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 Author

**Plagiarism Certificate**

I, Manas Chandra Das would like to strongly assure that I have performed all the work furnished here in this report. The information has been collected from national and international journals and other references. All references have been acknowledged duly.

Therefore, I hold entire responsibility of collection, preservation and publication of all data accumulated here in this report.

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The author

September, 2015

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# LIST OF ABBREVIATION AND SYMBOLS

|  |  |
| --- | --- |
| Abbreviation | Elaboration |
| DM | Dry matter |
| ME | Metaboligable energy |
| CP | Crude protein |
| CF | Crude fiber |
| EE | Ether extract |
| NFE | Nitrogen free extract |
| EPA | Eicosapentaenoic acid |
| DHA | Docosahexaenoic acid |
| RBC | Red blood cell count |
| PCV | Packed cell volume |
| TRBC | Total red blood cell |
| WBC | White blood cell |
| Hb | Haemoglobin |
| TEC | Total erythrocyte count |
| TLC | Total Leukocyte count |
| ESR | Erythrocyte sedimentation rate |
| SE | Standard error |
| NS | Non significant |
| < | Less than |
| > | Greater than |
| e.g | Example |
| ml | Millilitre |
| mg | Milligram |
| kg | Kilogram |
| et al. | And his associates |
| etc. | Et cetera |
| gm | Gram |
| % | Percentage |
| i.e. | That is |
| Tk | Taka (Bangladeshi taka) |
| TP | Total Protien |
| AAFCO | Association of American Feed Control Officials |
| BRAC | Bangladesh Rural Advancement Commission |
| AOAC | Association of Official Analytical Chemists. |
| Sig. | Significance |
| Ref. | Reference |
| MS | Master of Science |
| Ctg | Chittagong |
| CVASU | Chittagong Veterinary and Animal Sciences University |

**ABSTRACT**

The trial was conducted to test the dog biscuit prepared from locally available ingredients in Bangladesh, which confirm the main nutritional requirements and to determine its influence on growth rate of local breeds. A total of 18 puppies (between 08-12 weeks of age) were selected for the study. Feed offered, body weight gain as well as metabolic profile test and heamatological analysis were done on weekly basis to determine health status. It was found that the body weight gain and feed intake had a significant (*P<*0.05) relationship. It was found that the mean weight gain of puppies which were fed using homemade food was 1.62kg±0.04 whereas 2.02kg±0.27 and 2.11kg±0.13 was the mean weight gain of puppies which were fed using commercial food and prepared biscuits respectively. Result of metabolic profile test and heamatological analysis revealed no significance difference between groups those were fed commercial food and prepared biscuits. In conclusion, both commercial food and prepared biscuits showed similar result in terms of weight gain, metabolic profile test and heamatological analysis.

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| **Key words:** puppies, commercial food, prepared biscuits, heamatological analysis, health Status |