Role of nutrition and supplements to prevent and treat gum disease

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For oral health, diet plays a critical role. We can help our body to minimize inflammation, avoid gum issues, and eventually help improve gum and mouth health by providing our body with adequate nutrition. Sometimes food alone cannot be considered as a complete nutrition hence several supplements are required this nutrition include:

CoenzymeQ10

- 1. Also called CoQ10 and ubiquinone.
- 2. It occurs naturally in the body and also in variety of foods.
- 3. It has more potential than vitamin C to reduce the gum inflammation and infection in periodontal disease.
- 4. It is a powerful antioxidant and a source of cellular energy.
- 5. It assists in gum healing and gum inflammation reversal.
- 6. CoQ10 supplements are oil based capsules and are better absorbed and utilized by the body.
- 7. Food: meat, fish, beef, pork, heart and chicken liver, vegetable oils, parsley.

Vitamin C

- 1. A powerful antioxidant which plays major role in synthesis of collagen and protects cells in gums from the free radical damage which can lead to periodontal diseases.
- 2. It prevents all forms of inflammation of gums.
- 3. However, the precise dose needed to minimize inflammation and improve existing gum conditions must be met in large amounts (1000-3000 mg/day).

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4. Food source: citrus fruits, papaya, broccoli, potato, strawberries, spinach, and berries.

Zinc

- 1. It is crucial for a healthy functioning immune system.
- 2. It is beneficial in supporting gum health, keeping the gum tissue strong and resilient and combats bacterial plaque formation.
- 3. Requirement is at least 15 mg zinc per day.
- 4. Food source: meat, shellfish, pumpkin seeds, wheat grains, oysters, and beef liver.

Selenium

- 1. It is an antioxidant which cleans up all the free radicals responsible for creating inflammation.
- 2. Food source: nuts (especially Brazil nuts) and vegetables.

Grapefruit seed extract

- 1. It exhibit antibiotic qualities.
- 2. During teeth brushing, a drop of it may be applied to our toothpaste.

Cranberries

- 1. It helps to avoid bacteria from binding to our teeth.
- 2. 90 ml per day is the appropriate volume.
- 3. Before supplementing cranberry, one who is vulnerable to kidney stone or takes warfarin should consult a doctor.

Omega-3 fatty acids

According to the studies published in the "Journal of Dental Research", they are used in the treatment of numerous inflammatory conditions, and may be helpful in a fight against the bone loss seen in advanced gum disease.

Vitamin D

- 1. It is necessary for optimal calcium absorption.
- 2. Food source: fatty fish (like tuna, mackerel, and salmon), some dairy products, orange juice, soy milk, cereals, beef liver, cheese, egg yolks.

Calcium

- 1. It is found in body and is essential for maintaining healthy bones and teeth.
- 2. It reduces the symptoms of gingivitis.
- 3. Food source: milk and milk products, sardines, clams, turnip and mustard greens, broccoli.

According to the study of "Journal of Periodontology", it was found that the patients who took both vitamin D and calcium during periodontal maintenance program were found to have better periodontal health than those who did not take those supplements.

Vitamin A

- 1. It is crucial for healthy gum health as it helps in maintenance of healthy mucous membrane and maintains salivary flow in the mouth.
- 2. It also supports the healthy immune system that is resistant to infection.
- 3. Food source: present only in animal foods; beef liver is an excellent source. Beta carotene is also a source of vitamin A which can be found in carrots, melons, squash, sweet potato, spinach.

Vitamin E

- 1. It also acts as a powerful antioxidant that protects the cells of the gums from free radical damage that can lead to periodontal diseases.
- 2. It aids in the healing and regeneration of damaged gum tissues.
- 3. Food source: citrus fruits, papaya, broccoli, potato, strawberries.

Vitamin B3 (Niacin)

- 1. It helps in reduction in the symptoms of gingivitis.
- 2. Food source: tuna, beef liver, chicken breast, mushroom.

Essential oils

- 1. They exhibit antibacterial properties and hence are used in treatment and prevention of gum diseases.
- 2. Various essential oils, such as clove oil, eucalyptus oil, tea tree, peppermint, oregano, rosemary, cinnamon, myrrh, thyme and fennel, can be used individually or in combination with each other.
- 3. Add 6 drops of oil to a cup of warm water and rinse the mouth after brushing for a quick mouth rinse.

Vitamin B

- 1. The vitamin complex is made up of eight vitamins.
- 2. These are thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, biotin, folic acid and B-12.
- 3. Association list of B vitamins are important for oral health, they are required for cell growth, and for healthy blood which all contribute to healthy gum tissue.
- 4. Food source: vitamin B-12 is found in animal products, like fish, meat, eggs and dairy products. In whole grains and many vegetables as well as animal products, other B vitamins are found in.

How to prevent gingivitis

Early stage detection of gingivitis can help to prevent the progress of disease hence it is required to follow following steps:

- 1. Practice good oral hygiene by brushing properly and using floss and washing your teeth.
- 2. Maintaining good overall health by having proper nutrition and exercise.
- 3. Leave smoking
- 4. Consulting dentist regularly so as to ensure healthy condition of mouth by having professional cleansing of teeth every 6 months.

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