

APPROVED
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[Seal:] Stovek, Limited Liability Company,
Republic of Belarus Minsk Region, Stolbtsy

**Instructions
for use of Animal Feed Supplement
PROVAGEN CONCENTRATE**

1. General Product Information

1.1 Animal Feed Supplement PROVAGEN CONCENTRATE (hereinafter referred to as the Supplement) is intended for cattle, pigs, horses, dogs and fur-bearing animals and poultry to normalize the intestinal biocenosis, as an aid in the prevention of infectious and non-infectious diseases with diarrheal syndrome, stimulation of nonspecific immunity, technological stress profiles, after antibiotic treatment, improvement of feed conversion, increase in productivity, preservation of young animals, stimulation of weight gain in young animals.

1.2 The Supplement is a powder from white or white-yellow to gray or brown, inclusions of dark color are possible, with a weakly specific odor, without impurities.

1.3 The Supplement contains in 1 g at least 10^{11} microbial cells of bacteria *Bacillus subtilis* BS3 (VKPM B-11817) and *Bacillus licheniformis* MRS (VKPM B-11170) and the products of their metabolism (amino acids, low molecular weight proteins, bacteriocins) in the filler (dextrose).

1.4 The Supplement does not contain genetically engineered organisms.

1.5 The Supplement for safety indicators complies with the requirements of "Veterinary and Sanitary Rules for Ensuring the Safety of Feed, Feed Supplements and Raw Materials for the Production of Combined Feed" dated 10.02.2011 No. 10 (as amended by No. 33 of 20.05.2011).

1.6 The Supplement is released in the form of a powder, packed in 10.0 g each in sterile glass vials, which are sealed with rubber stoppers and metal caps.

1.7 Shelf life of the Supplement is 12 months from the date of manufacture, provided that it is stored in a dry, dark place at a temperature from $+4^{\circ}\text{C}$ to $+25^{\circ}\text{C}$.

2. Properties of the Supplement

2.1 Provagen Concentrate belongs to multicomponent probiotics based on *Bacillus subtilis* and *Bacillus licheniformis* strains. The properties of the Supplement are due to the bacillary microorganisms included in its composition.

2.2 Supplement has a complex effect on the body, including:

- the competitive relationship of *Bacillus subtilis* and *Bacillus licheniformis* strains with pacified bacteria for the necessary nutrients or for adhesion, thereby significantly reducing the number of pathogens and preventing their penetration into the animal through the intestinal wall (the first line of defense);

- stimulation of immunity: activation of phagocytic and cytostatic activity of macrophages, synthesis of immunoglobulins, level of complement, activity of lysozyme, stimulation of lymphoid tissue, impact on immunocompetent T- and B-cells (second line of defense);

- antagonistic action of *Bacillus subtilis* and *Bacillus licheniformis* to both gram-positive (*Streptococcus*, *Staphylococcus*, *Klebsiella*, etc.) and gram-negative (*Pseudomonas*, *Pasteurella*, *Escherichia coli*, *Salmonella*, etc.) pathogenic microorganisms;

- enzymatic action: strains of *Bacillus subtilis* and *Bacillus licheniformis* are able to synthesize a number of enzymes that promote the activation of the processes of enzymatic digestion of proteins, lipids, high molecular weight carbohydrates, nucleic acids, fiber, which improves feed conversion;

- synthesis of biologically active substances (organic acids, alcohols, lipids, vitamins, essential amino acids);

- participation in metabolic processes: electrolyte metabolism, regulation of the metabolism of bile acids, cholesterol, detoxification of exogenous and endogenous substrates, microbial transformation of toxic substances, stimulation of intestinal motility.

2.3 The Supplement provides: normalization of intestinal biocenosis, suppression of pathogenic microflora in the intestine, stimulation of nonspecific immunity, increased safety of young stock and weight gain, reduced feed conversion.

3. Dosage and Indication

3.1 Provagen Concentrate is used in case of disruption of the functioning of the gastrointestinal tract against the background of disruption of natural microbiocenosis (dysbacteriosis, diarrhea of infectious etiology, enteritis, poisoning), prevention of various stress effects, stimulation of immunity, increase in safety, decrease in feed conversion and increase in weight gain. Also, the Supplement is used for hatched chicks, which have not yet formed the natural intestinal microflora, and the risk of developing pathogens before and after the use of antibiotics increases. The Supplement is recommended to be used as an alternative to the use of antibiotics as an adjuvant in the prevention of gastrointestinal diseases caused by both infectious and non-infectious causes.

3.2 The Supplement is administered orally individually or in groups with water or feed.

Poultry (it is recommended to set in a group with drinking water):

- chickens 1-7 days of age 0.15-0.20 g per 1000 heads once a day;
- chickens 1-2 weeks of age at the dose of 0.25-0.5 g per 1000 heads, if necessary, the addition of the Supplement is increased to 0.5-1.0 g per 1000 heads once a day for 5-10 days.

- broiler chickens from 2 weeks of age to the end of fattening- 0.5-1.0 g per 1000 head in a course of 5-7 days, if necessary, once a day and the addition of the Supplement is doubled and after 7-10 days the course is repeated;

- for laying hens at the dose of 0.5-1.0 g per 1000 heads, if necessary, the addition of the Supplement is increased to 1.5-2.0 g per 1000 heads once a day for 10 days. If necessary, repeat the course after 10-20 days.

- after antibiotic treatment and during a period of stress 0.5-1.0 g per 1000 head for 5-7 days;

- when mixed with compound feed 1.0-10.0 g per 1000 kg of compound feed, depending on the epizootic situation, age and physiological state of the poultry.

Cattle and horses:

- newborn calves and foals are given in a mixture with milk at the dose of 10.0 g of Supplement per 1000.0 g of milk. The mixture is set in a volume of 10-15 ml per head once a day for 3-5 days;

- calves and foals 0.05-0.08 g per 10 kg of body weight once a day for 7-10 days, a second course can be carried out in 10-20 days; if necessary, the introduction of the Supplement is doubled with a course duration of 10-20 days.

- for adult animals as part of complex therapy for diseases of the gastrointestinal tract 0.1-0.3 g per head once a day for 10-20 days;

- for pregnant cows and mares 0.1-0.2 g per head once a day 7-10 days 3-4 weeks before calving, repeat the course 3-5 days before the expected calving.

- as part of complex therapy for chronic acidosis of the rumen in cattle, the Supplement is added to the compound feed at the dose of 0.1-0.2 g per cow per day (10-20 g per ton of compound feed). The Supplement can also be used by adding to the feed mixture or sprinkling on the feed table. Supplement is applied continuously throughout the year, the minimum course of application is 1 month. Apply to dry cows, lactating animals, heifers, firs and fattening animals.

Pigs:

- for suckling piglets 0.01-0.05 g per head once a day for 5-7 days;

- to weaning piglets 0.01-0.07 g per head once a day for 5-7 days;

- for rearing piglets 0.01-0.1 g per head once a day for 5-7 days;

- hypotrophic piglets and other groups of pigs, if necessary, increase the addition of the Supplement by 1.5-2 times and the course is extended to 10-20 days;
- sows 0.01-0.1 g per head once a day in courses of 5-7 days for 4 weeks, 1 week before farrowing and after farrowing;
- when mixed with compound feed 1.0-10.0 g per 1000 kg of compound feed, depending on the epizootic situation, age and physiological state of the animals.

Dogs, fur animals:

- for puppies up to 3-4 months of age 0.01-0.02 g per head once a day for 5-7 days, if necessary, the addition of the Supplement is increased by 1.5-2 times and the course is extended to 10-20 days;
- for adult animals 0.02-0.04 g per head once a day for 5-7 days, if necessary, the addition of the Supplement is increased by 1.5-2 times and the course is extended to 10-20 days.

When added to whole milk replacer:

- 20.0 - 30.0 g per 1000 kg of dry weight, at the dose of 3.0 g per 1000 kg of finished product for animal feeding.

3.3 If necessary, the duration of the course of the supplement is not limited, Supplement can be used throughout the life of animals. When indicated, the dose of the Supplement is doubled.

3.4 Supplement is stable when exposed to high temperatures, it can be added to feed in the technological cycle of which the use of high temperatures is laid (for a short time up to 110 ° C).

3.5 Contraindications and adverse effects have not been established.

3.6 Preventive measures: special measures for personal prevention when working with the Supplement are not required.

3.7 There were no adverse effects and complications when using the Supplement in the recommended doses.

3.8 The use of livestock products and slaughter for meat after the use of the Supplement is allowed without restrictions.

4 Preventive Measures

4.1 Supplement does not pose a danger to people and does not cause adverse reactions (dermatitis, local and general fever) in contact with the skin.

4.2 Workers and veterinarians, when using the Supplement, must use overalls, personal protective equipment and observe general sanitary and hygienic work practices.

5 Claiming Procedure

5.1 In case of complications after the use of the drug, its use is discontinued and the consumer should apply to the State Veterinary Institution on the territory of its location. Veterinary specialists of this institution study compliance with all the rules for the use of the drug in accordance with the instructions. After the confirmation of a drug adverse effect to the animal, the veterinary specialists take samples in the required amount for laboratory tests, at least three unopened vials of the drug from the batches that caused the complication, a sampling report is drawn up and sent to the State Institution "Belarusian State Veterinary Center" (220005, Minsk, Krasnaya Str. 19-a, tel. 290-42-75) for confirmation of compliance with regulatory documents.

6 Manufacturer

6.1 Stovek, LLC is the Manufacturer of the Supplement.