VeyFo®



Phytodiet Doser

- Strengthens the gut
- Regulates digestion
- Promotes rearing success















Formulations for professionals demanding peak performance





Conception/components essential for the nutritional purpose*

Paste (microemulsion) containing mono-, lauric- and butyric acid, natural herb oils/extracts, thyme, soybean oil, sunflower oil, linseed oil, chamomile and fennel, as well as zinc oxide, cupper (II) oxide, vitamin E, vitamin B_1 , vitamin B_2 , vitamin B_6 , vitamin B_{12} , niacinamide, calcium-D-pantothenate, iron fumarate, 3.5 x 10¹⁰ KBE *Enterococcus faecium* (Cernelle 68), selenium and bentonite.

Product characteristics

The product has been formulated as a nutrient/micronutrient complementary diet with natural components fulfilling high quality standards and meeting the requirements for the particular nutritional purposes:

Stabilisation of physiological digestion in case of risk of, during or after digestive disorders, Support for nutritional imbalances in dietary transition, Support of weaning

according to the "List of intended uses of animal feedingstuffs".

Note: The information given is to be understood as a general survey and are subject to alterations, especially if these do not affect the intended nutritional purpose. The latest version of the labelling of the product/packaging is always valid.

Nutritional physiological fundamentals

Disorders of the digestive system very often are the expression of a multi-factorial process where non-infectious and infectious influences are closely related with each other. Differing causes, such as spoilt or badly compiled feed rations along with unfavourable housing conditions result in the spread of harmful bacteria. These germs, however, will only act as pathogens under unfavourable conditions, particularly in cases of inappropriate feeding and poor nutrition (i.e., diseases of multiple aetiology).

The nutritional physiological role and biological and dietetic functions of the individual nutrients/micronutrients contained in VeyFo® Imbac ColoCur can be summarised based on the available technical literature, including the AWT series "Vitamins and Amino Acids in Animal Nutrition":

Enterococcus faecium (Cernelle 68) is a probiotic that plays the most important role in animal nutrition. According to the current state of knowledge the special feature is mainly based on the development of its metabolic activity in the gut as well as on the release of antimicrobial substances and the formation of an organic film for the protection of the intestinal mucosa.

Additional mechanisms of action are:

- formation of inhibiting substances such as short-chain fatty acids (pH reduction) as well as of other substances with a selective advantage against other microorganisms without suppressing the desired intestinal flora,
- suppression or inhibition of the adhesion of potential pathogens to the intestinal mucosa,
- suppression of the formation of microbial toxins,
- stimulation of the local immune system in the gut,
- interference on the physico-chemical conditions in the intestine, e.g., pH value and redox potential, thus restricting the conditions for growth of undesirable germs,
- influencing the decomposition of bile acid thus supporting the absorption of fat.

Zinc (Zn) is an essential trace element and as such a component of various enzymes and of the hormone insulin. It has various important functions in the metabolism: It plays a key role in the sugar, protein and fat metabolism and is involved in the formation and growth of cells. Zinc has an influence on the metabolism of the intestinal cells. It promotes the microbial eubiosis, has absorbing as well as astringent effects and thus positively influences the regeneration processes. In 2004, WHO and UNICEF gave opinions on the treatment of active digestive disorders in which they recommended the supplementation of zinc and oral rehydration solutions. **Copper** (Cu) belongs to the group of trace elements. In interaction with iron, it is involved in the formation of hemoglobin and myoglobin. It is a component of enzymes and plays an important role in skeletal growth and pigmentation. Symptoms of copper deficiency may be retarded growth, skeletal development disorders, nervous system dysfunction, reproductive disorders, and anaemia. In case of copper deficiency, protein synthesis may be affected, too.

Butyric acid – correctly "butanoic acid" – is produced by the intestinal flora. One of its most important producers is *Faecalibacterium parusnitzii*. Butyric acid and its derivates are the most important energy sources of the intestinal epithelium. Proliferation, differentiation and apoptosis of cells are also regulated by butyric acid. In addition, it has an anti-inflammatory effect.

One of the major causes of intestinal inflammation is the invasion of the epithelium by the intestinal flora. Butyric acid prevents this from happening by strengthening the connection between the cells – the so-called "tight junction" – and thus maintaining the integrity of the intestinal barrier.

Monolaurin is a component of the medium-chain triglycerides, also known as MCT (medium-chain triglycerides) or MCFA (medium-chain fatty acids). Its name is derived from the Latin name Laurus nobilis that stands for laurel. Research on lauric acid and its characteristics has been conducted since the 1960s. Their antimicrobial effect has been scientifically confirmed. For example, medium-chain fatty acids manage to disable viruses by breaking down their outer membrane of lipids and thus destroying it. The inside is released, and the virus dies by virtually dissolving. It is precisely this effect against viruses, microbes, (yeast) fungi, bacteria and co. that makes lauric acid so valuable. It is important to know that it is the monoglycerides which are effective, i.e., the monolaurin.

Selenium (Se) has a close connection to vitamin E, which has arisen through the oxidation protection of the cell membranes. While vitamin E acts in the cell membrane, the effect of selenium is based on peroxide degradation by glutathione peroxidase in the soluble parts of the cell. For sufficient formation of the seleniumcontaining glutathione peroxidase, a selenium content of 0.2 to 0.3 mg/kg dry feed mass is necessary. Certain forms of growth disorders, muscle-, liver- and pancreatic degeneration can be corrected with additional selenium. Worthy of mentioning in this connection is also the white muscle disease (together with vitamin E) in piglets, lambs and calves. It also plays a major role in the protection from mastitis and high cell counts.

Iron (Fe) as a trace element, is a component of the red blood pigments haemoglobin and myoglobin, which are necessary for oxygen transfer in the blood and muscles. It is involved in various metabolic processes. In the case of iron deficiency, anaemia, loss of appetite, changes in skin and hair and growth disorders are observed. An adequate supply of iron improves resistance to infections and daily gains. Bentonite is a clay mineral that usually forms from weathering of volcanic ash. Caused by its structure and geology and depending on its rate of montmorillonite, the material has an extremely large surface, which is negatively charged, and is therefore capable of absorbing harmful substances. Bentonite offers an exceptionally high absorption capacity und ensures removal of toxins from the gut, at the same time providing a huge area for beneficial bacteria to populate. Bentonite promotes the functions of the intestinal flora and thus stabilises normal physiological digestion.

Vitamins (micro-emulsified) – especially vitamin E and B_{12} , available in sufficient quantities, are important components of a balanced dietary ration.

Vitamin E prevents the formation of lipid peroxide radicals from polyunsaturated fatty acids, liver necrosis and muscle degeneration. It achieves an antioxidant effect through which stabilisation of oxidation-sensitive phospholipids in the cell membrane and other oxidation-sensitive substances such as vitamin A, carotenoids and their intermediates are achieved. It regulates hormone metabolism via the anterior pituitary gland, maintains the stability of membranes (especially heart and skeletal muscles), regulates the development and function of gonads, stimulates antibody formation (better resistance to disease) and phagocytosis, stimulates the bactericidal activity of phagocytes and provides preparation and protection for pregnancy.

Vitamin B₁ in phosphorylated form (thiamine pyrophosphate) is, as a coenzyme of diverse forms of decarboxylases (pyruvate dehydrogenase, α -ketoglutarate, dehydrogenase) and transketolases, indispensable for the breakdown processes in the carbohydrate metabolism, important for nerve tissue and heart muscle function, and necessary for maintaining peristalsis in the gastrointestinal tract. In the form of thiamine triphosphate it is a possible activating substance for the stimulation of peripheral nerves.

Vitamin B₂ (Riboflavin) which is present almost exclusively bound to proteins (Flavoproteins), is important as a component of coenzyme FMN (Flavin mono-nucleotide) and FAD (Flavin-Adenine-Dinucleotide) for the transfer of hydrogen in the respiration chain for the production of energy, and for oxidation and reduction processes for the formation and breakdown of fatty acids as well as amino acids. **Vitamin B**₆ as a component of coenzyme pyridoxal-5'-phosphate takes up a central place in: Amino acid metabolism in transamination, decarboxylation and racemisation of amino acids. For the breakdown of Tryptophan (as with the synthesis of Niacin), the vitamin B6 dependent enzyme kynureninase is necessary, the carbohydrate metabolism is a result of the participation of the phosphorylase effect.

Vitamin B₁₂ (Cyanocobalamin) is essential for normal blood formation, growth and protein metabolism. A deficiency can result in insufficient meat production, growth disorders, anaemia and poor feed conversion.

Niacinamide (Nicotonic acid amide) is a component of the coenzymes NAD (nicotinamide adenine dinucleotide) and NADP (nicotinamide adenine dinucleotide phosphate). These, as coenzymes serving as hydrogen carriers, are involved in vital metabolic processes (carbohydrates, fats and animo acids). Niacin plays a key role in energy turnover.

Pantothenic acid (Calciumpantothenat, Dexpanthenol) is, as a constituent of coenzyme A, involved in synthesis and degradation processes in the metabolism of proteins, carbohydrates and fats. Production of Acetylcholine for the function of neurons. Function of skin and mucous membranes. Pigmentation of hair.

Herbal extracts and natural vegetable oils such as aromatic (spice plant) oils and extracts intensify the taste and thus stimulate the appetite. In addition, they can have immunobiological, stabilising and intestinal epithelium-protecting effects.

Recommendations for use and dosage

Stabilisation of physiological digestion: 2 - 4 weeks

Support for nutritional imbalances in dietary transition: 2 - 14 days

Support of weaning: Up to 4 weeks around the time of weaning. Administer directly via feed or drinker.

| Species | Qty./day | Duration | Qty./animal |
|--------------------------------------|----------|----------|-------------|
| Small rodents (according to size) | 2 g (cc) | 2 | 4 g (cc) |
| Piglets | 2 g (cc) | 5 | 10 g (cc) |
| Calves and foals | 4 g (cc) | 5 | 20 g (cc) |
| lambs and goat kids | 2 g (cc) | 5 | 10 g (cc) |

Dosage recommendation animal species (1 cc = 1 g)

Administer directly.

It is recommended that a veterinarian's opinion be sought before use.

Resorption, bioavailability, and physiology

The herbal extracts and natural oils used come from certified production. This guarantees the exclusive use of material that meets our strict requirements regarding the standardisation of important ingredients.

The special preparation ensures an optimal distribution of the intestinal function regulating substances over the entire intestinal mucosa. At the same time a fast and almost complete absorption of the vitamins contained on the corpuscular-lymphatic way is ensured.

High-performance animals demand optimised nutritional strategies.

We want you to be successful and do our utmost to achieve this target. All constituents contained in VeyFo[®] Imbac ColoCur are well known in animal nutrition. They are also used as nutritional supplements as well as for parenteral nutrition in humans. The quality and processing meet the highest purity criteria. We are thus achieving a long shelf-life as well as a trouble-free application of the same.

Additional Notes

Shelf-life: Original packages sealed and stored at max. 20 °C, 24 months from manufacturing date, opened and re-sealed packages at least 6 months.

In order to achieve a clear separation from our veterinary medicines and care products, all our feed specialities that are subject to the feedstuff law – as the present one – are exclusively marketed and labelled under the umbrella brand "VeyFo®". They are no medicinal products and need not to be entered into the stable treatment diary.

Due to its particular nutritional purposes, this product has increased zinc, copper, selenium and bentonite contents compared to complete feeds. It may therefore be fed at a maximum rate of 0.20 % of the daily ration only.

Package sizes

Injector (cartridge) with dosing piston à 10 ml Injector (cartridge) with dosing piston à 100 ml

The information given in this catalogue sheet corresponds to the state of knowledge upon completion. Please read the label prior to using the product.

Veyx-Pharma is GMP-, QS- and VLOG-certified.

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