

## AB-DENTISANIUM

**Probiotic formula which acts as a shield against caries, preventing the growth of caries-associated bacteria.**

### THE CAUSES

Dental caries is a multifactorial condition caused by different risk factors

- Presence of microbial agents
- Dental biofilm
- pH
- Others (e.g. dietary habits, genetic variations, salivary composition and hygiene habits, etc)

### A KISS STORY

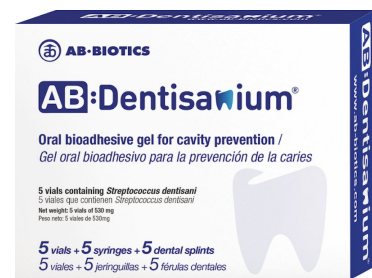
Dr. Álex Mira, researcher of the Department of Genomics and Health from FISABIO, had a coworker who belonged to the 10% of population who had never had a cavity. When she told him that her boyfriend used to have caries but since she was with him he no longer had, Dr. Mira immediately thought that the reason could be the transfer of probiotics while kissing. And he was right!

After that, the results of a study showed that *S. dentisani* was positively detected in the 99% of 120 healthy subjects screened in Spain and USA who have never suffered caries.

### THE PRODUCT

*Streptococcus dentisani* CECT 7746

Patent: WO2012028759



*S. dentisani* is able to colonize the enamel and form a protective barrier against the colonization of cariogenic bacteria. Experimental results demonstrate that biofilm composition changes in the presence of *S. dentisani*, resulting in a reduction of *S. mutans* and *Veillonella*, bacteria commonly present in carious lesions.

Food provides nutrients to cariogenic bacteria that use them to produce acid, which is the main cause of enamel damage and dental caries. Cariogenic bacteria *S. dentisani* expresses pH regulation genes. This probiotic bacteria is able to detect a drop in pH and activate the arginine metabolic pathway. Ammonia is produced as a result of this metabolism which neutralizes the acids and protects the tooth

## **APPLICATIONS**

Probiotic with a wide range of galenic opportunities, from the Healthcare Professional to the General Consumer