

Energy expenditure measurement | Additions

To calculate the total energy expenditure extra percentages will be added:

Activities

Bedridden	+ 10%
Ambulant	+ 20%
Small amount of activity	+ 30%
Mediate activity	+ 40%

Metabolic stress (not useful in burns)

No metabolic stress	+ 0%
Poor metabolic stress (en/ of + 1°C fever)	+ 10%
Mediate metabolic stress(en/ of + 2°C fever)	+ 20%
Severe metabolic stress (en/ of + 3°C fever)	+ 30%

Weight gain (not useful in acute situations)

Weight gain desired	+ 30%
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Burns

10% of the bodysurface	+ 25%
25% of the bodysurface	+ 50%
> 50% of the bodysurface	+ 100%

Other factors

Fasting (without metabolic stress)	+ 15%
Pulmonary patients (no artificial breathing)	+ 15%
Artificial breathing	- 10%
Hypertonia	+ 10%
Sedation or musclerelaxation	- 10%

Abnormal energy losses

Any losses like bloodlosses, protein loss by pressure ulcers, diarrhea, vomitting, enterocutan fistula have to be estimated.
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Measured energy expenditure can be compared with the calculated energy expenditure. Calculations can be made using different formulas. The Harris and Benedict formula is often used, but also the formula '30-35-kcal/-kg body weight per day' for ill patients is a useful method.

Literature

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