

Definition

A dental disease is a disease which affects the teeth or gums. Some of the most prevalent types of dental disease include dental caries (also known as tooth decay), and gum disease.

Preventing

Preventing dental disease focuses on the following 3 areas:

- 1 Controlling bacteria on teeth
- 2 Making teeth more resistant to decay
- 3 Changing dietary intake

Step one would be controlling dental plaques by disturbing vegetative oral bacteria (free floating) before they organize into mature colonies. These mature colonies (dental plaque) stick to the teeth, absorb sugars from food eaten and give off acids which are the byproduct of their metabolism.

The acids attack hard tooth structures, removing calcium from the outer crown surface (enamel), the outer root surface (cementum) and the inner tooth structure (dentin). Simply put, this is the dynamic of cavity formation.

Bacterial byproducts also attack the gum tissues and cause inflammation, swelling, bleeding, and tartar accumulation above and below the gum line. Left to continue, the attack progresses and the bone that holds the teeth firmly in the jaw begins to erode. Over time, teeth can get loose and be lost.

Another serious side effect is the entry of oral bacteria into the blood stream lodging in plaques that collect and block arteries in the heart, neck and other organs of the body. These plaques can be life threatening if they break free and lodge in an organ and cut off blood supply.

Step two would be making existing tooth structure more resistant to attack from acids. This can be done by the use of fluorides in mouth rinses, toothpastes and topical applications at the dental office or at home in specially adapted plastic trays. Dental sealants also help to keep plaque from getting into crevices in tooth surfaces and causing calcium loss. Unfortunately, if decay begins to spread through the softer dentin layer, it must be stopped by physical removal and restoration.

The third way we prevent dental disease is by changing our diet. Sugars in foods are the most devastating source of fuel for bacterial plaques. Dietary sugars in the form of sticky candy (caramel, nougat) stick to the teeth for long periods causing accelerated acid attack. Simple sugars in soda and sweetened drinks do their damage a little more slowly.

Teeth and oral health can produce clues as to what is going on systemically. What is really called for is a paradigm shift. We need to begin to focus on healthy eating and a healthy lifestyle. Ultimately, what is good for us generally is good for our oral health as well.