaned by our natural saliva.

See your dentist if your partial/denture is ill fitting.

### Office care:

Obtain denture/partial from patient using a paper towel Disinfect denture/partial

In a plastic bag (or container with lid), add stain and calculus remover solution

Place the denture/partial inside the bag (or container) Double bag

Place bag/container in ultrasonic cleaner (10-14 mintes) Rinse prosthesis and scrub any debris with a NEW denture brush Return prosthesis to patient to place back in the mouth





# XYLITOL

- Naturally occurring sweetener and is a type of sugar alcohol
- Contains around 40% fewer calories than table sugar, but equal to or sweeter than sucrose.
- Lowers plaque levels
- Reduces occurrence of xerostomia
- Improves halitosis
- Promotes tooth remineralization
- Reduces the number of cariogenic bacteria, S. mutans. Bacteria are attracted to xylitol over other sugars, but cannot utilize it. Therefore, the bacteria become deprived of nutrients.
- Raises the pH of the mouth.

# TOOTH SNACK GUIDE

Won't cause cavities	(Usually) Won't cause cavities	Causes cavities easily
(Low Carb Foods) Raw, Crunchy Vegetables Raw, Leafy Vegetables Cheese Nuts 100% Nut butters All meats All Fats Water Eggs	Whole Milk Fresh Fruit Whole Grain Bread Popcorn Smoothies Dark Chocolate (>70% Cacao) Yogurt Ice Cream Dips & Sauces Oatmeal	Candies Soda Juice Chocoate milk Cookies Dried Fruit Fruit snacks/strips Dried flour cereals Pretzels Crackers Oranges & Bananas Sports Drinks

Ice cream: Don't get carries away but it rinses better than other desserts. Oranges & Bananas: Please still eat them just not all day long.