

Longitudinal study of weight gain in rats during gestation: evaluating the toxicity of a chemical

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Abstract: Data of weight gain in rats during gestation was analyzed to evaluate the effect of a chemical. The changes in mean response were described using piecewise quadratic regression with two or three change points fixed to accommodate faster increases in some intervals. Random effects and covariance structures were considered.

Keywords: weight gain; longitudinal data; piecewise regression; linear mixed model; random effect.

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