How to cut chicken feed costs by 50% by simply fermenting poultry feed

In commercial poultry production, particularly with broiler chickens, the cost of feed can contribute up to 70% of the total production costs. Therefore, minimizing feed expenses should be a top priority for every farmer.

While formulating your own chicken feed using various grains like soybeans, maize or corn, sunflower seeds, sorghum seeds, and similar ingredients may seem cheaper in some cases, it often turns out to be more expensive and time-consuming compared to buying commercial feed from a poultry shop. To reduce production costs, besides formulating your own poultry feed, you can also use commercial chicken feed and ferment it for three days.

Fermentation Process

Fermentation is a process where food is covered in liquid and allowed to sit, creating probiotics that aid in digestion and gut health. Various types of chicken feed, including mash, crumbled feed, pellets, and whole grain feeds, can be successfully fermented, resulting in positive outcomes. Fermented food, such as sourdough, yogurt, and cheese, is not only beneficial and nutritious for humans but also widely used in animal husbandry, particularly in pig nutrition.

When chickens consume fermented feed, it provides natural probiotics packed with beneficial bacteria and yeast. This increased accessibility to nutrients leads to reduced feed consumption over time. It's important to note that fermenting grains is different from sprouting them. While both methods involve adding water to grains, sprouting requires daily

rinsing until a green sprout appears, and the entire sprouted grain is fed to the chickens. Some flock owners find this method beneficial for feeding grain.

Benefits

The benefits of fermenting chicken feed are manifold. Fermentation promotes good gut health, lowers feed consumption per serving, and extends the nutrient availability of grains. Fermented grains can also be fed to waterfowl, guineas, turkeys, and quail. When organic chicken feed, particularly whole grains, is fermented, it becomes an exceptionally healthy option. The fermentation process breaks down the food, increases enzyme content, and enhances vitamin B, C, and K levels. This results in improved digestibility, increased usable protein, and easier absorption of nutrients, while normalizing acidity in the chickens' stomachs, aiding in digestion, and neutralizing toxins in their digestive systems.

Advantages of fermenting feed

The advantages of fermenting feed include larger eggs with thicker shells, a boost in intestinal health by creating a natural barrier against pathogens like E. coli and Salmonella, and reduced susceptibility to diseases and pests carried by wild birds. Fermentation increases beneficial bacteria in the chickens' guts while decreasing pathogens. It also improves the digestibility of feed, nutrient absorption, and overall feed efficiency. The fermented feed contains more water, leading to increased water intake. Furthermore, it preserves essential vitamins and minerals found in fermented whole grains, such as B vitamins (folic acid, riboflavin, thiamin, and niacin), and makes protein more readily available to chickens.

To initiate the fermentation process, start by fermenting approximately two-thirds of the daily feed amount you typically provide to your birds. For example, if you offer 1

kg (or 1.5 lbs) of feed in the morning, afternoon, and evening, totaling 3 kg (or 3 lbs) per day, ferment about two-thirds of that amount. Mash the grains, seeds, or feed you use for your chicken feed, ensuring it is covered with non-chlorinated water to avoid hindering the lacto-fermentation process. Cover the container and let it sit for three days, stirring the mixture a few times daily to incorporate oxygen and expedite fermentation. Maintain sufficient water coverage, adding more as needed. When you observe a layer of bubbles on the liquid's surface, it indicates the presence of lactic acid bacteria and an ongoing lacto-fermentation process. You can start feeding the fermented chicken feed at this stage, but it will truly ferment when bubbles become visible after several days.

It's crucial to keep at least 2 inches (or 5 cm) of water covering the feed to prevent harmful bacterial growth. Clean the feed containers daily to avoid mold development and ingestion. Metal containers should be avoided as the high acid content of fermented feed can interact with the metal, potentially contaminating the feed.