

4.07 Virtual Lecture Notes

The total daily energy expenditure (TDEE) is the amount of calories your body burns in 24 hours to support your basal metabolic rate and any additional activities you undertake. TDEE is calculated according to the following formula.

$$TDEE = BMR * AF$$

where, BMR = basal metabolic rate
AF = activity factor

Activity factors vary with gender and activity level, as indicated in the following chart.

		Activity Factor	
Activity Level	Activities	Male	Female
Resting	Sleeping, reclining	1.0	1.0
Sedentary	Minimal movement, mainly sitting/lying down (e.g., watching TV, reading, etc.)	1.3	1.3
Light	Office work, sitting (e.g., walking, laundry, walking on level ground at 2.5 – 3.0 mph).	1.6	1.5
Moderate	Light manual labor (e.g., dancing, cycling, gardening, etc.)	1.7	1.6
Very Active	Hard manual labor (e.g., team sports, climbing, agricultural labor, etc.)	2.1	1.9
Extremely Active	Heavy manual labor (e.g., full-time athletes, construction workers, etc.)	2.4	2.2

For a female with a BMR of 1312 and a Moderate Activity Level, her TDEE would be

$$1339 * 1.6 = 2142.4 \text{ calories/day}$$

For a male with a BMR of 1876 and a Moderate Activity Level, his TDEE would be

$$1776 * 1.7 = 3019.2 \text{ calories/day}$$