

# **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.

## Rate of Perceived Exertion Borg CR10®

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)



#### **CARDIO**

3 days of 30 minutes of movement to get your heart rate into the moderate zone

#### **RESISTANCE**

2 days a week of total body resistance training

BE MINDFUL AS YOU PERFORM THE EXERCISES

Visualize the muscle you're working

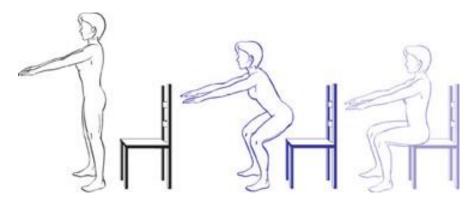
Always pause when the muscle is totally contracted

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

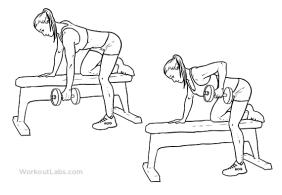




#### Sit to Stand

Concentrate on keeping shoulders lowered, abs braced and weight in your heels as you raise and lower yourself from the chair. Knees should remain centered over your feet, not rolling in or out. Note the 90 degree angle at knees and ankles. To increase intensity don't sit, but hover over the chair.

REPS: 8-12 SETS: 1-3



#### One-Arm Row - 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. Pause at the top of the movement, and then slowly lower the arm. Repeat on the other side.

REPS: 8-12 SETS: 1-3



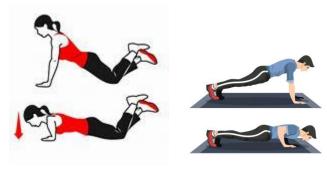


## Chest Press –Remember to keep your elbows off the floor

With back of shoulders pressed toward the floor, slowly press arms toward ceiling bringing the weights together. Pause and return arms to starting position.

REPS: 8-12 SETS: 1-3

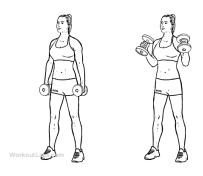
#### OR



## Chest – pushup

The first picture is a modified push-up; the second is the traditional one. When doing a push up it's important to keep your cervical spine (neck) in alignment with the rest of your spine – don't let your head hang.

REPS: 8-12 SETS: 1-3



#### **Hammer Curls-Biceps**

Brace, slowly bring hands toward the shoulders, pause at the top, then return to start. Immediately move hands back to shoulders.

REPS: 8-12 SETS: 1-3



#### **Triceps Kickback - dumbbells**

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





**Calf Raises** 

REPS: 8-12 SETS: 1-3

Hold on to something for balance. Slowly raise heels from floor. When you lower the heels back down, try to avoid touching the floor. I don't have a picture showing that unfortunately. By NOT touching the floor you keep the muscle under tension for a longer period of time.

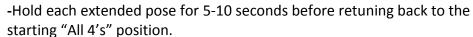
REPS: 8-12 SETS: 1-3

## CORE



## **Bird Dog**

- -Assume an "All 4's" position (quadruped) with your back in a neutral alignment. Remember a 'neutral' position is a very slight arch and not completely flat.
- -Without allowing any movement to occur at the lower back, slowly raise one of your legs while simultaneously raising the opposite side arm until both are fully extended. Making a fist and contracting your arm muscles as you hold it in the extended position can also increase muscle activity of the core (especially of the erector spinae muscles)







# **Bridging**

Brace abdominals, tighten glutes and slowly lift hips from floor. Only rise as high as you feel comfortable. Pause at the top of the movement. Slowly lower hips to floor. Work to keep the knees from collapsing inward. Your sitz bones

should line up with the Achilles tendons, i.e., a narrow foot placement rather than wide.

REPS: 12 SETS: 1-2







or

#### **Basic Plank from Knee or Straight Leg**

Place elbows directly under your shoulders. Brace abdominals, lift the pelvic floor and slowly raise hips from floor. Begin with 10-15 seconds. When you're ready to add time, do so in 5 second increments. You don't need to hold for more than a minute.

### Repeat 2-4 times

## **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.







#### 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.







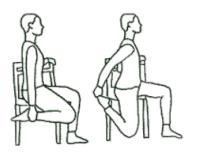
## **Seated Hamstring Stretch**

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.





OR

OR

## **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.