

**posterior\_epred()** gives the draws from the expected value of the posterior predictive distribution, or the average of each draw from `posterior_predict()`.

In Gaussian regression, this is the **same as the linear predictor  $\mu$** .

$$E(y_i)$$

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

$$\mu_i = \alpha + \beta x_i$$

**posterior\_linpred()** gives the posterior draws of the linear model.

**posterior\_predict()** gives the draws from a random normal distribution with draws from the posterior distributions of  $\mu$  and  $\sigma$ .