

# GRAPHICAL PRESENTATION OF MEDICAL DATA USING SAS

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# SODIUM DATA FOR DIABETICS

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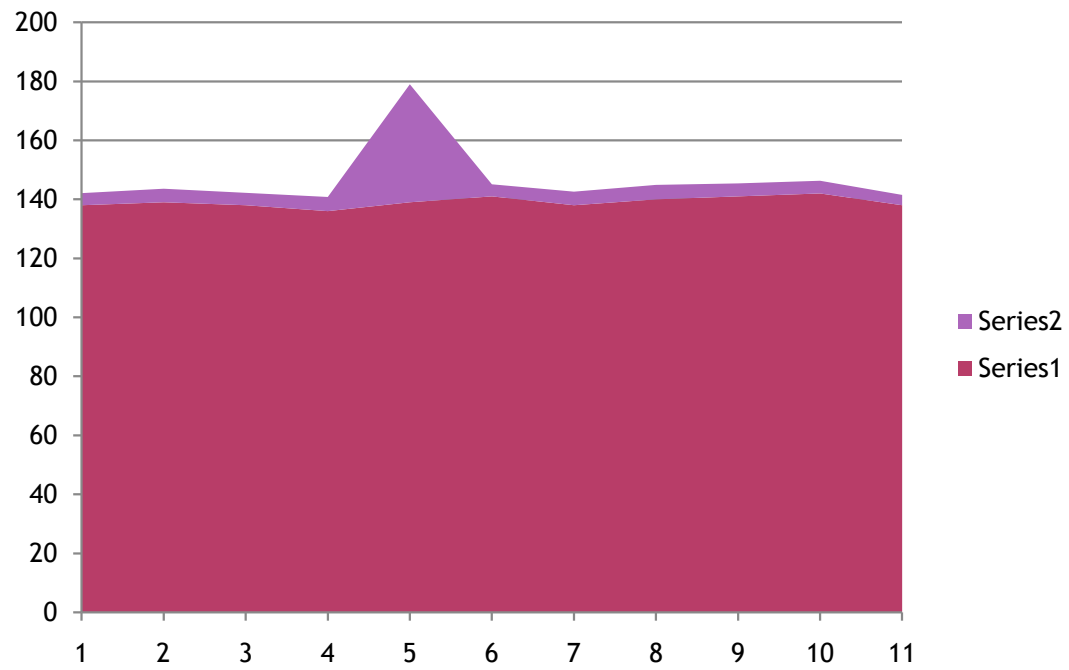
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# GRAPHICAL REPRESENTATION





# APPLICATION

- To smooth data and retain curve fit features to yield accurate data beneath the curve
- To facilitate extension to physiology through accuracy of the curve estimator.

# PROBLEMS

- ⦿ Loss of minute details due to real-time fitting of the curve
- ⦿ Details important to physiology
- ⦿ Best estimator assumes:
- ⦿ Loss of minute detail
- ⦿ Required:
- ⦿ Estimation of all critical points
- ⦿ One data point provides important physiological detail

# QUESTION

- ⦿ How to write a procedure to capture all points yet remove chaotic influence due to biological confounders
- ⦿ Fitting using traditional model curves from math does not solve this problem
- ⦿ These curves have assumptions in most instances
- ⦿ Important to retain three dimensional outlay to maximise model

# ISSUES

- ◉ Spline fitting
- ◉ Neuronal networks
- ◉ Graphing theory
- ◉ Failure to capture and discern physiological relevance of outliers
- ◉ Skewness may be a benefit rather than an error in Biology/Physiology

# ADVANTAGES WITH SAS

- ◉ User defined keywords can be inserted in code
- ◉ Codes can be edited to include math component

REAL ISSUE MAYBE:

MATH DELIVERABLES TO BE INPUTTED>

# PROBLEM SOLUTION

- ◉ Improve model building
- ◉ Extend to physiological analysis
- ◉ Extend computational physiology research platform
- ◉ Facilitate multi-dimensional data capture