





# **Product Description**

# Megaflora 9 evo













#### **APPLICATION**

**Megaflora 9 evo** is indicated for the treatment and prevention of the following disorders:

- Gastrointestinal disorders: diarrhoea, constipation, intestinal bloating...
- Excessive antibiotic therapy.
- Depressed immunity.
- Food intolerances.
- Dysbiosis of the intestinal and vaginal flora.
- Skin disorders (eczema).
- Prevention of intestinal candidiasis.
- Detoxifying nitroaromatic compounds present in processed foods.

## COMPOSITION

Bacterial strains:

Bifidobacterium lactis W51 Bifidobacterium lactis W52 Enterococcus faecium W54 Lactobacillus acidophilus W22 Lactobacillus paracasei W20 Lactobacillus plantarum W1 Lactobacillus plantarum W21 Lactobacillus salivarius W24 Lactococcus lactis W19

## Organic and mineral matrix

Starch and corn maltodextrins, fructo-oligosaccharides, (FOS), inulin, corn dextrin, potassium chloride, hydrolysed vegetable protein, magnesium sulphate, enzyme (amylase), vanilla powder and manganese sulphate.

## **TECHNOLOGY**

To increase the half-life and efficiency of **Megaflora 9 evo**, a novel and unique technology has been developed.

This special technology consists of a mixture of ingredients with a protective and nutritive function specific to the bacteria present in the blend. These ingredients are selected for their ability to increase:

- The useful life of the product.
- The survival of bacteria in the gastro-intestinal tract.
- The activity of beneficial bacteria in the intestine.

This technology synergizes the effect of the strains of **Megaflora 9 evo** optimizing the results that the consumer notices.

#### **PROPERTIES**

#### High lifespan

In traditional products based on probiotics, viable cells die over time due to their exposure to surrounding conditions. The technology protects the bacteria present in **Megaflora 9 evo** allowing a **long shelf life** when stored **at room temperature** and controlled humidity.

In **Megaflora 9 evo** the bacterial strains are kept alive and viable throughout the half-life of the product.

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## High gastro-intestinal survival

When a powdered product containing probiotics is re-hydrated before swallowing, the unprotected bacteria may experience osmotic shock that destroys and disables them. The ingredients present in the matrix of **Megaflora 9 evo** create an isotonic environment that reduces the osmotic shock that bacteria can experience and, therefore, keeps them alive during their re-hydration.

In addition, in traditional probiotic-based products, a large number of bacteria are destroyed by the low pH of the gastric juice and by the digestive enzymes present in the fluids of the gastro-intestinal tract. It is estimated that the survival of bacteria that are ingested **without any protection** is between 0.5 and 1% when they reach the intestine. In other words, in a product with a concentration of 100,000 million bacteria per gram, only a maximum of 1,000 million viable bacteria will reach the intestine.

The unique technology protects the bacteria of **Megaflora 9 evo** against the acidic conditions of the stomach and keeps them alive ensuring a **survival of more than 90%.** 

#### **COMPARATIVE**

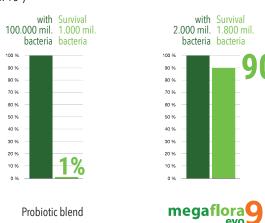
## **Probiotic blend:**

with 100.000 million bacteria/g (1 x  $10^{11}$ )  $\Rightarrow$ 1% de survival = 1.000 million viable bacteria (1 x  $10^{9}$ )

### Megaflora 9 evo:

with 2.000 million bacteria/g (2 x 109)

 $\Rightarrow$  minimum 90% survival = more than 1.800 million viable bacteria (>1,8 x 10°)



This explains why the concentration of bacteria in Megaflora 9 evo does not need to be as high as that in other preparations, which starts from very high concentrations given the high mortality suffered by bacteria during their journey through the gastro-intestinal tract.

## Increase in metabolic activity

In order a **probiotic-based product to be effective**, the bacteria need to be in perfect condition and activated upon arrival at the **site of action: the qut.** 

**The technology improves also the metabolic activity of bacterial strains.** When the bacteria of **Megaflora 9 evo** arrive to the small intestine, the presence of carefully selected ingredients in the matrix, facilitate the achievement of the active state. In this state, the strains of **Megaflora 9 evo** produce lactic acid, short chain fatty acids and other metabolites. The production of lactic acid is essential not only for its regulatory action on the intestinal flora, but also as an indicator of the activity of bacteria.

The matrix provides the nutritional needs of bacteria and therefore they are able to colonize and multiply quickly and efficiently in the intestine.

This has been demonstrated analyzing the lactobacilli and bifidobacteria still viable and present in the faeces. After consumption of **Megaflora 9 evo** there is a significant increase in the concentration of fermentative bacteria in the faeces.

### Barrier effect

Under normal conditions, in a healthy person, there is a communication and regulation between the host and the microbiota hosted in the intestine, which creates a homeostatic balance of the intestinal flora, which favours the growth of beneficial bacteria, prevents overgrowth and controls the development of pathogens.

The imbalance of intestinal flora, known as **dysbiosis** or **dysbacteriosis**, invariably leads to bacterial overgrowth of the small intestine, called SIBO (Small Intestine Bacterial Overgrowth), which move the balance towards pathogenic bacteria.

It is also known, that special situations such as food intolerances, the presence of allergens such as gluten, digestive disorders and even lifestyle causes an **increase in intestinal permeability** due to the **loss of the integrity** of the intestinal mucosa.

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All these unfavourable conditions, taken altogether, lead to an imbalance of the intestine that causes an alteration of the absorption processes, with the consequent lack of nutrients and micronutrients in the organism, essential for a healthy life and that, in the most serious states, favours the passage of toxic substances into the body.

The affectations caused by the intestinal imbalance not only cause situations that affect directly the intestines like the irritable bowel syndrome (IBS) or Crohn's disease, but some scientific studies assure that a high permeability of the intestine can participates in the development of many mental and nervous system diseases, such as senile dementia or Alzheimer's and Parkinson's among others.

Megaflora 9 evo has demonstrated its ability to counteract the phenomena of dysbiosis by rebalancing the gut flora, maintaining the barrier effect and promoting the integrity of the intestinal mucosa, which allows the maintenance of absorption processes and homeostasis between the host and his intestinal microbiota.

### Activity against Candida sp. and Clostridium difficile

**Megaflora 9 evo** is a highly effective multispecies mixture of probiotics, designed for the management and maintenance of the intestinal flora balance and, therefore, effective for several applications.

In this sense, the bacterial strains of **Megaflora 9 evo** have been tested on the inhibition capacity of *Candida albicans* associated with intestinal candidiasis. The results have shown that the probiotic mixture of **Megaflora 9 evo** is active against two strains of *Candida* present in the human intestine. Some of the strains of **Megaflora 9 evo** have a 100% inhibitory activity on this pathogen.

It has also been demonstrated a potent growth inhibitory ability of *Clostridium difficile*, with a reduction in the production of toxins A and B, essential for the pathogenicity of the bacteria involved in many intestinal disorders.

#### **SECURITY**

The bacterial strains contained in **Megaflora 9 evo** have the qualification of QPS (Qualified Presumption of Safety).

For *Enterococcus faecium*, an accepted security assessment dossier was developed for the registration of **Megaflora 9 evo** at European level.

#### **RECOMMENDED DOSE**

Adults:

- Maintenance dose: 1 g per day (equivalent to 2 billion bacteria).
- Treatment dose: 2 g (1 g in the morning before lunch, 1 g in the evening before dinner).

Children from 1 year: half of the adult dose is recommended.

#### **HOW TO USE**

Dissolve the mixture in water, milk or yogurt and wait 1 minute to activate the probiotics before intake.

#### **REMARKS**

Genetic tests carried out on all probiotic strains of **Megaflora 9 evo** ensure that they are free of the genes necessary to produce histamine, so **Megaflora 9 evo** is safe for people with histamine intolerance.

#### **ADVICE**

We carefully recommend to contact with SOLCHEM first in case the customer wants to include **Megaflora 9 Evo** as ingredient in a multi ingredient product to consider this possibility.













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