

All about Pet Food

Good vs Bad Ingredients

How to choose a premium pet food? The first thing is to check the ingredients. Since cats and dogs are carnivores, meat should be the first one or the first two ingredients on the list. Premium pet foods use only human grade ingredients, meat of pure source (e.g. beef, chicken, turkey, lamb and fish), no fillers and no synthetic additives or preservatives. Poor quality pet foods use meat or meat by-products of mixed or unknown source (e.g. poultry, meat by-products, animal fat, animal digest), grain fragments, fillers and chemical preservatives (e.g. BHT/BHA, ethoxyquin).

Human grade vs animal grade ingredients

It is common knowledge that most pet foods are made with the undesirable remnants of the human food industry. These include damaged and diseased parts of slaughtered animals, rancid fats, and grain fragments and dusts collected from grain milling. The meat and meat by-products are obtained from the 4-D sources (dead, dying, disabled and diseased livestock). These ingredients are rejected for human consumption. They have little nutritional value and pose a threat to our pets' health over long term consumption. Studies have shown that feeding slaughter-house wastes to animals increases their chance of getting cancer and other degenerative diseases. In contrast, human grade ingredients include whole, fresh and single-source meat/meat meal, ground whole grains and vegetables. They are more nutritious and digestible.



Guaranteed analysis

In each product label, you can see information called "Guaranteed Analysis". These values tell you the content of protein, fat, fibre and moisture in a product. However, reading these values can be misleading. For example, the label may list the amount of crude protein in the product, but not their quality, digestibility and biological value. Many manufacturers add cheap protein source (blood meal, connective tissues) to increase the protein content but these ingredients provide little nutritional value. The nutritional value of a protein is determined by both biological value and digestibility. Biological value reflects the unique composition of amino acids. The higher the biological value, the more balanced and useful the protein is. Digestibility of protein is a measure of how well the



protein can be absorbed in the digestive tract. Therefore, two products can have similar protein and fat content in "Guaranteed Analysis" but differ greatly in nutritional value.

Dry vs canned food

Have you compared the product labels of dry and canned food? Did you ever notice that canned food has lower percentage of protein? Does this mean that it is inferior to dry food? The answer is "no" because dry and canned food have different moisture content. To compare the percentage of protein (or fat) in dry and canned food accurately, you need to know the dry weight (i.e. the amount of dry solid food). For example, let us compare the percentage of protein in a canned food with 8% protein and 80% moisture vs protein content in a dry food with 20% protein and 10% moisture.

For the canned food:

The amount of dry solid food is 20% (100% - moisture content), the percentage of protein (dry weight basis) is $8\% / 20\% = 40\%$.

For the dry food:

The amount of dry solid food is 90% (100% - moisture content), the percentage of protein (dry weight basis) is $20\% / 90\% = 22\%$.

Canned food is generally more nutritious than dry food as it is less processed. Mixing canned food with dry food can often improve the appetite of your pets.

Suggested reading:

Richard H. Pitcairn & Susan Hubble Pitcairn (1995). Dr. Pitcairn's Complete Guide to Natural Health for Dogs and Cats. Rodale Press, Inc., Emmaus, Pennsylvania.