

## Industry Material | Inactivated Probiotics

Inactivated probiotics are of the same function because they are rich in lipoteichoic acid, peptidoglycan, exopolysaccharides, fatty acid and bacteriocin.

### Product Advantage :

1. Inactivated bacteria can not be affected by gastric acid, bile and heat. It can be used in food processing as ingredients.

2. Inactivated bacteria have strong induced tumor necrosis factor, interleukin, immunoglobulin and interferon. It can promote the intestinal epithelial cell proliferation, enhancing epithelial tissue to stimulate the intestinal bifidobacterium proliferation, inhibiting the growth of *Clostridium* in the large intestine, meanwhile playing a good role of prebiotics.



### Product application :

As a functional ingredient added in food, health food and Medicine.

## Industry Material | Lactic Acid Bacterial Fermentation Lysate

This product is made by bifidobacterium, lactobacillus and other probiotics through high-density fermentation and exine-detached technologies, which is rich in peptidoglycan, exopolysaccharide and other lactic acid bacterial thallus active ingredients.

### 1. Cosmetics applications

In the Catalogue of International Cosmetic Ingredient (2010 Edition) issued by MOH, the microbial ferment ingredients have 309 species including 93 species of lactic acid bacteria related.

Probiotic nutritional compositions: metabolites structure protein, amino acids, peptides and lipid et-al. have a good effect on skin protect.

Functions: protection against premature aging, Inhibition of wrinkles, Prevent dry skin, sensitive skin problems, adjust immune systems and improve the skin dynamic balance.

Application solutions: Lotion, Essence, Face cream, Facial mask, Concealer ect.

### 2. Medical care applications

Studies found that peptidoglycan and beichoic acid, which origins from Lactobacillus, can strenthen phagocyte, inducing release the cytokines, carbon monoxide and other immune-mediators. It plays an important role in immunity aspect of anti-infection and antineoplastic. Lactobacillus lysates has strong inhibitory effects on *Staphylococcus aureus* and *E. coli* in vitro and vivo.

