

NUTRITION FOR ORAL HEALTH

OVERVIEW OF NUTRITION'S ROLE IN ORAL HEALTH

A healthy balanced diet is necessary for good oral health. Proteins, vitamins, minerals, and some fats aid the development of the jaw and teeth and help keep the gums and oral tissues healthy. Often times, the first signs of malnutrition show up in the mouth. This is because the cells of the oral tissues rapidly turnover and are replaced by new cells. A deficiency of vitamins and minerals impacts this cycle of cell repair and contributes to gingivitis, gum disease, and poorly formed enamel.

WHAT ARE SOME VITAMINS AND MINERALS THAT ARE IMPORTANT?

1. Calcium and Fluoride are both minerals that strengthen the enamel and bone. Calcium is found in many dairy products such as cheese, milk, and yogurt. Fluoride is a naturally occurring mineral that can be applied to the teeth topically in a gel or rinse form or can be ingested systemically when it is added to drinking water.
2. Vitamin C is very important to the health of the gums. Vitamin C helps white blood cells fight harmful oral bacteria.
3. Vitamin D is very important during the development of the teeth and jaw bones. A deficiency leads to an interruption of the process of enamel formation and can result in very poorly formed enamel that is highly susceptible to tooth decay.
4. Vitamin A helps aid in oral tissue repair and regeneration.

Unfortunately, the teeth are very different from other organs and tissues. Once the tooth structure has been completely formed it can no longer be strengthened by eating healthy foods or vitamins. Only fluoride that is applied topically to the teeth can seep into the tooth and help mineralize the tooth crystals. Balanced nutrition is most crucial for young children and infants, since it is in their early years that tooth development occurs.

VITAMIN CHART

VITAL NUTRIENTS FOR ORAL HEALTH	IMPACT ON ORAL CAVITY	ORAL SIGNS OF VITAMIN DEFICIENCY
VITAMIN A	An excess or shortage can impair oral tissue repair and healing. It can also effect the process of tooth development	Enamel Hypoplasia (poorly formed enamel). Presence of oral yeast infections. Xerostomia (Dry mouth). Gingivitis and swelling of the gum tissues.
VITAMIN C	Assists White Blood Cells in fighting oral bacteria and neutralizes harmful toxic by- products of bacteria	Slower wound healing in the mouth. Gingivitis and bleeding of the gums. Increased risk of developing periodontal disease.
VITAMIN D	Essential for healthy teeth and bone development	Incomplete calcification of teeth and alveolar bone (bone that supports the teeth in the jaw). Jaw abnormalities. Missing teeth/misaligned teeth/ Enamel Hypoplasia.
THE "B" VITAMINS	Defficiency can cause oral discomfort and increases risk of developing gingivitis.	Burning sensation in the mouth/tongue. Loss of papillae (taste buds on tongue). Angular Cheilitis(dry,red patch of irritated skin at corners of the mouth). Apthous Ulcers (oral mouth sores). Gingivitis and inflammation of the gums
IRON	A deficiency in iron is known as Anemia. Severe Anemia can cause oral discomfort and increased bleeding of the gums.	Gingivitis and increased bleeding of the gum tissue. Burning sensation in the mouth/ tongue. Very pale oral tissues including gums. Loss of papillae (taste buds on tongue). Angular Cheilitis