

A group of people of various ages are exercising outdoors in a grassy field. In the foreground, a woman with short, curly grey hair and a purple t-shirt is in a low, athletic starting position, smiling at the camera. Behind her to the left, a man with glasses and a grey shirt is also in a similar position. To the right, a woman with dark hair in a ponytail, wearing a red tank top, is in a similar position. The background is a soft-focus green field with trees and a warm, golden light, suggesting a sunny day.

## MOVE YOUR WAY: EXERCISE FOR EVERYBODY

Dr. Natalie Jones, Extension Family Health Specialist





# Introducing the *Physical Activity Guidelines for Americans*, 2<sup>nd</sup> edition

Information adapted from the Physical Activity Guidelines for Americans, 2nd edition. Available at [health.gov/PAGuidelines](http://health.gov/PAGuidelines).







What is Physical Activity?

# Learning Objectives

01

Explain three types of physical activity

02

Describe the benefits of physical activity to overall health

03

Describe the physical activity recommendations for Americans

04

Examine how physical activity impacts health

05

Identify ways to be physically active



# Types of Activity: Aerobic

---

- Definition:
  - Activity in which the body's large muscles move in a rhythmic manner for a sustained period of time.
- Aerobic activity has 3 components:
  - **Intensity**, or how hard a person works to do the activity. The intensities most often studied are moderate (equivalent in effort to brisk walking) and vigorous (equivalent in effort to running or jogging);
  - **Frequency**, or how often a person does aerobic activity; and
  - **Duration**, or how long a person does an activity in any one session.





# Types of Activity: Muscle-Strengthening

- Definition:
  - Physical activity, including exercise, that increases skeletal muscle strength, power, endurance, and mass.
- Muscle-Strengthening activity has 3 components:
  - **Intensity**, or how much weight or force is used relative to how much a person is able to lift;
  - **Frequency**, or how often a person does muscle-strengthening activity; and
  - **Sets and repetitions**, or how many times a person does the muscle-strengthening activity, like lifting a weight or doing a push-up (comparable to duration for aerobic activity).



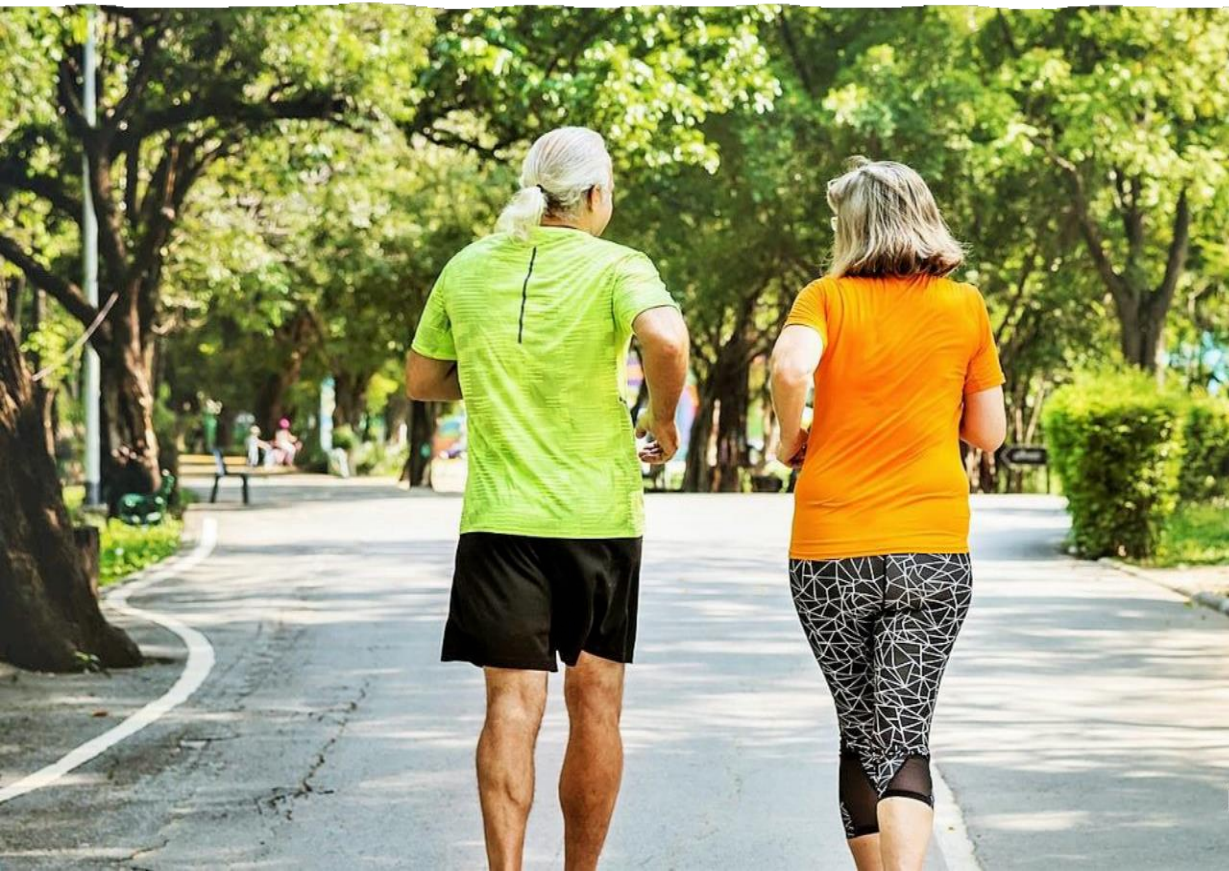




# Types of Activity: Bone-Strengthening

---

- Definition:
  - Physical activity that produces an impact or tension force on the bones that promotes bone growth and strength.
  - Also called weight-bearing or weight-loading activity
- Note: bone-strengthening activities can also be aerobic and muscle strengthening.



# Defining Intensity



**Moderate Intensity** -  
Relative scale: 5 or 6  
on a scale of 0 to 10



**Vigorous Intensity** -  
Relative scale: 7 or 8  
on a scale of 0 to 10

## Talk Test

As a rule of thumb, a person doing moderate-intensity aerobic activity can talk, but not sing, during the activity. A person doing vigorous-intensity activity cannot say more than a few words without pausing for a breath.



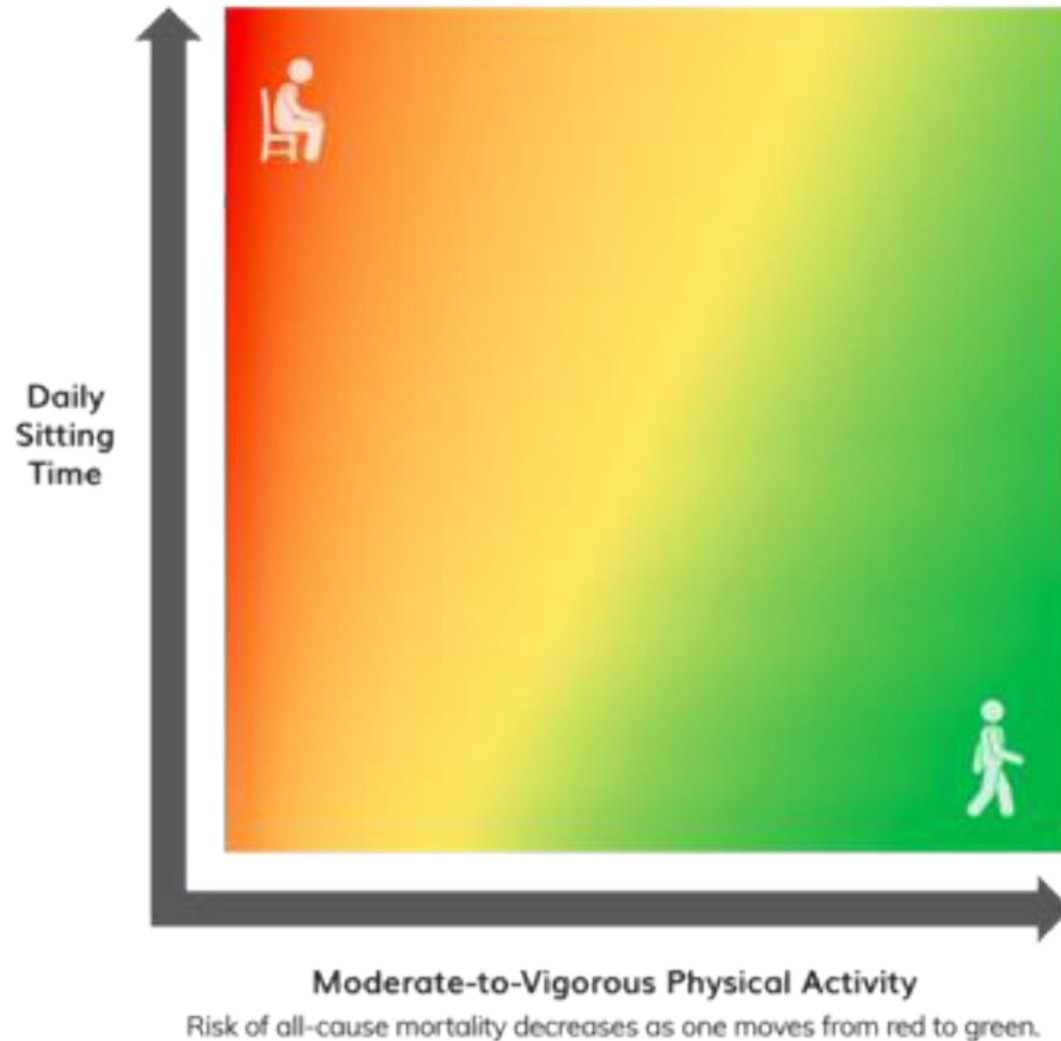
# Move More and Sit Less

Sedentary behavior increases risk of:

- All-cause mortality
- Cardiovascular disease
- Type 2 diabetes
- Colon, endometrial, and lung cancers

Inactive adults, replacing sedentary behavior with light-intensity physical activity can produce some health benefits

Anyone replacing sedentary behavior with moderate-to-vigorous activity will see even greater benefits



# Any Activity Counts

- Encourage Americans to move frequently throughout the day.
- Most benefits are attained with at least 150-300 minutes of moderate physical activity per week
- Some health benefits are immediate. For example, reduce anxiety and blood pressure, and improve quality of sleep.





# Benefits of Physical Activity for Adults and Older Adults

- Lower risk of all-cause mortality
- Lower risk of cardiovascular disease mortality
- Lower risk of cardiovascular disease (including heart disease and stroke)
- Lower risk of hypertension
- Lower risk of type 2 diabetes
- Lower risk of adverse blood lipid profile
- Lower risk of cancers of the bladder,\* breast, colon, endometrium,\* esophagus,\* kidney,\* lung,\* and stomach\*
- Improved cognition\*
- Reduced risk of dementia (including Alzheimer's disease)\*
- Improved quality of life
- Reduced anxiety
- Reduced risk of depression
- Improved sleep
- Slowed or reduced weight gain
- Weight loss, particularly when combined with reduced calorie intake
- Prevention of weight regain following initial weight loss
- Improved bone health
- Improved physical function
- Lower risk of falls (older adults)
- Lower risk of fall-related injuries (older adults)\*

*\*New health benefit*

# New Health Benefits

## Short Term Benefits

- Improve quality of life
- Reduce anxiety
- Reduce blood pressure
- Improve insulin sensitivity
- Improve sleep outcomes

## Long Term Benefits

- For youth, improve cognition
- For adults, prevent 8 types of cancer (previously 2)
- For adults, reduce risk of dementia, including Alzheimer's disease
- For older adults, lowers risk of injuries from falls
- For pregnant women, reduces the risk of postpartum depression.
- For all groups, reduces the risk of excessive weight gain

## Disease Management

- Decrease pain of osteoarthritis
- Reduce disease progression for hypertension
- Reduce disease progression for type 2 diabetes
- Reduce symptoms of anxiety and depression
- Improve cognition for those with dementia, multiple sclerosis, ADHD, and Parkinson's disease





# Key Guidelines



## PRESCHOOL-AGED CHILDREN (3-5 YEARS)

Physical activity **every day throughout the day**

**Active play** through a **variety** of enjoyable physical activities



## CHILDREN AND ADOLESCENTS (6-17 YEARS)

**60 mins (1 hour)** or more of moderate-to-vigorous intensity physical activity daily

**A variety** of enjoyable physical activities

**As part of the 60 minutes, on at least 3 days a week, children and adolescents need:**

- **Vigorous activity** such as running or soccer
- Activity that **strengthens muscles** such as climbing or push ups
- Activity that **strengthens bones** such as gymnastics or jumping rope



## ADULTS (AGES 18-64 YEARS)\*

At least **150 minutes a week** of moderate intensity activity such as **brisk walking**

At least **2 days a week** of activities that **strengthen muscles**

*\*Aim for the recommended activity level but be as active as one is able*



## OLDER ADULTS (65 YEARS AND OLDER)\*

At least **150 minutes a week** of moderate intensity activity such as **brisk walking**

At least **2 days a week** of activities that **strengthen muscles**

Activities to **improve balance** such as standing on one foot

*\*Aim for the recommended activity level but be as active as one is able*





## Adults: Moderate Intensity

### ***Aerobic Activity: At least 150 minutes a week***

- Anything that gets your heart beating faster.

### ***Muscle Strengthening: At least 2 days a week***

- Activities that make your muscles work harder than usual.





## Tight on time?

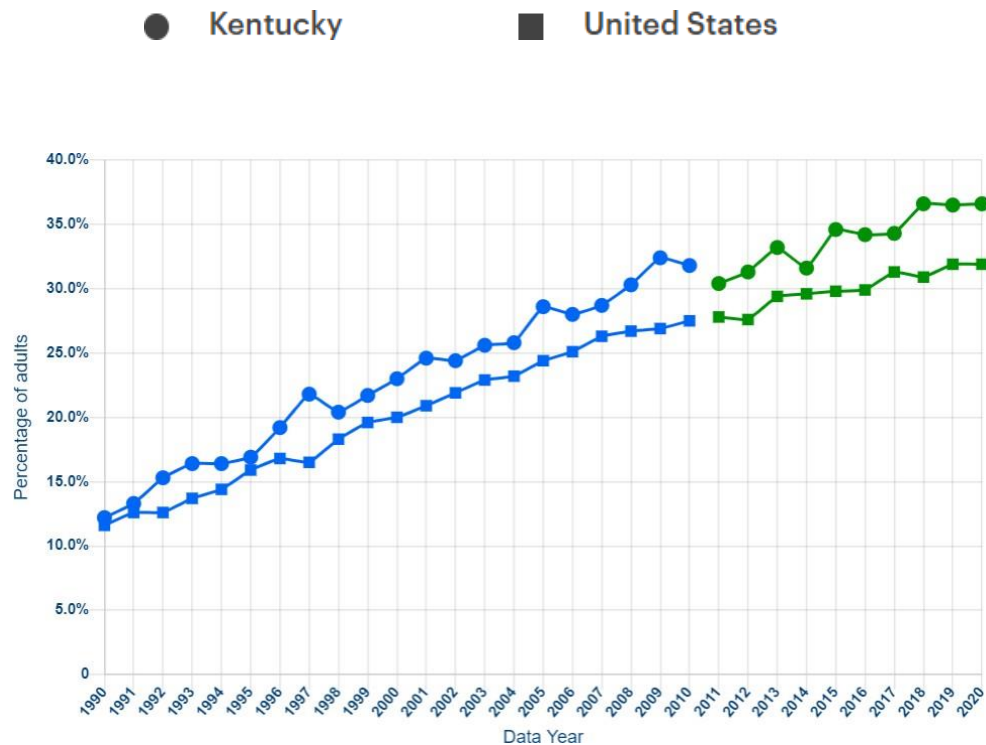
- **Get the same benefits in half the time.**
- If you step it up to **vigorous – intensity aerobic activity**, aim for at least 75 minutes a week.
  - Hiking uphill
  - Swimming laps
  - Heavy yardwork
  - Jumping rope



# Key Guidelines for Safe Physical Activity

- Understand the risks - physical activity can be safe for almost everyone.
- Choose activities that are appropriate for current fitness level
- Increase physical activity gradually over time
- Protect yourself by using appropriate gear and sports equipment, choosing safe environments, and following rules/ policies.
- Use health care provider guidance if you have chronic conditions, symptoms, or pregnant.
- Work with a specialist to find appropriate movements.





## Obesity in Kentucky

Percentage of adults with a body mass index of 30.0 or higher based on reported height and weight

### 2020 Obesity Rates

- KY: 36.6%
- US: 31.9%



# Physical Inactivity

- **Definition:** Percentage of adults who reported doing no physical activity or exercise other than their regular job in the past 30 days
- **U.S. Value:** 22.4%
- **Least-healthy State:** Kentucky: 30.6%
- The prevalence of physical inactivity is higher in:
  - Females than males.
  - Adults ages 65 and older
  - Hispanic, Black and American Indian/Alaska Native
  - Adults ages 25 and older with less than a high school education
  - Adults ages 25 and older with an annual household income less than \$25,000







## Physical Activity is for Every Body

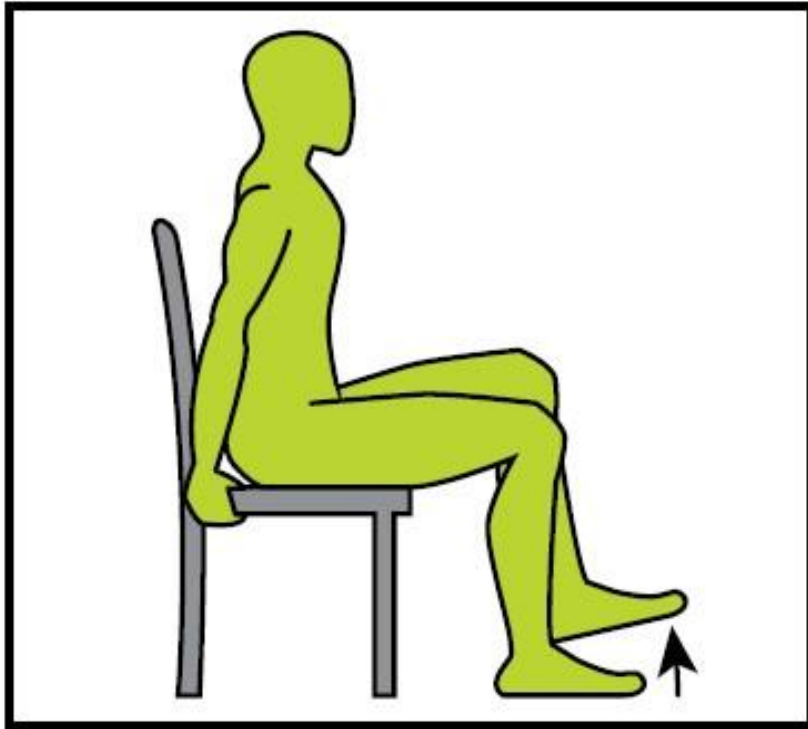
- Discuss benefits and physical activity guidelines
- Move more and sit less
- Change a little at a time
- Consult certified fitness professionals
- Have FUN!





# Movement Break

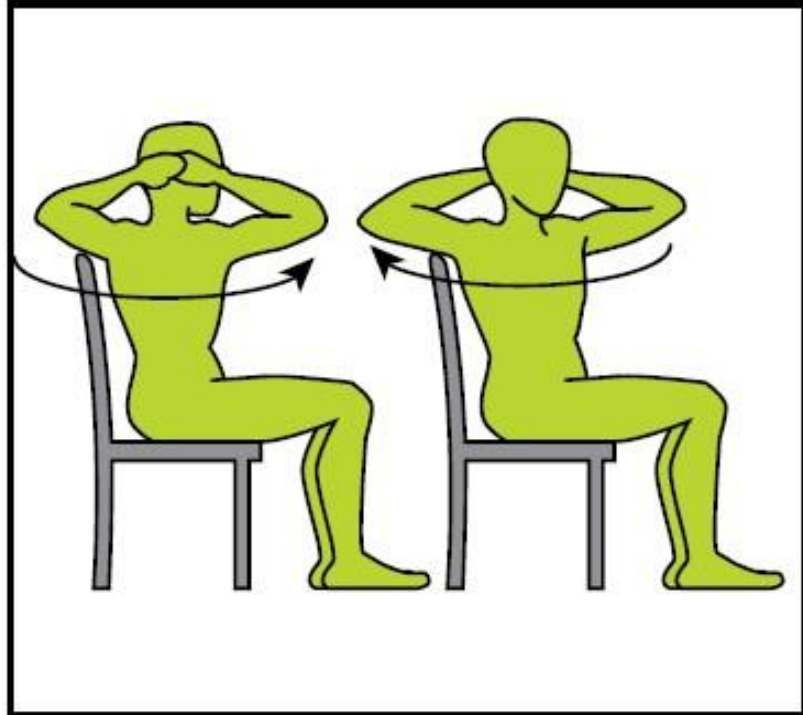
Group Exercise & Stretches



## SEATED MARCHES

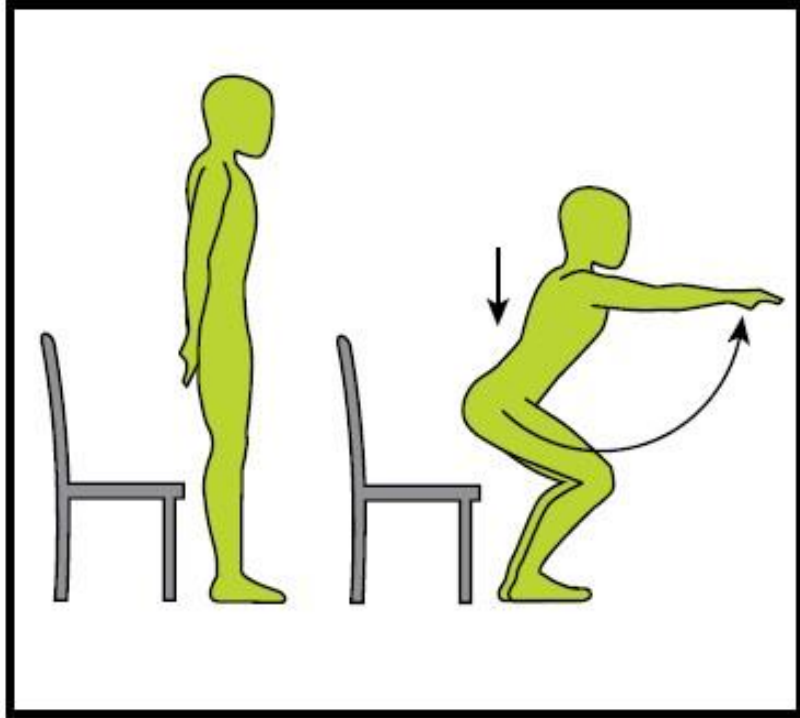
Sit on the chair with your back straight. Bend your legs at the knees and “run” on the spot with short, quick steps as fast as you can for 15–20 seconds.





## SEATED TORSO TWISTS

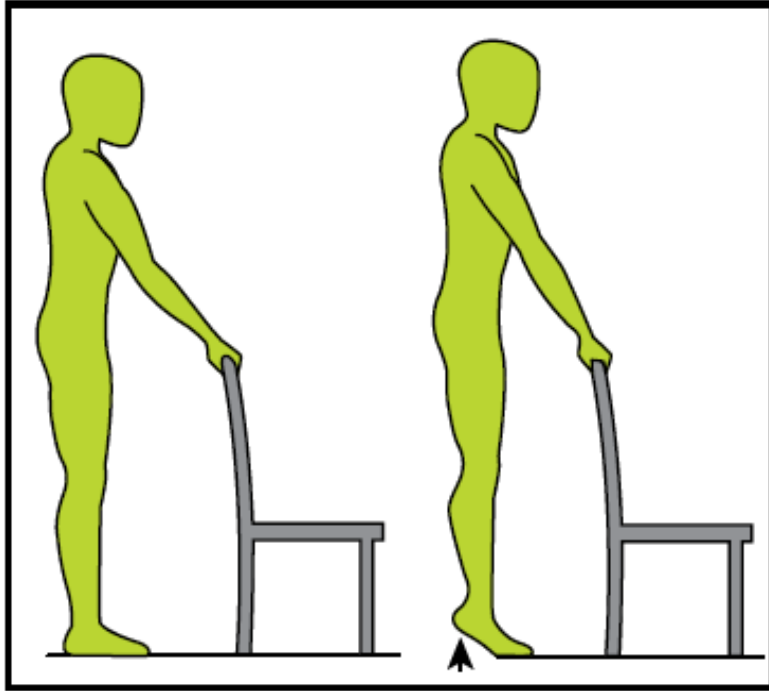
Sit on the edge of the chair, bend your legs at the knees, and lean slightly back without rounding your spine. Bend your arms so your elbows are level with the bottom of your ribcage. Pull your navel in and twist slowly to the left. Inhale and twist to the right. Repeat the exercise dynamically 20 times total.



## CHAIR SIT AND STAND

Stand in front of the chair with your legs shoulder-width apart. Squat down like you are sitting on the chair but without actually touching it. Maintain a proper position: back straight, knees above the feet, weight on the heels. Straighten your legs to go back to the starting position. Repeat the movement 10–15 times.

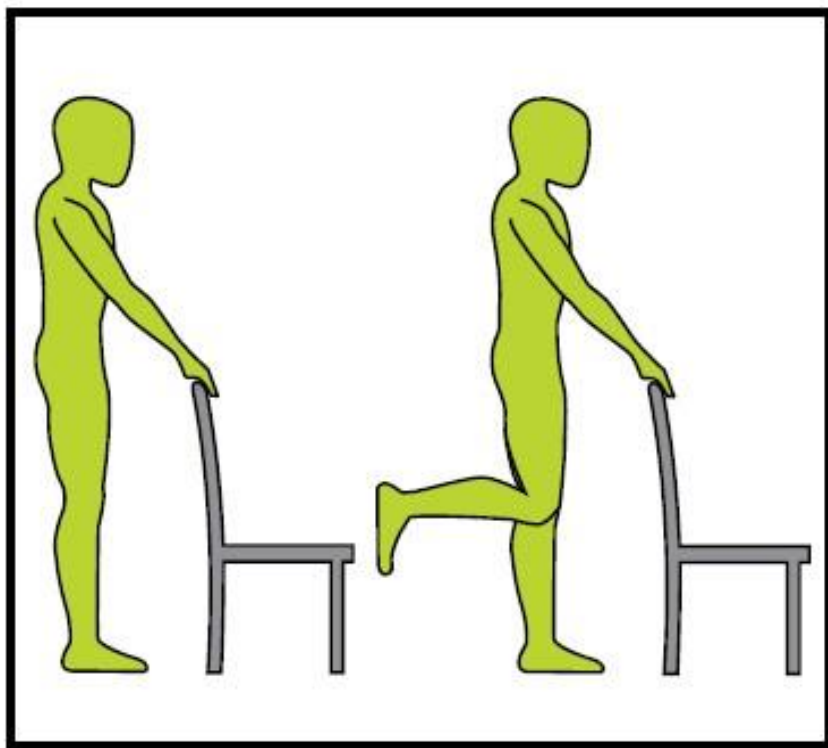




## STANDING CALF RAISES

Stand up behind your chair and hold on for support. Raise your heels off the floor until you are standing on your toes. Slowly lower yourself back to the floor.

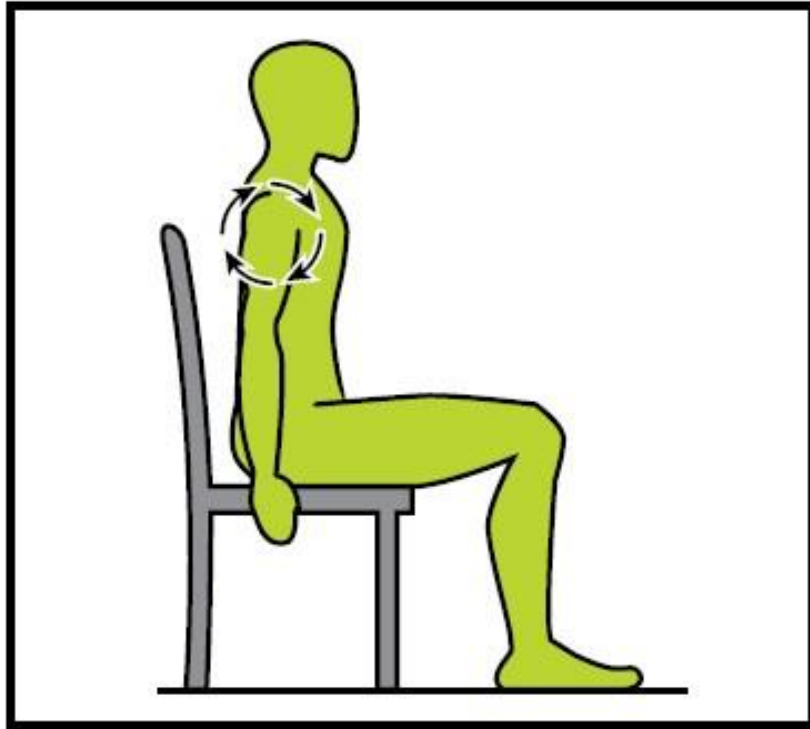
Perform 12–15 times.



## STANDING LEG CURL

Stand behind your chair and hold onto it for support. Keep your body straight and firm. Start by raising one foot up to your backside and then lowering it down. Repeat the process for 10–15 times, and then switch to the other leg and repeat.

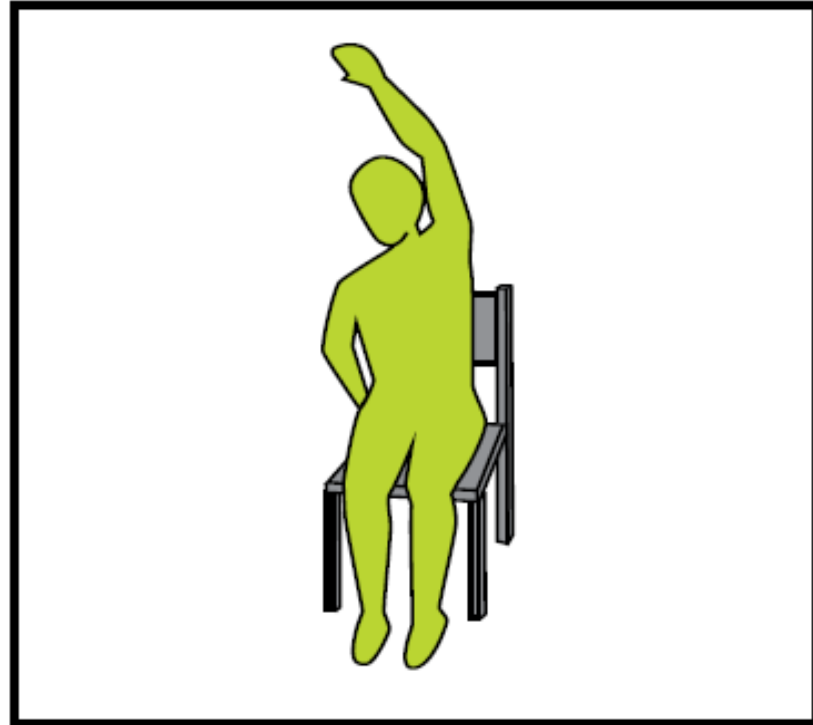




## SEATED SHOULDER ROLL

Raise both shoulders up toward your ears, then slowly roll them backward. Repeat, rolling forward. Sit tall and do not allow your upper back to round.

Complete this two times in both directions.

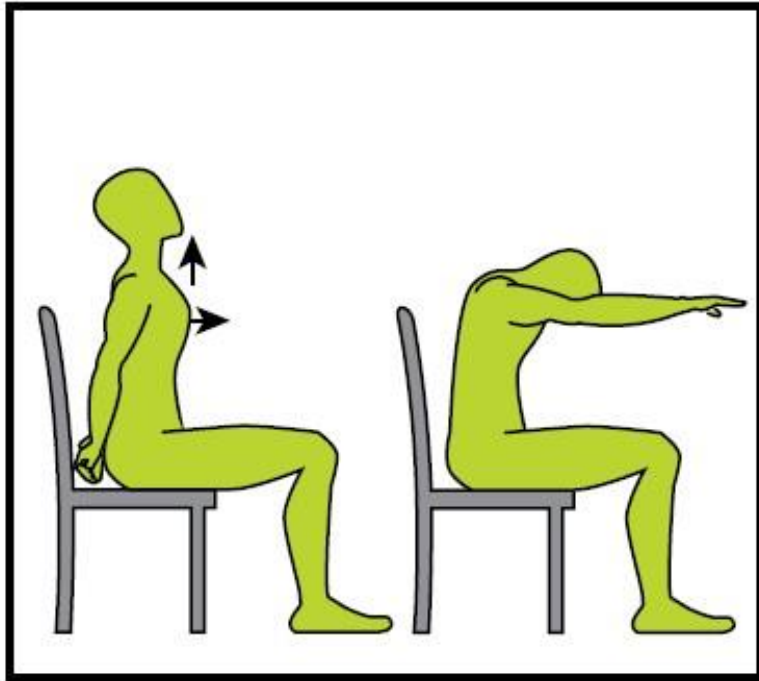


## SEATED LEAN STRETCH

Sit up tall and raise your arm. Bend toward your left side reaching with your right hand overhead and hold for 10–15 seconds.

Repeat to other side for two sets.





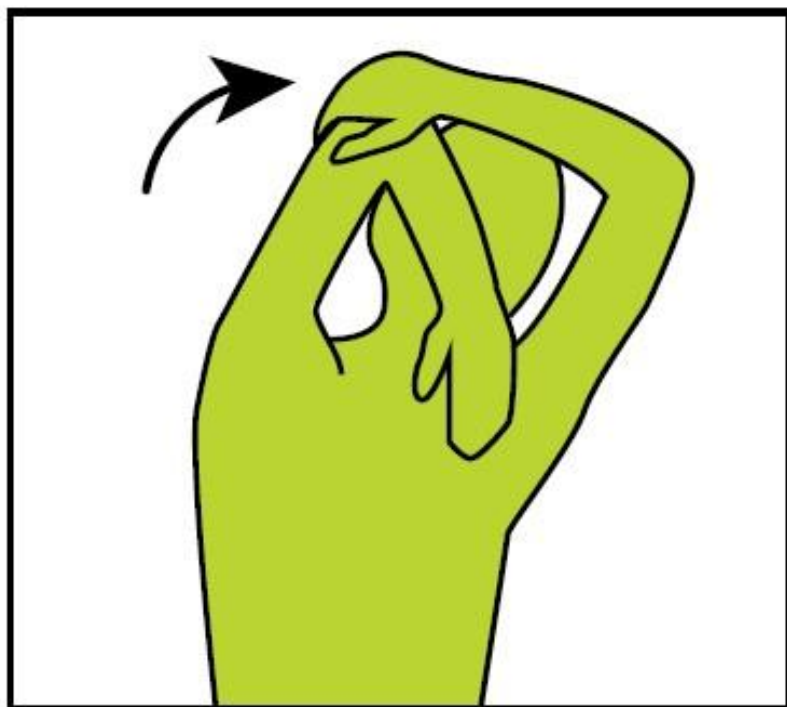
## SEATED CHEST AND BACK STRETCH

Clasp your hands behind your lower back. Push your chest outward, and raise your chin.

Hold this stretch for 10–15 seconds with deep breaths. Perform two sets.

Hold your arms out straight in front of you, palms facing down. Lower your head in line with your arms, and round your upper back while looking down toward the floor.

Hold this stretch for 10–15 seconds with deep breaths. Perform two sets.



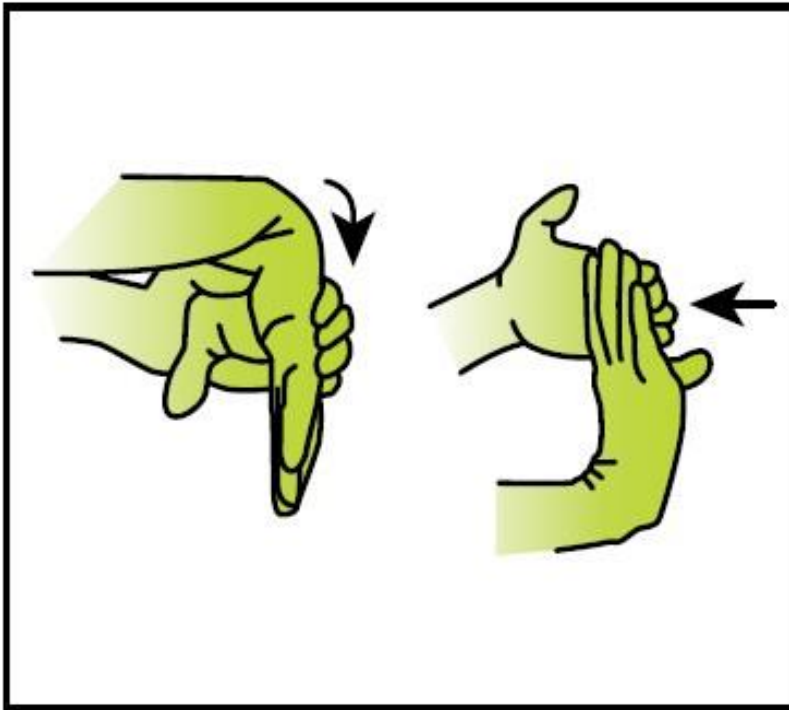
## SEATED TRICEP STRETCH

Raise one arm and bend it so that your hand reaches to touch the opposite shoulder blade. (It's okay if you can't reach it.)

Use your other hand and pull your elbow toward your head.

Hold this stretch for 10–15 seconds while taking deep breaths. Repeat on the other side for two sets.





## WRIST/FOREARM STRETCH

Stretch your arm out in front of you. Slowly, point your fingers down until you feel a stretch. Use the other hand to gently pull the raised hand toward the body. Hold this position for 3–5 seconds.

Point your fingers toward the ceiling until you feel a stretch. Use the other hand to gently pull the raised hand toward the body. Hold this position for 3–5 seconds.

Repeat this stretch two times in each direction.



# Questions + Comments

Move Your Way + Exercise for Everybody



# UK Family and Consumer Sciences



<https://fcs-hes.ca.uky.edu/>



University of Kentucky Family and Consumer  
Sciences Extension



@ukfcsext



**University of Kentucky**  
College of Agriculture,  
Food and Environment  
*Cooperative Extension Service*