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YMCA Awards

Level 3 Nutrition to support physical activity

2018

Level 3 Nutrition to support physical activity

Basal metabolic rate (BMR)

BMR is an individual's basic requirement for energy at rest

Calculating BMR

Schofield calculation

Men:

10 – 17 years BMR = 17.7 x W + 657 SEE = 105
18 – 29 years BMR = 15.1 x W + 692 SEE = 156
30 – 59 years BMR = 11.5 x W + 873 SEE = 167

Women:

10 – 17 years BMR = 13.4 x W + 692 SEE = 112
18 – 29 years BMR = 14.8 x W + 487 SEE = 120
30 – 59 years BMR = 8.3 x W + 846 SEE = 112

Key:

W = Body weight in kilograms
SEE = Standard error of estimation

Physical activity factor (PAF)

- BMR x 1.4 inactive men and women (this applies to most people in the uk
- BMR x 1.6 moderately active women
- BMR x 1.7 moderately active men
- BMR x 1.8 very active women
- BMR x 1.9 very active men

Example 1

Female, 28 years old, 65kg, moderately active

BMR = 14.8 x 65 + 487 = 1449kcal

PAF = 1.6

Daily energy requirement = 1.6 x 1449
= 2318kcal

Example 2

Male, 54 years old, 95kg, inactive

BMR = 11.5 x 95 + 873 = 1966kcal

PAF = 1.4

Daily energy requirement = 1.4 x 1966

= 2752kcal

Fats/Proteins/Carbohydrates

Fats

2752 x 35% = 963kcal

Proteins

2752 x 15% = 413kcal

Carbohydrate

2752 x 50% = 1376kcal

Fats/Proteins/Carbohydrates

Fats:

963 ÷ 9 = 107g

Proteins:

413 ÷ 4 = 103g

Carbohydrate:

1376 ÷ 4 = 344g


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