

## High-resistant beneficial microorganisms

### ■ Helping digestive & immune systems work efficiently

By maintaining the natural balance of our intestinal microflora, we are strengthening our body to better fight modern lifestyle side effects : stress, illnesses, poor diets, fast ageing, pollution, medicines, antibiotics.

To achieve this balance, we are indicated to regularly consume foods or supplements containing viable beneficial microorganisms, which must reach the lower digestive tract "alive". However, this task is made difficult by food processing, additives and preservatives, gastric acids, bile salts,...

### ■ New generation of naturally high-resistant bacteria

In the last years, we are experiencing the development of *Bacillus* viable spores used in food and supplements for human consumption.

The strong resistance of the viable spores to stomach acidity and bile salts allow them to reach intact the lower gut for an optimal colonization.

The robust stability of the spores secures its viability throughout food processing (heat, extrusion, freezing, drying,...) and prolonged shelf-life (even at room temperature, thus convenient for ALL types of products).

### ■ Producers of antimicrobials, enzymes & vitamins

The diverse strains of *Bacillus* spores show additional benefits when compared to traditional lactic bacteria :

- Generate **inhibitory substances** specific to pathogenic microorganisms
- Intense activity of amylolytic, proteolytic and fibrinolytic **enzymes**
- In-host production of **vitamins** (B12, K2) and **antioxidants** (carotenoids)

## High-resistant beneficial SPORES - ALLERGEN FREE

### ■ *Bacillus coagulans*

- Important producer of **L(+)** lactic acid and bacteriocins
- Potent **immunity stimulator**, also helps maintain healthy flora
- Proven efficiency against **inflammatory processes** (IBS, IBD, CDAD)
- Suitable for a wide range of **cares** (digestive, intimate, oral)

### ■ *Bacillus subtilis* “natto”

- Large producer of bacteriocins and **digestive enzymes** (proteases, lactase)
- Naturally fights against harmful and opportunistic **bacteria** and **virus**
- Important producer of **nattokinase** (fibrinolytic activity against CVD)
- And bioactive form of **vitamin K2** (essential for calcium metabolism)

### ■ *Bacillus clausii*

- Prescribed to use during **antibiotic treatments** for its tolerance
- Helps in the prevention of **respiratory affections** (allergies)
- Available also for **liquid suspension** presentations

## Other resistant beneficial microorganisms

Among our production range, we do also supply high-performing strains from **Enterococcus, Saccharomyces, Kluyveromyces, Debaryomyces**. These species are recognized as effective agents in treating and preventing symptoms associated with the use of antibiotics or with lactose intolerance.

### ■ *Saccharomyces boulardii*

- Supports a **healthy digestive system** and maintains balanced flora
- Effective to **treat diarrhea** symptoms due to antibiotics and others
- Helps restore normal gut functions and **reduce bloating** and gas
- Stimulates intestinal **immune response** against pathogens