SP 1

Lacticaseibacillus rhamnosus SP 1

For a confident smile

Dental caries is one of the most prevalent conditions worldwide affecting 60-90% school children in industrialized countries. They occur when oral bacteria, predominantly *Streptococcus mutans*, colonize the tooth surface, metabolizing dietary carbohydrates (especially refined sugars) to produce lactic and other acids, producing biofilm and then resulting in teeth demineralization and breakdown of the hard enamel[1].

Dental caries is expensive to treat and is consuming 5–10% of healthcare budgets in industrialized countries. Prevention is therefore, a strategy that can be applied as a family routine.

Probiotics for oral care can be a more agreeable alternative or an adjuvant to other practices, such as the use of mouthwash.
Probiotics can act locally antagonizing oral pathogens. In addition, probiotics may control the inflammatory responses caused by the infection through the interaction with the immune system towards the restoration of physiological conditions[2].

L. rhamnosus SP 1 improves the oral health by reducing the severity of caries in children and relieving the associated inflammatory response.

- Hypoallergenic
- Vegetarian
- Gluten free
- Kosher
- Halal
- GMO free
- Genome Sequenced
- Gastric resistant

CultureScience

microbiome

Contact us to learn about product availability in your market

Supporting food cultures and life since 1872
saccosystem.com

SACCO system

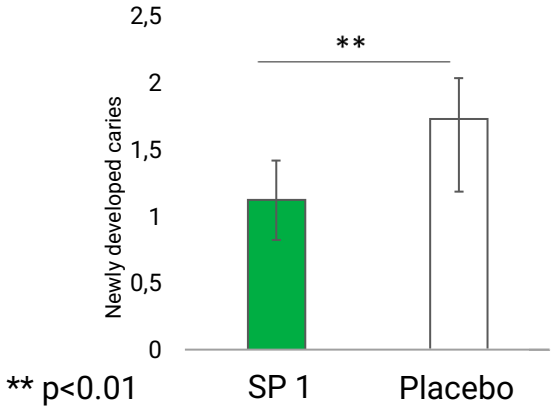
SP 1 supports oral health

SP 1's mechanism of action in preventing caries formation is likely related to a direct inhibitory action on the responsible oral pathogen and an indirect effect by rebalancing the oral microbiota composition and, also systemically, through the modulation of host immune responses.

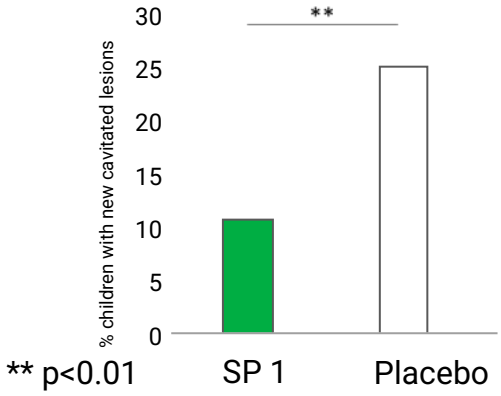
In a human clinical study has been evaluated the presence of human-β-defensin (HβD-3) in the groups taking SP 1 or placebo. HβD-3 is a key biomarker of oral caries since this molecule is present at sites of infection in the oral cavity.
The group taking SP 1 demonstrated a reduction of HβD-3 by almost 80% compared with the placebo group, indicating a rebalance of homeostasis in the oral cavity[3].

247 children | **1.5 Bn CFU/day** | **Randomized, triple-blind, placebo-controlled study**

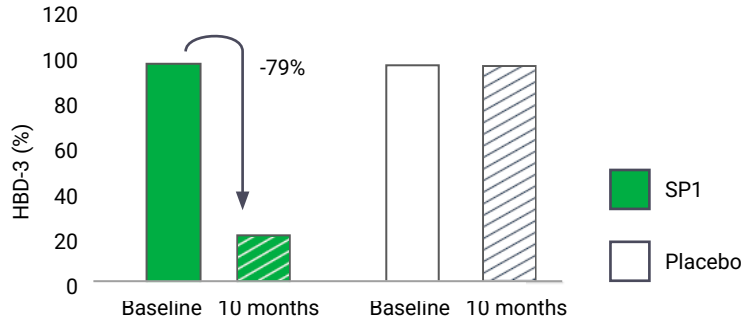
Reduces the number of new caries development



Prevents the first insurgence of cavitated lesions



Reduces the inflammatory response induced by HβD-3 release, associated to caries formation



SP 1 facts

- Because dental caries are as a result of oral microbiome dysbiosis, the use of probiotics for oral care represents a more natural solution than conventional mouthwashes (such as those containing chlorhexidine).
- SP 1 has been demonstrated to have beneficial effects on oral health for children: its regular long-term intake may reduce caries development, prevent dental damage, and decrease the associated inflammatory response.

Reference:

[1] Anderson M. Pediatr Dent. 2002 Sep-Oct;24(5):377-85. - [2] Kaźmierczyk-Winciorek M et al. Cent Eur J Immunol. 2021;46(1):99-104.
[3] Sandoval F et al., Clin Oral Investig. 25(6):3823-3830 (2021)

CultureScience

microbiome

Contact us to learn about product availability in your market

Supporting food cultures and life since 1872
saccosystem.com

SACCO system

rev. 06.02.23