

Simple Linear Regression

- $\begin{matrix} 1 & x\text{-value} \\ 1 & y\text{-value} \end{matrix} \left\{ \begin{array}{l} \text{fit least-squares (LSQ)} \end{array} \right.$

$\Rightarrow \text{lm()} \text{ in R}$

- Beef cattle data:
linear regression of body weight (y) on
breast circumference (x)

Multivariate Regression

- More than one x -variable, e.g.
- breast circumference (BC) x_1
 - height (HEI) x_2

$$\Rightarrow E(y_i) = b_0 + b_1 x_{1i} + b_2 x_{2i}$$

