

Calculating energy expenditure in children | The Schofield formula

To calculate resting metabolic rate (RMR) in children, in Maastricht UMC+ the **Schofield formula** is used (Kcal/ day).

age	boys	girls
0-3 years old	$60.9 \times (\text{kg}) - 54$	$61.0 \times (\text{kg}) - 51$
3-10	$22.7 \times (\text{kg}) + 495$	$22.5 \times (\text{kg}) + 499$
10 – 18	$17.5 \times (\text{kg}) + 651$	$12.2 \times (\text{kg}) + 746$

The RMR is a measure for the energy expenditure in a thermal neutral environment in awake, non-fasting, inactive children. Also in this formula the RMR multiplied by a 'disease factor' and/ or an activity factor for calculating the total energy expenditure.

Literature (Dutch)

- Chapter 4; 'Bepaling van de voedingsbehoeften' door J.A.J.M. Taminiau, K. de Meer en Z. Hofman. In: Werkboek enterale voeding bij kinderen van J.A.J.M. Taminiau en anderen, VU uitgeverij, 1997.