

# **Warning Signs to Stop Exercising**

## **Symptoms**

- Chest pain or pressure
- Development of irregular pulse (irregular heart rate or palpitations)
- Development of resting pulse higher than 100 beats per minute
- Decreased heart rate or blood pressure during increased activity
- Excessive rise in blood pressure
- Recurring leg pain or cramps
- Sudden shortness of breath, muscular weakness, or tiredness
- Sudden onset of nausea
- Blurred vision, dizziness, faintness, or lightheadedness
- Vomiting or diarrhea within previous 24 to 36 hours
- Disorientation or confusion
- Pallor (paleness) or cyanosis (bluish skin)
- Fever

# Treatment, Lab Values, or Blood Cell Counts (obtained from doctor)

High-dose intravenous (IV) chemotherapy within previous 24 hours

- Platelet count below 50,000/mm<sup>3</sup>
- Hemoglobin below 10 g/dl
- White blood cell count below 3,000/mm<sup>3</sup>
- Absolute granulocyte count below 2,500/ mm<sup>3</sup>

## Additional precautions to observe:

- Reduce exercise intensity in response to very hot or humid environments or to altitudes above 5,000 feet
- When you experience tenderness in a joint that worsens with activity, stop that specific exercise
- Avoid strenuous aerobic activity during viral infections, such as the flu or an upper respiratory tract
  infection
- If lymph nodes have been surgically removed or damaged by treatment, monitor for any signs of swelling, redness, rash, a sense of fullness. Contact your medical team for a physical therapy referral if any of those signs occur



The ACSM (American College of Sports Medicine) and ACS (American Cancer Society) advise accumulating a minimum of 90 minutes a week of movement. Movement doesn't have to be a structured exercise program, but should contain 2 days of resistance work and 3 days of cardio, i.e., movement that causes the heart rate to elevate.

The Rate of Perceived Exertion (RPE) scale (shown below) is used to measure the intensity of your exercise. The RPE scale runs 6-20. Six (nothing at all) would be how you feel when sitting in a chair; 19 (very, very hard) is how you feel at the end of an exercise stress test or after a very difficult activity (think walking up out of the Grand Canyon).

In most cases, you should exercise at a level that feels between **11** (*fairly light*) to **14** (*somewhat hard*). When using this rating scale, remember to consider if you are experiencing any shortness of breath, as well as how tired your legs feel. We're looking for an overall sense of exertion. The ACSM (American College of Sports Medicine) and ACS (American Cancer Society) consider brisk walking as moderate activity.

# BORG Scale of Perceived Exertion Standardized Scale (how hard are you working)\*

Rating of Perceived Exertion Borg RPE Scale		
6 7 8 9 10 11	Very, very light  Very light  Fairly light	How you feel when lying in bed or sitting in a chair relaxed. Little or no effort.
12 13 14 15 16	Somewhat hard Hard	Target range: How you should feel with exercise or activity.
17 18 19 20	Very hard Very, very hard Maximum exertion	How you felt with the hardest work you have ever done.  Don't work this hard!

Source: Borg's Perceived Exertion and Pain, 1998, Gunnar Borg

## Examples of Moderate and Vigorous Activities Moderate (I can talk while I do them but I can't sing)

• Ballroom and line dancing • Biking on level ground or with few hills • Canoeing • General gardening (raking, trimming shrubs) • Sports where you catch and throw (baseball, softball, volleyball) • Tennis (doubles) • Using your manual wheelchair • Using hand cyclers (also called ergometers) • Walking briskly • Water aerobics

#### Vigorous (I can only say a few words without stopping to catch my breath)

- Aerobic dance Biking faster than 10 miles per hour Fast dancing Heavy gardening (digging, hoeing) Hiking uphill
- Jumping rope Martial arts (such as karate) Race walking, jogging, or running Sports with a lot of running (basketball, hockey, soccer) Swimming fast or swimming laps Tennis (singles)

US Department of Health and Human Services. Be Active Your Way: A Fact Sheet for Adults. Washington, DC: US Department of Health and Human Services; 2008. http://www.health.gov/PAGuidelines/factSheetAdults.aspx. Accessed February 21, 2012.



## Cardio

3 days a week - 30 minutes of movement to get heart rate into the moderate zone.

## Resistance

2 days a week of *total* body resistance training
BE MINDFUL AS YOU PERFORM THE EXERCISES
BREATHE!

Visualize the muscle you're working
Always pause when the muscle is totally contracted
Perform each movement S-L-O-W-L-Y
Abdominals are braced and pelvic floor is lifted
If you don't have weights use cans of soup or bags of dried beans



**1-Arm Row – non-working arm will rest on opposite leg to support your back** Slide shoulder blades down back and toward the hips, brace the abdominals and keep the back straight. Allow the arm to hang naturally from the shoulders. Slowly begin to move shoulder blade toward the spine and bring the arm up. Slowly lower the arm. Repeat on the other side.

**REPS: 8-12 reps SETS: 1-3** 



## **Bicep Curls**

Bracing abdominals and keeping the upper arms close to your body slowly bring hands toward shoulders, pause, and return to start. Avoid any swing of the arms or swaying of upper body.

**REPS: 8-12 reps SETS: 1-3** 



## Wall Push-Ups

Place hand shoulder height on wall. Depress the shoulders to stabilize them. Slowly, pivot from the ankle and allow the body to move toward the wall. Avoid the "turkey vulture" forward head. Pause when you are as close to the wall as you can get, and then return to start.

**REPS: 8-12 reps SETS: 1-3** 



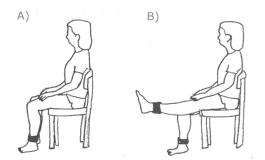




## **Triceps Kickback**

Keeping upper arm in line with the back, slowly extend (straighten) arm, pause, and then return the hand to the start position.

REPS: 8-12 reps SETS: 1-3







## Seated Leg Extensions-With or without weights

Sitting tall in the chair slowly straighten your leg. Stop short of locking out at the knee. Pause, and then return to the start. Don't allow the working leg to touch the floor until you've completed all reps. Repeat with the other leg.

**AND** 

**REPS: 8-12 reps SETS: 1-3** 

## **Standing Leg Curl**

Support yourself against the wall, place the foot of the working leg behind the support leg. Bring heel toward fanny then straighten the leg. Don't allow the working leg to touch the floor until you've completed all reps. Repeat with the other leg.

**REPS: 8-12 reps SETS: 1-3** 



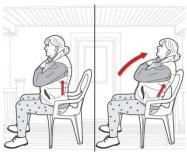
## Core



## **Standing Supported Bird Dog**

Raise opposite arm and leg, pause, then repeat on the other side. Concentrate on keeping your shoulders away from ears, hips level and abs braced.

**REPS: 8-12 reps SETS: 1-3** 



## **Lean Backs**

Brace the abs and lift pelvic floor, lean toward back of chair from your HIPS and not your low back. Pause. Return to start.

REPS: 8-12 reps SETS: 1-3

# **Stretching**

Stretching improves range of motion in the joints and increases blood flow to the muscles. Hold each stretch 20-30 seconds. You can repeat each stretch 2-3 times. Stretching is the perfect activity if you're having a not so good day.



OR



#### Chest

Both of these can be done seated or standing. If the first movement is uncomfortable, then do the second. Be careful not to arch your low back, maintain a neutral lumbar spine.







## **Seated Hamstring Stretch**

OR

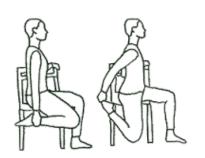
OR

OR

Hinge from the hips, place hands on the thigh of the leg you are not stretching, slowly lean forward, hold.

## **Supine Hamstring Stretch**

Bring one leg toward the chest. Straighten to ceiling. Hold, and repeat with the other leg. If you can't keep the leg you're holding straight, bend the leg that is on the floor.





## **Quad Stretch**

It's not necessary to grab your foot as shown in the seated picture, you can rest the foot on the floor. Once you're in position, perform a pelvic tilt to enhance the stretch.





## **Seated Spinal Rotation**

It's critical that you keep the core braced and the spine tall when turning from side to side. You'll want to avoid using your hands to pull the body around.

## **Lying Spinal Rotation**

Keeping shoulders on the floor, slowly lower both legs to one side, hold, and then repeat on the other side. It's critical to keep the shoulders in contact with the floor. If the shoulder or arm lifts from the floor move the arms in closer to your body. There should be no pain.







OR

#### **Piriformis Stretch**

Gently place ankle on knee. Sit tall, exhale and slowly lean forward from the hip. Repeat with the other side.

## **Lying Piriformis Stretch**

Gently place ankle on knee. Bring both legs toward chest. Repeat on the other side.



## **Triceps Stretch**

Gently raise arm up and place hand behind shoulder. If there's no pain, press raised elbow back until you feel a gently stretch. Repeat on the other side.

If you experience any pain raising the elbow to ceiling, STOP the stretch when the elbow reaches the shoulder height.



## **Upper Back/Shoulder Stretch**

With shoulders depressed, gently pull one arm toward your body. Repeat with the other side.



#### **Side Neck Stretch**

Drop ear toward shoulder while depressing shoulders. Stretch only in a pain free range. Repeat on the other side.