

ORA**GUARD*** GUM HEALTH

Supports your patient in the treatment of periodontitis.

ORAGUARD GUM HEALTH: ITS BENEFICIAL IMPACT

Periodontitis is a complex disease with multifactorial origins, involving three primary groups of factors: risk factors, microbial pathogens, and an exaggerated immune-inflammatory response from the host.

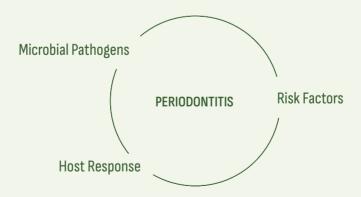
Dental professionals play a crucial role in combating periodontitis, primarily by addressing the first two factors. You spend considerable time educating your patients on oral hygiene and utilize techniques like motivational interviewing to discourage smoking or parafunctional habits.

Treatment efforts by professionals are predominantly directed at combating bacterial pathogens. Subgingival debridement is employed to decrease the microbial burden within periodontal pockets, facilitating a shift from a pathogenic to a more beneficial microbial composition within the biofilm.

Additionally, the use of disinfecting mouthwashes and, in certain cases, antibiotics, are common practices. Your approach in these areas is highly effective! However, managing the host's response presents a more challenging task, as it is considerably more difficult to modulate.

In recent years, the role of micronutrients in periodontal health has gained considerable attention within scientific research. It's increasingly recognized that specific nutrients could play a crucial role in enhancing the outcomes of periodontal treatments.

Studies indicate that 13-36% of patients undergoing periodontal treatment do not respond as well as expected, regardless of their oral hygiene practices^{1,2}. These "poor responders" may require additional support to achieve optimal treatment outcomes, with micronutrient



deficiencies being a potential contributing factor3. Various factors encountered in dental practice can lead to these deficiencies, including:

Drug-induced effects

Certain medications impact micronutrient absorption. For instance, ACE inhibitors can reduce zinc absorption. Aspirin may lower vitamin C serum levels. Proton pump inhibitors can decrease the serum levels of vitamins B9, B12, C and iron. Metformin affects vitamins B9 and B12 and statins may reduce the bioavailability of coenzyme Q10 and vitamin D.

Lifestyle factors

A poor diet can significantly affect micronutrient status⁵, and smoking (including passive smoking) can reduce the absorption of vitamins C, B12, and A⁶.

Systemic illnesses

Conditions such as diabetes, liver disease, and thyroid disorders can affect micronutrient absorption and availability.³

Increased requirements:

Situations like pregnancy, breastfeeding, and stress can elevate thebody's needs for specific micronutrients.⁷

We've utilized scientific research to develop an oral health supplement specifically formulated to meet the micronutrient requirements of periodontal patients. Our goal is to provide dental practitioners with an additional resource in the fight against periodontitis.

By prescribing Oraguard Gum Health, you offer your patients a cutting-edge, comprehensive supplement that supports a healthy immune system and includes a range of antioxidants and probiotics.

Let us help you to effectively manage the host response component.

THE ACTIVE INGREDIENTS OF ORAGUARD GUM HEALTH

Oraguard Gum Health is formulated with a scientifically-backed blend of micronutrients and probiotics, designed to enhance the efficacy of periodontal treatments.

For a comprehensive understanding of the ingredients in Oraguard Gum Health, please refer to Table 1, which provides a detailed overview of the micronutrients included. Additionally, a compilation of pertinent studies on periodontitis, demonstrating the relevance and impact of these nutrients, can also be found. This information is geared towards supporting dental professionals in making informed decisions about integrating Oraguard Gum Health into their treatment protocols, thereby potentially improving patient outcomes.

P4 - 7: Table 1. What is in Oraguard Gum Health

MICRONUTRIENT SUBSTANCE
Vitamin A
Vitamin B9
Vitamin B12
Vitamin C
Vitamin D
Vitamin E

CONTRIBUTES TO

RELEVANT STUDIES RELATED TO PERIODONTITIS

- · Normal iron metabolism
- Maintenance of normal mucous membranes
- Normal function of the immune system
- The process of cell specialisation

Stahl et al. 1998 8 , Harpenau et al. 2011 9 , Chandra et al. 2012 10 , Ambati et al. 2017 11 , Estévez-Santiago et al. 2016 12 , Clinton 1998 13 , Cerna et al. 1990 14 , Gupta et al. 2015 15 , Reddy et al. 2015 16 , Wood et al. 2004 17

- Normal amino acid synthesis
- Normal blood formation
- Normal homocysteine metabolism
- Normal function of the immune system
- The process of cell division

Pack & Damp; Thomson 1980^{18} , Pack et al. 1984^{19} , Erdemir & Damp; Bergstrom 2006^{20} , Vogel et al. 1976^{21}

- Normal energy-yielding metabolism
- Normal homocysteine metabolism
- Normal red blood cell formation
- Normal function of the immune system.
- The process of cell division

Warad et al. 2014²², Neiva et al. 2005²³, Zong et al. 2016²⁴

- Normal collagen formation for function of blood vessels, bone, cartilage and gums
- Normal energy-yielding metabolism
- Normal function of the immune system
- The protection of cells from oxidative stress
- Regeneration of the reduced form of vitamin E
- Increasing iron absorption

Gokhale et al. 2013²⁵, Abou Sulaimann et al. 2010²⁶, Nishida et al. 2000²⁷, Leggot et al. 1991²⁸, Fageeh et al. 2021²⁹, Jacob et al. 1987³⁰, Staudte et al. 2005³¹, Sahni et al. 2008³², Amaliya et al. 2015³³, Van der Velden et al. 2011³⁴, Pussinen et al. 2003³⁵, Chapple et al. 1996³⁶, Amarassen et al. 2005³⁷, De Jong et al. 2014³⁸, Leggott et al. 1986²⁸, Tada et al. 2019³⁹, Kuzmano et al. 2012⁴⁰

- Normal absorption of calcium and phosphorus
- Normal blood calcium levels
- Maintenance of normal bones
- Maintenance of normal teeth
- Normal function of the immune system
- The process of cell division
- Normal function of the immune system

Dietrich et al. 2004 ⁴¹ , Hennig et al. 1999 ⁴² , Jönsson et al. 2013 ⁴³ , Krall et al. 2001 ⁴⁴ , Dawson et al. 2014 ⁴⁵ , Hildebolt 2005 ⁴⁶ , Antonoglou et al. 2015 ⁴⁷ , Jabbar et al. 2011 ⁴⁸ , Zahn et al. 2014 ⁴⁹ , Laky et al. 2017 ⁵⁰ , Schulze-

Späte et al. 2016⁵¹, Machado et al. 2020⁵², Millen et al. 2014⁵³, Pavlesen et al. 2016⁵⁴

Protection of cells from oxidative stress

Cerná et al. 1984 14 , Panjamurthy et al. 2005 55 , Iwasaki et al. 2012 56 , Zong et al. 2015 24 , Slade et al. 1976 57 , Singh et al. 2014 58 , Brigelius-Flohé & Traber 1999 59 , Traber & Stevens 60

OUR COMMITMENT TO INNOVATION

Our dedication is to continuously update the formulation of our supplements to align with the latest scientific findings.

This ensures that when you prescribe our products, you are offering your patients a solution that is both comprehensive and reflective of the most current research. It's our way of ensuring you can provide the best possible care with confidence in the effectiveness and relevance of the treatment options you recommend.

P4 - 7: Table 1. What is in Oraguard Gum Health

MICRONUTRIENT SUBSTANCE Co-enzyme Q10 Omega-3 fatty acids Magnesium Selenium 7inc Lactobacillus reuteri

CONTRIBUTES TO	RELEVANT STUDIES RELATED TO PERIODONTITIS
Protection of cells from oxidative stress	Sale et al. 2014 ⁶¹ , Hansen et al. 1976 ⁶² , Hans et al. 2012 ⁶³ , Sharma et al. 2016 ⁶⁴ , Littaru et al. 1971 ⁶⁵ , Manthena et al. 2015 ⁶⁶ , Pranam et al. 2020 ⁶⁷ , Merle et al. 2023 ⁶⁸ , Rasoolzadeh et al. 2022 ⁶⁹
 Maintenance of normal blood triglyceride levels Maintenance of normal blood pressure Normal function of the heart 	Castro Dos Santos et al. 2022 ⁷⁰ , Van Ravensteijn et al. 2022 ⁸⁰
 Electrolyte balance Normal protein synthesis Maintenance of normal bones Maintenance of normal teeth The process of cell division 	Thomas et al. 2013 ⁷¹ , Meisel et al. 2005 ⁷² , Yoshihara et al. 2011 ⁷³
 Normal function of the immune system Normal thyroid function Protection of cells from oxidative stress 	Freeland et al. 1976™
 Protection of cells from oxidative stress The process of cell division Normal DNA synthesis Normal acid-base metabolism Normal metabolism of carbohydrates, fatty acids, vitamin A Normal protein synthesis Maintenance of normal bones Normal function of the immune system 	Freeland et al. 1976 ⁷⁴ , Pushparani et al. 2016 ⁷⁵ , Pushparani et al. 2014 ⁷⁶ , Frithiof et al. 1980 ⁷⁷
 Probiotic bacteria leading to immunomodulation 	Teughels et al. 2013 ⁷⁸ , Ochôa et al. 2023 ⁷⁹



PRESCRIBING THE RIGHT MICRONUTRIENTS FOR YOUR PATIENT

Previously, prescribing an effective combination of micronutrients was a complex process, involving multiple prescriptions and requiring patients to manage a variety of different supplements. This was not only cumbersome for dental professionals but also for patients. However, this is no longer the case.

With the development of Oraguard Gum Health, we offer a streamlined solution for supplementing essential micronutrients. On our website, **www.oraguard.com**, you can order flyers. These leaflets contain ready-to-use prescriptions for Oraguard Gum Health, which you can give to your patients if you determine they could benefit from our product. Each prescription includes a QR code that leads your patients to our website where they can easily order Oraguard Gum Health. The product is delivered to their home. This simplifies the process for both the professional and the patient.

HOW TO TAKE ORAGUARD GUM HEALTH: IT IS SIMPLE!

Step 1: Consume one Oraguard Gum Health tablet <u>daily</u> with 200 ml of water.

Step 2: Take 10 ml of our Oraguard Gum Health syrup, with a delightful orange flavor, <u>every day.</u>

To achieve optimal results, we recommend following the **Oraguard Gum Health regimen for 90 days**, starting on the first day of subgingival cleaning, in accordance with the protocol used in most relevant studies. However, we also offer a 45-day supply option to accommodate different treatment needs.

FEATURED READING: MICRONUTRIENTS AND PERIODONTITIS

For a comprehensive understanding of the scientific research on the impact of micronutrient supplementation on periodontitis and its treatments, we highly recommend exploring the following article:

Dommisch et al. 2018 - Effect of micronutrient malnutrition on periodontal disease and periodontal therapy ³

1+2

YOUR FEEDBACK IS VALUABLETO US

At Oraguard, our mission is to support dental professionals in delivering top-notch care to their patients. We highly value your opinions and experiences with our products and services. Your feedback is crucial to us, and we welcome your thoughts and suggestions. Please share your insights by emailing us at feedback@oraguard.com.

Your input helps us to continually improve and ensure we meet your needs and expectations.



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