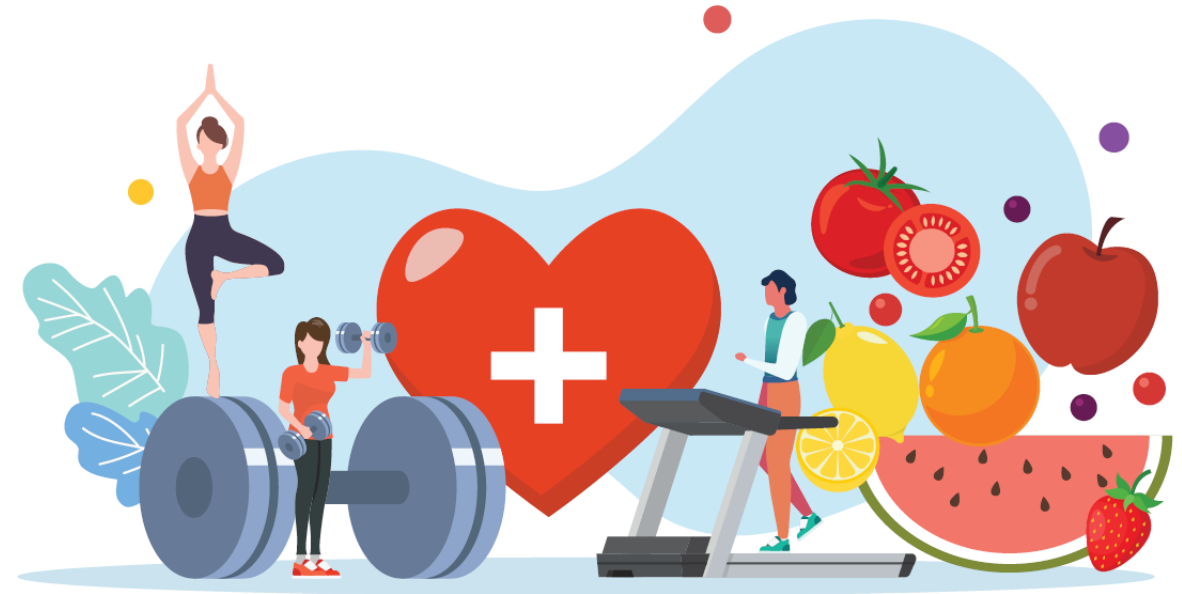


Tools And Strategies For Nutrition And Exercise Quality Improvement Project ECHO Model Sessions

Session 4: Solutions for Physical
Activity Improvement



April 1, 2026

Housekeeping Items

- All participants muted upon entry
- Engage in chat
- Raise hand if you would like to unmute
- Meeting is being recorded
- Slides and recording link will be sent via email
- *Let us know about you!*
 - State
 - Organization name
 - Title
 - What brings you here today



National Center for Health in Public Housing

- This session is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$668,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit [HRSA.gov](https://www.hrsa.gov).



An examination of national health survey records shows Americans are exercising less, which could be driving the rising obesity rates.

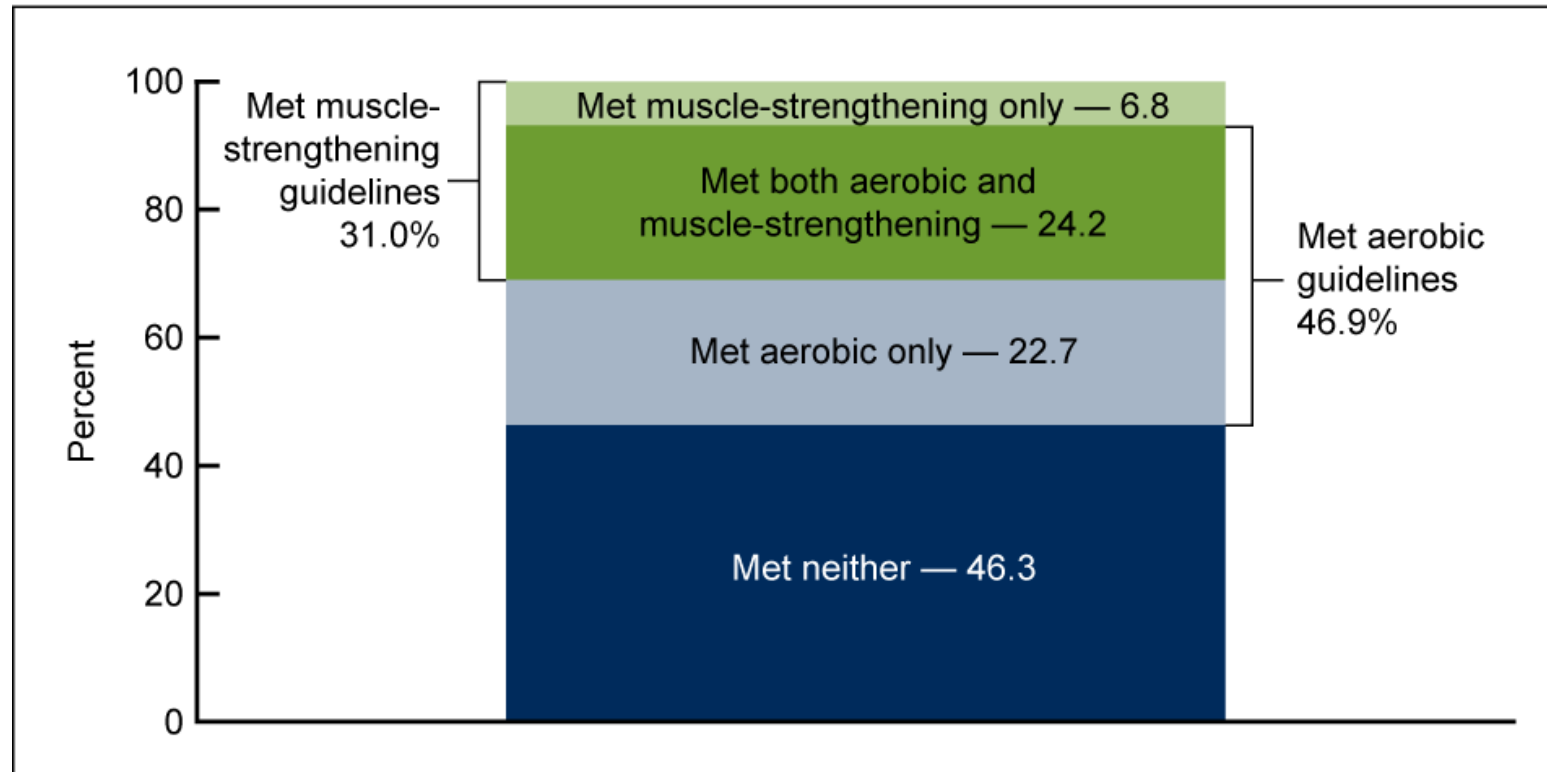
- The percentage of women reporting no physical activity jumped from 19 percent to 52 percent between 1988 and 2010; the percentage of inactive men rose from 11 percent to 43 percent over the same period.
- Obesity also increased, climbing from 25 to 35 percent in women and from 20 to 35 percent in men.

Source: Bach, B. (2014). Lack of exercise, not diet, linked to rise in obesity, Stanford Research shows.

<https://med.stanford.edu/news/all-news/2014/07/lack-of-exercise-not-diet-linked-to-rise-in-obesity--stanford-.html>



Figure 1. Percent distribution of adults aged 18 and over who met 2018 Physical Activity Guidelines for Americans for aerobic and muscle-strengthening activities: United States, 2020



NOTES: Adults met 2018 federal physical activity guidelines if they met both aerobic and muscle-strengthening guidelines outlined in U.S. Department of Health and Human Services 2018 *Physical Activity Guidelines for Americans, 2nd edition* (available from: <https://health.gov/paguidelines>). Aerobic guidelines for adults recommend at least 150 to 300 minutes a week of moderate-intensity, or 75 to 150 minutes a week of vigorous-intensity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Muscle-strengthening guidelines for adults recommend activities of moderate or greater intensity involving all major muscle groups on 2 days a week or more. Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population. Access data table for Figure 1 at: <https://www.cdc.gov/nchs/data/databriefs/db443-tables.pdf#1>.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2020.

Exercise Prescriptions and Tracking Progress

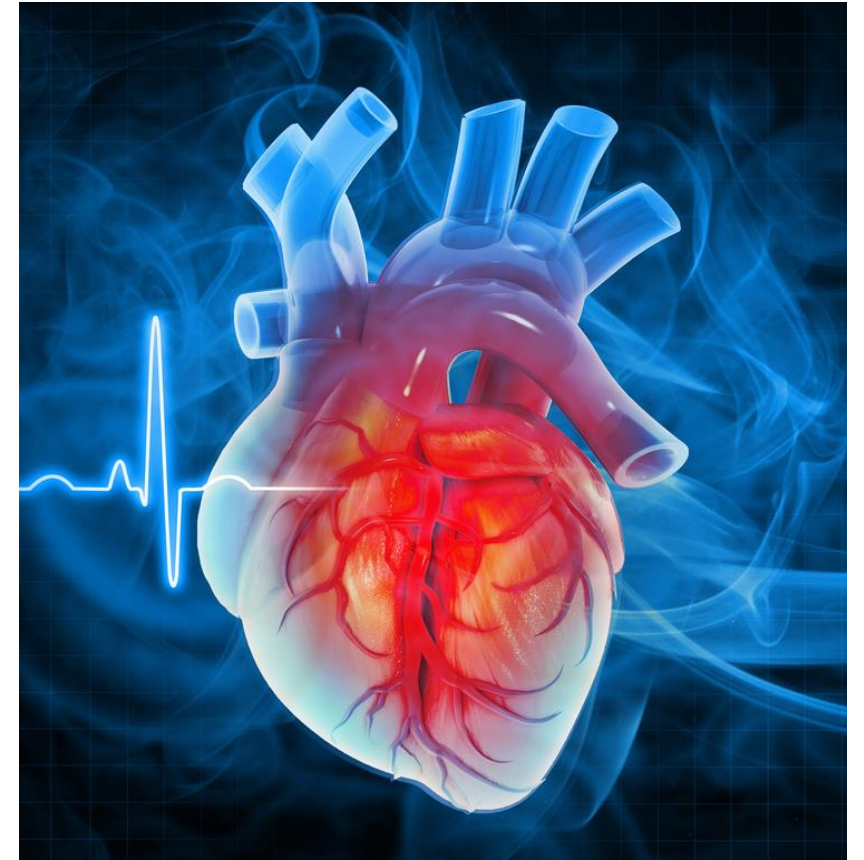
- Some **literature reviews** show that people adhere better to an exercise regime when their doctor prescribes it. They may simply not know where to start, or they may benefit from knowing they have support.
- When building an exercise program, consider four main things: frequency, intensity, time, and type, or FITT.
 - Here is an example of what an exercise prescription might look like:
 - Frequency: Five days a week
 - Intensity: Moderate
 - Time: 30 minutes a day
 - Type: Walking at a pace where you can talk but not sing
 - Volume: Distance walked (keep track to gauge progress)
 - Progression:
 - Start at 10 minutes a day and increase by five minutes each month
 - Increase the distance as time increases

Medical Evaluations Before Initiating a New Exercise Program

A person with obesity should undergo a medical evaluation before starting an exercise regimen. You will want to examine a patient's cardiovascular and pulmonary health, as well as their mobility and range of motion. Different forms of exercise exist for individuals with varying levels of fitness, ranging from those who struggle to stand or walk to those who can move freely.

It's also important to understand the person's current level of physical activity. Avoid making assumptions that someone is inactive simply because they are obese. PAR-Q+ for people of any age.

You may also consider the potential need to adjust medications, particularly diabetes or blood pressure medications.



Physical Activity Readiness Questionnaire

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	1. Has your doctor ever said that you have a heart condition <u>and</u> that you should only do physical activity recommended by a doctor?
<input type="checkbox"/>	<input type="checkbox"/>	2. Do you feel pain in your chest when you do physical activity?
<input type="checkbox"/>	<input type="checkbox"/>	3. In the past month, have you had chest pain when you were not doing physical activity?
<input type="checkbox"/>	<input type="checkbox"/>	4. Do you lose your balance because of dizziness or do you ever lose consciousness?
<input type="checkbox"/>	<input type="checkbox"/>	5. Do you have a bone or joint problem that could be made worse by a change in your physical activity?
<input type="checkbox"/>	<input type="checkbox"/>	6. Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?
<input type="checkbox"/>	<input type="checkbox"/>	7. Do you know of <u>any other reason</u> why you should not do physical activity?

If you answered:	YES to one or more questions
	<p>Talk to your doctor by phone or in person BEFORE you start becoming much more physically active or BEFORE you have a fitness appraisal. Tell your doctor about the PAR-Q and which questions you answered YES.</p> <ul style="list-style-type: none"> You may be able to do any activity you want – as long as you start slowly and build up gradually. Or, you may need to restrict your activities to those which are safe for you. Talk with your doctor about the kinds of activities you wish to participate in and follow his/her advice. Find out which community programs are safe and helpful for you.
	NO to all questions
	<p>If you answered NO honestly to <u>all</u> PAR-Q questions, you can be reasonably sure that you can:</p> <ul style="list-style-type: none"> Start becoming much more physically active – begin slowly and build up gradually. This is the safest and easiest way to go. Take part in a fitness appraisal – this is an excellent way to determine your basic fitness so that you can plan the best way for you to live actively.
	<p>Delay becoming much more active:</p> <ul style="list-style-type: none"> If you are not feeling well because of a temporary illness such as a cold or a fever – wait until you feel better; or If you are or may be pregnant – talk to your doctor before you start becoming more active.
	<p>Please note: If your health changes so that you then answer YES to any of the above questions, tell your fitness or health professional. Ask whether you should change your physical activity plan.</p>

Source: Alameda County. (n.d.). *Physical Activity Readiness Questionnaire (PAR-Q) and safety guidelines*.
<https://www.acgov.org/wellness/documents/parQandSafety.pdf>

Knowledge Check

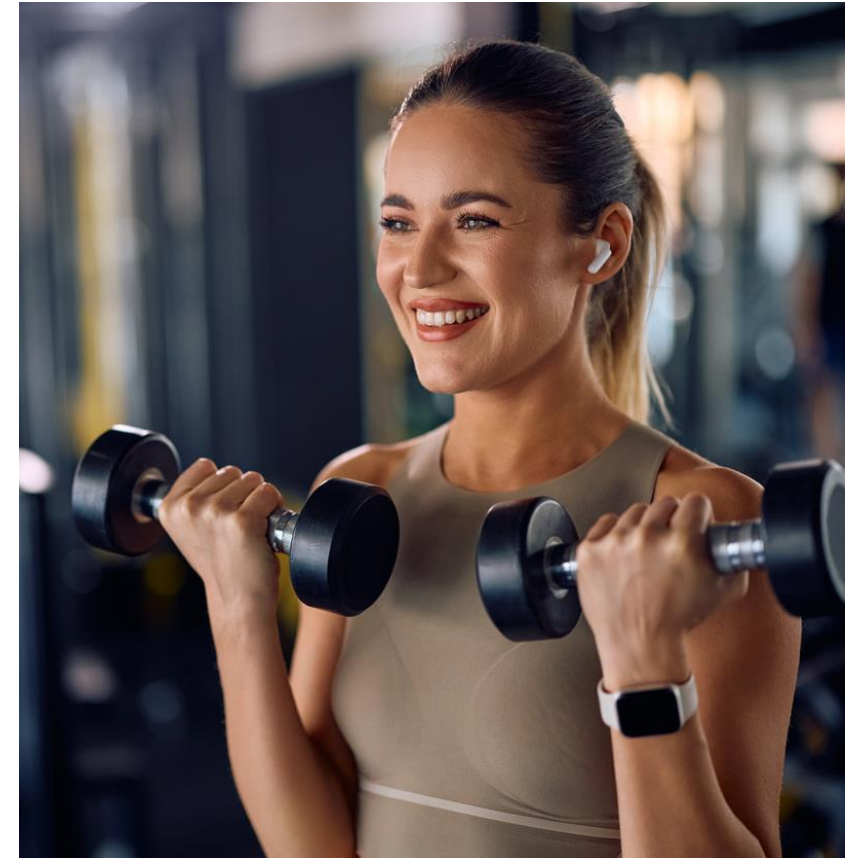
What are some benefits of physical activity?



Types of Exercises for Addressing Obesity

- Aerobic training
- Strength or resistance
- Balance and flexibility
- HIIT workout

The Department of Health and Human Services and the American College of Sports Medicine recommend 150 minutes per week of moderate intensity **exercise** or 75 minutes per week of vigorous exercise, in addition to at least 2 sessions of **resistance training** weekly alongside stretching and flexibility work . With those recommendations, that's 30 minutes of moderate intensity exercise 5 days a week – at the very minimum. Some with **obesity** who have lost weight may even complete upwards of 300 to 420 minutes a week of moderate intensity exercise to help prevent weight regain.



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)

Benefits of Physical Activity for Youth

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)

New Health Benefits

Short Term Benefits

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

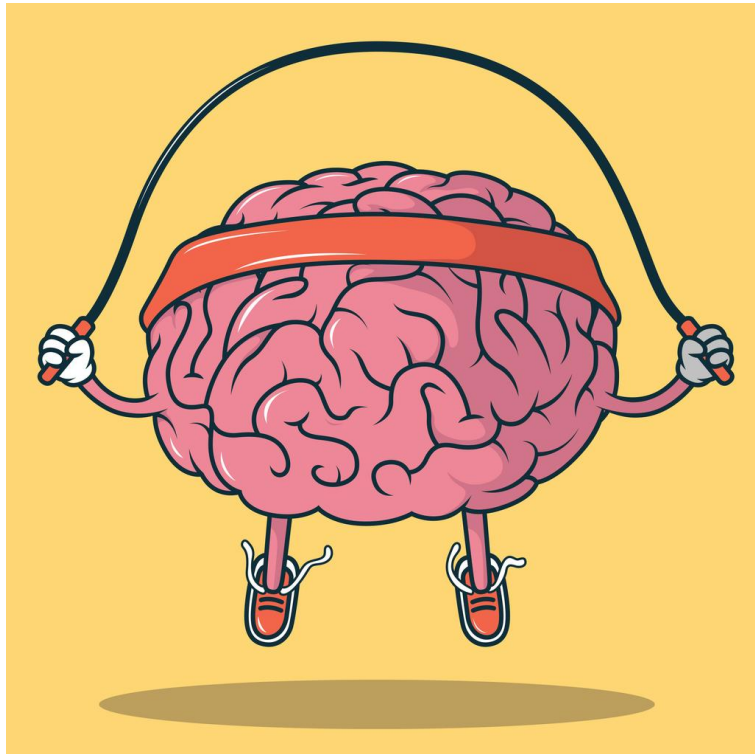
Long Term Benefits

- 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

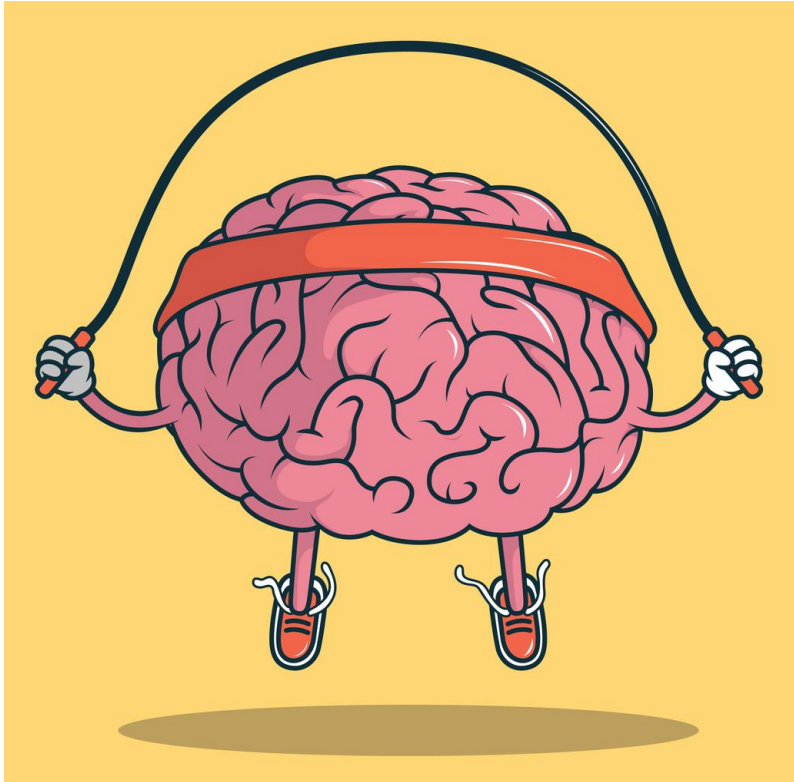
- Decrease pain of osteoarthritis
- Reduce disease progression for hypertension
- Reduce disease progression for type 2 diabetes
- Reduce symptoms of anxiety and depression
- Improve cognition for those with dementia, multiple sclerosis, ADHD, and Parkinson's disease

Brain Health



Outcome	Population	Benefit	Acute	Habitual
Cognition	Children ages 6 to 13 years	Improved cognition (performance on academic achievement tests, executive function, processing speed, memory)	●	●
	Adults	Reduced risk of dementia (including Alzheimer's disease)		●
	Adults older than age 50 years	Improve cognition (executive function, attention memory, crystallized intelligence,* processing speed)		●
Quality of life	Adults	Improved quality of life		●

Brain Health Cont.



Outcome	Population	Benefit	Acute	Habitual
Depressed mood and depression	Children ages 6 to 17 years and adults	Reduced risk of depression Reduced depressed mood		●
Anxiety	Adults	Reduced short-term feeling of anxiety (state anxiety)	●	
	Adults	Reduced long-term feeling and signs of anxiety disorders		●
Sleep	Adults	Improved sleep outcomes (increased sleep efficiency, sleep quality, deep sleep; reduced daytime sleepiness frequency of use of medication to aid sleep)		●
	Adults	Improved sleep outcomes that increase with duration of acute episode	●	

What Works to Increase Physical Activity?

**For Individuals
or
Small Groups**

- Guidance from peers or professionals
- Support from others
- Technology

**For
Communities**

- Point of decision prompts
- School policies and practices
- Access to indoor or outdoor recreation facilities or outlets
- Community-wide campaigns
- Community design

Key Guidelines for School-aged Children And Adolescents



- ✓ It is important to provide young people opportunities and encouragement to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.
- ✓ Children and adolescents ages 6 through 17 years should do 60 minutes (1 hour) or more of moderate-to-vigorous physical activity daily:
 - **Aerobic:** Most of the 60 minutes or more per day should be either moderate- or vigorous-intensity aerobic physical activity and should include vigorous-intensity physical activity on at least 3 days a week.
 - **Muscle-strengthening:** As part of their 60 minutes or more of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least 3 days a week.
 - **Bone-strengthening:** As part of their 60 minutes or more of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days a week.



Key Guidelines for Adults



- ✓ Adults should move more and sit less throughout the day. Some physical activity is better than none. Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.
- ✓ For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- ✓ Additional health benefits are gained by engaging in physical activity beyond the equivalent of 300 minutes (5 hours) of moderate-intensity physical activity a week.
- ✓ Adults should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.

Key Guidelines for Older Adults



The key guidelines for adults also apply to older adults. In addition, the following key guidelines are just for older adults:

- ✓ As part of their weekly physical activity, older adults should do multicomponent physical activity that includes balance training as well as aerobic and muscle-strengthening activities.
- ✓ Older adults should determine their level of effort for physical activity relative to their level of fitness.
- ✓ Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.
- ✓ When older adults cannot do 150 minutes of moderate-intensity aerobic activity a week because of chronic conditions, they should be as physically active as their abilities and conditions allow.



Key Guidelines for Adults with Chronic Health Conditions and Adults with Disabilities Cont.



- ✓ When adults with chronic conditions or disabilities are not able to meet the above key guidelines, they should engage in regular physical activity according to their abilities and should avoid inactivity.
- ✓ Adults with chronic conditions or symptoms should be under the care of a health care provider. People with chronic conditions can consult a health care professional or physical activity specialist about the types and amounts of activity appropriate for their abilities and chronic conditions.



Key Guidelines For Women During Pregnancy And The Postpartum Period



- ✓ Women should do at least 150 minutes (2 hours and 30 minutes) of moderate-intensity aerobic activity a week during pregnancy and the postpartum period. Preferably, aerobic activity should be spread throughout the week.
- ✓ Women who habitually engaged in vigorous-intensity aerobic activity or who were physically active before pregnancy can continue these activities during pregnancy and the postpartum period.
- ✓ Women who are pregnant should be under the care of a health care provider who can monitor the progress of the pregnancy. Women who are pregnant can consult their health care provider about whether or how to adjust their physical activity during pregnancy and after the baby is born.



Key Guidelines for Safe Physical Activity

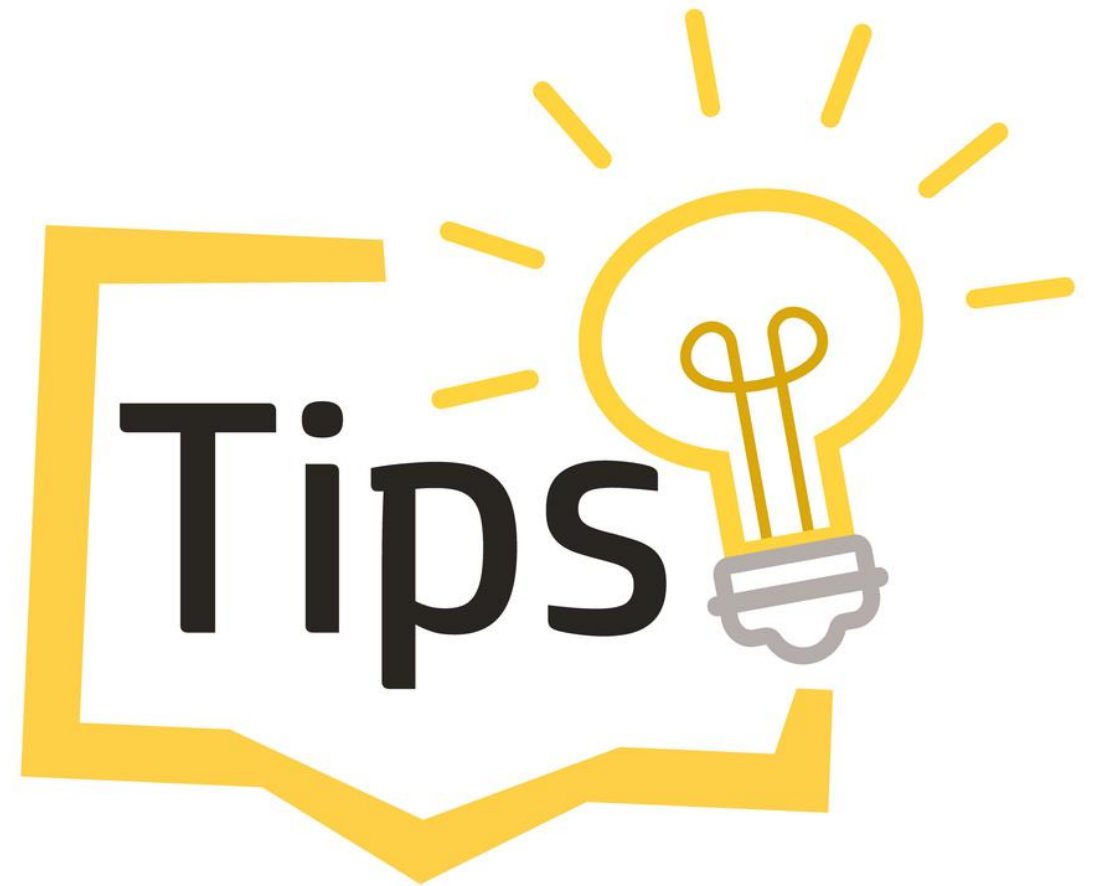
To do physical activity safely and reduce risk of injuries and other adverse events, people should:

- Understand the risks yet be confident that physical activity can be safe for almost everyone.
- Choose types of physical activity that are appropriate for their current fitness level and health goals, because some activities are safer than others.
- Increase physical activity gradually over time to meet key guidelines or health goals. Inactive people should “start low and go slow” by starting with lower-intensity activities and gradually increasing how often and how long activities are done.
- Protect themselves by using appropriate gear and sports equipment, choosing safe environments, following rules and policies, and making sensible choices about when, where, and how to be active.
- Be under the care of a health care provider if they have chronic conditions or symptoms. People with chronic conditions and symptoms can consult a health care professional or physical activity specialist about the types and amounts of activity appropriate for them.



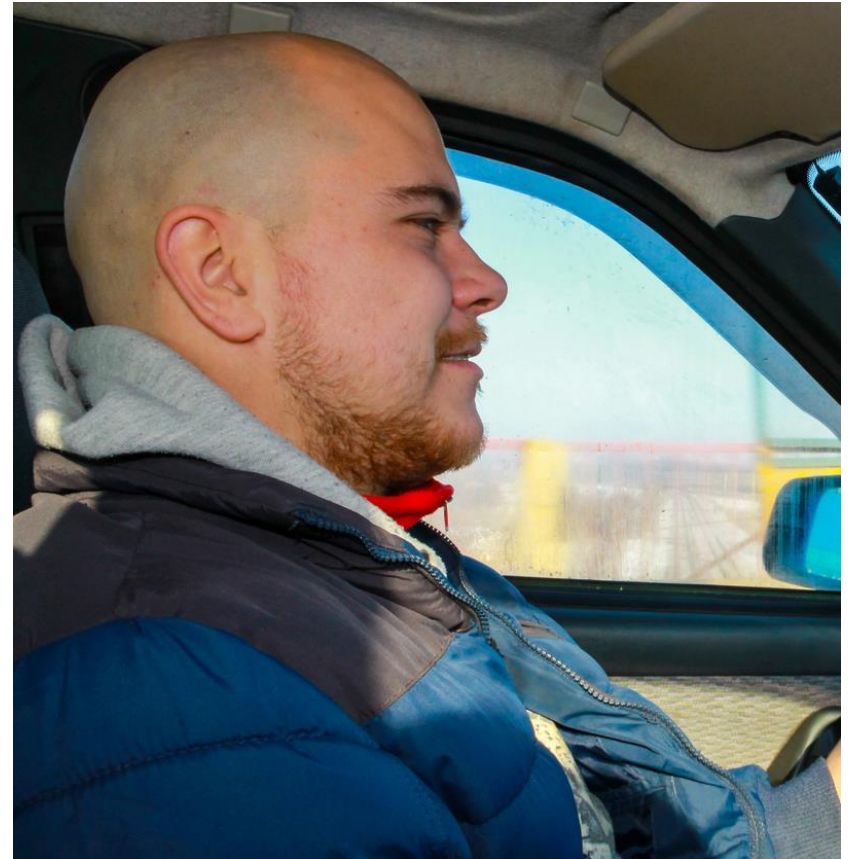
How Can We Help the Following Patients?

- “I find exercise difficult and uncomfortable.”
- “I feel self-conscious when I exercise.”
- “Physical activity makes me hungrier.”
- “I’m afraid of getting injured.”
- “It’s too hard to stick with exercise.”



Case Study

Mr. Smith is a 45-year-old man with a history of hypertension that is under good control using medication. He works as a taxi driver for eight hours per day. He smokes one and a half packs of cigarettes per day and has done so for over 20 years. His father died from a heart attack at age 60. He has no signs or symptoms of cardiorespiratory disease. He has just completed a medical check-up, and the report shows a body height of 173cm and body weight of 88kg, total cholesterol of 8 mmol/L, and fasting glucose of 5.4 mmol/L. His BMI was 30 kg/m², his hip circumference was 40 inches (102 centimeters), and his waist girth was 47 inches (119 centimeters).



Case Study Discussion

What are Mr. Smith's
health risk factors?



Case Study



Mrs. R.'s severe obesity and inability to lose weight on her own prompted her referral to the clinical weight loss center. Her physician is concerned that without intervention she will develop Type 2 diabetes and heart disease.

Her clinical findings are as follows:

- Age: 62
- Gender: Female
- Comorbid conditions: Hypertension, insulin resistance, hypothyroid, previous ankle injury
- Height: 64" | Weight: 253 pounds | Total body water: normal
- BMI: 43.4 kg m⁻² | Body fat: 44.2% | Muscle mass: 30.4 pounds
- BP: 132/84 mm hg | HbA1C: 6.1% | TSH: 2.2 mU/L
- Medications: Lisinopril, Metformin, Levothyroxine, Sertraline

She is currently seeing a dietician in the office to address her diet. For several years, she exercised on and off. She saw success with group classes but has increasingly felt uncomfortable in a group setting due to insecurities. Currently, she is walking her dog once or twice per day for 10 minutes at a very low intensity and isn't doing any strength or flexibility training.

Case Study Discussion

- Risks factors
- Contraindications
- Additional information
- Special considerations



Q & A SESSION



Complete Our Post Evaluation



CONTACT INFORMATION

<p>Robert Burns Program Director Bobburns@namgt.com</p>	<p>Jose Leon, MD Chief Medical Officer jose.leon@namgt.com</p>
<p>Kevin Lombardi, MD, MPH Director of Research Kevin.lombardi@namgt.com</p>	<p>Fide Pineda Sandoval, MPH, CHES Training and Technical Assistance Manager fide@namgt.com</p>
<p>Olajumoke Oladipo, MPH Health Communications and Research Analyst Olajumoke@namgt.com</p>	<p>Please contact our team for Technical Support at 703-812-8822 or info@nchph.org</p>

THANK YOU!

