

PRESS RELEASE

The Microbiotics Company

Chewing Gum Against Gingivitis and Periodontal Disease

Active Lactobacillus reuteri ingredient against helicobacter pylori

Berlin, 3 December 2020 – A novel, special chewing gum to prevent periodontitis, gum bleeding, and gum inflammation is now available. It contains a microbial agent which represses one of the causes of periodontitis and other gum issues, protecting teeth and gums.

More specifically, the agent acts against helicobacter pylori, a bacterium known to cause stomach inflammations, which also elicits periodontitis. Bacteria such as H. pylori collect as a dental biofilm or plaque on the teeth and attack teeth and gums with their metabolic products. The tissue around the teeth pulls away, leading to the formation of periodontal pockets – crevices which may then be colonized by rapidly multiplying inflammation-causing bacteria. Depending on its severity, this inflammation of the gums can result in the destruction of the periodontal apparatus, loss of teeth, or damage to the jaw bone.

The chewing gum developed by BELANO medical AG is a medical product with the agent "ventrisana" which specifically targets the inflammatory bacterium Helicobacter pylori and removes it from the saliva, thus preventing a build-up of the pathogen in the mucus and the subsequent triggering of inflammations.

Mode of action: Bacteria are bound mechanically

The surface of the "ventrisana" agent has great contact affinity to the surface structure of the pathogen. Upon contact, agent and pathogen adhere to each other within milliseconds, a process clearly visible with the help of an electron microscope and demonstrated in several studies. This co-aggregation binds the pathogen in the mouth, natural salivation later removes it. Mechanical binding means that the effect of "ventrisana" is limited exclusively to helicobacter pylori, leaving the rest of the mouth flora with its healthy and useful bacteria unaffected – by contrast to broad-spectrum antibiotics.

The periodontal disease chewing gums are certified medical products, the active ingredient is patented. It is extracted from a strain of the lactic acid bacterium lactobacillus reuteri DSM17648 and is prepared for use as a medical product in a state-of-art microbiological process developed by BELANO medical. "As a result of their anti-inflammatory properties, strains of Lactobacillus reuteri have long since been known for the special positive health effects they have on people", emphasizes Professor Dr Christine Lang, BELANO medical AG's head of research and development.

In a double-blind, randomized and placebo-controlled clinical study published recently (<u>https://doi.org/10.1007/s00784-019-03065-x</u>), Italian scientists showed that Lactobacillus

reuteri improved oral health and were a sensible adjunct in the maintenance therapy of periodontal disease.

The chewing gums support both the treatment of acute and the prevention of chronic inflammation of the gums (gingivitis) and periodontal disease. They reduce colonization of tooth surfaces, gums, and periodontal pockets by the bacterium H. pylori, achieved by aggregating the agent and the pathogen as well as by the increase in salivary flow caused by gum chewing.

Additional protection from gastritis and stomach cancer

The new microbial chewing gum is not only able to offer protection from halitosis, caries, and inflammation of the gums (gingivitis and periodontitis). Since helicobacter pylori causes a range of stomach diseases, in particular heartburn, gastritis, functional dyspepsia, ulcers, and in the long run stomach cancer, blocking the pathogen offers additional health benefits. The periodontal pockets which develop during periodontitis can become a reservoir for these stomach bacteria. They may become the starting point for a (renewed) colonization of the stomach by the pathogen. In this respect, ventrisana chewing gums help in two ways in the protection of teeth, gums, and stomach.

About BELANO medical AG:

BELANO medical AG is a biotechnology company which leverages the findings of its research into beneficial microorganisms for pharmaceutical and care products. The company develops and brings to market novel approaches to medical skin care, disease prevention, and the support of healing processes. In this way, new therapeutic options are created for diseases and indications which currently cannot be treated satisfactorily. BELANO's mission is to make its patented agents and products available to everyone. To do so, the company relies on national and international collaboration with distributors and larger partners.

For further Information:

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