

Prior predictive distribution

Priors should express scientific knowledge, but **softly**

When $H = 0$, $W = 0$

Weight increases (on avg) with height

Weight (kg) is less than height (cm)

sigma must be positive

$$W_i \sim \text{Normal}(\mu_i, \sigma)$$

$$\mu_i = \alpha + \beta H_i$$

$$\alpha \sim \text{Normal}(0, 10)$$

$$\beta \sim \text{Uniform}(0, 1)$$

$$\sigma \sim \text{Uniform}(0, 10)$$