



# MYTH OR FACT?

## By-products are poor-quality ingredients.



### IT'S A MYTH

By-products are sometimes thought to be low-quality ingredients that shouldn't be included in pet foods.

### THE FACTS

By-products are an excellent source of protein and other nutrients.

#### By-products defined:

- A by-product is any ingredient that is produced or left over when some other product or ingredient is made.
- Broths and gelatin are examples of meat by-products in human foods.
- By-products in pet foods that meet Association of American Feed Control Officials (AAFCO) guidelines come from clean animal parts other than meat, such as liver, kidneys and other organs.<sup>1</sup>
- Purina purchases all by-products from USDA-inspected plants. They must meet stringent criteria for nutrient content, production and quality assurance.

BY-PRODUCTS	
WHAT THEY CAN BE	WHAT THEY CAN'T BE
<ul style="list-style-type: none"> <li>• LIVER</li> <li>• KIDNEYS</li> <li>• LUNGS</li> <li>• SPLEEN</li> </ul>	<ul style="list-style-type: none"> <li>• FEATHERS</li> <li>• HAIR</li> <li>• HIDE</li> <li>• HOOVES</li> <li>• INTESTINAL CONTENTS</li> </ul>

#### By-products can be more nutritious than meat alone.

- Muscle meat is deficient in many nutrients, including calcium, other minerals and vitamins. Many of these missing nutrients are abundant in meat by-products or poultry by-products.
- By-products are also an excellent source of protein and amino acids.
- For example, poultry by-product meal contains 60% to 70% protein and can be highly digestible.<sup>2</sup>

### REMEMBER

By-products used in Purina® diets are high-quality ingredients that can boost the nutritional value of a pet food.

1. Wortinger A. Nutritional myths. *J Amer Anim Hosp Assoc.* 2005;41(4):273–276.  
 2. Murray SM, et al. Raw and rendered animal by-products as ingredients in dog diets. *J Nutr.* 1998;128(12):2812S–2815S.