



## Loyall Pet Food Guide

### INGREDIENTS' PRIMARY FUNCTIONS

- To provide nutrients such as: proteins and their amino acids components
  - fats (lipids) and their fatty acids components
  - carbohydrates
  - vitamins
  - minerals
- To provide energy (from proteins, lipids and carbohydrates)
- To provide functional elements (which may help improve or maintain bodily functions) - functional ingredients

#### **Protein sources**

Proteins, which are made of amino acids chains, contribute to the development and maintenance of muscles and organs and are important constituents of hormones, enzymes and several secretions of your animal's body.

#### **Lipid (fat) sources**

Lipids are necessary as a source of energy, a source of essential fatty acids (Omegas 3 and 6), for healthy skin and coat as well as for palatability. They also help vitamins A, D, E and K absorption.

#### **Carbohydrate sources**

Carbohydrates, starch and fibers, are excellent sources of rapidly available energy (starch) and have an effect on the gastro-intestinal functions (fibers). They also contribute to the kibble's texture and structure at manufacturing.

### INGREDIENTS

#### **chicken by-product meal**

Source of highly digestible proteins mainly made of chicken flesh (meat) and a small quantity of skin and bones as well as organ meats such as livers, hearts, gizzards, lungs, etc., cooked and ground.

**brewer's rice**

Broken pieces of food-grade rice used typically in the manufacture of food and beverages, as well as in animal feeds; broken rice

**whole ground wheat**

Source of highly digestible carbohydrates containing a level of fibers which may help digestive system functions.

**wheat bran**

It is the hard outer layer of wheat grains, which is beneficial in providing digestive motility and regularity because it has a very high level of dietary fiber

**wheat flour**

Fine powdery foodstuff obtained by grinding and sifting the meal of wheat grains and free of most outer shell / fiber

**oat groats**

Hulled kernels of oat which include the germ and fiber-rich bran portion of the grain as well as the endosperm (which is the usual product of milling)

**chicken fat**

Source of energy and Omega-6 fatty acids made exclusively of chicken fat.

**corn gluten meal**

Dried residue after the removal of the larger part of the starch and germ, and the separation of the bran from corn kernels. It is an excellent protein source with more than 61% protein.

**ground whole corn**

Milling and grinding of whole grain corn kernels which still contain the endosperm, the germ and the bran, making it a whole grain product.

**dried beet pulp**

Source of nutritional fibers having beneficial effects on intestinal functions and stool consistency.

**herring meal**

Source of highly digestible proteins mainly made of herring flesh (meat) and some bones, cooked and ground.

**dried egg product**

Is the product obtained from egg which has been dehydrated and ground. It is free of shells and other non-egg materials and contains a maximum ash content of 6% on a dry matter basis.

**flaxseed**

Whole seeds containing a very high level of oil. Flaxseed oil is the best vegetable source of Omega-3 fatty acids as its fat is made of 54% of it.

**mannan-oligosaccharides (MOS)**

Carbohydrates derived from the cellular wall of yeasts which can help limit proliferation of pathogenic bacteria (salmonella and E. coli). These bacteria will attach to MOS instead of becoming attached to the intestinal wall and are then excreted with stool.

**fructo-oligosaccharides (FOS)**

Carbohydrates derived from sugar cane and sugar beet, which are in fact food for probiotics (beneficial bacteria). They are also named prebiotics

**organic acids**

Facilitate the presence of beneficial bacteria by acidifying intestinal bowel, which would also help reduce the presence of pathogenic bacteria (which do not like acidic conditions). Beneficial bacteria are not affected by acidity and will continue to

**chelated minerals**

Also named proteinates or amino acid complex, these minerals are indeed associated with proteins or amino acids, which allows them to optimize and improve their assimilation. The main ones are zinc, iron, copper and manganese proteinates / amino acid complexes.

**Yucca Schidigera extract**

May help reduce stool odors.

**thyme extract**

Source of natural essential oils including thymol and carvacrol (considered the most effective) and phenols such p-cymene, estragol and linalool. Obtained by steam distillation of thyme leaves, it has antimicrobial activity (against Enterobacteriaceae and others) at very low concentrations. It helps lower intestinal pH as well as maintaining stool firmness.

**Taurine**

Amino acid isolated from bull's bile, from which it takes its name. It is an essential amino acid for cats who do not synthesize it in sufficient quantity. A deficiency will cause degeneration of the retina, heart disease, reproductive disorders and immune deficiency.

**L-tryptophan**

Essential amino acid and precursor compounds such as serotonin and melatonin which are connected to relaxation and calm

**extracted hydrolyzed citric acid fermentation presscake dehydrated**

Excellent natural source of glucosamine

**rosemary extract**

Powerful antioxidant extracted from rosemary leaves which help protect fats from rancidity.