

# Tips for Monitoring Aerobic Exercise Intensity

Substantial health benefits are gained when adults achieve 150-300 minutes per week of moderate intensity exercise, or 75-150 minutes of vigorous intensity exercise per week. Several tools and methods are used to monitor exercise intensity. Utilizing these methods help adults achieve physical activity goals.



**Talk test** is a way to gauge exercise intensity based on ability to carry on a conversation.



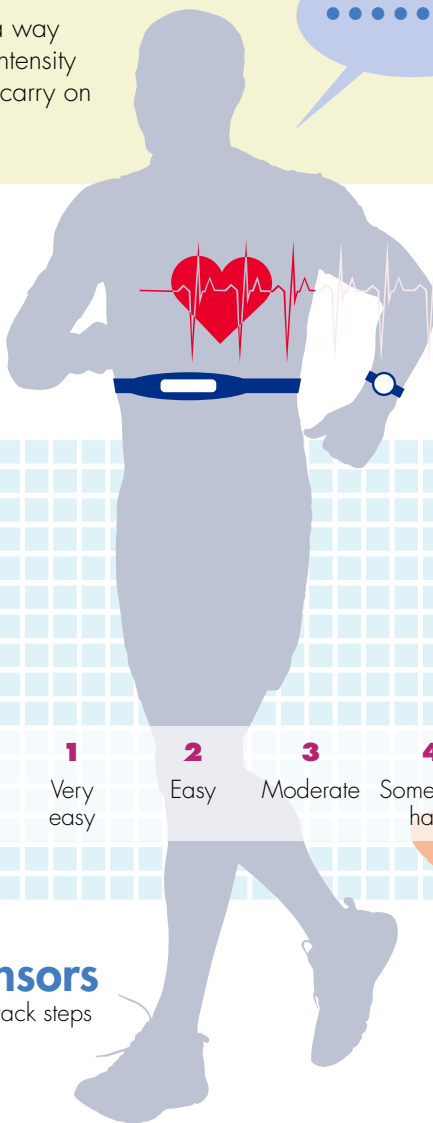
**Steady conversation** is associated with moderate intensity aerobic exercise.



**Vigorous intensity** is an exercise intensity where only a few words are sustainable.

## Heart rate

can be monitored by using a wrist watch and chest strap or a smart watch.



- A percentage of maximal heart rate indicates intensity (%HRmax)
- Moderate intensity exercise is estimated at 65-75 %HRmax
- Vigorous exercise is 76-96 %HRmax
- Target HR = (220-age) x %HRmax

## Perceived effort

is a subjective method to monitor how hard exercise feels.

- Commonly reported as a rating of perceived exertion (RPE)
- Scale is a range between 0-10
- Moderate intensity exercise is targeting an RPE of 3-4
- Vigorous exercise is an RPE of 5-7

Rating	0	1	2	3	4	5	6	7	8	9	10
Descriptor	Rest	Very easy	Easy	Moderate	Somewhat hard	Hard	-	Very hard	-	Very, very hard	Maximal effort

## Motion sensors

are devices used to track steps and other activities.

- Moderate intensity exercise is a step rate of 100 steps per minute, or 1,000 per 10 minutes
- A common recommendation is to achieve 3,000 steps in 30 minutes
- Vigorous intensity is > 100 steps per minute.



In addition to the above 0-10 scale, the Borg Scale of Perceived Exertion, which rates exertion on a scale of 6-20, can also be used.

Author: Micah Zuhl, Ph.D.; 2020