

ESTIMATED PRODUCTION AND PROCESSING

(A)

estimated global pork consumption



$$E_{\text{pork}} \approx 0.05 \cdot E_{\text{day}} \approx 100 \text{ kcal} \cdot \text{day}^{-1}$$

$$\rho_{\text{pork}} \approx 2 \text{ kcal} \cdot \text{g}^{-1}$$

$$m_{\text{pork}} \approx \frac{100 \text{ kcal}}{\text{day}} \cdot \frac{1 \text{ kg pork}}{2000 \text{ kcal}} \cdot \frac{365 \text{ days}}{1 \text{ year}} \cdot 7 \cdot 10^9 \text{ people}$$
$$\sim 10^{10} \text{ kg} \cdot \text{year}^{-1} \sim 100 \text{ Mt} \cdot \text{year}^{-1}$$



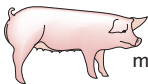
AGGREGATED DATA

data source: FAOSTAT (2010–2018)
mean \pm std

global pork
production
 $\approx 115 \pm 5 \text{ Mt} \cdot \text{year}^{-1}$

(B)

total processed swine population



$$m_{\text{pork}} \sim 10^{10} \text{ kg} \cdot \text{year}^{-1}$$

$$m_{\text{edible}} \approx 75 \text{ kg} \cdot \text{pig}^{-1}$$

$$N_{\text{pigs}} \approx \frac{10^{10} \text{ kg}}{\text{year}} \cdot \frac{1 \text{ pig}}{75 \text{ kg}} \sim 2 \cdot 10^9 \text{ pigs} \cdot \text{year}^{-1}$$



global processed swine
population
 $\approx 15 \pm 5 \cdot 10^8 \text{ pigs} \cdot \text{year}^{-1}$