VeyFo®

Jecuplex

Premium diet with L-carnitine and phosphorus carriers

- Fat metabolism (lipolysis/lipogenesis)
- Liver functions

Veyx

Formulations for professionals demanding peak performance

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Conception/essential components for the nutritional purpose*

Nutrient solution with glucose, calcium gluconate, dihydrogen phosphate, propylene glycol and magnesium sulphate. Furthermore, the product contains a plurality of essential amino acids, D-panthenol, the vitamins B_1, B_2, B_6 and B_{12} as well as Veyx premix "AE-TyBetan sensoric".

Product characteristics

VeyFo® Jecuplex has been formulated with excellent bio-availability of the organically bonded components meeting high quality standards. Production and filling are carried out in compliance with the particular purity criteria under cleanroom conditions (germ-free).

The product can be given without problem directly to individual animals and to groups of animals via the feed or water.

In dairy cows and ewes, the formulation can be used as a complementary feed with the particular nutritional purpose for the

reduction of the risk of ketosis/acetonaemia

according to the particular nutritional purpose as defined in the "List of intended uses of animal feedingstuffs for particular nutritional purposes" as well as for a needs-based supplementation of the daily ration in a variety of other animal species.

Physiological significance

As to the importance and biological functions of the individual nutrients and micronutrients contained in the product we would like to introduce to you the following information that has been extracted from the technical literature and (amongst others) from the AWT series „Vitamins and Amino Acids in Animal Nutrition".

* Note: The information given is to be understood as a general survey and is 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.

Amino acids are protein building blocks, components of enzymes, in practically all tissues in the animal organism. Particularly significant (e.g. lysine) in the formation of collagen tissues and ossification: as a component of nucleotides in the cell nucleus it activates cell division. Additional metabolic functions: (e.g. methionine) in particular as a precursor of cystine and thus also of peptides such as glutathione, as the initiator of protein biosynthesis, methyl group donator. Components (e.g. threonine) of the digestive system and immune substances significant in energy metabolism, e.g. precursor for glycine synthesis. Involved (e.g. tryptophan) in the formation of precursors of NAD (nicotinamide-adenine-dinucleotide) as well as in many metabolic processes via the tissue hormones serotonin and tryptamine.

Glucose is a biologically valuable nutrient provider. Belongs to the monosaccharide family.

L-carnitine has numerous functions in the metabolism; the most important are fat metabolism functions: in this case it serves as a carrier in the transport of active fatty acids in the mitochondria for the production of energy, as well as a reservoir for active acetyl residues. The latter is significant in case of extreme muscular activity, ketotic metabolic states, as well as in hunger situations and presents quantitatively by far the highest level of demand. A high demand for L-carnitine can occur in animals during reproduction, in young animals, high growth rates, as well as in case of liver metabolism overload.

Niacin (nicotinic acid/nicotinamide) is a building block of NAD (nicotinamide adenine dinucleotide) and NADP (nicotinamide adenine dinucleotide phosphate), involved in essential metabolic reactions as hydrogen transferring coenzymes (carbohydrates, fats and amino acids), key function in the conversion of energy.

Phosphorus is a skeletal building block, buffer substance in the blood and cell, essential component of nucleic acid and various lipoids and proteids, respectively. Is necessary for the production, storing and utilisation of energy and facilitates hormone function. Phosphorus deficiency leads to reduced feed intake, retarded growth, reduced milk yield and ultimately (energy metabolism disorders) also to reproductive disorders. Rickets (inadequate mineralisation of the bones) and osteoporosis, brittle bones, respectively (high removal rates of Ca and P from the skeleton), can be caused by phosphorus as well as vitamin D_3 or Ca deficiency (pigs, poultry). Disorders of the acid-base balance (e.g. in case of acidosis) and parturient paresis can lead to low blood phosphate (< 5.0 mg inorganic P per 100 ml serum). In order to maintain a limited environmental impact through the excretion of excrement, a formulation is to be favoured in which its release into the body cells occurs with low levels of loss. This is achieved in a particularly reliable way with organic compounds.

Propylene glycol (1,2-Propandiol) belongs to the polyvalent alkanols (bivalent alcohol) and can be considered as an additional energy provider. Its energy content is quoted with 9.8 up to 16.8 MJ MEL/kg.

Vitamin B_1 in phosphorylised form (thiamine pyrophosphate) is, as a coenzyme of diverse forms of decarboxylases (pyruvate dehydrogenase, α-ketoglutarate dehydrogenase) and transketolases, indispensible for the breakdown processes in carbohydrate metabolism, important for nerve tissue and heart muscle function, necessary for maintaining peristalsis in the gastrointestinal tract.

Vitamin B_2 (riboflavin), which is present almost exclusively bound to proteins (flavoproteins), is important as a component of coenzyme FMN (flavin mononucleotide) and FAD (flavin-adenine-dinucleotide) for: the transfer of hydrogen in the respiration chain for the production of energy, 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 B_6 dependent enzyme kynureninase is necessary, carbohydrate metabolism as a result of the participation of the phosphorylase effect.

Vitamin B_{12} (cyanocobalamin) is essential for the formation of blood and growth, serves for the formation of the two coenzymes 5-desoxyadenylcobalamine (important for the utilisation of propionic acid and thus for glucose and lactose formation in ruminants) and methylcobalamine (necessary for methylation reactions and thereby amongst others for methionine metabolism). Symptoms of a Vitamin B_{12}-deficiency are changes in the red cell count, disorders of protein metabolism, diseases of the nervous system, skin infections, growth disorders and poorer feed efficiency.

Recommendations for use and dosage
VeyFo® Jecuplex complementary feed with a particular nutritional purpose for dairy cows and ewes

Particular nutritional purpose: Reduction of the risk of ketosis/acetonaemia in dairy cows 3 - 6 weeks after calving and in breeding ewes in the last 6 weeks prior to and the first 3 weeks after lambing.

Dairy cows:	up to 500 ml, repeat feeding possibly after 24 hours
Ewes	up to 100 ml, repeat feeding possibly after 24 hours

Especially on the day of calving/lambing and during the first days after calving/lambing, respectively.

Ketosis/acetonaemia is triggered by disorders of the fat metabolism that can be accompanied by considerable liver damage. The cause is a nutritional imbalance, as well as inadequate nutritional supply of glucose-providing energy sources to the animals and important micronutrients that are essential for their metabolism.

It is recommended that advice from a veterinarian be sought before use and before extending the period of use.
This complementary feed with a particular nutritional purpose can also be recommended for feeding during convalescence from ketosis.

VeyFo® Jecuplex for cattle, small ruminants, horses, pigs, poultry and cats and dogs

Nutritional purpose: Needs-based supplementation of the daily ration with the nutrients and micronutrients contained in the product in the animal species listed hereafter:

Cattle:	up to 500 ml
Calves:	up to 50 ml
Eaters (fattening calves), small ruminants:	up to 100 ml
Pigs (breeding sows):	200 – 300 ml
Piglets:	3 – 6 ml
	5.0 – 10.0 ml/l water when using wet mix feeders
	0.2 – 2.0 ml/l when given via the drinking water
Horses:	up to 500 ml
Foals:	up to 50 ml
Dogs (according to size):	20 – 50 ml
Cats (according to size):	3 – 10 ml

Use via drinking water:

Laying hens:	short term use:	up to 4.0 ml/l
	long term use:	up to 0.5 ml/l
Table poultry:	short term use:	up to 2.5 ml/l
	long term use:	up to 0.5 ml/l

VeyFo® Jecuplex for carrier pigeons and pet birds

Carrier pigeon competitions extraordinary demands on the birds in a very short time frame. The demand for the substances contained in VeyFo® Jecuplex increases dramatically. If these are not available in adequate amounts of a well absorbable form, then in particular, liver function disorders of a threatening type can be the result. It could be determined on the basis of results – measured using the number of prizes won – that well supplemented animals were significantly superior to those not given optimum provision.
The same applies during mating and rearing periods, as well as during moulting, both in pigeons and pet birds.

Carrier pigeons: 10 ml (see measuring cup) per litre drinking water for 20 pigeons per day twice weekly. On those days when it is administered, the animals should only receive drinking water containing the dissolved VeyFo® Jecuplex.

Pet birds: 5 – 10 ml/kg body weight, in cachetic animals and animals where a subfunctioning liver is suspected, then in order to increase the provision of liquids, the product is mostly used diluted (1:3) with common salt solution or Ringer's solution.

High performance animals require optimised feeding regimes.

We want you to be successful and do our utmost to achieve this target.
All constituents contained in VeyFo® Jecuplex 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.

Note:

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. For information concerning storage, please, kindly see label.

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.

For further information on the use of VeyFo® Jecuplex in poultry, competition birds and pet birds, please refer to the product information.

Package sizes

100 ml and 500 ml bottles
5 litre plastic canister

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- and QS-certified.

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