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**Fight tooth decay with chewing gum? Maybe**

By Charnicia Huggins

NEW YORK (Reuters Health) - A new chewing gum may soon be available to help fight tooth decay.

The gum, along with a number of other products, is being developed by the German chemical company BASF, in conjunction with a microbial strain development and screening company called OrganoBalance, according to a report in Chemistry & Industry.

The products will contain a new strain of lactobacillus, the bacteria normally found in live yogurt and buttermilk. It binds to the bacteria Streptococcus mutans, which causes tooth decay. S. mutans promotes tooth decay by attaching itself to the surface of the teeth while converting sugar in the mouth into acid that breaks down the teeth's enamel.

The new lactobacillus strain, termed Lactobacillus anti-caries, disrupts the normal attachment of S. mutans to the teeth by adhering itself to the tooth decay-causing bacteria, thereby allowing it to cluster together. In this way, the bad bacteria can easily be rinsed out of the mouth.

So far, scientists have found that the gum can decrease the amount of S. mutans in the mouth by half, the report indicates.

In addition to gum, the newly discovered bacteria is also expected to be used in mouthwashes and toothpastes as well.

According to Dr. Andreas Reindl, Project Leader at BASF Future Business, "the effectiveness has been demonstrated and the first oral hygiene products containing probiotic lactobacilli are scheduled to appear in 2007."

Stefan Marcinowski, executive director of research at BASF did not confirm that the new L. anti-caries product to be released sometime next year is indeed chewing gum, but he stated in Chemistry & Industry that the gum "has been tested on large numbers of people and demonstrated the ability to significantly reduce bacterial levels."

A spokesperson from BASF, Christian Boehme, told Reuters Health, "BASF Future Business and its partners focus on the development of innovative mouth hygiene products such as toothpaste and mouthwash, but the mode of action of probiotic lactobacillus is transferable to other applications such as chewing gum."

BASF also hopes to produce a deodorant based on L. ala-odoris, another Lactobacillus strain that has been found to inhibit the production of an acid that causes foul odors in the armpit.

Marcinowski acknowledges a need for more work before such a product is launched, yet preliminary tests show that a prototype of the L. ala-odoris-containing deodorant can reduce odor formation in the armpit for as long as eight hours.

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