



VET EXPERT

BASED ON EVIDENCE

Diagnostics
Medicines
Nutrition
Cosmetics



Alimentary tract diseases

- Basic management in acute conditions – fasting for 12-48 h and then administration of highly digestible diet for at least several days
- Recent studies show that the composition of diet and is much more important than feed withdrawal after first signs of the disease



Alimentary tract diseases – protein

- GIT diseases negatively influence digestion and absorption of protein. Its deficiency causes disorders of alimentary tract removal and of local intestinal immunity (protein-losing enteropathy)
- Incompletely digested protein from small intestine is transported to colon where it is digested by microflora and significant amounts of gases and ammonia are produced. This could lead to diarrhoea, colitis and could lead to local immunity disorders and allergy to specific nutrients



Alimentary tract diseases – carbohydrate

- Diet should contain carbohydrates from plant origin, which does not contain gluten.
 - White rice is good solution since it does not contain gluten and has low antigenicity;
 - Corn and potato are also good solution but they are less digestible than rice, and corn could induce hypersensitivity
- Wheat, oat and barley should be avoided.

Prebiotics – definitione

Not digested diet component which exerts beneficial action of host by stimulating growth and/or activity of one or several probiotic bacteria in the colon.

Main probiotics

- Fructooligosaccharides
- Mannooligosaccharides
- Galactooligosaccharides
- Transgalactooligosaccharides
- Lactose

Fruktooligosaccharides - FOS



Fructooligosaccharides (FOS) are prebiotics being a natural nutrient for probiotic bacteria and they can not be used by harmful bacteria.

The molecule of FOS contains fructose and glucose (short chains of fructose with glucose molecule at the end)

Prebiotics by decreasing feces pH stimulate the growth of beneficial bacteria and inhibit the growth of harmful bacteria, such as *Clostridium perfringens*.

Action

- Prebiotics improve the feces consistency without increasing its volume (prevent constipation)
- inhibit production of endotoxins and decrease the level of putrescent substances within gut.
- Increase the number of beneficial bacteria i.e. Bifidobacterium
- Majority of Bifidobacterium, Lactobacillus, Bacteroides bacteria uses FOS as glucose whereas Salmonella, Clostridium is not metabolising FOS at all or in small amount

Mannooligosaccharides - MOS

Mannooligosaccharides (MOS) due to its adhesive properties block the sites of adhesion of harmful bacteria with alimentary tract endothelium what unables the colonization of intestines by pathogenic bacteria.

MOS increases the level of IgA antibodies in colon what stimulates the non-specific immunity of alimentary tract.

MOS molecule contains mannose and glucose

Not hydrolysed by digestive enzymes but only by *Lactobacillus* and *Bifidobacterium* bacteria; not fermented on the level similar to FOS

Main role:

- Immunomodulation

INTESTINAL ELIMINATION DOG



12KG

- MOS**
MANNANOLIGO-SACCHARIDES
- FOS**
FRUCTOOLIGO-SACCHARIDES
- REDUCED FAT**
- MONOPROTEIN TURKEY**
- GLUTEN FREE**
- GINGER**

INTESTINAL ELIMINATION DOG

First on the market diet being combination of intestinal diet and hypoallergenic diet

INTESTINAL DIET

High protein level

Low fat level

Low fibre level

FOS + MOS

Ginger



ELIMINATION (Hypoallergenic) DIET

Single source of animal protein

No gluten

Rice and potatoe as carbohydrate source



Why combination of intestinal and hypoallergenic diets matters?

- 1. Food allergies often have clinical signs from alimentary tract (diarrhoea)**
 - Hypoallergenic diet w one source of animal protein but of high palatability and absorption is necessary
- 2. Upośledzenie wchłaniania / trawienia często wymaga stosowania prostej diety – opartej na pojedynczych składnikach**
 - High-protein and easy-digestible diet jest necessary since GIT damage increases the risk of potential allergies – the best is diet without potential allergens (grain gluten) and based on single source of protein)



VetExpert Intestinal Dog

Compensation of digestion disorders

reduction of acute absorption disorders

Features

- Diet for dogs with digestion and absorption disorders
 - Low amount of fat fulfils requirements of dogs in case of exocrine pancreas insufficiency
 - Contains ingredients supporting digestion in alimentary tract (Fructooligosaccharides and mannooligosaccharides) or supporting its function (ginger)
 - Moderately decreased fibre level ensures proper peristalsis of GIT without increase of faeces volume
 - Could be given to puppies
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- **ADDITIONAL INDICATION:** diet formulated on the basis of single animal protein and potato and brown rice – diet could be used as elimination diet in dogs with dietary allergy / intolerance suspicion

Composition and additives

Composition: 47% Turkey (Including 27% Dried Turkey, 17% Freshly Prepared Turkey, 2% Turkey Gravy, 1% Turkey Fat), Sweet Potato, Brown Rice, Potato, Peas, Pea Protein, Chick Peas, Linseed, Vitamin and Minerals, Ginger Powder, Psyllium Powder, Yucca Extract, Fructooligosaccharides (Prebiotic FOS; 1000 mg/kg), Mannanligosaccharides (Prebiotic MOS; 1000 mg/kg).

Nutritional Additives per kg: Vitamin A (Retinyl Acetate) 14,423 IU, Vitamin D3 (Cholecalciferol) 2,160 IU, Vitamin E (Alpha Tocopherol Acetate) 95 mg; Zinc Sulphate Monohydrate 133 mg, Manganous Sulphate Monohydrate 105 mg, Ferrous Sulphate Monohydrate 160 mg, Cupric Sulphate Pentahydrate 58 mg, Calcium Iodate Anhydrous 1.57 mg, Sodium Selenite 0.64 mg. Contains EU permitted antioxidant.

Analytical constituents: Crude protein – 30.0%, Oils and crude fat – 9.0%, Crude Fibre – 2.80%, Crude ash – 8.50%, Omega 6 fatty acids – 1.8% Omega 3 fatty acids – 0.4%, Calcium – 1.8%; Phosphorus – 1.2%; Potassium – 0.6%; Sodium – 0.3%.

Key nutritional factors content

Ingredient	Amount	Function
Protein	30%	Single source of animal protein (turkey); increased level
Fat	9%	Reduced amount of fat enable use of the diet in animals with exocrine pancreas insufficiency (acute pancreatitis)
Fibre	3%	Reduced amount increases diet digestibility about is sufficient for proper peristalsis of GIT
FOS	1000 mg/kg	Fructooligosaccharides are main source of energy for probiotic bacteria
MOS	1000 mg/kg	Mannanooligosacharydy stimulates natural mechanisms of local immunity in alimentary tract
Ginger	800 mg/kg	Soothes intestine wall
Gluten-free		Helps to avoid hypersensitivity to proteins from grains