

Psychology 8031

Assignment 8 – Due November 6 by 5 PM

Weight versus age of chicks on different diets

Description

The ChickWeight data frame has 578 rows and 4 columns from an experiment on the effect of diet on early growth of chicks.

An object of class `c("nfnGroupedData", "nfGroupedData", "groupedData", "data.frame")` containing the following columns:

weight: a numeric vector giving the body weight of the chick (gm).

Time: a numeric vector giving the number of days since birth when the measurement was made.

Chick: an ordered factor with levels $18 < \dots < 48$ giving a unique identifier for the chick. The ordering of the levels groups chicks on the same diet together and orders them according to their final weight (lightest to heaviest) within diet.

Diet: a factor with levels 1, ..., 4 indicating which experimental diet the chick received.

Details: The body weights of the chicks were measured at birth and every second day thereafter until day 20. They were also measured on day 21. There were four groups on chicks on different protein diets.

Question: If you are presented these data by a farmer who has the goal of producing the meatiest chicks, which diet do you proscribe for them? They are interested in maximizing rate of growth. Provide visual information to support your suggestions.

****Hint: Make sure that you use the treatment variable as a factor variable!!!**