Blood as a Super Meal

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Introduction

Blood is one of byproducts remaining after the food animal is slaughtered, Aletor (1989). Blood meal is a by-product of the slaughtering industry and is used as a protein source in the diets of non-ruminants and ruminants. Animal blood is a good source of protein, but the whole package is discarded. Blood contains about 80% crude protein.

Aim

- It provides a significant amount of protein as compared to other animal and plant sources.
- Provides important minerals such iron in plenty amounts.
- Elimination of blood from environment means preventing environmental pollution.
- It is an enterprise, increasing economic value of an animal.
- To reduce cost

Method

- Blood was collected from abattoir using clean trough
- The blood collected was left to clot then fried
- The fried blood meal was grinded to obtain powder, dried more on sun light so as to kill the pathogens which are resistant to more temperature, then mixed with powdered garlic
- Then the kept chicken of the age of one month were in three different chambers each containing 14 chickens were supplied equal ratio of food, first chamber supplied prepared protein meal, second chamber bought soy meal and third chamber of chicken was supplied fish meal. Then the growth rate was observed per each month as well as the weight of eggs laid was measured.

Fed with protein meal	Fed with Soya meal	Fed with Fish meal

Results

Table 1.0 show that the body weight of chicken feeding protein meal is greater than soya meal as well as fish meal.

Table 1.1 shows that the eggs weight of chickens feeding protein meal is greater than soya meal as well as fish meal

Blood meal is a by-product of the slaughtering industry and is used as a protein source in the diets of livestock. The drying of whole blood from slaughtered animals derives blood meal. The method of drying does affect the nutritional quality of the protein in the meal. The three methods of processing whole blood are batch dry rendering, ring dried rendering and spray died rendering. Batch dry rendering involves the cooking of whole blood in a jacketed cylindrical cooker that is indirectly heated by steam at a pressure of about 500 kPa. Ring dried rendering involves coagulating the blood by steam heating; the coagulum is centrifuged and dried with hot gas in a ring drier. The process of manufacturing spray dried blood meal is similar to that of skim milk powder in which liquid is sprayed inside the warm chamber and then becomes fine powder instantly.

The ring-dried and spray dried blood meal has a greater content of total and available amino acids and is of better nutritional quality. For example, the availability of lysine as a percentage of the total lysine is 84% to 89% for ring-dried blood meal, as compared to batch-dried meal in which lysine is 62% to 77% available.

Table 1.0, show the body weight of chicken per week for every meal.

AGE (WEEK)	FEED INTAKE PER CHICKEN PER DAY	FISH MEAL	SOYA MEAL	PROTEIN MEAL
		BODY WEIGHT(gm)	BODY WEIGHT (gm)	Body weight (gm)
1	12	62	64	67
2	18	110	114	122
3	26	180	186	197
4	33	265	268	283
5	38	354	360	380
6	43	453	459	483
7	47	560	564	591
8	51	667	671	702

Table 1.1 shows the egg weight laid by chicken for every feeded meal

FISH MEAL	SOYA MEAL	PROTEIN MEAL
EGG WEIGHT (gm)	EGG WEIGHT (gm)	EGG WEIGHT (gm)
55	56	60

Conclusions

We do advice people to use blood meal since it is cheap with high content of protein and minerals such as iron and vitamin K and also it increasing economic value of an animal.

References

Aletor, V.A., E.A.O. Laseinde and O. Ogunyemi, 1989. Equi-protein replacement of fish meal with soybean meal in the diets for broiler chickens: Effect on carcass characteristics and the development of certain muscles of the chest and the hind limb. Nig. J. Technol.

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