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Dog Tips

Even Better Than Hamburger and Rice for Loose Stools

Should you offer your dog food during bouts of diarrhea, and if so, which ones are best? Many veterinarians prescribe bland foods like beef and rice, but I recommend two other foods that do a better job of soothing irritated bowels and delaying gastric emptying to help stop loose stools.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Unlike most veterinarians, for pets with diarrhea who need a bland diet for a few days, I recommend 100% pumpkin and ground turkey vs. the usual rice and hamburger diet
- Canned 100% pumpkin provides much more soluble fiber than rice; soluble fiber soothes irritated bowels and delays gastric emptying, which slows down GI transit times and alleviates diarrhea
- Diarrhea causes the loss of important electrolytes, including potassium, and pumpkin is an excellent source of potassium
- I recommend ground turkey instead of ground beef for bland diets because beef is higher in fat, which can aggravate existing GI problems and pancreatitis

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Many veterinarians have updated their bland diet recommendations, replacing the old school recipe of ground beef-and-rice bland diets for diarrhea. An increasing number of hospitals are recommending 100% pumpkin in place of white rice, and ground fat-free turkey in place of hamburger.

The subject of fiber is certainly confusing, but a basic knowledge of the different types is important in understanding what effect each will have on an animal's body.

Fiber (the tiny threadlike structures in fruits, vegetables, and grains) has historically been defined as the remnants of plant cells that are resistant to digestion, which includes lignans, cellulose, and the indigestible carbohydrates found in plants.[1]

However, this narrow definition omits indigestible carbs found in animal sources, such as chitin, as well as fructooligosaccharides (FOS) and other indigestible carbs that are resistant to an animal's digestive enzymes.

For this reason, in 2001 the Institute of Medicine developed definitions of fiber that distinguished between fiber that naturally occurs in foods ("dietary fiber") and other isolated fibers that may be added to foods or dietary supplements (called "functional fiber").

Some examples of specific types of dietary fiber found in plants are cellulose, hemicellulose, lignins, beta-glucans, and resistant starches (found in green bananas and legumes). Examples of functional fiber are inulin, oligofructose, plant gums and pectins.

Additional Classifications of Fiber

- **Viscous and nonviscous —** Fiber can be classified as viscous and nonviscous, based on its consistency when mixed with water. If the fiber gels in water, as pectins, beta-glucans, psyllium and some gums do, it's considered viscous. Viscous fiber slows gastric emptying time, can delay the absorption of some nutrients (including sugars) in the small intestine, and lowers cholesterol.
- **Soluble and insoluble —** Fiber is further classified as soluble and insoluble. Soluble fiber, such as beta-glucans, gums, most pectins and psyllium, disperses easily when stirred into water. Cellulose and lignins do not disperse in water, so they're classified as insoluble fiber.[2,3]

  Research shows that a fiber's solubility does not predict its effect on the body, as previously thought. Soluble fibers bind with fatty acids and slow digestion, which can have a stabilizing effect on an animal's blood sugar levels. Soluble fiber has also been proven to help lower cholesterol in humans.[4,5]

  Both insoluble and soluble fibers can be fermentable, and most whole plant fibers contain both soluble and insoluble fiber.

  Insoluble fiber provides roughage, which helps to bulk up the stool and move waste products through the intestine. Because of this, insoluble fiber prevents constipation and keeps pets regular. In my experience, almost all pet owners and many veterinarians lump all fiber into this category, assuming all fiber creates the same laxative effect in the gut.

  However, some fiber, such as the pectins found in bananas, is binding and potentially constipating to mammals. Banana pectins draw water out of the feces, putting it back into the body. When water leaves the colon, harder stools are the result. In the case of diarrhea, adding a small amount of mashed banana to your dog's bland diet (if he'll eat it) can often help reduce the incidence of loose stools.
- **Fermentable, partially fermentable and nonfermentable —** In addition to solubility and viscosity, fiber can also be classified as fermentable, partially fermentable and nonfermentable. Fermentable fiber sources, such as pectins, beta-glucans, guar gum, inulin and oligofructose, provide a food source for the billions of bacteria naturally found in your pet's gastrointestinal (GI) tract.

  Some fiber sources, such as cellulose and lignin, are nonfermentable. In general, fruit and vegetable fibers are fermentable and grain fibers are nonfermentable.

  Current fiber research is focused on the actions and influence of certain types of fermentable fiber in feeding beneficial bacteria in the GI tract. The GI tract is the largest immune organ in the body. GI lymph tissue, called Peyer's patches, as well as Gut Associated Lymphoid Tissue (GALT) is impacted by the balance and health of the microbial microenvironment.

  Scientists are evaluating how foods can help heal or harm this critically important bacterial balance within your pet's gut, and fermentable fiber can play a huge role in modulating your pet's GI defenses for the better.

Why I Recommend Pumpkin Over Rice

Canned pumpkin (100%) provides about 80 calories and 7 grams of soluble fiber per cup, compared to 1.2 grams of fiber in a cup of cooked white rice. Pumpkin is especially rich in soluble fiber (the type that dissolves in water to form a viscous gel, which also coats and soothes irritated bowels). Soluble fiber delays gastric emptying, slowing down GI transit times (and the number of episodes of diarrhea).

When animals have diarrhea, they can lose important electrolytes, including potassium, which puts them at risk of dehydration. Hypokalemia, or low potassium levels, can result in cramping, fatigue, weakness, and heart rate irregularities. Pumpkin is an excellent source of potassium, with 505 milligrams of naturally occurring potassium per cup.

Pumpkin is also safer for diabetic patients. Rice is a high glycemic grain and will ultimately break down into sugar that can tax the pancreas, whereas pumpkin extracts may restore beta cell function (beta cells are the cells that produce insulin in the pancreas).[6]

Rice is a bland grain, but in my opinion, it isn't the most species-appropriate choice for a recovery diet for facultative carnivores. The FDA has issued a potential warning about arsenic loads in white rice,[7] and rice is very often passed out whole in the stool, giving rise to the question of how much digestion and absorption of this carbohydrate is occurring.

Ground Turkey vs. Ground Beef

My reason for recommending **turkey** is simple: it has the lowest fat content. Hamburger has more fat, which can worsen GI upset in some cases, and boiling ground beef doesn't always substantially decrease the fat content.

Boiling the meat for a bland diet is important because it's the cooking technique that removes the largest amount of fat. Meat must reach 464°F for the fats to melt away from the flesh. Boiling water only reaches a temperature of 212°F, so it may only slightly reduce the overall fat content of the meat. The remaining fat can exacerbate pancreatitis and GI symptoms.

Baking the meat at 470°F may seem like a better idea, but it's impossible to remove the fat during baking. Rinsing boiled or baked meat removes surface fat, but it can't remove the fat that remains in the flesh (not to mention the detrimental advanced glycation end products that are produced when cooking food at such high temperatures).

For this reason, I recommend poached fat free meat for bland diets. You can easily find fat free ground turkey or turkey breast in most grocery stores, along with 100% solid packed pumpkin in the baking isle (make sure it's not pumpkin pie filling).

Many people (including me) prefer to buy organic and non-GMO foods whenever possible. So, if you prefer, you can buy fresh, organic pumpkin, steam or boil it, and can it or freeze it for later. If you also have access to fresh, organic turkey meat, even better. Mix the cooked turkey with the pumpkin 50/50, and feed very small meals throughout the day, adding in slippery elm, activated charcoal or other GI nutraceuticals, as recommended by your vet.

Options for Picky Eaters and Pets With Food Intolerances

On occasion clients will say, “My dog doesn’t like pumpkin,” or “My pet is allergic to turkey.” In those cases, I recommend using skinless, cooked, mashed sweet potatoes or yams (my preference, but white will do), and cooked chicken breast, fat-free pork or cod fish (recognizing that fish contains a higher percentage of naturally occurring fat than poultry).

If your pet’s diarrhea doesn’t resolve in 48 hours, he grows lethargic, or is acting like he’s sick, it’s time to visit the vet. If a bland diet resolves the diarrhea, transition your pet back over to his regular food 24 hours after his stools have returned to a normal consistency. It’s important to remember that this recovery diet isn’t balanced and shouldn’t be fed long term.

Sources and References

[1] European Journal of Clinical Nutrition, December 2000, Vol. 54, Issue 12, pp 861-4

[2] Lupton JR, Turner ND. Dietary Fiber. In: Stipanuk MH, ed. Biochemical and Physiological Aspects of Human Nutr. Philadelphia: WB Saunders; 2000:143-154

[3] Gallaher CM, Schneeman BO. Dietary Fiber. In: Bowman BA, Russell RM, eds. Present Knowledge in Nutr. 8th ed. Washington, DC: ILSI Press; 2001:83-91

[4] American Journal of Clinical Nutrition, October 2010, Vol. 92, Issue 4, pp 723-32

[5] American Journal of Clinical Nutrition, March 2006, Vol. 83, Issue 3, pp 601-5

[6] Nutrition Review, April 2013

[7] FDA.gov, Arsenic in Rice and Rice Products Risk Assessment