CLINIC

## What interval training can do for you

Interval training is doing short periods of higher intensity exercise followed by periods of lower intensity exercise during your aerobic workout. This type of training is effective if you are new to exercise, an accomplished athlete, or somewhere in between.

No matter what your exercise or fitness goals are, interval training can help you more than always exercising at the same intensity level. Interval training can:

- Improve your cardiovascular fitness (aerobic capacity) and endurance so you can exercise at a higher intensity and for a longer time.
- Improve various measures of cardiovascular health including blood sugar, blood lipids and arterial function.
- Help you avoid an injury due to repetitive overuse. Interval training allows you to increase training intensity without overtraining.
- Increase how many calories you burn during exercise and shortly afterward which can help you lose weight and body fat.

When you exercise at a higher intensity, such as with interval training, you can decrease the amount of time needed for exercise.

| Borg Rating of Perceived Exertion (RPE) Scale ${ }^{\circledR}$ |  |
| :---: | :---: |
| 6 | No exertion at all |
| 7 | Extremely light |
| 8 |  |
| 9 | Very light |
| 10 |  |
| 11 | Light |
| 12 |  |
| 13 | Somewhat hard |
| 14 |  |
| 15 | Hard (heavy) |
| 16 |  |
| 17 | Very hard |
| 18 |  |
| 19 | Extremely hard |
| 20 | Maximal exertion |
| Gumara Bor, $1970,195,1994,1998$ |  |

## How to do interval training

Use the Borg Rating of Perceived Exertion (RPE) Scale ${ }^{\circledR}$ as a guide for your intensity during exercise.

## Warm up

During your warm up, do low-intensity aerobic exercise at a perceived exertion of 9 to 11 for five minutes to increase blood flow to your muscles, joints and connective tissue. This prepares them for your workout.

## Conditioning

The exercise you do during conditioning makes your heart and muscles work. Do interval training during this portion of your exercise session. You are ready to start interval training when you can exercise for 20 minutes at a moderate intensity, which is a perceived exertion of 11 to 14 .

## Interval training step 1

Go from moderate intensity to a higher intensity that is more challenging or difficult for a short time. Start with 30 seconds. This should be at a perceived exertion of 15 to 17.

When you exercise with moderate intensity, you can talk but not sing. During the higher intensity part of the interval, you can say only a word or two before needing to take a breath.

## Interval training step 2

After the short period of higher intensity, exercise at a lower intensity for one to two minutes until you can return to your regular or moderate intensity. This is called active recovery.

## Interval training step 3

Repeat steps 1 and 2 as you are able until you finish the conditioning portion of your exercise session. Start with one to three interval cycles. Gradually increase to five higher intensity intervals during a 30-minute workout.

Determine the speed, incline, or resistance and the length of each higher intensity interval based on how you feel. For example, you might increase the intensity for 30 seconds, do a minute of active recovery, and then resume your regular pace. Over the next several workouts, gradually increase the length and number of higher intensity intervals as you are able. Gradually increase the length of the higher intensity interval to one to three minutes and the active recovery interval to three minutes.

## Cool down

Gradually slow your exercise intensity to a perceived exertion of 8 or 9 for five minutes so that your body may recover quickly.

## Interval training guidelines

If you are new to exercise or physical activity, start by doing one or two intervals during two exercise sessions a week, but not two days in a row.

Work your way up to doing interval training more often. How much you pick up the pace, how often, and for how long is up to you. As you become more conditioned, you may find it easier to increase the length or intensity of each interval.

As your fitness and endurance improve, challenge yourself but keep in mind that more may not necessarily be better. If you think you are overdoing it, reduce the number of intervals or reduce their intensity.

There is no need to do interval training every exercise session.
If you are working toward a specific fitness goal, consider working with a personal trainer or other expert to help you time the intensity and duration of your intervals based on your current fitness level.

## Interval training examples

Depending on your exercise or physical activity preferences, you can do interval training by increasing your speed or other intensity variable such as the incline or tension. For example, you might:

- Go from walking to walking briskly or slow jogging.
- Walk up a flight or two of stairs after walking.
- Pedal faster, stand up to pedal, or increase the resistance when bicycling.
- Maintain or increase your speed as you run or walk up a hill.
- Alternate between dancing to music that has faster and slower tempos.
- Swim several laps at your regular pace followed by a lap that is faster.
- Pedal faster or increase the resistance on the elliptical machine.
- Go from your regular jogging pace to a faster pace.


## Cautions

Stop exercising and rest if you have:

- Tightness, pressure or pain in your chest.
- Pain in your arm, shoulder, neck or jaw.
- Severe shortness of breath.
- Light-headedness, dizziness or confusion.
- Stomach pain.
- Nausea, vomiting or headache.
- Extreme or unusual fatigue.

Tell your health care provider about any of these.

Do not do interval training if:

- Your health care provider recommends that you avoid higher-intensity exercise due to a chronic health condition.
- You are sick or recovering from an illness.
- You are recovering from recent surgery.
- You are undergoing cancer treatment, unless instructed otherwise.


## For more information

Talk with your health care provider if you have questions about this information or would like to know more about interval training.

## Example of a 40-minute exercise session that includes interval training

1. Walk slowly to warm up. Gradually increase to a moderate pace for five minutes.
2. Increase your speed so that you are walking briskly.
3. After five minutes of brisk walking, increase your speed so that you are jogging for 30 seconds to 2 minutes.
4. Slow down to walking a moderate pace for one to three minutes.
5. Repeat steps 2,3 and 4 .
6. After 35 minutes, walk at a slower pace for five minutes to cool down.


