

Revisions to Book 7: Older Adults

Physical Activity Kit (PAK)

Presenters



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Purpose of Revisions

- “Elders are not only our links to the past but our sails that help us navigate the waters of the future. They also serve as our anchors to stand firm when progress is lost in progression. They deserve the same support they have always given us.”-Kevin Tushka
- As science changes within exercise and preventative medicine, we owe it to the ones we lead to adapt in the ways that are purely beneficial
- PAK has always aimed to guide Native communities to safer, efficient, active, and culturally competent lifestyles.
- Revision team does not aim to recreate original but to change in part.
- Make more accessible, laymen friendly, more transportable, and more relevant (where appropriate).

The Mission Stays the Same



Physical Activity Kit (PAK) OVERVIEW **Physical Activity Kit (PAK): Staying on the Active Path in Native Communities...a lifespan approach!**

The Physical Activity Kit (**PAK**) *Staying on the Active Path in Native Communities...a Lifespan Approach* strategy refines an effective and efficient method to package, implement, evaluate and disseminate culturally appropriate physical activity for American Indian/Alaska Native and other communities. The primary goal of the **PAK** is to increase the time spent in moderate to vigorous physical activity (MVPA) by promoting age and culturally appropriate physical activities across the life span of Native American communities. These physical activities are appropriate across age spans (Young People, Adults/Family, and Older Adults) and include various levels of activity: Warm-up (flexibility) cardiovascular, Strength, Cool-down (flexibility).

The **PAK** strategy is a collaboration/partnership with:

Test

Finish these song lyrics:

1. "Sugar Pie, Honey Bunch..."

- "You know that I love you!"-4 Tops

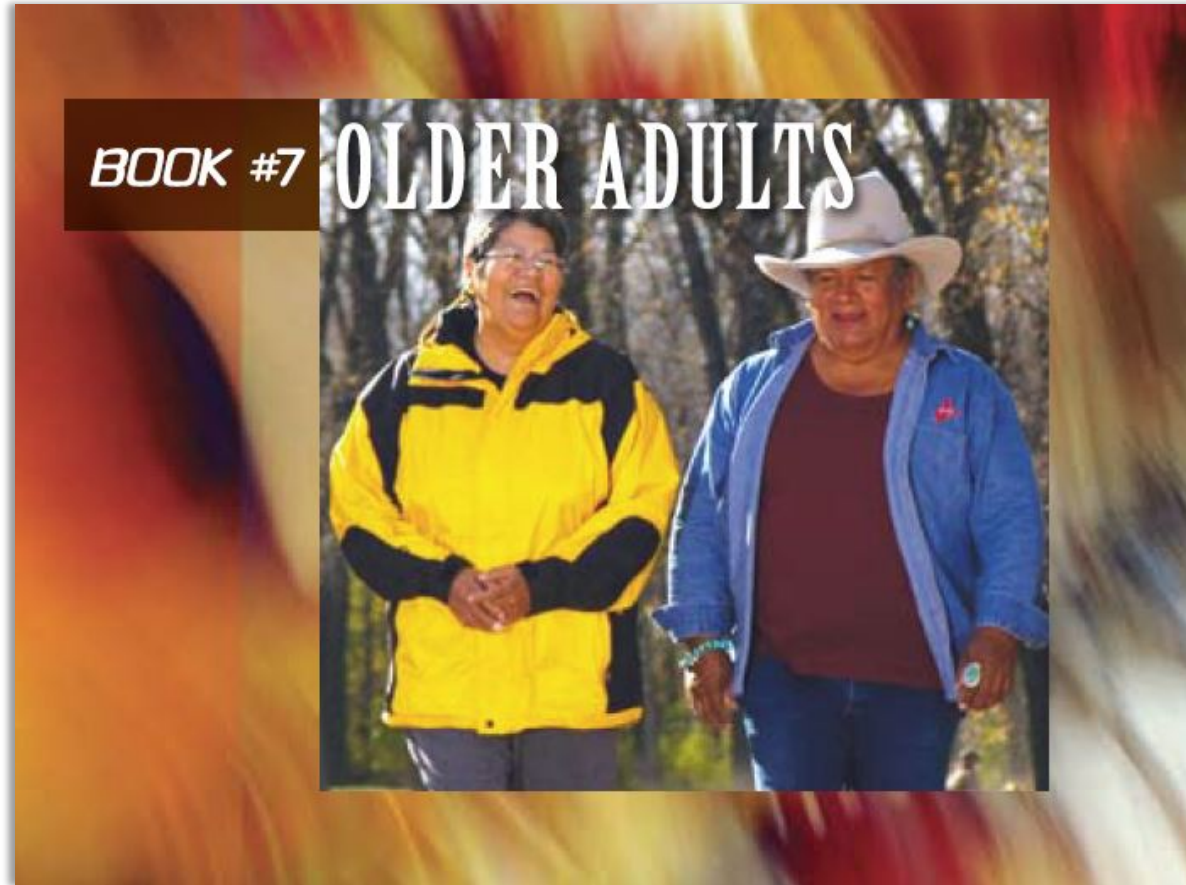
2. "I like it, I love it..."

- "I want some more of it"- Tim McGraw

Do what you're inspired to do:

- Raise The Roof
- The Funky Chicken

Book 7: Older Adults



Reformatting

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Reformatting

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For Instructors

- Setting up your space
- Health numbers- Blood Pressure and Blood Sugar ranges to be aware of

Reformatting

OLDER ADULTS

PHYSICAL ACTIVITY RECOMMENDATIONS

It is recommended that older adults participate in at least **30 minutes of moderate intensity physical activity on 5 or more days of the week**. (Centers for Disease Control and Prevention, <http://www.cdc.gov/nccdphp/dnpa/physical/>).

Cardiovascular endurance, strength, balance, and flexibility exercises should all be part of a physical activity program for older adults. No one type of activity will bring about all the benefits of physical activity. It is important to include all of them. The following is a sample schedule:

- Cardiovascular: Participate in moderate-intensity aerobic activities 3-5 days a week for at least 30 minutes each session.
- Flexibility: Stretch every day.
- Strength training: Do strength-building activities 2-3 days per week.

What is "moderate-intensity physical activity?"

Moderate-intensity physical activity refers to any activity that burns 3.5 to 7 Calories per minute (kcal/min) (Ainsworth et al., 2000). These levels are equal to the effort a healthy individual might burn while walking briskly, mowing the lawn, dancing, swimming for recreation, or bicycling.

What is "vigorous-intensity physical activity?"

Vigorous-intensity physical activity refers to any activity that burns more than 7 Calories per minute (kcal/min) (Ainsworth et al., 2000). These levels are equal to the effort a healthy individual might burn while jogging, engaging in heavy yard work, participating in high-impact aerobic dancing, swimming continuous laps, or bicycling uphill.

Warm-up Activities (Flexibility)

- Warm-up activities should be done before any other kind of cardiovascular or strength activities. They get your body ready to work a little harder. They help protect you from getting hurt while doing other activities.
- Walk a few slow laps inside or outside before starting these warm-up activities.
- Hold a chair or wall lightly for balance if you are doing these activities standing up.
- Many of the warm-up activities are light stretches. Do not over stretch or lock your joints and muscles.

Cardiovascular Activities

- Cardiovascular activities help your heart, lungs and blood vessels work better.
- These activities will probably make you sweat, get hotter, have a red face, and have a faster or heavier breathing than normal and a faster heart rate.

Reformatting

MUSCLE-STRENGTHENING ACTIVITIES – WHAT COUNTS?

Besides aerobic activity, you need to do things to make your muscles stronger at least 2 days a week. These types of activities will help keep you from losing muscle as you get older or after a prolonged period of inactivity due to illness or injury.

To gain health benefits, muscle-strengthening activities need to be done to the point where it's hard for you to do another repetition without help. A **repetition** is one complete movement of an activity, like lifting a weight or doing one sit-up. Begin moderately by performing 3-5 repetitions and then try to do 8—12 repetitions per activity that will count as 1 set. Try to do at least 1 set of muscle-strengthening activities, but to gain even more benefits, do 2 or 3 sets.

There are many ways you can strengthen your muscles, whether it's at home or the gym. The activities you choose should work all the major muscle groups of your body (legs, hips, back, chest, abdomen, shoulders, and arms). You may want to try:

- Lifting weights
- Working with resistance bands
- Doing exercises that use your body weight for resistance (push-ups, sit ups)
- Heavy gardening (digging, shoveling)
- Yoga

(Centers for Disease Control and Prevention, 2015)

Updates in Visuals and Uniformity

Adapted from the Healthy Body Awareness Project

Strength

Brake Push
Position: Sitting in a chair
Equipment: Chair and exercise band
Approximate Time: 1 minute

Instructions:

- Put your right foot in the middle of the band and hold one end of the band in each hand.
- Lift right foot off the ground and pull the band tight around the foot
- Point your right toe against the resistance of the band (like a driver stepping on the brakes).
- Relax the foot, then point the toe again. Repeat 8-15 times.
- Repeat exercise with left foot
- Do 1-3 sets.



Adapted from the Healthy Body Awareness Project

Strength

Carding Wool
Position: Sitting in a chair
Equipment: Exercise band
Approximate Time: 1 minute

Instructions:

- Begin by sitting up straight in your chair and holding the exercise band with both hands about 6 inches apart.
- Lift your left arm out in front of you with your palm facing up, still holding the band.
- Bring your right band over on top of your left band, and then pull your right arm back, as if you were carding wool.
- You will feel the band stretch tightly as you pull your right arm back - pull back as far as you can comfortably.
- Repeat this motion slowly 8-15 times.
- Switch hands and repeat the motion of carding wool 8-15 times.
- Do 1-3 sets.



Updates in Visuals and Uniformity

STOP THE TRUCK

(Legs)

Position: Sitting Upright in Chair

Equipment: Resistance Band, Chair

Execution: 1-3 sets, 8-10 repetitions, Rest 30-90 seconds between sets, Breath naturally through the movement.

Instructions:

- Safely place your right foot in the middle of the band and secure each end of the band in both fists.
- Lift right knee as high as comfort allows while leaving left foot flat on the ground.
- While keeping stretched band in both fists near the sides of ribs, push your right foot back to the floor. Slowly return knee back to elevated position. After appropriate repetitions are completed on right leg, switch band over to left foot and repeat motion as directed in execution.



CARDING WOOL

(Upper Back, Shoulders, Arms)

Position: Sitting Upright in Chair

Equipment: Chair, Resistance Band

Execution: 1-3 sets, 8-10 repetitions, Rest 30-90 seconds between sets, Breath naturally through the movement.

Instructions:

- Begin by sitting upright in your chair and holding exercise band with both hands about 6 inches apart.
- While holding both ends of the band in your fists, lift your left arm in front of you and turn your fist over.
- Bring your right fist over the top of your left, then pull your right arm back and stretch the band.
- You will feel the band stretch tightly as you pull the right arm back as far as comfort allows.
- Switch hands and repeat motion of carding wool as directed in execution.



Language links

“Among those who identified as American Indian or Alaska Native alone, older people reported speaking a Native North American language more often than younger people (Table 3). Over 1 in 5 of these people aged 65 and over spoke such a language, while about 1 in 10 people aged 5 to 17 did so. Among those who identified as American Indian or Alaska Native in combination, people aged 65 and over were slightly less likely than other people to speak a Native North American language”

www.census.gov/topics/population/language-use/data.html

Adapted from the Healthy Body Awareness Project

Strength

Wall-Ups

Position: Standing close to a wall

Equipment: A wall

Approximate Time: 1 minute

Instructions:

- Begin by standing up straight facing the wall. Stand about arms-length from the wall.
- Place your hands straight out in front of you on the wall.
- Keep hands a little more than shoulder width apart.
- Bend elbows and lower body toward the wall like doing a push-up
- Breathe in as you lean towards the wall and breathe out as you push your body away from the wall.
- Do 8-15 wall-ups slowly. Rest for 1 minute. Do 1-3 sets.



Language links

“Native languages have been in decline for decades; currently Ethnologue lists 245 indigenous languages in the United States, with 65 already extinct and 75 near extinction with only a few elder speakers left”

-Lillian Sparks, Commissioner, Administration for Native Americans

<https://www.acf.hhs.gov/ana/preserving-native-languages-article>

CHUKKA PUSH

*Chukka means House or Wall in the Choctaw language
(Strength)

Position: Standing close to a wall

Equipment: Sturdy wall in house or building

Execution: 1-3 sets, 8-10 repetitions, Rest 30-90 seconds between sets, Breathe naturally through the movement.

Instructions:

- Begin standing tall (chest high, shoulders back) facing a wall. Stand about arms-length from the wall.
- Raise both arms in front of your shoulders and move forward until palms are comfortably flat against the wall.
- Keeping your hands shoulder-width apart, bend elbows and allow your entire body to lower towards the wall.
- Breathe in as you lean towards the wall and breathe out as you push your body away from the wall. Push your body only the length of your arms and repeat as directed in Execution section.




Safety Concerns and Measures


Adapted from the PATHWAYS Project

Important tips for exercising


1. Start slowly if you have not exercised for awhile.
2. Remember to "warm up" before exercising and "cool down" after exercising.




 *Warm up* includes stretching your muscles and beginning slowly, building up to a faster pace.

 *Cool down* includes stretching your muscles and slowing down your pace until you are relaxed.

3. To help you stick with the type of exercise you choose, remember to:

 Choose a time you are more likely to stick with exercising.

 Reward yourself for exercise.

Adapted from the PATHWAYS Project

Everyday Physical Activities

Walking
Riding a bike
Tag
Swimming
Hoeing
Stacking wood
Herding sheep
Push ups
Skate boarding
Softball
Dancing
Aerobics
Hiking
Hide and seek
Soccer
Basketball

Working Muscles

Breathing Hard

Sweating

Warm Face

Faster Heartbeat

Frisbee
Running
Hacky sack
Kickball
Track and field
Volleyball
Lacrosse
Field hockey
Jump rope
Jogging
Riding horses
Roller skating
Roller blading
Sit ups
Climbing rocks

These and others were extracted due to confusing formats or possibilities of promoting unsafe habits within exercise.

Safety advisories are assembled in a singular place and age specific advisories are within the individual books.

Guidance for the Laymen

We understand not all instructors have a background in physiology, kinesiology, or training. The goal for those placed in charge of the care and promotion of our Elders is to be clear minded, focused, and not confused about their tasks.

Recommendations for class composition and safety cues (BP, BG, Topical signals) will be included and specific to older adults.

Guidance for the Laymen

POSTURE IS PARAMOUNT

- **Balance is Key-** Falls are the number one cause of injury among seniors and many other hazardous situations can ensue as a result of even one fall. As the trainer, ensure that your patients are speedily accessible, have stability tools at arms-length, and you constantly reinforce mindfulness regarding balance.
- **Prevent structural degeneration-** Conditions such as osteoporosis and osteoarthritis can occur at faster rates when the body attempts to overcorrect itself due to bad posture. When the spinal column is constantly positioned out of line, the muscles, tendons, ligaments, and vital organs can work excessively to as a result.
- **Correct posture helps us feel better-** Having proper posture increases blood circulation, which carries higher amounts of oxygen and better quality blood sugar throughout our bodies. When the brain and body are better replenished, it can lead to improved chemical flow.
- **Start right-** Begin each exercise by ensuring that the chest is nice and high by pressing shoulder blades together gently. Shoulders should remain natural and not raised near the ears. Upper body should be centered over the hips and not over the knees or feet.
- **Test your posture-** You can check your own posture by taking a deep breath. Breathe very deeply and notice if your chest is rising and falling or if your stomach is pressing forward. If your posture is correct, your stomach should be moving forward, indicating good diaphragmatic breathing.

SET UP YOUR SPACE

If you have one patient, or you have many, ease of access matters when it concerns our precious elders. Many times you may not have the most ideal space, or even too much, but you must be concerned how you will use your space. Consider the following topics regarding how you set up your class and make additions as they fit your culture, resources, or community requirements:

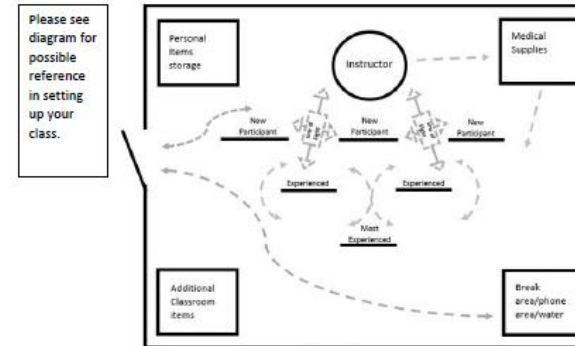
Mobility- Ensure you will have enough space area to maneuver without obstructing exercise or making excessive moves that could be hazardous to you.

Line of Sight- Being able to see all of your class or individual develops trust and increases quality

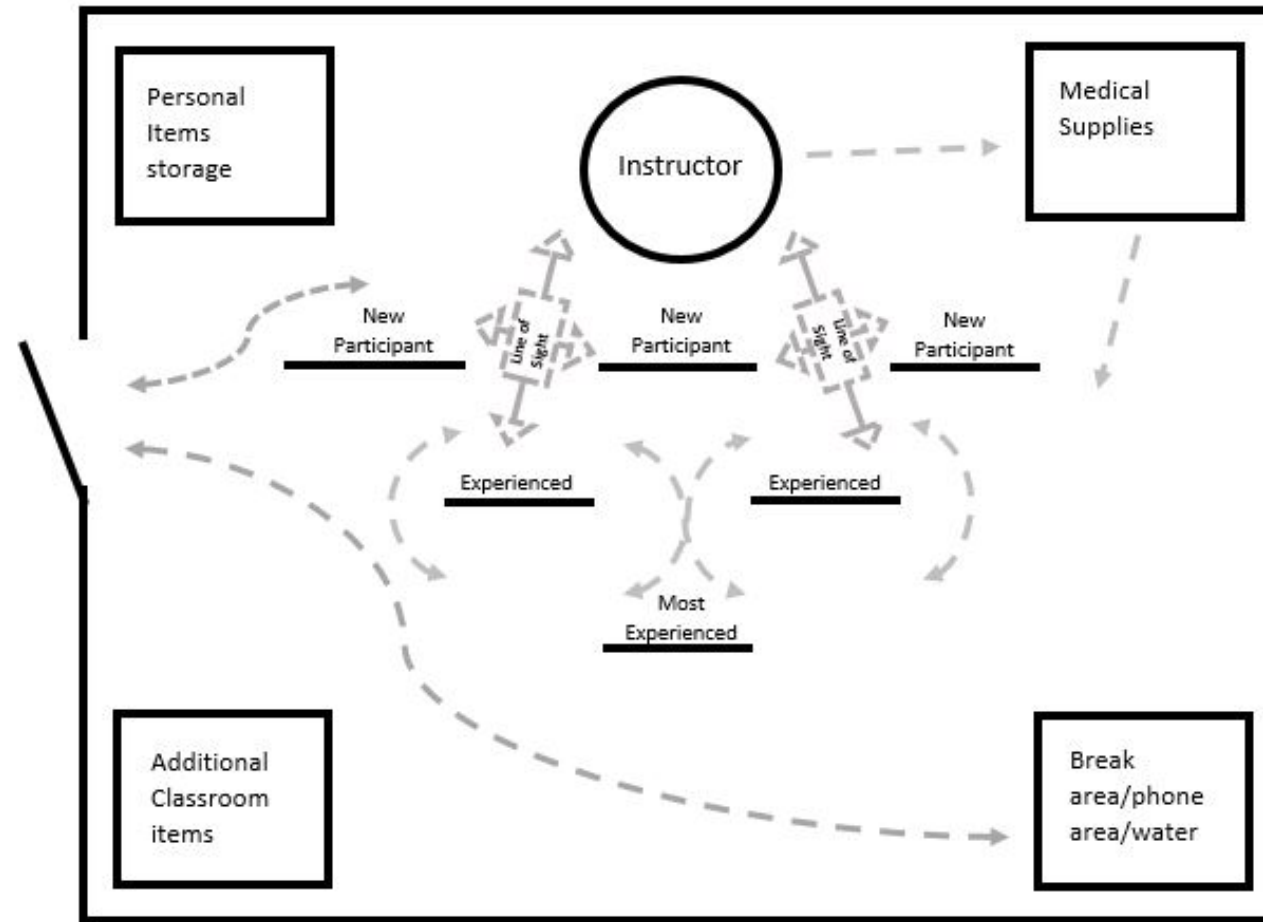
Facility access- Restrooms, break areas, medical supplies, water locations, etc., will all need to be accessible.

Emergency Plan- Your space needs to have a clearly visible and accessible exit in the event of an emergency. Make sure you are well versed in your facility's emergency alert systems and relay the appropriate directions to your patient(s).

Ratio- If you cannot confidently ensure that safety and quality of experience can be accomplished being a solo instructor, explore avenues of staffing or class participant numbers to gain the best situation for your patient(s).



Guidance for the Laymen



Practical Exercise

STOP THE TRUCK

(Legs)

Position: Sitting Upright in Chair

Equipment: Resistance Band, Chair

Execution: 1-3 sets, 8-10 repetitions, Rest 30-90 seconds between sets, Breath naturally through the movement.

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- Safely place your right foot in the middle of the band and secure each end of the band in both fists.
- Lift right knee as high as comfort allows while leaving left foot flat on the ground.
- While keeping stretched band in both fists near the sides of ribs, push your right foot back to the floor. Slowly return knee back to elevated position. After appropriate repetitions are completed on right leg, switch band over to left foot and repeat motion as directed in execution.



Conclusion

Updates continue and quality of revisions will continue to be tested. Our Elders deserve that.

The Books will no longer be distributed in the previous cardboard case but they will be made available online for download and print at instructors preference.

Digital video components have been discussed and are still heavily considered to support the laymen instructor and independent user

Questions

