

Climate variation in the human population

Age, sex, and height
Table 20-10

- Predictable trends in
- Body weight (mass) (kg)
- Body height (cm) (m)
- Capital energy (kg day⁻¹)
- % fat in adipose tissue (kg kg⁻¹)
- Energy use (kJ day⁻¹)
- % lean tissue (kg kg⁻¹)
- Temperature: core body temp (37°C)



- Body mass
- Predictable trends in
- Growth rate (kg yr⁻¹)
- Fat gain (kg yr⁻¹)
- Energy intake (kJ day⁻¹)
- Energy expenditure (kJ day⁻¹)
- Energy balance (kJ day⁻¹)



- Energy supply: $E_{in} = E_{out}$
- Energy balance: $E_{in} - E_{out} = \Delta E_{body}$
- Energy intake: $E_{in} = E_{out} + \Delta E_{body}$
- Energy expenditure: $E_{out} = E_{in} - \Delta E_{body}$



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