

1. Tooth Anatomy

- a. Most of us have 32 permanent teeth (incl. wisdom)
- b. **Crown** - visible
 - i. front teeth = incisors/sharp as a chisel
 - ii. back teeth = molars with rugged surfaces to chew
- c. **Root** - beneath gums
 - i. makes up $\frac{2}{3}$ of tooth
 - ii. serves to fasten tooth to the jawbone
- d. **Enamel** - hard outer coating protecting
 - i. most solid material in human body- 95% made of minerals; calc phosphate
 - ii. but can be broken down if teeth are not clean
- e. **Dentin** - layer under enamel;
 - i. made of living cells which secrete hard mineral substance
 - ii. permanently porous; very sensitive → sensation of pain bc tooth decay
- f. **Pulp** - most inner part of tooth
 - i. blood vessels and nerves run through → form dentin (moisture and nutrients)
 - ii. **pulpitis**: dental pulp becomes inflamed → root canal
 1. increased stimuli, especially to hot/cold, throbbing
 2. caused by: inflammation; tooth decay/cavity penetrates enough
- g. **Gums** (gingiva) - soft mucosal tissue lining mouth used as a seal around teeth
 - i. coral pink means healthy
- h. **Salivary glands** - help flush away food, stop acids from attacking teeth, replenish minerals in tooth enamel, and kill disease causing organisms

2. Gum Disease

- a. **What is it?**
 - i. Swelling/soreness of gums caused by bacteria in plaque. Bacteria have toxins that inflame the gums and can lead to infection of the gums, teeth, and the bone that supports them

3. Relationship between oral and overall health

- a. **Bacteria in mouth**
 - i. controlled by regular brushing and enzymes in saliva
 - ii. harmful bacteria can grow out of control when either are missing, result in tooth decay, gum disease, and make it easier for them to get into bloodstream
- b. **Conditions resulting from poor oral health**
 - i. Cardiovascular disease - heart disease, clogged arteries, and stroke may be linked to chronic inflammation from periodontitis
 - ii. Endocarditis - infection of the inner lining of the heart, bacteria in bloodstream able to affect this area if you have weak immune system or a damaged heart valve
 - iii. Pregnancy - Gum disease has been linked to premature birth and low birth weight (bacteria and mother's immune response → fetus)
- c. **Signs to look for**
 - i. Gums that bleed, are red, puffy or swollen
 - ii. Gums have pulled away from teeth
 - iii. changes in the way teeth fit together
 - iv. Pus between teeth and gums
 - v. Constant bad breath or taste in mouth
- d. **Prevention**
 - vi. Brushing - make sure to clean all surfaces of teeth, especially tongue side, twice a day, replace brush every 3-4 months
 - vii. Flossing - follow curve of tooth, get on both sides of gum "peak," floss beneath gumline
 - viii. Use mouthwash if available

- ix. Avoid soda (sticky sugar = bacteria food, CO₂=acidic), tobacco (damage gum tissue cell),
- x. Regular check ups with dental hygienist