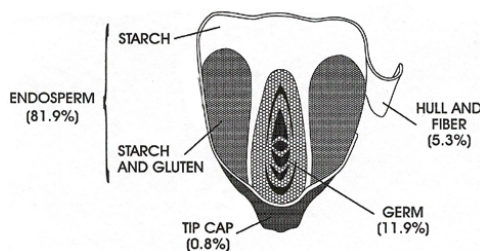


## THE FACTS ABOUT CORN

Corn is a valuable and nutritious ingredient in many of our pet foods. From a single ingredient, corn provides protein and amino acids, starch, fat and fatty acids. Let's look at some of the facts about corn and why we choose to use corn in our diets.

- *Essential fatty acids*
  - The germ is a source of linoleic acid (omega 6 fatty acid). It helps promote healthy skin and a luxurious coat.
- *Vitamin A*
  - Involved in healthy vision and skin regeneration
- *B complex vitamins*
  - Play a role in many functions of the body such as supporting the nervous system and the skin
- *Essential amino acids (AA) (such as methionine and other sulphur AA)*
  - The gluten part is the source of amino acids, the building blocks for protein in the body (muscles, growth and immune system). Methionine is a natural urinary acidifier, reducing the likelihood of struvite crystal and stone formation.
- *Antioxidants*
  - Beta-carotene, Vitamin E, Lutein and Zeaxanthin support eye health. Antioxidants reduce damage caused by free radicals to cellular membrane
- *Fibre and highly digestible carbohydrates*
  - It is more efficient for the body to use carbohydrates as an energy source, thus sparing protein for important vital functions. The use of protein for energy also increases protein waste product excretion



Corn Kernel Components

requirements by the kidney. Carbohydrates have fewer calories/gram than fat and are not converted to fat stores as readily as dietary fat

- Fibre helps with intestinal motility and maintains GI health

- *Minerals*

- Corn is rich in phosphorus, magnesium, manganese, zinc, copper, iron and selenium. Minerals are required for important functions such as zinc for skin integrity and cellular function, manganese contributes to quality of bone and cartilage along with proper cellular function.

Here are some common **myths about corn**:

1. *Corn is not digestible*

**This is false.** When the kernel is broken by grinding, the germ (fat), starch (carbohydrate) and gluten (protein) are accessible and readily digestible ( > 90%)

2. *The incidence of food allergy to corn is high*

**This is not true.** Studies on food allergies in dogs suggest that corn is equivalent or less allergenic than other proteins such as beef. The Small Animal Clinical Nutrition (4<sup>th</sup> ed) referenced a literature review where out of 253 total **confirmed** veterinary cases of food-related allergies, only 6 were confirmed corn allergies. Food allergy is diagnosed in less than 1% of all dermatological conditions in pets.

3. *Corn is a cheap filler*

Corn is **not** a “filler” at all. Fillers have no nutritional value. Corn has a multitude of components that provide important nutritional value.

4. *Carnivores like cats and dogs do not do well on a diet high in grains*

**This is false.** In fact, "all meat" diets are imbalanced and can lead to orthopaedic problems and vitamin/mineral excesses or deficiencies. The definition of carnivore is that an animal requires some animal protein sources in the diet. It does not mean that these animals have to subsist solely on meat.