

MONITORING EXERCISE INTENSITY USING RATINGS OF PERCEIVED EXERTION

You want to get fit. You want to look good. And you want to stay healthy. But how hard are you going to have to exercise to achieve those things?

To reap the most cardiovascular benefit from your workout, it is necessary to exercise within a recommended intensity range. In some respects, gauging your exercise intensity can be a difficult task.

Heart-rate assessment is a commonly used method for monitoring exercise intensity. For some, however, this method can be difficult to master, particularly during exercise. Additionally, monitoring heart rate to manage exercise exertion is inappropriate for individuals taking certain medications that affect exercise heart rate, such as beta blockers for high blood pressure, and those with health conditions that affect heart rate, such as pregnancy.

One of the easiest ways to monitor your exercise intensity is to use the ratings of perceived exertion (RPE) scale. Whether you walk, jog, bicycle, bench step, climb stairs or perform low-impact aerobics, your exercise intensity should be within a range of comfort.

By becoming familiar with the RPE scale, you can continually assess your exercise intensity and ensure a level of exertion that is comfortable.

Why use RPE?

Monitoring exercise intensity with the RPE scale is beneficial because:

- It provides a double-check on heart rate, especially when the target heart-rate zone is estimated from age.
- Assessing RPE can be performed without stopping to “check” it, as is necessary with heart-rate monitoring.
- It’s free! There is no equipment you can buy to accurately describe your perception of intensity, whereas heart-rate monitors can be expensive.

An increase in exercise intensity is directly related to an elevation in exercise heart rate and other metabolic processes. Consequently, RPE can be used alone or together with heart rate when monitoring exercise intensity.

During aerobic activities, perceived effort is a combination of sensory input from muscles, joints, breathing rate and heart rate. By using the RPE scale, you can more accurately “describe” your sensation of effort when exercising and gauge how hard you are working. Plus, RPE helps you evaluate your internal comfort zone, or “how you feel” during the exercise session, with respect to the normal sensation of exertion, breathing and even discomfort.

RATINGS OF PERCEIVED EXERTION

RPE	Category	Ratio Scale
6		0 Nothing at all
7	Very, very light	0.5 Very, very weak
8		1 Very weak
9	Very light	2 Weak
10		3 Moderate
11	Fairly light	4 Somewhat strong
12		5 Strong
13	Somewhat hard	6
14		7 Very strong
15	Hard	8
16		9
17	Very hard	10 Very, very strong
18		* Maximal
19	Very, very hard	
20		

Source: Adapted, with permission, from American College of Sports Medicine (2006). *ACSM’s Guidelines for Exercise Testing and Prescription* (7th ed.). Philadelphia: Lippincott Williams & Wilkin

How many times have you exercised and not felt comfortable, or seemed to be extending beyond your comfortable exertion level? The use of your perceived exertion is helpful in monitoring intensity to avoid uncomfortable exercise sessions.

How do you use RPE?

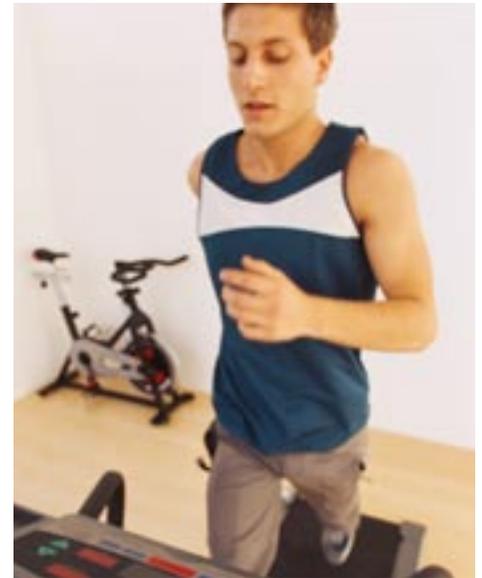
Perceived exertion is assessed by use of either a 0-to-10 or 6-to-20 chart to rate the feelings caused by your exertion. For example, using the 0-to-10 scale, quietly sitting in a chair would have a rating of 0. Adding a gentle waving of your arms might increase the effort rating to 0.5. Walking at a pace that you feel is moderate would be given a rating of 3.

Remember, the rating of your exertion should be completely independent of the pace you think you are walking; it is dependent solely on the feelings caused by the exertion. Increase the pace to a run and add a hill and you could work your way up to a 10 on the scale.

On the 0-to-10 scale, the recommended RPE range for most people is usually between 3 (moderate) and 5 (strong).

Who uses RPE?

Regardless of fitness or training, anyone



can use perceived exertion to effectively gauge exercise intensity.

Whether you are new to aerobic exercise or a fitness enthusiast, use the RPE scale to become familiar with your perception and description of exercise effort. Your exercise sessions will be more effective and more enjoyable.

Additional Resource

American College of Sports Medicine Current Comment—Perceived Exertion: www.acsm.org/AM/Template.cfm?Section=CurrentComments1&Template=/CM/ContentDisplay.cfm&ContentID=8648

If you are interested in information on other health and fitness topics, contact: American Council on Exercise, 4851 Paramount Drive, San Diego, CA 92123, 800-825-3636; or, go online at www.acefitness.org and access the complete list of ACE Fit Facts™

