

GARDENING Safely

FACILITATOR'S GUIDE

RATIONALE: Gardening as an activity has many potential health benefits, from the physical activity component to the exposure of fresh air and sunlight, as well as the satisfaction of growing food and plants. However, more than 400,000 people visit emergency rooms each year for injuries related to outdoor garden tools, according to the Consumer Product Safety Commission (CPSC). There are steps a person can take to get the benefits of gardening, while also staying safe. This information is relevant to Homemakers and the adult population in general.

PROGRAM GOAL: Promote gardening as a form of physical activity with overall health benefits; increase participants' knowledge and skills related to self-efficacy in injury prevention.

LESSON OBJECTIVES

As a result of participating in this program, participants will be able to:

1. Identify health benefits of gardening,
2. Describe gardening as exercise, and
3. Apply injury prevention strategies to gardening.

LESSON MATERIALS

For Homemaker Lesson Leaders:

- Copy of PowerPoint presentation
- Adult Health Bulletin, May 2023, Gardening Safely
- Program Evaluation

For Homemaker Participants:

- Adult Health Bulletin, May 2023, Gardening Safely
- Program Evaluation (optional)

The following lesson content follows the lesson PowerPoint. You may choose in your delivery method to use the PowerPoint as a visual tool and click through the slides as you discuss each objective. The corresponding slide numbers are included for your reference. If you do not have access to the PowerPoint or do not wish to use it, you can simply read the information in this guide to deliver the same information to program participants.

LESSON INTRODUCTION (SLIDE 1)

Gardening is a great way to be physically active, enjoy the outdoors, and beautify your home or yard. There are added health benefits to growing your own vegetables, fruit, and herbs, as well. As with any activity though, it is important to know how to move prudently, use equipment properly, and interact with nature responsibly.

ICE BREAKER (SLIDE 2)

Ask participants: Do you garden? What do you enjoy growing?

Encourage every participant to answer. If they do not garden, ask if they enjoy benefiting from others gardening - fresh flowers, landscaping, garden herbs, or vegetables, etc.

HEALTH BENEFITS OF GARDENING (SLIDE 3)

Ask participants: Why do you enjoy gardening?

Generally, the reasons we enjoy gardening are benefits to our physical and mental health.

GARDENING PROMOTES PHYSICAL ACTIVITY (SLIDE 5)

When we garden, we use large and small muscle groups - large muscles like our quads (thighs) and biceps (arms), and small muscles in our fingers and hands.

As a result of using those muscles, we can maintain or increase strength in our muscles and dexterity in our hands.

Gardening can also be aerobic exercise, an activity that can increase our heart rate.

For individuals recovering from an injury or illness, some may choose gardening as a form of formal or informal physical or occupational therapy, as it can be an effective, enjoyable, and sustainable form of therapy outside of formal exercise settings.

GARDENING INCREASES MENTAL HEALTH (SLIDE 6)

Gardening, as well as learning about plants, can provide a common interest and learning opportunities for anyone who wants to spend more time with others.

For those who often spend time alone, gardening can be a group project that counteracts isolation.

Working with our hands and producing a finished product (such as planting seeds, weeding a plot, or harvesting) elicit feelings of pride in our work, can enhance self-esteem, provide opportunities for self-mastery, and maybe even a way to make money.

Additionally, studies have shown that gardening can help delay the onset and counteract the effects of dementia as well.

GARDENING INCREASES EXPOSURE TO NATURE AND SUNLIGHT (SLIDE 7)

There are many health benefits to spending time outdoors, including lowering blood pressure, increasing vitamin D levels, promoting deeper breathing and higher oxygen intake levels, improving immune response, and reducing stress levels and heart rate.

DESCRIBING GARDENING AS EXERCISE (SLIDE 8)

Think, Pair, Share Activity: Ask participants, "Does gardening feel like exercise to you? Why or why not?" Encourage participants to take a minute to think about their responses, and then find a partner to share their responses. Allow a few minutes for partners to each share their response with one another.

GARDENING AS AEROBIC ACTIVITY (SLIDE 9)

Aerobic exercise is any activity in which the body's large muscles move in a rhythmic manner for a sustained period. In gardening, this can look like raking, chopping, scooping, etc.

Aerobic activity has three components:

- Intensity, or how hard a person works to do the activity;
- Frequency, or how often a person does aerobic activity; and
- Duration, or how long a person does an activity in any one session.

BENEFITS OF AEROBIC ACTIVITY (SLIDE 10)

Research has shown that doing aerobic activities can help a person do many things: achieve or maintain a healthy weight, increase stamina, ward off viral illnesses, reduce health risks, manage chronic conditions, strengthen their heart, increase mental clarity, boost their mood, stay independent as they age, and live longer.

GARDENING AS MUSCLE AND BONE STRENGTHENING ACTIVITY (SLIDE 11)

Muscle and bone strengthening activities are activities that produce an impact or tension force on the muscles and bones. They increase muscle strength and muscular endurance and promote bone growth and strength.

Muscle or bone strengthening activities have three components:

- Intensity, or how much weight or force is used;
- Frequency, or how often a person does an activity; and
- Sets and repetitions, or how many times a person does the activity, such as lifting a weight or doing a pushup.

BENEFITS OF MUSCLE AND BONE STRENGTHENING ACTIVITY (SLIDE 12)

Research has shown that doing muscle and bone strengthening activities can increase bone density and reduce the risk of osteoporosis, increase metabolism, protect joints from injury, contribute to better balance and reduce risk of falls, manage chronic pain from arthritis, and increase mental clarity.

COUNT IT! (SLIDE 13)

Physical Activity Recommendations for American Adults includes at least 150 minutes a week of moderate aerobic activity AND muscle strengthening activities at least two days a week.

The same activity can count for both, and gardening and other outdoor chores may be either or both!

APPLYING STRATEGIES TO GARDEN SAFELY (SLIDE 14)

The American Society of Surgeons of the Hand (ASSH) recommends taking the following precautions when gardening:

WATCH YOUR GRIP (SLIDE 15)

Aim to work with your wrist in a relaxed or neutral position for optimum strength.

Only use hand tools with the appropriate hand (for example, do not grip a right-handed tool with your left hand).

Square up your shoulders in front of where you are working instead of reaching across your body.

WEAR GLOVES (SLIDE 16)

Wearing gloves while gardening can reduce blistering, protect your skin from chemicals, bacteria, and fungi that live in the soil, prevent small cuts and scrapes from becoming infected when exposed to dirt and germs, and prevent sun damage.

USE THE RIGHT TOOLS (SLIDE 17)

Use a hand shovel or rake rather than your hands for digging.

Use tools for their intended purposes only (for example, do not use a broken shovel as a hoe to chop weeds).

Avoid products with form-fitting handles because they only fit one size of hand and can cause extra stress on fingers.

Use functional or adaptive tools as needed to avoid injury.

AVOID OVERLY REPETITIVE MOTIONS (SLIDE 18)

Repetitive motions such as digging, raking, trimming hedges, pruning bushes, or planting bulbs may cause muscle damage and soreness.

Rotate gardening activities every 15 minutes with a brief rest in between so the same muscles are not overused.

STRETCH FIRST (SLIDE 19)

Reduce the risk of injury by warming up.

Stretch major muscle groups: shoulders and neck, core, back, arms, and legs.

Include wrist, hand, and finger movements.

If you have time or want to, watch and follow along with one or both of the included Fit Blue stretching videos linked on slide 19.

The Standing Warm Up/Cool Down video includes stretches you can do while standing up, or you can modify them for sitting in a chair. The video is approximately 1 minute and 30 seconds long.

The Sitting Warm Up/Cool Down video includes stretches that require sitting on the floor or ground and is approximately 2 minutes and 30 seconds long.

***These videos are on the UK FCS Extension YouTube Channel, and you can also find them by

searching "Fit Blue Sitting Warm Up Cool Down" and "Fit Blue Standing Warm Up Cool Down" on YouTube.***

APPLICATION AND REVIEW (SLIDE 20)

- Stretch before spending time gardening.
- Break up tasks to avoid repetitive movements.
- Use the correct tools or adaptive tools to avoid pain points.

Ask participants if they have any questions or need clarification on any lesson points.

Agent Note: For assistance compiling lesson evaluation responses, send completed lesson evaluations to Katherine Jury, via email at Katherine.jury@uky.edu or via mail:

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