Is serving size the same as portion size? Understanding the Nutrition Fact Label
By: Lydia Kaume

The U.S. Food and Drug Administration (FDA) Nutrition Facts label appears on most packaged foods and informs us how many servings are in a box or can. When consumers understand the food label, they can use nutrition information to make quick, informed food choices that contribute to a healthy diet.

- **Serving size** varies from product to product and provides information on how many calories are in one serving size. **A portion size** is how much of that food we choose to eat at one time. In some cases, serving sizes and portion sizes match but at all times individuals determine their portion size. Ask, how many servings am I consuming?
- **Calories** and calories from fat tell us how much energy we get from that food.
- **% Daily Value** informs us if a serving size of food is high or low in a nutrient. As a guideline, 5% or less is low and 20% or more is high.
- **Nutrients:** Limiting fat, cholesterol, and sodium can reduce the risk for cardiovascular disease, cancer and diabetes.
- **Nutrients:** Select foods high in fiber, Vitamin A, Vitamin C, calcium, and iron to help your body fight diseases and support healthy body functions.
- **A Footnote** is found only on larger packages and does not change from product to product.

The Nutrition Facts label is a very important tool for us to:

- Keep track of how many calories we eat based on the number of serving sizes we choose to eat. As a general guide, based on a 2,000 calorie diet, 40 calories is low, 100 calories is moderate and 400 calories or more is high.
- Use in choosing healthy foods and selecting items lower in fats, salt, and sugar and higher in fiber and vitamins.


For more information on nutrition, go online to [http://extension.missouri.edu](http://extension.missouri.edu) or contact one of the nutrition and health specialists working in the Ozarks: Dr. Lydia Kaume in Barton County, (417) 682-3579; Dr. Pam Duitsman, in Greene County, (417) 881-8909; or Cammie Younger in Texas County, (417) 967-4545.
Use of Poultry Litter for Field Crops
By: John Hobbs

Poultry litter can be utilized as a fertilizer for cropland and is recognized as an excellent source of the plant nutrients phosphorus (P), and potassium (K). In addition, litter returns organic matter and other nutrients such as nitrogen, calcium, magnesium, and sulphur to the soil, building soil fertility and quality. Those using poultry litter should use a nutrient management plan to prevent nutrient imbalances and protect surface-water and groundwater contamination. A nutrient management plan is a road map for your farm and how to manage manure in an efficient and environmentally sound way. A nutrient management plan matches the nutritional requirements of the crop with nutrients available in the poultry litter. The value of poultry manure varies not only with its nutrient composition and availability, but also with management, transportation, and spreading costs.

What is the typical nutrient content in poultry litter? The nutrient content in litter varies depending on the bedding system, feed ration, and cleanout system. When using poultry litter, a litter test can be requested from the poultry grower to determine the amounts of nutrients from that particular source of litter. In the chart below is a 7 year average of nutrient values from samples submitted to the U. of Arkansas Ag Diagnostic Laboratory.

<table>
<thead>
<tr>
<th>Moisture %</th>
<th>N lbs per ton</th>
<th>P205 lbs/ton</th>
<th>K20 lbs/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>2</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Maximum</td>
<td>47</td>
<td>98</td>
<td>96</td>
</tr>
<tr>
<td>Median</td>
<td>22</td>
<td>60</td>
<td>57</td>
</tr>
<tr>
<td>Average</td>
<td>23</td>
<td>60</td>
<td>57</td>
</tr>
</tbody>
</table>

How much should be applied? Poultry litter should be applied based on the PHOSPHORUS needs of the crop to be grown. A soil test will determine the amount of phosphorus needed. Applying litter based on the crop’s NITROGEN requirements will result in phosphorus rates well above the P-fertilizer rate required for optimum crop growth and yield. Once the rate of litter has been calculated from the phosphorus requirements supplemental nutrient rates can be estimated to fill the crop nutrient requirements. Recommended practices to properly use poultry litter:

- Take a soil sample to know how much P205 fertilizer is needed.
- Obtain an analysis of the litter.
- Calculate the amount of litter needed to supply the amount of P205 required for your crop.
- Calculate the amount of supplemental nutrients (N & K) needed.
- Apply litter during times of the year runoff is unlikely.
- Take soil samples on a regular basis to monitor buildup of nutrients in the soil.

Is litter right for my farm? It depends! Transportation costs to your area from poultry concentrated areas in Missouri could prohibit you dollar wise. If your phosphorus levels are too high at the present time, it would keep you from applying poultry litter. If soil test levels of phosphorus are above 300 pounds per acre do not apply poultry litter. However, litter can be a great source in many situations to provide nutrients for both row crops and forages.

Who Gets Grandma’s Yellow Pie Plate?
By: Janet LaFon

Okay, so there may not be a special yellow pie plate in your family. But we all have personal belongings that are valued or have meaning to us and/or family members. Have you thought about who you would want to have those belongings someday? Non-titled personal property transfer issues are frequently ignored until a crisis occurs. Often, the issues are assumed to be unimportant because the property doesn’t have a title or may not have a high financial value.

Non-titled property is a term referring to personal items without a legal document (such as a title) to indicate who officially owns the item. Non-titled property includes items such as guns, tools, photos, furniture, dishes, books, jewelry and collections.

Decisions about the transfer of both titled and non-titled property are important. When dealing with non-titled property, these decisions can present some special challenges. Here are some factors to consider when transferring personal property:

- Understand the sensitivity of the issue. It’s important to recognize the sentimental value personal property may have to both the owner(s) and receiver(s). To some, it may just be “stuff.” To others, it has emotional value.
- Determine what you want to accomplish. What’s most important to you? Is a co-owner involved? Come to an agreement. What are your goals?
- Determine what fair means in the context of your family. Fair does not always mean equal, such as an equal number of items, equal value, or equal in terms of emotional value. Sentimental value varies from individual to individual.
- Identify the meaning of objects. What special personal belongings are in your family? Do they have special meanings to others? Make no assumptions about what someone else will value and why.
- Recognize distribution options and consequences. It’s important for individuals involved to discuss, identify and agree upon a method or methods of transfer before beginning the distribution process. If decisions are made prior to death, it eliminates misunderstanding of the owner’s wishes.
- Agree to manage conflicts if they arise. Discuss and clarify problems. Make a commitment to work toward a solution. Perhaps the most important thing to remember is to listen to one another.

Transferring personal property can be a time to celebrate a person’s life, an opportunity to share memories and stories, and a way to continue traditions and family history.

Adapted from: “Who Gets Grandma’s Yellow Pie Plate?”
Minnesota Extension Service.
One of the most important management skills of livestock producers is the ability to recognize when their animals are too skinny or too fat or just right in their fat reserves. The body condition or flesh on an animal affects its ability to resist infection and parasites, its ability to grow and produce milk, and its likelihood of breeding.

Body condition scoring methods are used for evaluating the current and past feeding program, assessing the health status of individual animals, and establishing the condition of animals during routine animal management. Condition scores also may be useful during assessment of animal welfare.

Body condition scores provide an indication of the energy status of sheep and goats, being largely an index of the amount of muscle and degree of fatness of the animals. Condition scores can be used for all ages of animals, although primarily they are used on the lactating animals to ensure that they do not get too skinny when they are milking or nursing. If the lactating animals get too thin, they are more apt to have health problems and less likely to breed. They also may not milk as well as they would in proper body condition. If the animals get too fat, they also may have other health problems, are usually poor breeders, and may give less milk (as too fleshy may be an indication of low milk production).

Body condition scoring provides an objective indication of the amount of fat cover on sheep and goats. This evaluation is accomplished by assigning a score to the amount of fat observed on several skeletal parts of an animal. Various point systems are used to score the animal. The two most common scoring systems for body condition for sheep and goats range from 1 to 5 or from 1 to 9. The two systems utilize a middle point of 3 or 5, respectively, as neither too fat nor too skinny. A score of 1 is very, very skinny or an emaciated animal while a score of 5 or 9, respectively, is a very, very fat animal. For dairy animals, the most commonly used system ranges from 1.0 to 5.0, in increments of 0.1 or 0.25. One point of body condition equals 10 to 15 pounds gain in body weight in sheep and goats. Larger frame animals require additional body weight to increase one point, compared to smaller frame or narrow animals. For beef cattle, the 1 to 9 system is often used but both systems are utilized with meat goats and sheep.

In contrast to body condition scoring for dairy or beef cattle, it is usually necessary to put your hands on sheep and goats to properly evaluate their body condition. An exception is with dairy goats where visual appraisal may be adequate. For most producers, it is not necessary to score each animal in the herd or flock, but it is essential that they recognize proper body condition and changes in body condition so they can adjust feeds for the animals and recognize diseases in the animal. To do this, they also must know that body condition varies for each stage of life of the sheep or goat. For example, animals in late lactation or heavily pregnant will have a higher condition score (i.e., 3.5-3.75 on a 5.0 scale) than animals that have been milking for two months after giving birth (i.e., 2.5 on a 5.0 point scale). Once a producer can identify a body condition score of 3 out of 5 or 5 out of 9, then it is important to note changes in body condition. If an animal loses weight and condition, then extra feed or a higher quality feed with lower fiber to allow greater feed intake may be needed for the animals to get back to proper body reserves.

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Pictures to show examples of body condition scores ranging from 1 to 5 are available from Langston University at http://www.luresext.edu/goats/research/bcs.html for meat goats and at http://www.extension.org/pages/19280/goat-body-condition-score-5#.UumHwpKA0zs http://www.luresext.edu/goats/research/bcs_factsheet.pdf and http://www.youtube.com/watch?v=a2ppHAubLYY for dairy and meat goats.


Body condition scores of both sheep and goats are shown at https://www.google.com/search?q=sheep+body+condition+score&tbm=isch&tbo=u&source=univ&sa=X&ei=G4bpUsrJO4qwygG9qYCQBw&ved=0CCwQsAQ&biw=1120&bih=622.

Sudden changes in body condition scores allow you to detect health problems in an individual animal or your herd or flock. If an animal is sick and quits eating, the body condition score can change dramatically in less than a week. For example, if a doe develops severe diarrhea after kidding, the body condition score can drop from 4.0 to 2.0 in less than a week if she quits eating and is still producing reasonable quantities of milk. This example would be the extreme in using body condition scores to indicate health problems in the herd. Other examples might include low scores in animals that have a heavy parasite load. These animals will generally not put on flesh like animals that are in good health. Also, animals that have a low grade respiratory infection will not be maintaining or increasing body condition.

In conclusion, BCS can be a useful management tool to improve the bottom line of your small ruminant enterprise through increased and more efficient growth and milk production, better reproductive performance and improved herd health.

**Body Condition Scoring of Sheep and Goats**

By: Jodie Pennington, Small Ruminant Educator, Lincoln University, Newton County Extension Center

**SW Missouri Sheep and Goat Conference, March 22, 2014, McDonald CO Fairgrounds, 100 Mustang Lane, Anderson, MO, 9 am to 3 pm.** To pre-register for $10 which includes lunch and educational materials ($15 at the door), contact the Newton CO Extension Center at 417-455-9500 or email newtonco@missouri.edu. Topics will include budgets for sheep and goats, pros and cons of sheep and goats, multi-species grazing, grades and grading of sheep and goats, marketing of your animals, producer panel on helpful hints to make a profit with sheep and goats, and pasture and grazing management.
Cold Injury to Wheat
By: Jill Scheidt

Low temperatures can kill winter wheat plants by injuring the crown. When adequately hardened, crowns can tolerate -9 to -11 degree Fahrenheit. Plants in the 3-4 leaf stage with good root systems are in the best position to survive the winter.

Planting date is important not only when considering protection against Hessian flies, but also to protect plants from cold temperatures and unpredictable weather that occurs in Missouri. If plants put out too many tillers in the fall, the overly lush plant will be more susceptible to cold temperatures. Larger plants are more subject than younger, smaller plants to shriveling due to cold, dry winds and lack of adequate snow cover.

Wheat should not be planted before October 10 south of Vernon County to Jasper County and ranging east to the state line; and not planted before October 14 south and east of Newton County to Missouri’s state borders to avoid yield loss caused by Hessian fly and cold temperatures.

Plants that are killed by low temperatures will normally fail to green-up in the spring and have a bleached-tan color to the leaves. These symptoms will be most apparent on exposed high areas of the field. The crown tissue of winter injury plants will be soft, brown and mushy and secondary roots will have rotted off. Healthy plants have firm, pale green crowns and white roots. Severity of freeze injury to wheat depends on temperature, length of exposure and growth stage.

Plants can be checked for winter injury by digging it up before spring green-up and bringing the plant indoors. If the crown tissue is still alive, new growth should be visible within 3 days on plants clipped at ½ - ¾ inch above the crown.

Wheat has the maximum amount of resistance to cold temperatures during mid-December to the end of January. Wheat can withstand temperatures of -9 to -11 degree Fahrenheit. Wheat can withstand temperatures as low as -5 degree Fahrenheit until the end of February. If there is 4” of snow to cover wheat plants during cold temperatures, the snow will provide enough insulation to protect the plant. If there is less than 4” of snow covering plants during temperatures of -4 degree Fahrenheit or below, producers should check their fields for freeze injury.

The tillering stage usually occurs in the fall when the plant has 4-5 leaves. During spring tillering, beginning in March, if temperatures drop to 12 degrees Fahrenheit for more than 2 hours, a wheat plant may see a slight to moderate yield reduction. Symptoms include leaf chlorosis, burning leaf tips; you may also see a blue cast to the field.

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**Barton County**

**2014 Weekly Field Crop Scouting Telephone Update**

The *Weekly Crop Scouting Telephone Update* is a program that informs producers of pest threats. A weekly, 2 minute recorded message is sent out containing research based information on pests such as: environmental issues, nutrient deficiencies, pest threshold level, pest description, damage description and pest control. Several fields in different areas of Barton County and surrounding counties are physically scouted each week and the report is based on those observations. Scouting begins in March and ends in November.

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Name: _______________________________________

Check if signed up last year and info unchanged (do not need to fill out rest of form if checked): ______

Address: _____________________________________ City: __________________ State: _____ Zip: _____________

Daytime Telephone: (___) _______________________ Email Address: _______________________________________

Crops intended for 2014: __________________________

___ Corn    ___ Wheat    ___ Soybeans    ___ Milo    ___ Other __________________________

I understand that the phone number listed will be contacted weekly for a field crop scouting report from MU Extension. I also understand that the field scouted will be in Barton County, but not necessarily on my farm. I understand that the report could be used as a tool to select and implement pest management programs. Successful pest management procedures depend on timely field sampling and scouting of your own fields. This report should not be used as the only resource for pest management on your farm.

Signature: ________________________________ Annual Fee $35.00

Remit to: Barton County Extension 801 E. 12th Lamar, MO 64759