



FELINE NUTRITION AND PROPER FOOD STORAGE

What is the best diet for my cat?

Cats are *obligate carnivores*, and as such, require meat proteins as their main source of nutrition. The best, most nutritionally complete and biologically appropriate diet is an organic human grade fresh raw food diet, a commercially prepared raw food diet, or a dehydrated raw food diet (according to Dr. Karen Becker, DVM, CVA, CCRT, NMD). Many pet parents might have difficulty offering a raw diet (or in some cases, the pet may not eat it), so Dr. Becker recommends a canned food diet as the next best option. However, not all budgets or lifestyles can accommodate these types of diets, so many pet parents opt for a dry food diet. Within dry food choices, there are better and lesser quality options. *Pet parents should feed their cats the highest quality food (raw, wet, or dry) that their budget will allow.*

What do cats need in their diets?

- ❖ protein (*from a recognizable meat source*)
- ❖ taurine (*an amino acid naturally present in meat*)
- ❖ vitamins, minerals, enzymes, and fatty acids (*naturally occurring vs. synthetic preferred; chelated minerals are best*)
- ❖ moisture (*water, broth*)

What should I look for when selecting a cat food?

Pet food labels follow the same basic rules as human food labels, meaning that the list of ingredients descends from the largest to the smallest amount. Look for whole foods on the label.

- ❖ A whole protein (muscle meat) should be the first ingredient; ideally, the first several ingredients will be proteins (*i.e. chicken, turkey, lamb, beef, rabbit, duck, venison, quail, kangaroo, etc.*) Fish based diets are *generally* discouraged due to high phosphorous levels (this is particularly bad for cats), concerns about mercury levels and contaminants, and have been associated with hyperthyroidism in cats.
- ❖ The word “meal” after an identified protein is okay, but the word “byproduct” is not. Byproducts can be comprised of heads, feet, viscera, and other animal parts. Unidentified protein meal (“meat meal”, “meat and bone meal”) can contain rendered euthanized pets from shelters and vet clinics, 4D meat (dead, diseased, dying, disabled), road kill, and zoo animals. Also avoid “animal” fat (vs. an identified fat, such as chicken fat).
- ❖ Avoid carbohydrate fillers such as corn (corn meal, ground whole corn, ground yellow corn, corn gluten meal, maize, etc.), cellulose (which is basically sawdust), wheat and other grains, and soy (especially if high up in the ingredient list or if several of these are listed). Cats do not need carbs, and the proteins, vitamins, and minerals from these sources are not readily bioavailable to them. Also, in combination, they could constitute a higher percentage of the food’s makeup than the first ingredient!
- ❖ Avoid chemical preservatives such as BHA, BHT, ethoxyquin, propyl gallate, and propylene glycol. Many fish meals are preserved with ethoxyquin, but this is not indicated on the label. These have been linked to cancer and other serious illnesses.
- ❖ Avoid foods containing dyes, as these can be harmful to your cat. Dyes are added to appeal to the human; cats have a limited ability to see color (naturally brown foods are best).
- ❖ Canned foods follow the same basic rules above, except that the first or second ingredient is typically water or broth. Cats require a lot of water, and canned food is an excellent source of moisture. Avoid carrageenan; it is a possible human carcinogen, has been linked to serious disease, and is thought to exacerbate conditions such as gastrointestinal disease. Cans larger than 5.5 ounces (and even some small cans) have BPA (an endocrine disruptor chemical) in the lining.

What are the benefits of feeding my cat a better quality food?

- ❖ Decrease in or elimination of hairballs and/or vomiting
- ❖ Shinier, healthier coat
- ❖ Less volume and odor of stool
- ❖ It is more protein/calorie dense, so cats tend to eat less of it than cheaper foods made with fillers (which helps offset the cost)
- ❖ A healthier diet equals a healthier pet (lower vet bills and longer life)

Isn't dry food better for my pet's teeth?

According to Dr. Becker, "Dry foods no more clean a pet's teeth than eating granola or crunchy crackers clean a human's teeth. What cleans a pet's teeth is the shearing action from consuming bone dense foods or grinding on raw bones, or brushing your pet's teeth" (and, of course, veterinary dental cleanings). Dry foods often contain grains, which actually promote plaque and tartar.

What about prescription foods?

Your vet is the best source of information in regards to your pet's health; however, not all vets are thoroughly trained in feline nutrition in general or as it relates to disease processes in cats. Prescription diets that vets often prescribe are made with biologically inappropriate, low quality ingredients that may address the cat's health issue, but can cause a myriad of other health issues if fed over a prolonged period of time. There are often high quality over-the-counter foods that can better address your cat's specific medical condition and are more cost-effective. Ask your vet what to look for or avoid in a food if your cat has a specific diagnosis for which a certain type of food would be therapeutic; this will often be in the form of limitations on certain minerals or the carbohydrate load. You might consider consulting an integrative veterinarian; they are often more well-versed in pet nutrition.

For more information on why feeding prescription foods should be carefully reconsidered, please read the following articles:

Prescription/Therapeutic Diets

Dr. Lisa Pierson, DVM

http://www.catinfo.org/#Prescription/Therapeutic_Diets

Saying No to Poor Quality Pet Food... Even When It's Recommended by Your Vet

Dr. Karen Becker, DVM, CVA, CCRT, NMD

<http://healthypets.mercola.com/sites/healthypets/archive/2012/03/09/nutrition-the-fifth-vital-assessment.aspx>

Advice from Most Veterinarians About this Stinks - Dr. Karen Becker, DVM, CVA, CCRT, NMD

<https://healthypets.mercola.com/sites/healthypets/archive/2012/03/09/nutrition-the-fifth-vital-assessment.aspx>

Can You Guess the First 5 Ingredients in This Popular Veterinary Diet?

Dr. Karen Becker, DVM, CVA, CCRT, NMD

<http://healthypets.mercola.com/sites/healthypets/archive/2012/11/30/avoid-veterinary-diets.aspx>

Recommended Commercially Prepared Cat Foods (and where to buy them):

Wet: <http://tiny.cc/WetCatFoods>

Dry: <http://tiny.cc/DryCatFoods>

Why is water so important? How can I get more water into my cat's diet?

Cats do not have a high thirst drive and can become dehydrated. Water is very important in keeping them from developing several diseases, especially those involving the kidneys and bladder.

The best way to get water into a cat's diet is with a raw food diet or a canned food diet (these contain around 70-75% moisture). Cats on a dry food diet (which contains about 10-12% moisture) only take in about half as much water as a cat on one of the other diets, so they are left in a chronic mild state of dehydration. Dry food diets can be supplemented with canned food, and a pet fountain will entice most cats to drink more.

What is the best feeding method and frequency?

How much and how often you feed your cat depends on its age, health, size, what type of diet you choose, and your schedule.

- ❖ *Free feeding* - Leaving food out all of the time ensures your cat will never go hungry (especially if you are gone for long periods of time), but free feeding dry food can quickly lead to obesity in an adult cat if not monitored. Canned food will spoil if left out for long periods of time (always refrigerate unused opened canned food).
- ❖ *Scheduled feeding* - Feeding once or twice (or even several times) a day (whether raw, wet, dry, or a combination) ensures that your cat will not overeat and allows you to monitor their caloric intake, but may not always be convenient. There are electronic feeders on the market for both wet and dry food that will dispense food at programmed times if you choose scheduled feeding but aren't home to do so. There are also microchip/RFID feeders you can use if you have multiple cats and want to keep an overeater out of another cat's food (also helpful if you have cats on different diets).

How do I transition my cat to a new food?

Cats are prone to gastrointestinal upset if their diet is changed abruptly (this is more of a problem with dry foods than wet foods). Slowly changing your cat from one food to another over several days helps to avoid this issue:

- * Step 1 (2-3 days): 25% new, 75% old
- * Step 2 (2-3 days): 50% new, 50% old
- * Step 3 (2-3 days): 75% new, 25% old
- * Step 4: 100% new

What/how often should I feed my kitten?

Kittens have special dietary requirements and should generally be given foods that are specifically labeled for kittens (or high quality foods labelled for all life stages) until they reach one year of age. Kittens are not prone to overeating since they are growing so rapidly; therefore, constant access to food is encouraged.

What types of food and water bowls or dishes should I use?

Nonporous bowls or dishes for food and water (ceramic, glass, or stainless steel) are recommended. Plastic dishes are porous and tend to trap food particles and bacteria. The feline acne that cats sometimes get on their chins is often caused by the bacteria harbored by plastic dishes.

How should I store my cat's food?

Frozen or refrigerated raw foods should be stored according to the package instructions.

Unopened cat food (canned or dry) should be stored in a cool, dry place (never in a garage or car; especially on a warm day). Opened canned food should be tightly covered and stored in the refrigerator. Some cats prefer room temperature food, so warming up refrigerated leftovers may entice them to eat it. Cold food can also upset a cat's stomach, so warming it up or allowing it to set out for a few minutes is advised.

Opened dry food should be stored *in its original bag* inside an airtight container in a cool, dry place (most kitchens are warm and humid). If dry food is poured directly into a plastic container, the plastic can suck vitamins out of the food, and the plastic itself can leach into the food. Fats from the food can leach into the plastic and become rancid and contaminate new food poured into it.

Once dry food is opened, the vitamins begin to break down, and it is susceptible to moisture (which causes mold and mycotoxins), light, oxygen (which oxidizes the fats), and storage mites and other pests (which are drawn to grain). Making sure your food is fresh and storing it in the original bag inside an airtight container will help prevent these things from happening.

Works Consulted

- Becker, Karen, DVM. "Antifreeze-like Ingredient Found in Pet Treats' Latest Recall." Mercola.com. N.p., 11 Jan. 2016. Web. 02 Feb. 2017. <<http://healthypets.mercola.com/sites/healthypets/archive/2016/01/11/propylene-glycol-pet-food.aspx>>.
- ."The Best and Worst Foods for Your Pet". Mercola Healthy Pets, YouTube. 7 Jun. 2010. Web. 02 Feb. 2017. <<https://www.youtube.com/watch?v=l5ZeNLUEHKY>>.
- . "The Quality of Pet Food Ingredients (Part 1 of 2)". Mercola Healthy Pets, YouTube. 17 Mar. 2011. Web. 02 Feb. 2017. <https://www.youtube.com/watch?v=aTWHxvjl_as>.
- . "The Quality of Pet Food Ingredients (Part 2 of 2)". Mercola Healthy Pets, YouTube. 17 Mar. 2011. Web. 02 Feb. 2017. <<https://www.youtube.com/watch?v=zDPi-1Yjy0>>.
- . "What Causes Feline Hyperthyroidism in Cats?" Mercola.com. N.p., 14 Mar. 2016. Web. 02 Feb. 2017. <<http://healthypets.mercola.com/sites/healthypets/archive/2016/03/14/cat-hyperthyroidism-pbdes.aspx>>.
- Bernard, Michelle. "Natural Diet: The Truth About Dry Cat Food." *Blakkatz Cattery*. N.p., 24 Aug. 2007. Web. 09 Aug. 2012. <<http://www.blakkatz.com/dryfood.html>>.

- Brown, Steve, and Beth Taylor. "How You Store Dry Dog Food Will Affect Your Dog's Health." *The Natural Paw*. WordPress.com, n.d. Web. 09 Aug. 2012. <<http://naturalpaw.wordpress.com/2007/11/19/how-you-store-dry-dog-food-will-affect-your-dogs-health/>>.
- Case, Linda P., et al. *Canine and Feline Nutrition (Third Edition)*. Mosby, 2011.
- Church, D. C., et al. *Basic Animal Nutrition and Feeding*. Wiley, 1995.
- "Cats Need Wet Food." *The Natural Paw*. WordPress.com, n.d. Web. 09 Aug. 2012. <<http://naturalpaw.wordpress.com/2007/11/18/cats-need-wet-food/>>.
- Fascetti, Andrea J., and Sean J. Delaney. *Applied Veterinary Clinical Nutrition*. Wiley-Blackwell, 2012.
- "Feeding Your Cat: Know the Basics of Feline Nutrition." *Catinfo.org*. Catinfo.org, Sept. 2011. Web. 09 Aug. 2012. <<http://www.catinfo.org/>>.
- "Feline Nutrition". Feline Nutrition Education Society, n.d. Web. 09 Aug. 2012. <<http://feline-nutrition.org>>.
- Martin, Ann N. *Food Pets Die For: Shocking Facts about Pet Food*. NewSage Press, 2003.
- Martin, Ann N. *Protect Your Pet: More Shocking Facts*. NewSage Press, 2001.
- "Pet Fooled". Dir. Kohl Harrington. Perf. Dr. Barbara Royal, Dr. Karen Becker, Dr. William J. Burkholder. Amazon Prime Video/Pet Fooled. N.p., 10 Jan. 2017. Web. 31 Jan. 2017.
- Pierson, Lisa. "Feeding Your Cat: Know the Basics of Feline Nutrition." *Cat Info*, 2016, <<https://www.catinfo.org>>.
- Pibot, Pascale, et al. *Encyclopedia of Feline Clinical Nutrition*. Royal Canin, 2008.
- Ray, Michael S. "Feline Nutrition - Obesity, Kidney Disease, Diet Recommendations." *The Cat Clinic of Roswell*. The Cat Clinic of Roswell, n.d. Web. 09 Aug. 2012. <<http://www.catclinicofroswell.com/nutrition.html>>.
- Schultze, Kymthy R. *Natural Nutrition for Cats: The Path to Purr-Fect Health*. Hay House, 2008.
- Syufy, Franny. "Canned Cat Food." *About.com Cats*. About.com, n.d. Web. 09 Aug. 2012. <http://cats.about.com/cs/catfood/a/canned_food.htm>.
- . "Tips for Choosing Cat Food." *About.com Cats*. About.com, n.d. Web. 09 Aug. 2012. <<http://cats.about.com/cs/catfood/a/tipsforchoosing.htm>>.
- . "What Cat Food Ingredients Should I Avoid?" *About.com Cats*. About.com, n.d. Web. 09 Aug. 2012. <<http://cats.about.com/od/catfoodandnutrition/f/avoidingred.htm>>.
- Thixton, Susan. "BPA Lies." *TruthaboutPetFood.com*. TruthaboutPetFood.com, 6 Jan. 2016. Web. 2 Feb. 2017. <<http://truthaboutpetfood.com/bpa-lies/>>.
- . *Buyer Beware: The Crimes, Lies and Truth About Pet Food*. CreateSpace, 2011.
- . "Food Dyes Called Rainbow of Risks." *TruthaboutPetFood.com*. TruthaboutPetFood.com, n.d. Web. 13 Aug. 2012. <<http://www.truthaboutpetfood.com/articles/food-dyes-called-rainbow-of-risks.html>>.
- . "Why Carrageenan Can Be Dangerous to Your Pet". *TruthaboutPetFood.com*. TruthaboutPetFood.com, 6 May 2015. Web. 2 Feb. 2017. <<http://truthaboutpetfood.com/why-carrageenan-can-be-dangerous-to-your-pet/>>.
- . "Why Then?" *TruthaboutPetFood.com*. TruthaboutPetFood.com, 8 Sept. 2009. Web. 2 Feb. 2017. <<http://truthaboutpetfood.com/why-then/>>.
- Wortinger, Ann, and Kara Burns. *Nutrition and Disease Management for Veterinary Technicians and Nurses*, 2nd. John Wiley & Sons, 2015.
- Zoran, Debra L. "Timely Topics in Nutrition: The Carnivore Connection to Nutrition in Cats." *Journal of the American Veterinary Medical Association* 211.11 (2002): 1559-567. Print.