SUMMARY
An investigation into the possibility of usage of Biscuit Factory Waste (BFW) as a poultry feed ingredient in partial and equivalent replacement of cereal grains has been conducted in chicks, growers, layers and broilers and the results so far obtained have been summarised below.

The different feeding regimens i.e. treatments are mentioned in the footnote.

A. CHICKS:

33 percent replacement of cereal grains by equivalent quantity of biscuit factory waste was found to be ideal for growth as shown below.

I) Liveweight gain: The average liveweight gain per bird at 8 weeks of age were 640 gms., 661 gms, 650 gms and 640 gms under treatments A, B, C and D respectively.

II) Feed Consumption: The average feed consumptions per chick up to 8 weeks of age were 2292 gms, 2252 gms, 2172 gms and 2202 gms under treatments A, B, C and D respectively.
III) **Conversion ratio**: The efficiency ratio of feed conversion were 3.51, 3.55, 3.34 and 3.44 under treatments A, B, C and D respectively.

**B. GROWERS**:

In case of growers 33 percent BFU replacement level (Treatment-B) appeared to be superior than other treatments in respect of growth as shown below.

**I. Liveweight gain**: The average live-weight gain per bird at 20 weeks of age were 1420 gms, 1440 gms, 1436 gms and 1415 gms in treatments A, B, C and D respectively.

**II. Feed Consumption**: The total feed consumption per bird upto 20 weeks of age were 9059 gms, 9057 gms, 8654 gms and 8648 gms in treatments A, B, C and D respectively.

Feed consumptions at grower stage were found to be somewhat lesser under treatments C & D but since the birds of C & D groups showed some undesirable symptoms like reduced appetite and digestive
disorders 33 percent replacement level (Treatment-B) was considered to be ideal for this category of birds.

III) Conversion Ratio: The efficiency ratio of feed conversion were 6.37, 6.28, 6.07 and 6.13 in treatments A,B,C and D respectively.

C. LAYERS:

I) Egg Production: The groupwise average henhouse egg production were 56.66, 60.45, 54.38 and 58.38 in treatments A,B,C and D respectively, showing that treatment 'B' yielded better result in regard to henhouse egg production.

II) Egg weight: The groupwise average egg weight per egg were 52.32 gms, 54.33 gms, 54.27 gms and 54.27 gms in treatments A,B,C and D respectively, revealing that the birds got sufficient opportunities to show up optimum egg weight capacity in the layers of Treatment-B.

III) Feed Consumption: The groupwise daily average feed consumption per bird per day were 108.02 gms, 112.13 gms,
107.47 gms and 106.21 gms in treatments A, B, C and D respectively.

Though the average feed consumption per bird per day under treatment B was slightly higher than other treatment groups, yet, it has been suggested that the birds of treatment B showed better performance because of their appetite, relish and toleration for the feed.

IV) Productive efficiency ratio: The average productive efficiency ratio were 3.45, 3.32, 3.60 and 3.36 in treatments A, B, C and D respectively, thus indicating superior efficiency ratio in the birds of treatment B.

D. BROILERS:

66 percent replacement of cereal grains by equivalent quantity of BFU was found to be ideal for growth as shown below.

I) Live weight gain: The average live-weight gain per bird at 8 weeks of age were found to be 1,747 gms, 1,739 gms, 1,788 gms and 1,773 gms in treatments A, B, C and D respectively, showing better liveweight gains at
at 66 percent replacement level. (Treatment-C).

II) Feed Consumption: The groupwise average feed consumption up to 8 weeks of age were 3.9 kg., 4.00 kg., 4.00 kg., and 3.85 kg. in treatments A, B, C and D respectively.

These results tended to show that there were very little difference amongst treatment groups.

III) Conversion Ratio: The efficiency ratio of feed conversion were 2.24, 2.33, 2.23 and 2.18 in treatments A, B, C and D respectively, showing very little difference amongst treatment groups.

Though best results were obtained in the broilers of treatment D, yet, in consideration to the speedy conversion of feed into flesh as evidenced by the results already stated (III above) treatment C (66% replacement level) seemed to be ideal for this category of birds.
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N.B.: 


Treatment-B.: Experimental group-I receiving feed with 33% replacement of cereals by equivalent quantity of BFU of the standard feed.

Treatment-C.: Experimental group-II receiving feed with 66% replacement of cereals by equivalent quantity of BFU of the standard feed.

Treatment-D.: Experimental group-III - receiving feed with 100% replacement of cereals by equivalent quantity of BFU of the standard feed.