

Metabolic Equivalent Chart

A Metabolic Equivalent (MET) Chart is essential for healthcare professionals. It quantifies the energy expenditure of various physical activities by assigning a specific MET value to each activity, expressing how many times greater the energy cost of that activity is compared to the resting metabolic rate (Herrmann et al., 2024).

The Metabolic Equivalent (MET) Chart is a reference to guide patients in assessing exercise intensity during exercise testing and for exercise prescription.

Understanding METs for measuring exercise intensity

- **MET (Metabolic Equivalent of Task):** One MET represents the resting metabolic rate (about 3.5 ml O₂/kg/min). Activities are rated in multiples of the resting state, enabling healthcare professionals to evaluate the energy expenditure of physical activities.
 - **Light intensity** activities, such as sitting or light housework, are typically less than 3 METs.
 - **Moderate intensity** activities like brisk walking or casual cycling are between 3-6 METs.
 - **Vigorous intensity** activities like running or competitive sports exceed 6 METs.
-

The chart lists common physical activities in order of MET level, corresponding to the multiple resting metabolic rates required to perform the activity.

Low intensity activities (less than 3 METs)

Activity	METs
Sleeping	1.0
Sitting quietly	1.0
Standing quietly (standing in a line)	2.0
Cooking or food preparation (general)	2.0
Watering plants	2.0
Walking on job (less than 2 mph)	2.0

Moderate intensity activities (3 to 6 METs)

Activity	METs
Ballroom dancing (slow)	3.0
Hot yoga	3.0
Walking for pleasure	3.5
Cleaning heavy or major (e.g., wash car, clean garage, moderate effort)	3.5
Golf, general	4.5
Water aerobics (water calisthenics, general)	5.5
Gardening with heavy power tools (using chain saw, tilling a garden)	5.8
Bicycling (leisure, 9.4 mph)	5.8

Vigorous intensity activities (more than 6 METs)

Activity	METs
Soccer (casual, general)	7.0
Backpacking (hiking with a daypack, organized walking with daypack)	7.8
Bicycling (12-13.9 mph, leisure, moderate effort)	8.0
Jumping rope (moderate pace)	9.0
Running 6-6.3 mph (10 min/mile)	9.3
Swimming laps (freestyle, fast, vigorous effort)	9.8

References

- Compendium of Physical Activities. (2024). *2024 adult compendium*. <https://pacompendium.com/adult-compendium/>
- Herrmann, S. D., Willis, E. A., Ainsworth, B. E., Barreira, T. V., Hastert, M., Kracht, C. L., Schuna, J. M., Cai, Z., Quan, M., Tudor-Locke, C., Whitt-Glover, M. C., & Jacobs, D. R. (2024). 2024 Adult Compendium of Physical Activities: A third update of the energy costs of human activities. *Journal of Sport and Health Science*, 13(1), 6–12. <https://doi.org/10.1016/j.jshs.2023.10.010>