

Malnutrition in Zambia

The following dataset is about malnutrition in Zambia (survey in 1992). The data refers to the nutritional condition of children who are between 0 and 5 years old. The nutritional condition is measured by an anthropometric measure called Z-score, which compares the anthropometric status of a child with comparable measures taken from a population (here the reference population is based on white US-American children with wealthy families with a high socioeconomic status). Namely, such a measure is given by

$$\text{zscore}_i = \frac{h_i - mh}{\sigma},$$

where h_i represents the height of the i -th child, mh represents the median height of children belonging to the reference population of the same age group, and σ refers to the corresponding standard deviation of the reference population. The dataset include the following variables

- **zscore**: child's Z-score
- **c_gender**: gender (1 = male, 0 = female)
- **c_breastf**: duration of breast-feedings (in months);
- **c_age**: child's age (in months);
- **m_agebirth**: mother's age at birth (in years);
- **m_height**: mother's height (in centimeter);
- **m_bmi**: mother's body mass index;
- **m_education**: mother's level of education (1 = no education, 2 = primary school, 3 = secondary school, 4 = higher education);
- **m_work**: mother's work status (1 = mother working, 0 = mother not working);
- **region**: region of residence in Zambia
 - 1 = Central
 - 2 = Copperbelt
 - 3 = Eastern
 - 4 = Luapula
 - 5 = Lusaka
 - 6 = Northern
 - 7 = North western
 - 8 = Southern
 - 9 = Western
- **district**: district of residence in Zambia (55 districts)