

More Resampling in Data Analysis

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Two Examples of Data ReSampling

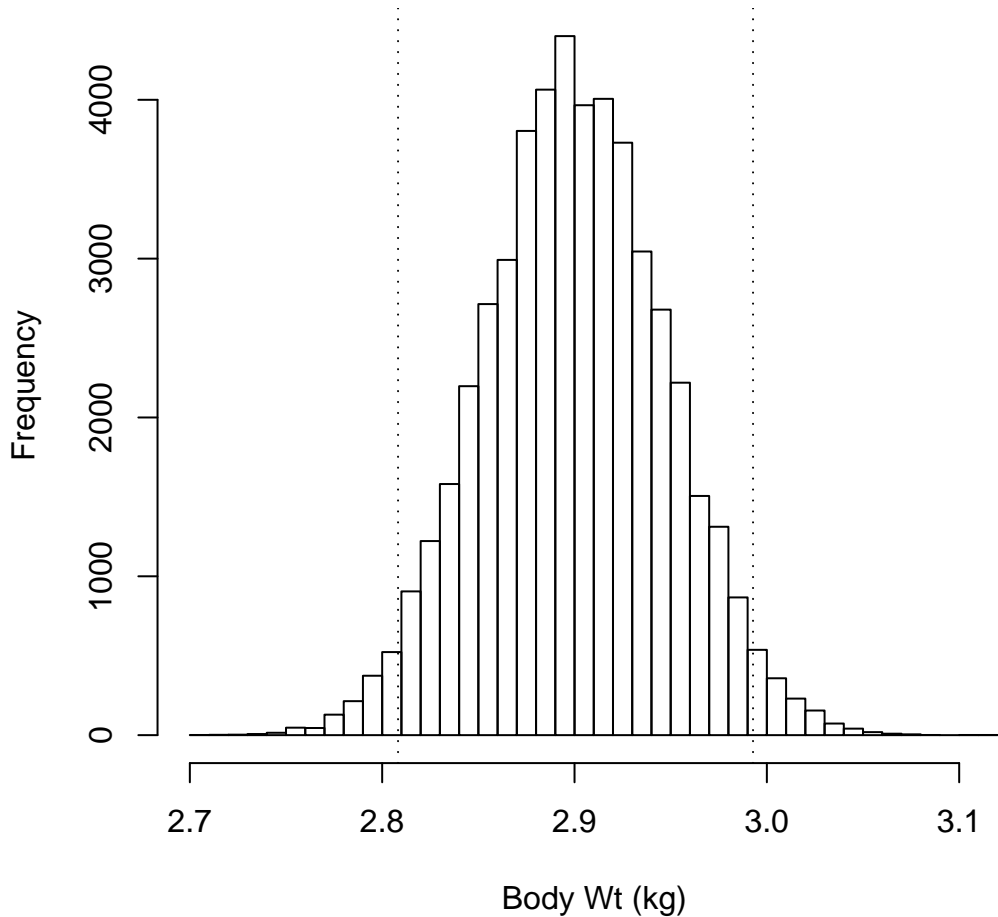
(A). Resampling to find 'similar' data with which to compute repeated statistic values and form Confidence Intervals.

Cat Bodyweight data

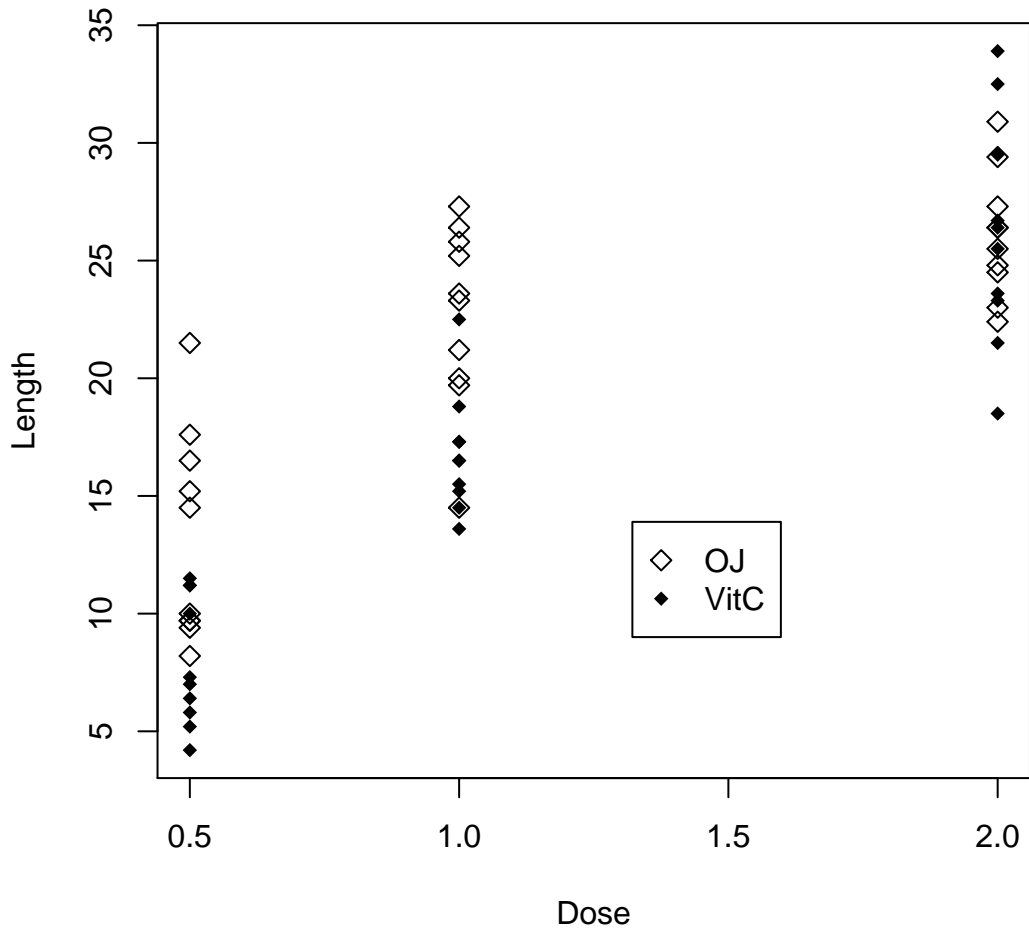
(B). Resampling to see just how 'outlying' a calculated statistic (measuring distance between two groups of data values) are.

Guinea pig Tooth Growth data

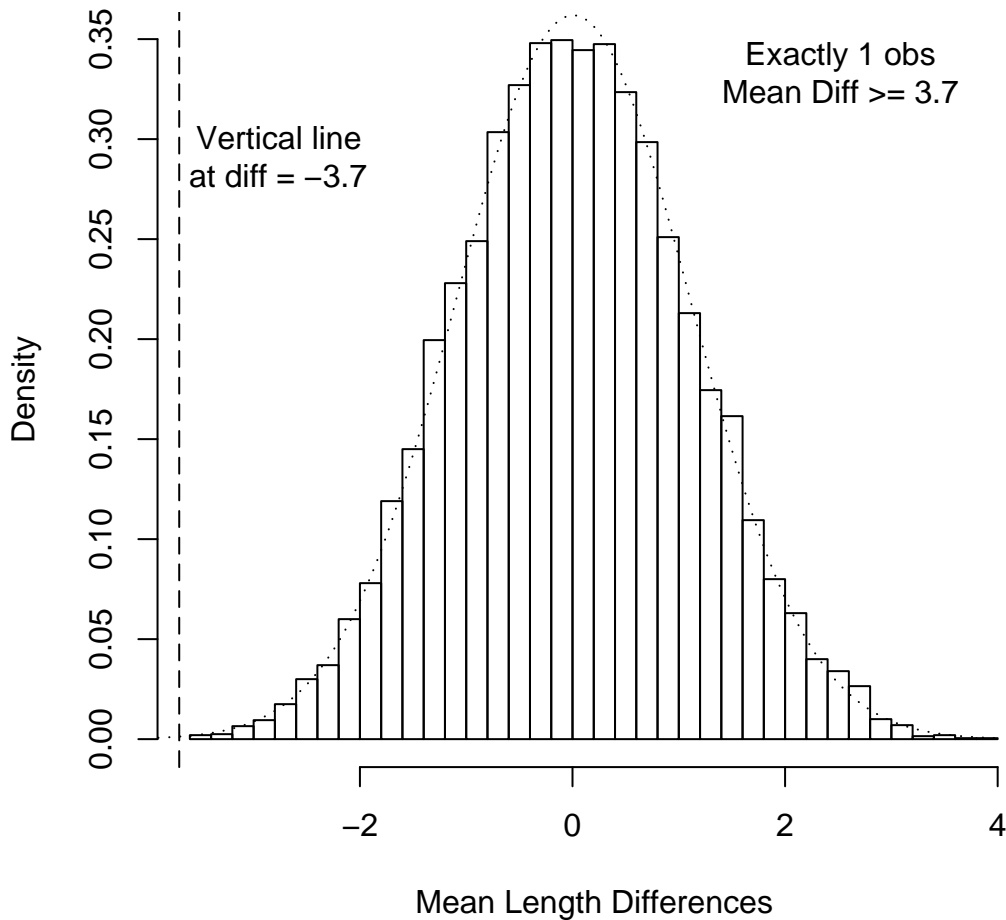
Histogram of Mean Cat Body Weights from 5e4 Resampled Cat Datasets, size of 97 Obs



Tooth Growth vs Vit C Dose in Guinea Pigs



Scaled Relative Frequency Histogram of Permutational Distribution of Mean Differences



References

Google Random Number Generation

http://en.wikipedia.org/wiki/Random_number_generator

Diaconis, P. & Efron, B. (1983). Computer-intensive methods in statistics. *Scientific American* May, 116-130.

Lecture slides at: <http://www.math.umd.edu/~evs/MMIslid09.pdf> .

Data Example slides at: <http://www.math.umd.edu/~evs/MMIdata09.pdf>

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Visit the **R project** website <http://www.r-project.org/> for freely downloadable software !