agrees with Bell and Weaver (2002) that carcass of 1520 g/body weight is 65.5 %.Shanir and Abdul ElAzeem (2005) suggested that chicken carcasses fed with ahigh content of fiber, with high or low protein contenthave the proportion of carcass weight with higher bone than chickens fed with a low content of fiber, both with contenthigh or low protein.

Abdominal fat percentage. Abdominal fat percentage of the broilers based on administration level and processing method of skipjack gill during this study is given in Table 3. Result showed that gill meal administration level and processing method interaction, administration level and processing method did not significantly affected (P>0.05) abdominal fat percentage of broilers. Average of abdominal fat percentage was in common range, 1.87 to 1.97%. North (1984) stated that the abdominal fat content of the broiler should not be higher than 4%. It reflected that the use of the administration level and the processing methods in this study produces the abdominal fat lower than 4 %, meaning that the abdominal fat of the broiler is the normal range.

In the fat developing process, the body fat is produced from carbohydrate, protein, food fat after the carbohydrate is absorbed in glucose form and glycogenic glucose is changed to glucose and then transferred to the liver to be stored as glycogen, while some fat enters the circulatory system through lymphatic system and can directly stored in the tissue. Since each certain cell possesses the highest limit of protein storage, excessive amino acid will be degraded to be energy source and will stored as body fat. Non-significantly different abdominal fat could result from that the energy and protein content in the ration is the same despite similar energy consumption. Abdominal fat could also rise if high energy level is given (North and Bell, 1990). This study used the ration of 22% protein and metabolizable energy of 3200 Kcal/kg. Beside for major living needs, the excessive energy is then stored in fat form occurring in the body cavity and attaching to the organs. Resnawati (2004) stated that the percent of abdominal fat at 5 weeks old ranged from 1.5 to 2.1%. The broilers used in the study had the same age and lived in the same environment. The skipjack (*Katsuwonus pelamis L*) gill waste through steaming processing method and administration of 12% as a replacement of anchovy meal protein in the ration gave good response to the percentage carcass weight and abdominal fat.

CONCLUSION

This study concluded that skipjack tuna gill meal can replace up to 12% of fish meal in broilerdiets without affecting carcass quality ofbroiler meat and it would be economically profitable toinclude STGM in feed mixtures for broiler production aspart of their balanced diet.

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