

# Cooking Matters

For Physical Activity

Instructor Guide



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# Acknowledgements

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Share Our Strength's Cooking Matters® is proud to make available this new Physical Activity addendum to our *Cooking Matters for Parents*, *Cooking Matters for Families*, and *Cooking Matters for Adults* curriculum.

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# Introduction

Welcome to Cooking Matters for Physical Activity - an addendum to your Cooking Matters for Adults, Parents and Families courses! This addendum is meant to complement the curriculum by incorporating physical activity into each lesson, but should not replace existing food skills and nutrition objectives.

Cooking Matters for Physical Activity adds to each lesson by showing how to incorporate exercise in daily life, while explaining the importance of physical fitness.

## Leading Cooking Matters for Physical Activity

This Physical Activity Addendum instructors guide is designed to provide the foundation you need to lead engaging and effective courses that empower participants to incorporate physical activity into their every day lives. Other key sources of guidance are the local Cooking Matters staff, your co-instructors, Cooking Matters training materials, and the participants you teach.

Participants benefit from Cooking Matters' distinctive team-teaching approach. In a single class, there may be a culinary instructor, nutrition instructor, Cooking Matters staff member, and class support volunteer. Each will contribute different expertise to the classroom and inspire participants with enthusiasm for fitness.

To maximize the time you have with participants, you and your co-instructors will need to develop your plans for leading each lesson in advance of each class session. Please read each lesson plan thoroughly, focusing your attention on the objectives and opportunities to engage participants in discussion and activities. Ask for participants' feedback about which activities, and discussion topics are most relevant to them.

# Creating a Learner-Centered Cooking Matters Course

Adults bring their life experiences to their learning experiences, and use those to determine what is important and relevant to them. As an instructor, your challenge is to build upon those experiences so that participants will be able to incorporate lessons from Cooking Matters into their own lives.

To achieve this, you'll need to focus on creating a learner-centered environment. This is more than providing information or teaching skills. It is an educational approach that focuses on the participants' concerns and involves them in making decisions and solving problems.

Learner-centered education aims to:

- Engage learners
- Develop respectful relationships
- Recognize that adult learners are decision-makers
- Provide immediately useful information
- Build on learners' past experience and knowledge
- Sequence the learning experiences and reinforce them

Facilitated Dialogue is a key technique in learner-centered education. Your role as an instructor is to provide opportunities for learning by engaging participants in discussion and activities that build upon their experiences. The participants' role is to share questions, concerns, and successes so that they can learn from each other as well as the instructors.

Each lesson plan in the addendum is written to assist you in creating a learner-centered course and using Facilitated Dialogue techniques. We hope that you will ask participants open-ended questions to share what they know and encourage hands-on practice with the new skills and information you present. Share Our Strength has provided training materials on these concepts to your local Cooking Matters coordinator. He or she should introduce you and other instructors to these before you begin teaching.

Remember participants are experts on their own lives. Use participants as a resource for teaching and encourage them to actively consider the changes they can make to get most out of their physical fitness.

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# Physical Activity Overview

In 2018, the U.S. Department of Health and Human Services released the 2<sup>nd</sup> edition of the Physical Activity Guidelines for Americans, which discusses the proven benefits of physical activity and the recommended types of physical activity for different ages and population (U.S. Department of Health and Human Services, 2018).

## Physical Activity Requirements for Adults

Adults should engage in at least 150 to 300 minutes of moderate-intensity per week or 75 to 150 minutes a week of vigorous- intensity exercise, or a combination of both vigorous and moderate aerobic activity. (U.S. Department of Health and Human Services, 2018). Adults should do muscle strengthening exercise, of moderate intensity or more, two or more days a week.

Adults over the age of 65 should adhere to the adult guidelines but choose activities that best fit their lifestyles. They should include physical activity that includes balance training as well as aerobic and muscle strengthening (U.S. Department of Health and Human Services, 2018).

## Physical Activity Requirements for Preschool-Aged and Children & Adolescents

Kids ages 3-5 should be physically active throughout the day

Children and Adolescents between the ages of 6-17 years old should get at least 60 minutes of exercise per day and should include aerobic activity, muscle strengthening, and bone strengthening activities (U.S. Department of Health and Human Services, 2018).

## Definitions

Moderate-intensity physical activity: “Aerobic activity that increases a person’s heart rate and breathing to some extent. On a scale relative to a person’s capacity, moderate-intensity activity is usually a five or six on a 0 to 10 scale” (U.S. Department of Health and Human Services, 2008).

Examples: Brisk walking, dancing, raking the yard, or bicycling.

Vigorous-intensity physical activity: “Aerobic activity that generally increases a person’s heart rate and breathing. On a scale relative to a person’s capacity, vigorous-intensity activity is usually a seven or eight on a 0 to 10 scale” (U.S. Department of Health and Human Services, 2008).

Examples: Jogging, carrying heavy groceries, shoveling snow, or bicycling uphill.

Muscle-strengthening activity: “Physical activity, including exercise that increases skeletal muscle strength, power, endurance, and mass. It includes strength training, resistance training, and muscular strength and endurance exercises” (U.S. Department of Health and Human Services, 2008).

Bone-strengthening activity: “Physical activity that produces an impact or tension force on bones, which promotes bone growth and strength” (U.S. Department of Health and Human Services, 2008).

Examples: Running, jumping rope, or lifting weights.

# Why Physical Activity?

Everyone can benefit from exercise and the more you do, the better the health benefits.

Exercise can help (U.S. Department of Health and Human Services, 2018):

- Increase life expectancy
- Improve overall sleep quality
- Improve cognitive function
- Build strong muscles and bones
- Maintain a healthy weight
- Reduce risk factor for disease, such as overweight or obesity, hypertension and high cholesterol, coronary heart disease, stroke, cancer at multiple sites, type 2 diabetes, and osteoporosis
- Reduce risk of brain health and conditions that affect cognition, such as depression and anxiety, and Alzheimer's disease
- Reduce risk of excessive weight gain, gestational diabetes and postpartum depression in pregnant women
- Reduce risk of fall-related injuries in older adults

For a more thorough list, refer to page 18 in your Handouts section

Heart disease is the leading cause of death in the United States. Many of the primary causes of death in the U.S. could be reduced through a healthy diet and regular exercise. The chart below shows the leading causes of death according to the Centers for Disease Control and Prevention.

Number of deaths for leading causes of death	
• Heart disease:	635,260
• Cancer:	598,038
• Accidents (unintentional injuries):	161,374
• Chronic lower respiratory diseases:	154,596
• Stroke (cerebrovascular diseases):	142,142
• Alzheimer's disease:	116,103
• Diabetes:	80,058
• Influenza and pneumonia:	51,537
• Nephritis, nephrotic syndrome, and nephrosis:	50,046
• Intentional self-harm (suicide):	44,965

(Centers for Disease Control and Prevention, 2017)

Individuals and families should feel empowered to find exercises for themselves that best fit their fitness goals. In the next pages, we will discuss, learn, and perform different fitness activities.

# Lesson 1

## Activity: Stretching

*Coordinators:* Please incorporate this activity during section V: Eating Together in the Week One lesson plan.

### Goal

Participants will learn the importance of exercise and learn how to warm up for activity through stretching.

### Objectives

- Discuss importance of physical activity and stretching.
- Complete a stretching warm-up exercise.

### III.b Physical Activity (15 minutes)

1. Open up a conversation about why it is important to engage in physical activity. **ASK:** What is physical activity? Why do you think exercise is important?
2. Add to the discussion as needed, explaining that physical activity is any way you move your body that uses energy. Explain that physical activity helps build strong muscles and bones, maintain a healthy weight, and reduce risk of heart problems and other diseases. In addition, studies have found that it improves mood and sleep quality.
3. **ASK:** What types of physical activity do you (and your family) already do? Why is it important for you (and your family) to be active?
4. Share that the recommendation for adults (over the age of 18) is to engage in 150 minutes per week of moderate-intensity exercise. This can mean strength training, brisk walking, bicycling, swimming or dancing.
  - a. **ASK:** What are some easy ways you could add more physical activity to your day? Guide participants to consider easy additions like taking the stairs instead of the elevator or getting off the bus one stop early and walking. (Dancing with their child to his or her favorite song)
5. Highlight that each week we will build upon the benefits of physical activity and participate in a quick activity that could be completed at home.
6. Share that this week we will start off with stretching
  - a. **ASK:** Why do you think it is important to stretch before working out?
  - b. Share that stretching is a good way to warm up for exercise. It also helps improve flexibility, and helps prevent injuries from exercise.

**FOR COOKING MATTERS FOR PARENTS OR FAMILIES COURSES:** Kids between the ages of 6 and 17 years old must get at least 60 minutes of exercise per day.

### Activity Instructions

- Share that the USDA recommends and suggests stretching as a physical activity. Not only does it prevent injuries but also it improves stability and flexibility (USDA, 2015).

- Ask the participants to stand and lead them in 1 to 2 of the following suggested stretches.
  - Head Circles: Roll head side to side bringing down chin in front (do not roll back head sharply).
  - Shoulder Rolls: Roll shoulders forwards and then backwards.
  - Arm Stretches: Bring arm across the body and gently press on the elbow with the other hand.
  - Side Bends: Spread feet shoulder width apart, raise one hand above the head with the arm touching the ear and bring the other hand to the corresponding hip. Lean slightly to the side with the bent arm. Repeat for other side.
  - Hamstring Stretch: With feet close together and knees slightly bent, reach for ankles and toes. Cross one foot over the other and reach for the floor. Switch feet and repeat the step.

Weekly Challenge Option: Once exercises are completed, discuss different options for stretching and have participants challenge themselves to add more activity into their day by using one of the ideas that came up in the discussion. (Encourage them to involve their kids if possible)



# Lesson 2

## Activity: Aerobic Exercise

*Coordinators:* Please incorporate this activity during section V: Eating Together in the Week One lesson plan.

### Goal

Participants will learn different types of aerobic exercises.

### Objectives

- Discuss how exercise helps reduce the risk of cardiovascular disease.
- Learn about different aerobic exercises.

### III.b Physical Activity (8 minutes)

**FUN FACT:** Did you know that people who are active for approximately 150 minutes per week have a 33% lower risk of all-mortality than those who are not active

(U.S. Department of Health and Human Services, 2018).

1. The Physical Activity Guidelines of Americans recommends incorporating aerobic activity (moderate or vigorous- intensity exercises) daily (USDA, 2015)
2. **ASK:** Does anyone know the two most common diseases in the US?
  - a. Share with participants that heart disease and stroke are two common health-related diseases in the US. Risk for these can be reduced through a healthy diet and regular exercise, similarly to how eating whole grain products not only provides us with energy but also helps lower cardiovascular disease risk.
  - b. Refer to chart on page iii for more information.
3. Let participants know that you will be leading them in exercises that will demonstrate moderate-intensity

exercises.

### Activity Instructions

1. Lead the participants in one the following suggested exercises. At the end, discuss different moderate-intensity exercises. *Look on page 17 for modifications.*
  - a. 10 jumping jacks or modified jumping jacks
  - b. 10 alternating standing toe touches
  - c. 2 minutes of running in place or marching in place
- Share that these are just a couple examples of moderate-intensity exercises, that are achievable even with limited space.
  - **ASK:** What are some examples of activities that make you breathe harder and make your heart beat faster?
- Remind participants that getting 150 minutes a week of moderate-intensity exercise can also lower your risk for diseases (or 75 minutes of vigorous or a combination of both). Kids age 6 and up should spend at least an hour a day.
  - Moderate-intensity exercise is defined as, “aerobic activity that increases a person’s heart rate and breathing to some extent. On a scale relative to a

### FOR COOKING MATTERS FOR FAMILIES COURSES:

If time allows you can lead participants into the Food Group Relay (pg. I-62) or Jump Rope (pg. I-66), in your instructors book, instead.

person's capacity, moderate-intensity activity is usually a 5 or 6 on a 0 to 10 scale" (U.S. Department of Health and Human Services, 2008).

- **ASK:** How could you split up your activity to reach this goal?
  - Add to the discussion as needed encouraging your participants to be active for at least 10 minutes at a time on at least 3 days per week.
- Participants might be engaging in moderate-intensity exercises every day without realizing it!
  - Share that the Center for Disease Control not only recommends running and jumping as a form of exercise for both adults and children but also other exercises such as:
    - brisk walking, bike riding, hiking, house and yard work (sweeping, mowing the lawn, vacuuming, mopping)

Weekly Challenge Option: If relevant, suggest that participants also challenge themselves to try an activity that makes them breathe harder for at least 10 minutes. Encourage those that are new to physical activity to start slow and build up gradually. Participants that are more active can try adding 5-10 minutes to their normal routine or being active one extra day this week. (Encourage parents to try activities they can do with their kids)

## Lesson 3

# Activity: Muscle and Bone Strengthening Exercises

*Coordinators:* Please incorporate this activity during section V: Eating Together in the Week One lesson plan.

### Goal

Participants will learn why exercise helps strengthen bones and muscles, and the different types of strengthening exercises.

### Objectives

- Explain benefits of muscle and bone strengthening exercises on health.
- Discuss and demonstrate different strengthening exercises.

### III.b Physical Activity (10 minutes)

**COOKING MATTERS FOR CMA/CMP CLASS:** This week the benefits of calcium are discussed. Share with participants that calcium is stored in bones. Bones can be strengthened by adequate calcium and vitamin d intake as well as exercise.

### FOR COOKING MATTERS CLASSES W/ SENIORS:

Share that they can engage in exercises using their own body weight, such as tai chi, walking, stair climbing, or low impact dancing.

1. **ASK:** What are some examples of activities that increase your strength?
  - a. **For CMA/ CMP classes:** Add to the discussion as needed, pointing out activities like lifting weights, doing push-ups and sit-ups, working with resistance bands, or digging or hoeing in a garden keep bones and muscles strong
  - b. **For CMF classes:** Add to the discussion as needed, pointing on that activities like playing on the monkey bars, climbing on the playground, doing push-ups and sit-ups, and lifting weights build stronger muscles. Activities like running and jumping help build strong bones. If time allows, consider leading families in the Activity Ball Toss in the activity bank (pg. I-68) to show them fun examples of muscle- and bone-strengthening activities.
2. **ASK:** Why is this type of activity important?
3. Aerobic activity is any type of cardio activity that circulates more oxygen into the blood (Weil, 2017). As discussed in the nutrition lesson there are many types of healthy proteins. Consuming protein helps build, repair, and maintain muscles that can be damaged from exercise. Also engaging in muscle and bone strengthening exercises can help slow the loss of bone density (Centers for Disease Control and Prevention, 2015).
  - a. When building muscle, the muscle tissue can break down and proteins help repair the broken muscle tissue. This is not something of concern but is a part of the natural muscle-building process.
4. Both kids and adults should engage these types of physical activity; kids needing about 60 minutes a day of exercise. Encourage participants to do strengthening activities at least 2 days per week. Remind participants to do activities that strengthen all major muscle groups

Activity Instructions

- Below are some examples that the National Institute of Health on Aging recommends to strengthen muscles and improve balance (National Institute on Aging, 2018).

1. Ask participants to stand next to their chairs. They can use their chairs for support if they like. Choose 1-2 of the activities below: *Look on page 17 for modifications*

a. Squats (Chair dip)

- Optional: Participants can rest their hands on the back of a chair or sit in the chair).
- Have participants stand hip-width apart and bends their knees until they are over the big toe, while keeping their back straight. Then gently come to a standing position. Repeat 10 times.

b. Calf raises (Toe stand)

- Optional: Participants can rest their hands on the back of a chair.
- Lift both heels off the floor, until you are standing on the balls of your feet, and then bring back down. Repeat 10 times.

c. Arm curls

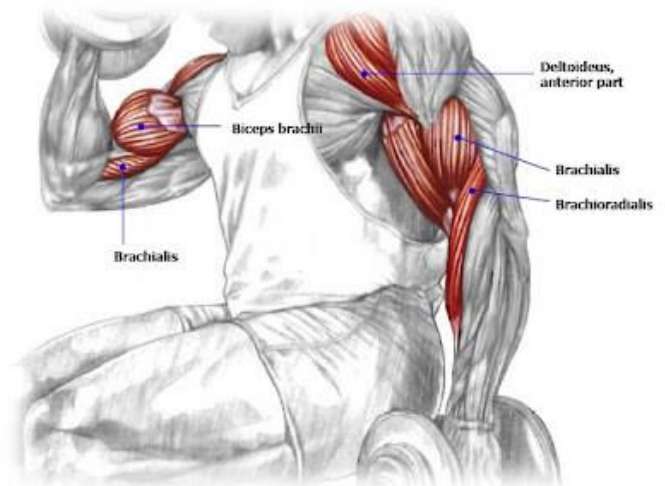
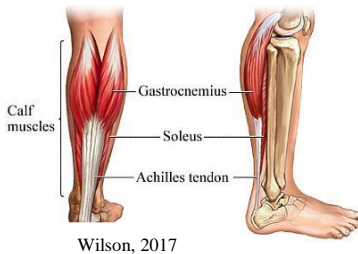
- Materials: water bottles, canned foods, or bags of groceries
- Have participants stand hip-width apart and hold a pair of light weights (or the above materials listed). Keeping the arms by the side, slowly bend arms until your hand reach your shoulders and then lower. Repeat 10 times

2. Share with participants that these are just some examples of bone and muscle strengthening exercises.

a. **ASK:** From the exercises we just did, which muscles did we work?

i. Share:

- Squats- quadriceps, hamstrings and your Gluteus Maximus (buttocks)
- Calf raises- Gastrocnemius (upper calf muscle) and soleus (lower side calf) muscle. See image left
- Bicep curls- brachialis, brachioradialis, and deltoid muscles. See image right



Christian, 2014

Weekly Challenge Option: If relevant, suggest that participants also challenge themselves to try a muscle-strengthening activity this week. Encourage participants who are new to this type of activity to start slow and build up gradually, and take safety precautions. Participants who already do muscle-strengthening activity can try an activity that strengthens another part of the body or is slightly more challenging than their usual routine.

# Lesson 4

## Activity: Yoga

*Coordinators:* Please incorporate this activity during section V: Eating Together in the Week  
One lesson plan

### Goal

Participants will learn other forms of exercise that are gentle on the body and appropriate for all age groups.

### Objectives

- Learn how exercise can improve mental health and mood.
- Demonstrate different exercises.

### III.b Physical Activity (8 minutes)

1. Share that, as previously discussed, meal planning can help stretch your food dollars, avoid spending on unnecessary purchases and help make healthier food choices. Additionally, it can also take the stress out of planning meals every night.
  - a. **ASK:** What are some other ways you reduce stress?
2. Share that one healthy way to improve both your mood and mental health is through exercise. Studies have shown that exercises reduce anxiety, depression, and negative moods (Sharma, Madaan, & Petty, 2006). Many American live sedentary lifestyles which can contribute to poor mental and physical health
3. **For CMF class:** Consider introducing the concept of reducing screen time. Point out that watching TV or playing video, computer, or phone games often takes up times that families could use to do something active together. **ASK:** what are some ways you could cut back on how much time your family spends watching TV or playing with technology? Add to the discussion as needed with ideas like turning off the TV during dinner, playing an active game together instead of playing with technology, making bedrooms a TV-free area, and choosing an activity that everyone has to do during commercial breaks.
4. **For CMA class:** Consider introducing the concept of reducing sedentary time. Explain that in addition to getting enough physical activity, it's important not to spend too much time sitting or lying down during the day. **ASK:** How much of your day is spent sitting? How could you move more during the times you usually spend sitting? Add to the discussion as needed with ideas like taking a walk around the block after dinner instead of watching TV, doing jumping jacks or using resistant bands while watching TV or during commercial breaks, and taking a short walk during their lunch break.

**DID YOU KNOW:** Children and adults spend approximately 7.7 hours per day being sedentary?

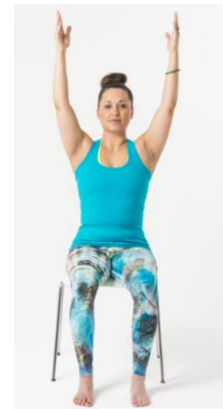
(U.S. Department of Health and Human Services, 2018).

**FACILITATORS:** During this week, hand out the informational chart, to participants, on page 16 of your addendum.

5. **For CMP class:** Consider discussing ways to encourage young kids to be more active. **ASK:** how can you encourage your child to be active now and as he or she grows up? Add to the discussion as needed with ideas like setting a good example by being active yourself, limiting TV and other screen time, keeping off the TV during mealtimes, and playing other games together as a family.
6. Share that in class you will show participants' different yoga poses that they can easily do at home and increase movement.

### Activity Instructions

- Share that yoga is one form of exercise that helps alleviate stress and improve mood.
  - For the purpose of our classes, we will do standing/sitting yoga poses since space is limited but all the yoga poses can be done standing.
1. Participants will start each new pose by being firmly planted in their seat.
  2. Pose #1: Seated Mountain (Tadasana). This pose engages your core and helps you focus on your posture and breath. (see example image right)
    - a. Ask participants to take a deep breath and sit up straight, extending their spine.
    - b. Their legs should be at a 90-degree angle with a couple of inches between their knees.
    - c. Ask participants to take a deep breath, and as they exhale to roll their shoulders down their back, pull their bellybutton towards the spine and have their arms relaxed by the side.
    - d. On the inhale, raise hands above head with arms by ears, shoulders relaxed and roll down back, fingers spread wide and slight inward rotation of pinkies. (see image right)
  3. Pose #2: Warrior 1 (Virbhadrasana 1)
    - a. Have participants come back to a standard seated pose. Ask them to take a deep breath and as they do lift their arms to the side, to form a T, and then slowly lift hands above head and interlace fingers.
    - b. As participants exhale, have them roll their shoulders away from their ears and have the shoulder blades slide down the back.
    - c. Take at least five deep breaths and have participants release clasped hands.
  4. Pose #3: Eagle Arms (Garudasana Arms)
    - a. Have participants come back to a standard seated pose.
    - b. Ask participants to take a deep breath and as they do to extend their arms to the side, to form a T.
    - c. As you exhale, interlace your arms (see image right).
      - i. Optional: wrap right foot around left leg.
    - d. Take a couple deep breaths, the release.



(MS Unites)



(Goldstein, 2018)

Poses adopted from Healthline.com (Healthline, 2018)

# Lesson 5 (Grocery Store Tour)

## Activity: Counting Steps

### Note

- For Cooking Matters for Families classes: Incorporate this activity during Week 7 (or when grocery tour is conducted)
- For Cooking Matters for Adults or Parents: Incorporate this activity during Week 5

### Goal

Participants will learn how to count their steps and how easily incorporate walking into their everyday life.

### Objectives

- Learn to count walking steps.

### Physical Activity (2 hours)

1. Share that while moving around the grocery store, we will keep track of the steps we walked. **ASK:** What are some ways that you can make errands like grocery shopping more active? Add to the conversation as needed, suggesting ideas like parking further from the stores entrance, walking rather than driving between nearby stores, and using a basket instead of a cart for smaller trips.
2. Participants can monitor their steps with their cell phones. Some Android and Apple devices have built-in step monitors; otherwise, they can download the following free apps:
  - a. Pedometer, Step Counter & Weight Loss Tracker
  - b. Step Counter
  - c. Pedometer- Accupedo
3. According to the Center for Disease Control, walking is considered a moderate-intensity aerobic exercise for both children and adolescents (Centers for Disease Control and Prevention, 2015).
4. The recommendation is to walk 10,000 steps per day, which equates to the recommended 150 minutes of exercise per day. Share that an hour of walking can burn anywhere from 180 to 240 calories. One mile is approximately 2,000 steps.
5. After participants complete the \$10 challenge, have them check their steps.

**FUN FACT:** Carrying groceries is a muscle strengthening exercise!

Weekly Challenge Option: If relevant, suggest participants also challenge themselves to be more active during one of their errands this week.



# Lesson 6

## Activity: Activity Dice

### Note

- For Cooking Matters for Families: Incorporate regularly scheduled activity dice lesson in Week 5.
- For Cooking Matters for Adults or Parents classes: Incorporate the activity dice lesson during Week 6.

### Goal

Encourage families and individuals to make healthy choices about physical activity.

### Objectives

- Participants will learn other types of muscle and bone strengthening exercises.

### Materials

- Activity dice
  - See notes below on how to make your own dice.

### III.b Physical Activity (5 minutes)

#### Activity Instructions

1. Divide participants into two teams. *For Families* classes keep parent-child pairs on the same team, keeping teams on separate sides of the room.
  2. Explain that the game starts when you toss both the dice to each team, one at a time.
  3. Explain that the person who catches the dice will read the activity or number. Everyone in that group will have to do the corresponding activity, X amount of times.
  4. Repeat 2-3 times.
- Feel free to use the instructions below to share how to make their own activity dice. (Handout on pg. 15)
  - Share that the exercises on the Activity Dice encompass a variety of forms of exercise, all of which are included in the Physical Activity Guideline for Americans.

**COOKING MATTERS FOR FAMILIES CLASS:** This week the benefits of calcium re discussed. Share with participants that calcium is stored in bones. Bones can be strengthened by adequate calcium and vitamin d intake as well as exercise.

### How to Make Your Own Activity Dice

#### Materials

- 2 empty cube tissue boxes
- Markers
- Paper
- Glue
- Scissors



## Instructions

1. Use the paper to cut 12 large squares; large enough to fit all sides of the tissue box.
2. Take 6 squares of paper and label each one a different number ranging from 5-15
3. Take the other 6 squares of paper and write an activity on each of the pieces (e.g., jumping jacks, push-ups, knee bends, etc.).
4. Glue each number on one side of one tissue box, then glue each activity on one side of the other tissue box.

# Lesson 6 (Alternate Activity)

## Activity: Sugar Squats

### Note

- This is an alternate activity to the Activity Dice for Week 6 Cooking Matters for Adults and Parents classes.

### Goal

Encourage families and individuals to make healthy choices about physical activity.

### Objectives

- Participants will learn other forms of muscle strengthening exercises.

### III.b Physical Activity

- This physical activity is to be incorporated in the sugar activity.

### Activity Instructions

1. Share with participants that for each teaspoon of sugar measured, they will complete one squat or chair dip.
2. According to the National Institute on Aging, chair dips/squats are muscle-strengthening exercises, working the lower body (National Institute on Aging, 2018). *Look on page 17 for modifications*
3. Examples:
  - a. One bottle of 20 oz citrus soft drink = 77g of sugar = 19.25 tsp sugar
    - i. Participants then complete 19 chair dips or squats
  - b. One bottle of 32 oz sports drink = 20g sugar = 5 teaspoons
    - i. 5 chair dips or squats
  - c. One bottle of 16 oz Energy Drink = 64g of sugar = 16 tsp sugar
    - i. 5 chair dips or squats
  - d. One bottle of 20 oz Cola flavored soft drink = 65g of sugar = 16.25 tsp sugar
    - i. 16 chair dips or squats
- Use your discretion to determine which exercises will best fit your participants.

# Lesson 7 (for *Cooking Matters for Families* only)

## Activity: Trainings for Trivia

### Note

- This activity should be incorporated during the trivia game. For each answer, participants will perform a different exercise.

### Goal

Participants will demonstrate their progress and understanding of physical activity exercises and its importance.

### Objectives

- Participants continue practicing different exercises.

### I. Physical Activity

1. Incorporate this physical activity portion into the trivia game. Questions will not change; except for each question, participants will do a physical exercise.
2. According to the National Institute on Aging, leg raises and chair dips are muscle-strengthening exercises, for the upper body and lower body, respectively (National Institute on Aging, 2018). The Center for Disease Control also suggests that crunches, squats, and pushups are muscle strengthening as well.



(National Institute on Aging, 2018)

Instructions (*Look on page 17 for modifications*)

- 100 point questions- 4 side leg raises (see example to the right)
- 200 point questions- 5 chair dips (see example to the left)
- 300 point questions- 5 crunches
- 400 point questions- 6 squats
- 500 point questions- 4 pushups



(National Institute on Aging, 2018)

# Handouts

# How to Make Your Own Activity Dice

## Materials

- 2 empty cube tissue boxes
- Markers
- Paper
- Glue
- Scissors

## Instructions

1. Use the paper to cut 12 large squares; large enough to fit the sides of the tissue box
2. Using a marker, take 6 squares of paper and label each one a different number ranging from 1-15
3. Take the other 6 squares of paper and write an activity on each of the pieces (e.g., jumping jacks, push-ups, knee bends, etc.)
4. Glue each number on one side of one tissue box, then glue each activity on one side of the other tissue box.



(Education.com, 2018)

# Appropriate Exercises for Age and Activity Level

	Age Group		
Type of Physical Activity	Preschool-Aged Children	School- Aged Children	Adolescents
<b>Moderate-intensity aerobic</b>	<ul style="list-style-type: none"> <li>• Tag or follow the leader</li> <li>• Playing on a play ground</li> <li>• Walking, running, skipping, jumping, dancing</li> <li>• Swimming</li> <li>• Playing games that require catching</li> <li>• Bicycle riding</li> </ul>	<ul style="list-style-type: none"> <li>• Active recreation such as hiking, skateboarding and rollerblading</li> <li>• Bicycle riding</li> <li>• Brisk walking to school</li> </ul>	<ul style="list-style-type: none"> <li>• Active recreation, such as hiking, skateboarding, and rollerblading</li> <li>• Brisk walking</li> <li>• Bicycle riding</li> <li>• House and yard work such as sweeping or pushing a lawn mower</li> <li>• Playing games that require catching and throwing, such as basketball and volleyball</li> </ul>
<b>Vigorous-intensity aerobic</b>	<ul style="list-style-type: none"> <li>• Tag or follow the leader</li> <li>• Playing on a play ground</li> <li>• Walking, running, skipping, jumping, dancing</li> <li>• Swimming</li> <li>• Playing games that require catching</li> <li>• Bicycle riding</li> </ul>	<ul style="list-style-type: none"> <li>• Active games involving running and chasing, such as tag</li> <li>• Bicycle riding</li> <li>• Jumping rope</li> <li>• Running</li> <li>• Swimming or basketball</li> <li>• Vigorous dancing</li> </ul>	<ul style="list-style-type: none"> <li>• Active games involving running and chasing such as soccer</li> <li>• Bicycle riding</li> <li>• Jumping rope</li> <li>• Running</li> <li>• Basketball or Swimming</li> <li>• Vigorous dancing</li> </ul>
<b>Muscle-strengthening</b>	<ul style="list-style-type: none"> <li>• Games such as tug of war</li> <li>• Climbing on playground equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Games such as tug of war</li> <li>• Modified push-ups (with knees on floor)</li> <li>• Rope or tree climbing</li> <li>• Some forms of yoga</li> <li>• Climbing on playground equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Games such as tug of war</li> <li>• Sit-ups</li> <li>• Push-ups</li> <li>• Resistant exercises such as weights</li> <li>• Some forms of yoga</li> </ul>
<b>Bone-strengthening</b>	<ul style="list-style-type: none"> <li>• Hopping, skipping, jumping</li> <li>• Jumping rope</li> <li>• Running</li> </ul>	<ul style="list-style-type: none"> <li>• Hopping, jumping, skipping</li> <li>• Jumping rope</li> <li>• Running</li> <li>• Basketball</li> </ul>	<ul style="list-style-type: none"> <li>• Jumping rope</li> <li>• Running</li> <li>• Basketball</li> </ul>

Adapted from: (U.S. Department of Health and Human Services, 2018)

# Exercise Modifications

If not this...	Try this...
<a href="#">Jumping jacks</a>	<ul style="list-style-type: none"> <li>• <a href="#">Modified jumping jacks</a></li> </ul>
Running	<ul style="list-style-type: none"> <li>• <a href="#">March in place</a></li> </ul>
<a href="#">Squats</a>	<ul style="list-style-type: none"> <li>• Chair dips</li> </ul>
Chair dips	<ul style="list-style-type: none"> <li>• <a href="#">Single leg squats w/ chair</a></li> <li>• <a href="#">Seated leg extensions</a></li> </ul>
Calf raises	<ul style="list-style-type: none"> <li>• <a href="#">Calf raises w/ chair</a></li> </ul>
<a href="#">Crunches</a>	<ul style="list-style-type: none"> <li>• <a href="#">Balancing hip flexion</a></li> <li>• <a href="#">Seated knee lift w/ chair</a></li> </ul>
<a href="#">Pushups</a>	<ul style="list-style-type: none"> <li>• <a href="#">Wall pushups</a></li> </ul>

# Health Benefits Associated with Regular Exercise

## Children and Adolescents

- Improved bone health (ages 3 through 17 years)
- Improved weight status (ages 3 through 17 years)
- Improved cardiorespiratory and muscular fitness (ages 6 through 17 years)
- Improved cardiometabolic health (ages 6 through 17 years)
- Improved cognition (ages 6 to 13 years)\*
- Reduced risk of depression (ages 6 to 13 years)

## 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)

(U.S. Department of Health and Human Services, 2018)



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