

Jody G. Holthaus
District Extension Agent
Livestock and Natural Resources

A Lot of Hype

As with a lot of the mislabeling of foods in our world, the same is true of pet foods, only worse. The following is some information from the Ohio State Veterinary Medical Center:

“Many pet owners are overwhelmed with conflicting information from varying sources regarding protein sources in pet foods. Many people have been led to believe that whole meat is better than meat meal, just based on the name. This is simply not true. As with all ingredients, the origin determines the quality. Meat meal is just like whole meat in that when it comes from a well-known provider and is of good quality, it can be an excellent source of protein. Meat meal is actually a more concentrated source of protein due to the fact that it does not contain the water content of whole meat, and therefore can be added in greater quantities to dry foods to achieve a higher protein content than whole meat because of the limitations of manufacturing machinery in their ability to include water beyond certain amounts. Depending on personal preference as to the type of diet fed (raw, homemade, canned vs. dry,) meat meal can provide a very economical source of high quality protein.”

The AAFCO definitions of what constitutes “meats” and “meals” are:

- **Meat** - "Meat is the clean flesh derived from slaughtered mammals and is limited to that part of the striate muscle which is skeletal or that which is found in the tongue, in the diaphragm, in the heart, or in the esophagus; with or without the accompanying and overlying fat and the portions of the skin, sinew, nerve, and blood vessels which normally accompany the flesh. It shall be suitable for use in animal food. If it bears a name descriptive of its kind, it must correspond thereto.
- **"Meat Meal** - "Meat meal is the rendered product from mammal tissues, exclusive of any added blood, hair, hoof, horn, hide trimmings, manure, stomach and rumen contents except in such amounts as may occur unavoidably in good processing practices. It shall not contain added extraneous materials not provided for by this definition.... If the product bears a name descriptive of its kind, composition or origin, it must correspond thereto."

Because of the variation in meal content, and in meat and meal quality, purchasing a food from a well-known company who stands behind their product and has the feeding trials and evidence to support its quality is best. Consulting a veterinarian or veterinary nutritionist is always helpful. In some aspects of pet food, a little research is worth the time to avoid manufacturer marketing and cultural hype

In recent years' corn has been described as a low quality “filler” in pet foods, and implicated as the culprit in pets with food allergies (typically by competitor food companies). In reality, corn provides a nutritious, affordable source of carbohydrate for energy, essential amino and fatty acids for healthy skin, coat and immune system function, and a variety of other nutrients. These nutrients are released during the manufacturing process, and are easily absorbed and utilized when included in complete diets.

With regard to corn as an allergen, few veterinarians or veterinary nutritionists believe that corn is a highly allergic food. They often cite the fact that other common ingredients, like wheat, dairy, soy, and beef, are much more frequently associated with food allergies. Moreover, we must remember that the problem in patients with allergies is with the immune system of the individual rather than with any external substance, which has no effect on those with healthy immune systems. For those pets that are proven to be sensitive to ingredients in foods through feeding elimination trails, the ingredient should obviously be avoided, but otherwise it remains a cost-efficient, quality nutrient source for pet foods.”

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Sulfur Research in Corn

A second part of the soil fertility research presented as part of the virtual Kansas Corn Management Schools focused on Sulfur (S) needs in corn. Considered one of the 16 elements essential for crop growth, Sulfur is often called the fourth major nutrient, just below nitrogen (N), phosphorous, and potassium. It is often tied closely to nitrogen, and N availability to plants. This is of particular importance when high levels of N are not balanced with Sulfur.

Soil organic matter has traditionally been an excellent source of sulfur, and good organic matter levels may well meet S needs in some cases. Higher yields coupled with less atmospheric deposition and more intensive cropping systems, however, have resulted in increasing instances of sulfur deficiency in Kansas. It's typically first seen on sandier soils, but hilltops and slopes, particularly if eroded, may show sulfur deficiencies as well. Adding to the challenge of determining crop need is cooler soils at planting (slower S mineralization) and the mobility of sulfur in the soil, making surface soil samples (typically six to eight inches deep or less...) less than stellar for predicting soil S levels. Soil test research shows little accumulation of sulfur in the soil profile until clay layers are reached at almost a foot deep.

In the absence of an appropriate soil test, determining S need for your corn crop might be difficult. In the interim, crop removal is an option to consider. A corn crop yielding 150 bushels removes approximately 12 pounds of S per acre. Research conducted by KSU Soil Fertility Specialist Dr. Dorivar Ruiz-Diaz using sulfur rates from zero to 100 pounds per acre showed good response from the first 20 pounds of sulfur applied, with additional increments of added S increasing yields only slightly, and generally not at significant levels. Fifteen pounds of S per acre is a good starting point – generally providing a crop response if one is going to be seen.

For more information on sulfur, check out *Sulphur in Kansas*, available upon request from me or any District Office or online at: <https://bookstore.ksre.ksu.edu/pubs/MF2264.pdf>.

Pruning Fruit Trees

It's time to *plan* for pruning, even as it might *not* be time to start. Mid-February through late March is our traditional fruit tree pruning window, allowing us to prune in advance of the start of the growing season. It will likely need to wait a bit this year, however. Pruning is typically not suggested when temperatures fall below freezing, to prevent potential damage to plant tissue. Cold temperatures now are not conducive for pruning – for you *or* the tree. It isn't a bad time to start the planning process, however, and that starts with the proper tools for the job.

Pruning shears are best for small cuts. Select a scissor-type shear when possible. They are less damaging to wood than anvil types. For larger cuts, consider loppers. They're basically hand shears with long handles that can often prune wood up to one inch in diameter. Once you get larger than one inch, you will likely need a pruning saw. Take precautions when making larger cuts to ensure bark isn't pulled away from the underside of the branch when limbs fall.

For specific pruning details, check out <https://bookstore.ksre.ksu.edu/pubs/MF3450.pdf>, *Pruning Apple and Pear Trees* or <https://bookstore.ksre.ksu.edu/pubs/MF3451.pdf> - *Pruning Peaches, Plums, Cherries and Other Stone Fruits*. Both publications are available online or upon request from a District Extension Office.

Cindy Williams
Meadowlark Extension District
Food, Nutrition, Health, and Safety

Rethinking Your Evening Snack

In our busy lives, we often find ourselves eating on the go or eating close to when we go to bed. Although it is understandable (who wants to go to bed hungry, right?), eating too late can lead to a variety of health issues. At some point, everyone has eaten a meal or a snack right before bed. Whether it is due to your busy schedule, feeling hungry, or mindless snacking, it is not the best for your health to just eat. There is good news, though. If you watch what you eat, even light snacks before bed so not cause many problems.

The first question you need to ask yourself is, are you really hungry? Many people often eat in the evening out of boredom, habit, or because of stress. If you truly are hungry, it is okay to have a snack in the evening. The best options for evening snacks are small portion food with high amount of protein and fiber. When eating these foods slowly, in small portions, and without distraction, you can meet your hunger needs without following the bad habit of mindless eating.

Laying down before fully digesting foods can cause discomfort leading to “burping up food.” This is especially true if you eat certain types of foods. Food you should try to avoid to get a good night’s rest are: spicy foods like peppers, acidic foods like oranges, caffeinated foods like coffee and chocolates, high fat/calorie foods like pizza or burgers, sugary foods like candy, and alcohol like wine or beer. While it is best to give yourself enough time to fully digest before laying down, some foods are healthier than others to eat in the evening.

Picking an evening snack is important. You need to find something to satisfy your hunger without causing sleep or health issues. The general rule to follow when snacking in the evening is to pick something high in fiber and protein while around 200 calories or less. Eating a snack high in fiber allows your body to slowly digest the food. High protein snacks will help you feel full faster. Keeping the snack under 200 calories will help you get to sleep on time and help you control weight gain.

Recommendations for good evening snacks include: fruits and seeds (ex. Cherries and pistachios) to more substantial snacks (ex. Hot cereal and protein smoothies). Basically, any fiber rich, minimally processed foods, makes for a good, easy and healthy evening snack.

When it comes to rethinking your evening snack, it is important to keep healthier snacks readily available in your home. Two of the drivers of unhealthy evening snacking is having only unhealthy snacks available or needing to go out later in the evening to get something to eat. Many people are more tempted to go the nearest fast-food drive-through or run into the nearest convenience store for an evening snack. Most of these options available would fall into the unhealthy category for evening snacking.

Nancy Nelson
Meadowlark Extension District
Family Life

Maintain Those Good Habits

A silver lining in the COVID-19 pandemic for those who have found themselves at home more is that many have used their spare time to be more active. Their challenge in the months ahead? Make it stick.

“What we’ve seen is that some of these new habits that people may have developed during the pandemic may be more sustainable than the habits they had previously,” said Emily Mailey, an associate professor of kinesiology at Kansas State University. “I think people are finding ways to fit physical activity into their day that will be easier to maintain.”

Mailey will be one of the featured speakers on February 18 during the online program Living Well Together hosted by K-State Research and Extension.

“We’ll be talking about planning physical activity into your schedule,” said Mailey, who also is the director of K-State’s Physical Activity Intervention Research laboratory. “It’s important to be intentional and to integrate physical activity into your day... and finding a support person to hold you accountable.”

Mailey said a simple way for people to be more active is to look for “little bits of physical activity” to tie into everyday routines – such as brushing your teeth, washing the dishes, or attending an online meeting.

“Enjoyment is one of the key things that we always highlight when encouraging physical activity,” Mailey said. “What one person enjoys doing may be very different from what someone else does. Sometimes we tend to have a very narrow idea of what counts as exercise, but in reality, there are lots of different ways to move your body and be physically active. We’ll encourage people to explore different types of movement to find something they’ll enjoy and would want to continue doing.”

Sharolyn Jackson, a northeast area extension specialist, will be a co-presenter with Mailey on February 18. She is also the coordinator of Walk Kansas, an eight-week program to get groups of people walking and moving a distance equivalent to the length of Kansas.

“In Walk Kansas, we want to give people plenty of time to establish that habit, to establish a new norm,” Jackson said. “The eight-week period allows them ample time to do that and reach out to people who can support them – their teammates, who are family, friends, and co-workers. We know that having a team of supporters is another way to make active habits stick.” Walk Kansas begins on March 28 this year.

Contact your local extension office for more information on how to register for the Living Well Together session.