

Price of the Tables at Quebec, September 13, 1750.
$$\text{Pr}(\hat{Y}_i = y_i | \text{cov}_i, \text{cov}_i^*) = \prod_{j=1}^J \text{Pr}(y_{ij} | \text{cov}_{ij}, \text{cov}_{ij}^*) = \prod_{j=1}^J \frac{1}{\sigma_{ij}} \exp \left\{ -\frac{1}{2\sigma_{ij}^2} (y_{ij} - \mu_{ij})^2 \right\}$$