Breaking News on Confectionery & Biscuit Processing

New gum set to chew its way through tooth decay.

By staff reporter

23/08/2006 - A chewing gum which fights tooth decay using bacteria commonly found in yoghurt is poised to join the growing functional confectionery market.

German chemicals group BASF will use Lactobacillus healthy bacteria in a raft of products including a new gum which is expected to reach retail shelves sometime next year.

The team researching the potential of the chewing gum reported that it can reduce the amount of Streptococcus mutans – the bacteria that causes tooth decay – by as much as fifty times in the mouth.

BASF Future Business and German biotech Organobalance, have been working together on the project since 2002. While Organobalance is responsible for screening for suitable microorganism cultures from its extensive collection, BASF ferments them and carries out further processing and formulation and marketing in accordance with customers’ requirements.

They are jointly commercialising the resulting products, and BASF project leader Dr Andreas Reindl said: "Negotiations are currently in progress with various manufacturers."

The dental health action is attributed to a Lactobacillus strain discovered by BASF, dubbed L anti-caries. It is said to bind to S mutans bacteria by sticking to the surface of the teeth and producing an acid that erodes enamel.

"With L anti-caries we have found an antagonist which effectively binds to the caries germs and prevents them adhering to the surface of the teeth," said Reindl.

It took some time for consumers to be convinced of the rationale behind consuming bacteria in the form of probiotic drinks and yoghurts. But now the foundations have been laid, it is unlikely that the same levels of education will be required for the gum market.

It is also not the first time that an anti-caries gum has been introduced to market. Evidence has indicated that gum containing Danisco’s artificial sweetener xylitol can also fight tooth decay.