The Ardent Mills Advantage













Did You Know?

QUINOA, BARLEY WHEAT FLOUR, WHEAT PROTEIN & CHICKPEA FLOUR

are in the **TOP 20 HEALTHIEST PERCEIVED INGREDIENTS**

> for consumers who look at ingredient statements

70%

INGREDIENT LIST CHECKING IS HIGHEST AMONG **PET OWNERS**

70 percent report they read the ingredient statement

Source: 2019 Cargill and Ardent Mills IngredienTracker®















Pet Food & Livestock Ingredients



► Wheat-Based Ingredients

► Specialty & **Ancient Grains** Pulse Flours



FOUNDATIONAL INGREDIENTS FOR PET FOOD FORMULATIONS

Animal lovers, farmers, trainers, and care givers want high value, quality ingredient options to nourish their pets and livestock. Ardent Mills' complete portfolio of Clear Flours, Middlings, Wheat Red Dog, Bran and Germ options provide a cost-effective means to deliver nutrition and value.

WHEAT-BASED INGREDIENTS	
SECOND CLEAR	Second Clear Flour is a dark flour produced from the outer layers of the wheat endosperm and includes the aleurone layer, which contains proteins, vitamins and minerals. Typically produced from hard wheat, it is a cost effective ingredient to help improve structural and binding characteristics in pet food biscuits and other baked applications.
DURUM SECOND CLEAR	Durum Second Clear is second clear flour made from durum wheat. It is typically higher in protein and has a larger particle size than Second Clear. Its strong binding capabilities make it ideal for extruded dry applications that need to maintain increased integrity through manufacturing and packaging processes.
WHEAT MIDDLINGS WITH GROUND WHEAT SCREENINGS	Wheat middlings with ground wheat screenings is a free flowing coarse powder that contains protein, fiber, phosphorus, and other nutrients; and can be blended with other ingredients to build high value livestock and pet food recipes.
WHEAT MIDDLINGS WITH WHEAT SCREENINGS PELLETS	With all the same functional and nutritional benefits of wheat middling screenings, our pellet version allows for increased shipping and storage flexibility.
WHEAT RED DOG AND GROUND WHEAT	Great for pelleting and extrusion mixtures, Wheat Red Dog's carbohydrate and protein content delivers nutrition and energy for cattle and other livestock. Produced from the offal of the wheat kernel, Wheat Red Dog can be used in formulations to assist farmers in maintaining weight and energy levels in dairy cattle.
► WHEAT GERM	Wheat Germ is produced by removing the seed embryo from wheat. Its fat, protein, B vitamins, and trace mineral content delivers one of the highest nutrient values in wheat. Wheat Germ can be used in animal vitamins and other nutritional supplements.
► WHEAT BRAN	Wheat Bran contains starch and protein; as well as digestible fiber which can be used in formulations to address gastrointestinal health in animals.

WHAT'S NEXT IN PET FOOD INNOVATION?

Differentiation is paramount. More than any other group of consumers, pet food owners pay attention to the ingredients in the foods they buy for their pets. Ardent Mills' Ancient Grains and Specialty Ingredients provide unique flavor, texture, and appearance to dry and wet pet food recipes. From biscuits, to bars, to savory treats, Ardent Mills' extensive line of flours and grains can help deliver a competitive advantage.

SPECIALTY GRAINS

ORGANIC FLOURS



Sourced from dedicated, certified organic growers, Ardent Mills Organic Flours provide the quality, consistency, and availability needed for new product launches.

HEIRLOOM WHEATS

Heirloom wheats offer differentiation in pet food. Spelt and White Sonora are available in berries, flakes, and flour formats offering different flavors and textures in your pet's diet.

NATURE'S COLORED™ BARLEY Pure-Purple™ Barley, Blackjack™ Barley and True Blue™ Barley deliver whole grain nutrition along with intriguing deep, rich color options, providing unique color and texture to pet food.

BARLEY

(SOURCE OF BETA GLUCAN)

A proprietary, identity-preserved, hulless barley that offers functionality and special nutritional benefits. Sustagrain is the highest fiber commercial available whole grain, with 30% total dietary fiber and 12% beta glucan. Sustagrain is available in flour, flakes, and chopped forms, making it a versatile ingredient across numerous pet food applications.

PEARLED BARLEY

A whole grain barley that has been polished to remove its fibrous outer hull therefore known as pearled.

RY

Ardent Mills offers a variety of refined and whole rye flours to satisfy any color or flavor preference. White rye flour is refined to remove bran and germ, delivering rye flavor with a light color. Medium and dark rye flours contain more bran than white rye flour, offering a darker color and stronger flavor for pet food.

GLUTEN-FREE ANCIENT GRAINS

AMARANTH
MILLET
QUINOA
SORGHUM
TEFF
BUCKWHEAT

The nutritional and marketing benefits of ancient grains are now more relevant than ever in the pet food industry. Organic and Gluten-Free options are available in whole seeds, flours, or custom blends; delivering unique flavor and appearance to pet food. Our portfolio includes US- and Canadian-grown quinoa.

PULSE FLOURS

DRY PEA
LENTIL
CHICKPEA

Dry pea, lentil and chickpea flours offer a cost-effective, grain-free source of plant-based protein.

1 Sources: USDA National Nutrient Database for Standard Reference, Release 23: I Agric Food Chem, 2010, 49: 2437; Cereal Chem, 1999, 76: 788; Cereal Chem, 2000, 77: 673; and ConAgra Food