ACSM/AHA PHYSICAL ACTIVITY GUIDELINES

Guidelines for adults over age 65

(or adults 50-64 with chronic conditions, such as arthritis)

Basic recommendations from ACSM and AHA:

Do moderately intense aerobic exercise 30 minutes a day, five days a week

Or

Do vigorously intense aerobic exercise 20 minutes a day, 3 days a week

And

Do eight to 10 strength-training exercises, 10-15 repetitions of each exercise twice to three times per week

And

If you are at risk of falling, perform balance exercises

And

Have a physical activity plan.

Key points to the guidelines for older adults

Although the guidelines for older adults and adults with chronic conditions are similar to those for younger adults, there are a few key differences and points to consider.

- **Start, and get help if you need it.** The general recommendation is that older adults should meet or exceed 30 minutes of moderate physical activity on most days of the week; however, it is also recognized that goals below this threshold may be necessary for older adults who have physical impairments or functional limitations.

- **Functional health** is an important benefit of physical activity for older adults. Physical activity contributes to the ease of doing everyday activities, such as gardening, walking or cleaning the house.

- **Strength training** is extremely important. Strength training is important for all adults, but especially so for older adults, as it prevents loss of muscle mass and bone, and is beneficial for functional health.

- **If you can exceed the minimum recommendations,** do it! The minimum recommendations are just that: the *minimum* needed to maintain health and see fitness benefits. If you can exceed the minimum, you can improve your personal fitness, improve management of an existing disease or condition, and reduce your risk for health conditions and mortality.

- **Flexibility** is also important. Each day you perform aerobic or strength-training activities, take an extra 10 minutes to stretch the major muscle and tendon groups, with 10-30 seconds for each stretch. Repeat each stretch three to four times. Flexibility training will promote the ease of performing everyday activities.

McLaren

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Exercise Guidelines

DO NOT EXERCISE

If you are experiencing a recent change in your general health:

1. Fever
2. Respiratory infection (cold, flu, pneumonia, etc.)
3. Chest pain or discomfort
4. Dizziness
5. Shortness of breath (more than usual)
6. Recent Surgery – without permission of your physician, especially eye surgery.
7. It is less than 1 hour since your last meal
8. Extremes in weather
9. If your blood sugar is above 250 or less than 80
   (Diabetics see your specific guidelines)

STOP EXERCISE or REDUCE YOUR WORKLOAD

If you experience any of these during your session:

1. Extreme shortness of breath
2. Chest pain or discomfort (Cardiac patients should slow down first, then stop, & take nitro if chest pain persists for more than 2-3 minutes)
3. Nausea
4. Dizziness
5. Unusual Fatigue
6. Leg pain / muscle cramps (Patients with PVD should stop until the pain subsides, then continue)
7. Heart rate above "Target Heart Rate Range

Pre – Work Stretch Program

Stretching "Safe Practices"

Stretching should not hurt: If you are doing a stretch and feel pain, discontinue the stretch. It is normal to feel a pulling sensation in the muscle, but *pain is to be avoided.*

Do not bounce when stretching: It is important to stretch the muscle and hold it for a few seconds. This longer stretch, rather than a bounce, gives the muscle more time to "breathe."

Remember the rule of opposites: Our bodies are designed to move. Whatever you have been doing for awhile, gently perform a different or opposite activity to "balance" your body.

Stretching, when done correctly, should not be painful. If you have had any recently physical problems or surgery, please consult your health care provider before you start a stretching or exercise program.

Arm Stretch
←

Extend arms above head, clasp hands. Alternate hands.

Hold and repeat stretches with other arm / hand.

Neck / Arm Stretch
←

Gently lower left ear to left shoulder and reach behind back with left arm to stretch right arm.

Hold and repeat stretches with other arm / hand.

Cross Arm Stretch
←

Extend right arm across chest. Gently grasp left hand around right elbow, and pull in. Extend fingers as you stretch.

Hold & repeat stretch with other arm/hand.

Extension Stretch
←

Extend right arm above head, then lower hand behind head to left shoulder. Gently grab right elbow with left hand & pull slowly.

Hold & repeat stretch with other arm/hand.

Wrist Stretch
←

Extend right arm out, palm away. With opposite hand, gently grab right hand /fingers with left hand and pull back slowly.

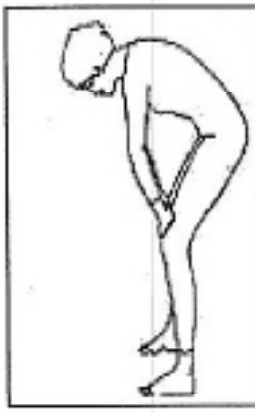
Hold & repeat stretches with other arm/hand.

Side Stretch
←

Reach overhead-grab one wrist with the other hand, or clasp hands. You can also do with arms at your side or in sitting position.

Slowly lean to one side until you feel an easy stretch.

Hold for several seconds. Repeat to the other side.



Low Back Stretch
← **(forward)**

Bend your knees slightly. Place your hands on your knees & support your upper body.

Slowly bend your arms—allowing your back to gently stretch upward.

Hold for several seconds.

Low Back Stretch
← **(backward)**

Place your hands on the small of your back. You can be sitting or standing.

Keep your head facing forward & knees slightly bent.

Gently bend backward at the low back until you feel an easy stretch.

Hold for 2 -3 seconds.

Thigh Stretch
←

Grab your ankle.

Point your knee towards the ground.

Gently pull the leg back to increase the stretch.

Benefits of Strength Training

Longfellow is on a mission. We have committed the next ten years to educate our community to the value and immense benefits of strength training. There are numerous reasons for incorporating strength training into your workout and the top nine are:

1. **Increased Metabolic Rate**—Strength training increases the body's metabolic rate, causing the body to burn more calories throughout the day.

2. **Increasing and Restoring Bone Density**—Inactivity and aging can lead to a decrease in bone density and brittleness. Studies have clearly proven that consistent strength training can increase bone density and prevent Osteoporosis.

3. **Increased Lean Muscle Mass and Muscle Strength, Power, and Endurance**—Every one can benefit from being stronger. We can work harder, we can play more, we can workout longer, and we can be more alive.

4. **Injury Prevention**—A wide variety of sports related or life related injuries can be prevented by strengthening muscles and joints.

5. **Improved Balance, Flexibility, Mobility and Stability**—Stronger and more resilient muscles improves our balance, which means more comfortable living and fewer falls or accidents.

6. **Decreased Risk of Coronary Disease**—Participation in a consistent strength training program has a wide variety of affiliated health benefits including decreasing cholesterol and lowering your blood pressure.

7. **Aids Rehabilitation and Recovery**---One of the best ways to heal many types of injuries is to strengthen muscles surrounding the injured area. The stronger your muscles, the quicker the healing process.

8. **Enhanced Performance in Sports or Exercise**---No matter what your favorite sport or physical activity, with the proper strength training program, your performance can unquestionably be improved, and in some cases, dramatically so,

9. **Aging Gracefully**---There is no more important reason to making strength training a consistent part of your life, than to ensure you age gracefully. Physical activity keeps us alive and vibrant. Strength training ensures we are strong enough to participate in aerobic activities, outdoor recreation, and sports. Strong seniors fall down less. If they do fall down, their stronger bodies are more resilient, are injured less by the fall, and are able to heal more quickly after an injury.

Exercise works like a drug to help fight heart disease

Reuters

(Monday, January 27, 2003)

Exercise can act like a drug on the blood vessels, reducing the risk of heart disease by literally getting the blood flowing, US researchers said on Thursday.

It works in a surprising way, reducing inflammation, which has recently joined high blood pressure and high cholesterol as a leading known cause of heart disease, the researchers said,

The blood stresses the walls of blood vessels as it passes over them, reducing inflammation in a way similar to high doses of steroids, the researchers report in Friday's issue of Circulation Research.

"Inflammation in blood vessels has been linked to atherosclerosis, a hardening of the arteries, and here we see how the physical force of blood flow can cause cells to produce their own anti-inflammatory response," Scott Diamond of the University of Pennsylvania's Institute for Medicine and Engineering, said in a statement.

"Conceivably, exercise provides the localized benefits of glucocorticoid--just as potent as high doses of steroids, yet without all the systemic side effects of taking the drugs themselves," added Diamond, who led the study.

"Perhaps this is a natural way in which exercise helps protect the vessels, by stimulating an anti- inflammatory program when the vessels are exposed to elevated blood flow."

The findings could help explain why exercise works so well to reduce the risk of heart disease, Diamond said.

"We're not talking about running a marathon here. We're just talking about getting the blood moving at high arterial levels," he said.

Studies in recent years have found that cells and chemicals linked with inflammation can be found in arterial clogs, and much research is now focusing on ways to reduce this inflammation. For instance, teams are investigating whether giving patients antibiotics or anti- inflammatory drugs lowers their risk of heart disease. Diamond has worked using human arteries in the lab but wants to move into animals to confirm his hypothesis.

"Think of blood flow as a stream--whenever a stream branches off you get small areas of recirculation eddies or pools of stagnant water," he said. "These same situations of disturbed flow irritate the endothelium (the lining of the blood vessels). When blood vessels branch off, all the arterial flotsam--fats and activated blood cells--can clump and stick at these hot spots for atherosclerotic plaque formation," he added.

"Perhaps, elevated blood flow may alter these disease-prone regions to relieve some of the localized inflammation."

Reference: January 2003 edition of American Heart Association's Circulation Research

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14 DAY WALKING DIARY OF:

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DATE	TIME OF DAY	HEART RATE	MINUTES WALKED	HEART RATE	RATE YOUR SHORTNESS OF BREATH	COMMENTS

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