

PROBIOTIC

HYPRO-LIFE هایپرو لایف

Broiler Chicken	1 to 10 day old	500 g per ton of feed
	11 to 24 day old	400 g per ton of feed
	25 day old up to the end of period	300 g per ton of feed
Laying Hens	Rearing Period: 1 to 4 weeks old	500 g per ton of feed
	Rearing Period: 5 to 18 weeks old	300 g per ton of feed
	Laying Period: 19 to 30 weeks old	500 g per ton of feed
	Laying Period: 31 weeks old up to the end of production period	300 g per ton of feed
Other Avians	According to the recommendation of veterinarian	

➔ To be used twice as much as the recommended amount for 48 hours after treatment with antibiotics

Dosage & Minimum Active Ingredient

The total number of microorganisms of probiotics per kg at least 10^{12}

Preservation Conditions

Keep in a cool, dry place, away from exposure to direct sunlight
For veterinary use only
Keep out of reach of children

Expiration Date

24 months from date of production


Probiotic Livestock, Poultry, & Aquatic Animals Production

www.biorun.ir

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Using the latest world technology
to produce sustainable products



HYPRO-LIFE هایپرولایف

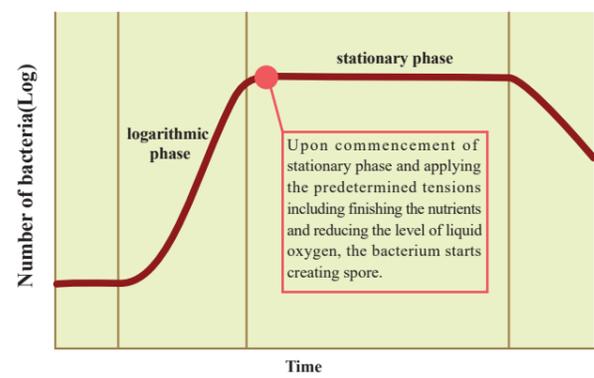
The gastrointestinal tract health & infection prevention and control

The nutrition and health of the gastrointestinal tract are two key parameters in the economic production of industrial poultry. Regulating and balancing the ingredients of poultry diet and nutrition management has a great influence on the health of the gastrointestinal tract, optimal use of feed ingredients (increasing the efficiency of using feed ingredients), and increase of the animals' growth. Gastrointestinal problems are caused by improper nutrition and an unhygienic environment, especially within the initial period of chickens' growth. Considering the health of the gastrointestinal tract at the beginning of the production period and help accelerate the development of this tissue leads to the increase of benefits resulting from the improvement of performance and reduction of diseases and death.

The process of Hypro-Life production

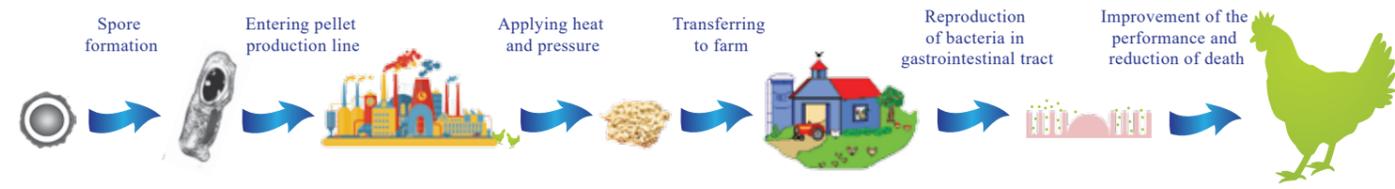
The scientific experts and researchers of Nature Biotechnology Company (Biorun) studied the most recent world techniques and used the latest equipment to produce Hypro-Life probiotic. This product includes a special family of Bacillus, which after culture in the industrial fermenters and reaching the maximum population forms a spore by applying predetermined tensions. This spore protects the microorganism against subsequent tensions such as pressure, temperature, pH, and food deficit and it can be used as a probiotic resistant to heat and pressure in the poultry and livestock feed factory.

The growth curve of the bacterium during the process of fermentation in the industrial fermenters



Resistance to temperature during the pelleting process

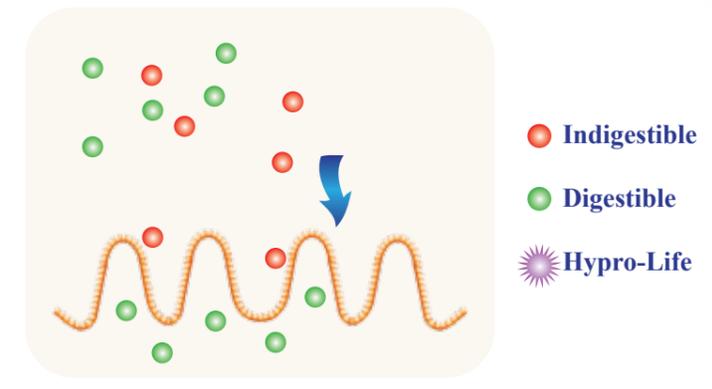
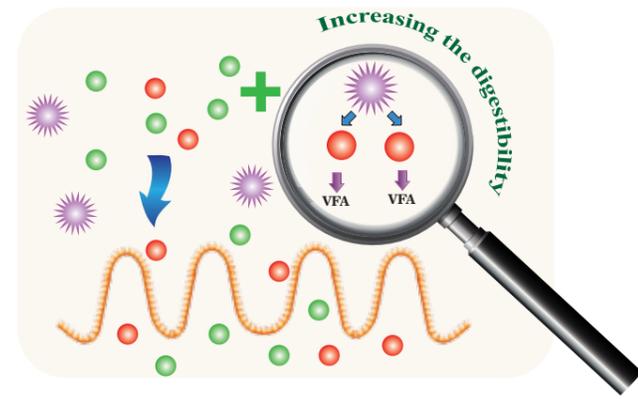
The bacteria in the Hypro-Life probiotic are resistant to pressure and temperature up to 100 degrees centigrade in the pellet feed production process due to the formation of spore made of calcium and Dipicolinic acid. The spores strengthen the bacteria against disinfectants such as formalin. When entering the gastrointestinal tract of the livestock and obtaining water, food, and oxygen, the bacteria in this product starts germinating and causes some positive effects on the performance of the flock.



The mechanism of action

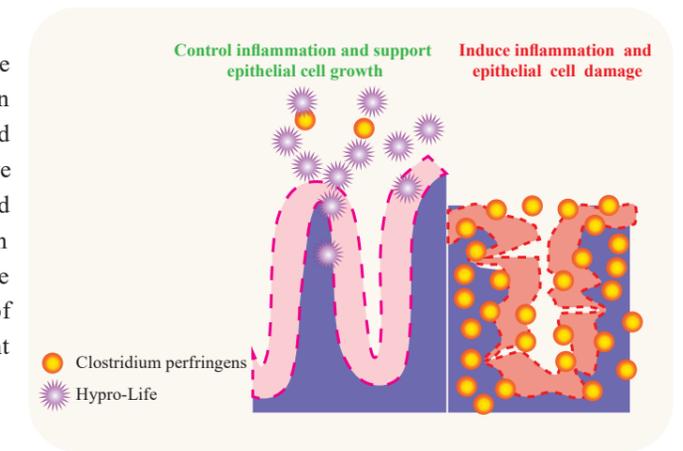
Increasing the ability to digest through releasing enzymes

The bacteria in the Hypro-Life probiotic use a dry matter of feed and retain fat that led to an increase of the metabolizable energy of feed. The Basilus used in the Hypro-Life probiotic has a high capacity in producing enzymes and it is used as a growth stimulant and a factor improving the performance in the commercial feed due to the production of protease, lipase, and amylase.



Increasing the length of villus & preventing gastrointestinal diseases

The bacteria used in the Hypro-Life probiotic use oxygen from the environment and create an ideal condition for growth and reproduction of the native Lactobacillus inside the intestine during germination and creation of an anaerobic environment. This activity led to the comparative exclusion of pathogens bacteria such as Clostridium perfringens and other pathogenic bacteria inside the intestine through the production of lactic acid by Lactobacillus. However, using Hypro-Life probiotic result in the reduction of the Crypt depth and increase of Intestinal villus, and consequently, the increase of the feed absorbent surface



Academic tests

In accordance with the conducted scientific research in form of Master's theses and Ph.D dissertation at the University of Tehran and Tarbiat Modares University, use Hypro-Life probiotic resulted in gaining weight up to 153 g during the period in comparison to the control group and it also resulted in improvement of the feed conversion ratio up to 0.11% in the broilers. Furthermore, considering the results of these studeis, using this product can strengthen the immune system and reduce the mortality during the experiment.

