### **Animal digestion and nutrition**

## **Baked chicken treats**

Which protein source provides the most nutrition for chickens?

Chickens need varying levels of protein dependent upon their age and function. Ideal protein for laying breeds based on age

• Chicks up to 6 weeks old: 20% - 22% protein

• 7 weeks to point of lay: 14% - 16% protein

• Once they have started laying: 15% - 18% protein

• All-purpose, over 6 weeks old: 16% protein

For meat chickens (broilers) the amounts change a bit

Starter (0-6 weeks)-23%

• Finisher (6 weeks)- 10%

These different formulations may be labeled chick starter, grower, layer, and so on. Chicks need a lot of protein because they're growing very quickly and growing in their feathers! Pullets need somewhat less because they've already completed the fastest growing stage, and have already grown in their feathers. Layers might need slightly more because even though they've completed growing, they have started laying eggs, which requires a lot of protein.

When chickens are molting (usually in the Fall season) they may need a feed with a higher protein level (20% rather than the normal 16% for laying hens). A protein supplement can help their new feather growth but is not a must have. Protein rich treats during the winter will supplement when they do not have access to many insects or green vegetation and when they are molting.

The following are some natural supplements: mealworms, kale, collard greens, dark leafy greens, and wheatgrass, cooked eggs (shell and all), sunflower seeds, fish, pumpkin, sprouts, peas, and oats.

This recipe will provide chickens with supplements in a "treat" that can be shared among members of the flock.

#### Materials/Ingredients

1/2 cup flour — einkorn flour (ancient grain) or whole wheat flour

1/2 cup water

1/2 cup creamy sunflower butter

1 tsp aluminum free baking powder

1/4 cup raisins, apples or strawberries

coconut oil for greasing cake molds or baking sheet

#### Optional Ingredients: (Choose 2 or More)

boiled egg(s) with shells, crumbled (high in protein and calcium from the shells)

dried mealworms (high in protein)

grass clippings (high in nitrogen/amino acids, and FREE)

additional fresh or dried fruit, chopped (high in fiber and vitamins)

fresh vegetables, chopped (high in fiber and vitamins)

soybeans (high in protein)

unsalted peanuts (high in protein)

plain yogurt (only use occasionally; helps keep intestinal tract healthy)

rolled oats (raises metabolism and helps keep chickens warm; reserve this one for colder months) cheese (high in calcium, yellower yolks)

<sup>\*</sup>This document may be reproduced for educational purposes, but it may not be reposted or distributed without crediting GrowNextGen and The Ohio Soybean Council and soybean checkoff.



# **Animal digestion and nutrition**

### **Procedure**

- 1. Preheat oven to 350° F
- 2. Grease cake molds, or a baking sheet with coconut oil
- 3. Combine flour, water, sunflower butter, and baking powder in a bowl. Stir until combined.
- 4. Toss in raisins, apples or strawberries
- 5. Add in two additional ingredients from optional list above.
- 6. Pour batter into molds or form into a round shape on the baking sheet (this will make 2 round cakes).
- 7. Bake for 20 minutes.

Feed 1 per day per 4 chickens.

