Orthomolecular Medicine News Service, February 19, 2009

Vitamin Deficiency Underlies Tooth Decay Malnutrition Causes Much More than Dental Disease

(OMNS, February 19, 2009) Cavities and gum diseases are not often regarded as serious diseases, yet they are epidemic throughout our society, from the youngest of children to the oldest of senior citizens. Research more than suggests that the same good nutrition that prevents cavities and gum diseases may also prevent other illnesses.

Dental caries and gum pathology are frequently associated with serious chronic health problems. Multiple independent studies published after 1990 document this. Cavities are associated with poor mental health [1-4]. Elderly individuals with dementia or Alzheimer's disease had an average of 7.8 teeth with fillings vs. an average of only 2.7 fillings for elderly individuals without dementia [1]. It is likely that the toxic heavy metal mercury, which makes up half of every amalgam filling, is a contributing factor.

A recent authoritative review showed a clear association between cavities and heart diseases [5]. More importantly, this same study showed that people with poor oral health, on average, lead shorter lives. The association between cavities and diabetes is also a subject of active, ongoing research [6-8]. Connections between heart disease, diabetes, and dental decay have been suspected for decades. Many of the scientists who called attention to this have proposed that diets high in sugar and refined carbohydrates were the common cause of these diseases [9-15].

Dental diseases, mental diseases, heart disease, infectious respiratory diseases, and heart disease are all at least partially caused by common failures in metabolism. Such failures are inevitable when there is a deficiency of essential nutrients, particularly vitamins D, C, and niacin.

There is especially strong evidence for a relationship between vitamin D deficiency and cavities. Dozens of studies were conducted in the 1930's and 1940's [16-27]. More than 90% of the studies concluded that supplementing children with vitamin D prevents cavities. Particularly impressive was a study published in 1941 demonstrated the preventative affect of "massive" doses of vitamin D [28]. And yet no subsequent studies in the scientific literature suggested a need to follow up and repeat this work.

Vitamin D deficiency is linked to respiratory infections, cancer, heart disease, diabetes and other ailments [29]. The evidence for vitamin C was reviewed by Linus Pauling [15], and the evidence for niacin was reviewed by Abram Hoffer [30].

Obtaining vitamins in sufficient doses to help prevent dental disease is safe and easily accomplished. Between 5,000 and 15,000 IU of vitamin D may be obtained from modest exposure to sunshine in the middle of the day. Recommending that people regularly use the capacity of their skin to make vitamin D is common sense. Certainly 1,000 to 2,000 IU per day of vitamin D in supplemental form is safe. 2,000 milligrams per day of vitamin C, and hundreds of milligrams per day of niacin, help prevent tooth and mouth troubles. Sick individuals, and those who are prone to cavities, will typically benefit by starting with higher doses of vitamin D, vitamin C, and niacin under the supervision of an orthomolecular physician.

We believe that individuals taking these nutrients, along with good dental care, will have dramatically fewer cavities and gum operations than individuals just getting good dental care. This idea is easily tested, and the time has come to do so.

References:


Nutritional Medicine is Orthomolecular Medicine

Orthomolecular medicine uses safe, effective nutritional therapy to fight illness. For more information: http://www.orthomolecular.org

The peer-reviewed Orthomolecular Medicine News Service is a non-profit and non-commercial informational resource.

Editorial Review Board:
Carolyn Dean, M.D., N.D.
This article may be reprinted free of charge provided 1) that there is clear attribution to the Orthomolecular Medicine News Service, and 2) that both the OMNS free subscription link http://orthomolecular.org/subscribe.html and also the OMNS archive link http://orthomolecular.org/resources/omns/index.shtml are included.