



## **Guidelines nutrition & oral health**

### Periodontitis, gingivitis and peri-implantitis

#### **Periodontitis and gingivitis**

Gingivitis is an inflammation of the gums caused by pathogenic bacteria. With periodontitis not only the gingiva but also the periodontium is inflamed. Currently, 90% of the world's population suffers from gingivitis. Nutrient deficiencies can weaken the gums and periodontium and reduce the resistance to bacteria.

#### **Peri-implantitis**

Inflammation around the implant occurs in more than 40% of all patients. Bone breakdown is the result of chronic inflammation. Diabetes patients are a higher risk group. Peri-implantitis as well as periodontitis and gingivitis occurs, among other things, due to deficiencies in nutrients. The recommendations are therefore the same with regard to nutrition and supplementation.

#### **Nutritional advice for gingivitis and periodontal disease:**

1. Daily incorporation of omega-3 fatty acids into the diet to reduce inflammatory reactions
2. Use sufficient proteins to accelerate the healing process.
3. Incorporate antioxidants into your diet on a daily basis
4. Drink 2 cups of green tea daily
5. Avoid the use of refined carbohydrates
6. Drink a glass of milk kefir twice a week

#### **Advice in gingivitis and periodontal supplementation:**

- Use the teeth & bone formula 3x daily for optimal calcium/magnesium level.
- Advise the use of vitamin C in supplement form. Always choose a combination of ascorbic acid and bioflavonoids.

*Additional advice: Treat gingivitis and periodontitis with blue<sup>®</sup>m oral gel. Please refer to the TOOTH guidelines. In addition to the oral gel, the use of blue<sup>®</sup>m fluoride free toothpaste and mouthwash is recommended for a complete treatment.*

See Appendix I for more information on dietary guidelines for inflammatory reactions.

## Guidelines nutrition and oral health

### Appendix I Periodontitis, gingivitis en peri-implantitis

#### 1. Omega-3 fatty acids

Omega-3 fatty acids have an anti-inflammatory effect. The best-known omega-3 fatty acids are EPA and DHA. Periodontitis is associated with low intake of omega-3 fatty acids. Combined with a high intake of omega-6-fatty acids (linoleic acid found in, among others, sunflower oil). It is recommended that patients consume oily fish twice a week and use nuts, seeds and flaxseed oil daily to meet their daily needs for omega-3 fatty acids. It is recommended that sunflower oil and foods containing sunflower oil be severely restricted.

#### 2. Proteins

A lack of protein in food can cause the healing process of inflamed tissues to slow down and deteriorate. Due to a lack of nutrients including proteins, the resistance in the body is lowered, which increases the risk of periodontitis if one is sensitive to it. Proteins, in particular, are needed to enter the paro-pathogenic bacteria. Advise mainly on plant-based proteins such as nuts, seeds and legumes. Animal proteins are highly digestible and for this reason are not conducive to put on the menu every day.

#### 3. Antioxidants

Inflammation reactions in the mouth are caused by bacteria. Strangely enough, the damage that occurs to the tissue is not caused by bacteria but by so-called cytokines and free radicals that the body itself creates to be able to destroy the bacteria. Antioxidants are the counterparts of free radicals and can make a positive contribution to both prevention and cure. Antioxidants are well represented in vegetables. In addition, it is advised to opt for a complete multi-vitamin.

#### 4. Green tea

Daily drinking of green tea helps in the prevention and treatment of inflammatory reactions in the mouth. The polyphenols present (strong antioxidants) play a particularly important role. Drinking two cups of green tea a day is recommended.

#### 5. Refined carbohydrates

There is a strong relationship between the amount of plaque and gingivitis. The more sugar is consumed, the more plaque is formed. Sugars can also cause inflammation. The advice is to avoid refined carbohydrates as much as possible. Think of white sugar, white bread, white rice and pasta, potatoes (starch), biscuits, pastries, sweets and chewing gum.

#### 6. Milk kefir

When probiotics are used, microbiological changes occur, including plaque reduction and an improvement in the gingivitis index. It has a positive effect on inflammation factors. A natural probiotic is milk kefir. Kefir is fermented milk full of beneficial bacteria for both the mouth and the intestine. Advise your patient to take a glass of kefir twice a week. Buy at a recognised organic foodstore so that the real kefir is consumed.



## Guideline Supplements

### Appendix II Supplementation for the purpose of strengthening oral health

#### **Caries:**

- Use the teeth & bone formula 3 times a day for an optimal calcium/magnesium and vitamin D level.
- Advise a cure of probiotics to reduce Streptococcus Mutans in case of severe cavity formation

#### **blue<sup>®</sup>m teeth & bone formula**

The teeth & bone formula contains a unique composition of high quality ingredients, such as biologically active magnesium, copper, manganese, zinc, boron, vitamin C, vitamin B6, B12 and folic acid. It also contains high doses of calcium, vitamin D3 and vitamin K2. Calcium naturally ensures that we maintain strong bones and teeth. If you choose to have the patient supplement calcium, always choose a combination with magnesium and vitamin D3. Calcium and magnesium have a so-called synergistic effect (one cannot do without the other). Vitamin D3 is necessary in order to be able to absorb the mineral calcium properly.

#### **Probio Oral**

In the case of serious caries, the temporary use of a probiotic is recommended. Bonusan brand Probio Oral supplement is a probiotic specifically designed to promote oral health. Probiotic bacteria are able to reduce the number of Streptococcus Mutants in saliva and plaque.

#### **Gingivitis en periodontitis**

- Use the teeth & bone formula 3x daily for optimal calcium/magnesium level.
- Advise the use of vitamin C in supplement form. Always choose a combination of ascorbic acid and bioflavonoids.

#### **blue<sup>®</sup>m teeth & bone formula**

See information 'Caries'

#### **Vitamin C**

A long lasting severe deficiency of vitamin C can lead to scurvy. One of the characteristics of this is gingivitis. A relationship has also been shown between deeper pockets and more loss of adhesion at reduced vitamin C levels. The severity and increase of periodontitis is also associated with decreased vitamin C values. The orthomolecular guidelines indicate a basic dose of 2000 mg per day. Always advise a combination of vitamin C and bioflavonoids (as it occurs in nature). Brands such as Bonusan, NOW and Vitals often offer the right dosage and combination. Vitamin C can be used for life and can be temporarily increased during the flu/cold period.



### Oral ulcers and herpes labialis

- Use the blue<sup>®</sup>m teeth & bone formula 3x daily for a higher calcium, magnesium, iron and vitamin B12 value
- Advise the use of vitamin C in supplement form. Always choose a combination of ascorbic acid and bioflavonoids.
- If serious vitamin B12 deficiency > choose a lozenge tablet including folate (folic acid)\*
- Advise the use of L-lysine in case of the herpes simplex virus

blue<sup>®</sup>m teeth & bone formula  
See information 'Caries'

Vitamine C  
See information 'Gingivitis en periodontitis'

**Vitamin B12**  
Vitamin B12 may attribute many health-promoting properties to its name. One of these is the reduction of oral ulcers and their frequency. If there are frequent and severe ulcers, the advice is to recommend vitamin B12 in supplement form. Always choose a lozenge tablet that contains both vitamin B12 and folate (folic acid). The brand Vitakruid offers a full-fledged B12 supplement. Use as a treatment for at least 1 to 3 months.

**L-lysine**  
As indicated, lysine has beneficial properties when it comes to reducing the herpes simplex virus. If patients experience a regular inflammation of the HSV virus, the advice is to use lysine in a supplemental form. Preventively as well as during an outbreak. The Bonusan brand has a full-fledged L-lysine supplement available. Advise 500mg per day for prevention. In the event of a flash-up/outbreak, it is advisable to use 1500mg temporarily.

### Note

Never try to 'just' advise supplements and doses if you are unsure what it exactly does and in what quantities a supplement should be taken. The supplements described above can be used as they are formulated and recommended by an orthomolecular nutritionist. Do you want to work more with supplements but don't have the necessary knowledge? Ask a nutritionist for advice.

Remember that a healthy diet is the basis for optimal (oral) health. Supplements support, but are not a substitute for a balanced diet.