Being Active
We benefit from all movement we do, but we get great health benefits from doing planned physical activities. Everyone can choose different activities, but the important thing is to get 30 minutes a day, most days of the week. (Children need 60 minutes per day.)

<table>
<thead>
<tr>
<th>Activities of Daily Living (ADL):</th>
<th>Planned Physical Activities (PPA):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities/movements that you perform in your everyday life.</td>
<td>Additional activities that are pre-planned in your day and result in health benefits.</td>
</tr>
<tr>
<td>Examples: walking to your car, light housework, walking in the grocery store, carrying children, etc.</td>
<td>Examples: going for a walk (in addition to what you would normally do), stretching, biking, swimming, etc.</td>
</tr>
</tbody>
</table>

Let's Warm Up
Warm-ups are important to help the body prepare for activity, and to prevent injuries. Warm-ups are usually around 5 minutes in length. They include stretching, deep breathing, and a gradual increase in movement. This gets the blood flowing and gently stretches the muscles.

For a simple warm-up:
- Start with several stretches. Reach your hands above your head toward the ceiling for a full body stretch. Take a deep breath in as you stretch up, and a deep breath out as you release back down.
- Start marching in place, keeping your arms moving (either punching or moving at your sides) for 10-20 seconds. Then, lift your knees higher and move your arms faster for 10-20 seconds.
- Next, switch to front kicks with punches for 10-20 seconds.
- Finally change to a light jog or fast march for 10-20 seconds.

Cool Down
After doing planned physical activities, a cool-down is needed. A proper cool-down brings the heart rate down to a safe level before stopping movement. It is also a time to stretch the muscles to help prevent muscle soreness and to increase flexibility.

To cool-down:
- Start by lightly jogging or marching in place with your arms still moving for 10-20 seconds.
- Then, march slowly in place and let your arms fall to your sides for 10-20 seconds.
- Slow down your march for 10-20 seconds to bring the heart rate down to a safe level.
- Finally, reach for the ceiling again for a full body stretch. Repeat 3-4 times, taking a deep breath in when you reach up, and a deep breath out when you release down.

Warming up and cooling down can help you to work harder during your physical activities and helps your body feel better after working out. Stretching during the warm-up and cool-down can improve flexibility, and gives you more freedom of movement to do the things you need to do, and the things you like to do. It helps to prevent injuries through all stages of life and can help you perform daily activities.
Being Active

Lesson 2
Taking your Pulse

Just like all your muscles, the heart needs exercise to become stronger and work better. Regular moderate activity helps you climb stairs and play with your children without running out of breath and getting tired. Taking your pulse (or heart rate) and the talk test are two ways to measure the intensity of aerobic or cardio physical activity.

Taking your Pulse (or heart rate)

Use your index and middle fingertips  
Carotid artery  
Radial pulse

<table>
<thead>
<tr>
<th>Intensity</th>
<th>Talk Test</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Talk Test** | When you do sedentary or light activities, you should be able to sing while doing the activity. | • Watching TV  
• Computer/video games  
• Talking on the phone  
• Housework |
| If you are doing moderate activities, you should be able to carry on a conversation comfortably while engaging in the activity. | • Walking  
• Light yard work  
• Light weight lifting  
• Stretching/Yoga  
• Dancing |
| If a person becomes winded or too out of breath to carry on a conversation, the activity they are doing can be considered vigorous activity. | • Jogging/running  
• Soccer, basketball, or volleyball  
• Heavy yard work  
• Swimming  
• High intensity aerobics |

Participating in at least 30 minutes of moderate to vigorous activity (shaded areas) all or most days of the week will improve heart health. Be sure to gradually warm up and cool down when doing activities that raise your heart rate.
Walking is the single most popular adult exercise in this country. And why not? It’s safe, easy, and cheap. Best of all, it makes us look and feel great. Studies show that a regular schedule of brisk walking has several benefits.

- Improves circulation and helps heart and lungs work more efficiently.
- Burns calories to help lose extra pounds or maintain ideal weight. An average 150-pound person walking at a speed of about 2 miles per hour will burn about 240 calories in an hour.
- Eases tension. You can walk to think—or walk to not think.
- Boosts energy.

What makes a walk a workout?
The short answer is pace and time or distance. When you are walking to exercise, you don’t stroll or stop to window shop. After an initial warm-up, you move out at a steady pace that is brisk enough to make your heart beat faster and to cause you to breathe more deeply. Walking needs to be done for at least 30 minutes if your body is to achieve any “training effect.”

Use the “talk test”
Benefits are highest when you walk as briskly as your condition permits. The “talk test” can help you find the right pace. If you are too breathless to talk, you’re going too fast. If you develop dizziness, pain, nausea, or other unusual symptoms when walking, slow down or stop. If your problem persists, see your physician before walking again.

Wondering what to wear?
Choose shoes that are comfortable and provide good support. Cushioned shoes with a slightly elevated heel and arch supports are preferable. Good running shoes are good walking shoes. Select loose, comfortable clothes for your walks. In cold weather, it’s better to wear several layers of light clothing than one or two heavy layers. The extra layers help to trap heat, and they are easy to shed if you get too warm. At night wear light colored clothing or a reflecting band. To maintain the proper body heat, always wear a cap during cold weather.

Walk with style
These tips will help you feel (and look!) better during and after your walking jaunts.

- Keep your head erect and back straight. Let your arms swing loosely at your sides.
- Stay relaxed, breathe deeply, and take comfortable steps.
- Always land on your heel and roll forward, finally pushing off the ball of your foot. Walking flat-footed or on the balls of your feet may cause fatigue or soreness.
- Toes should point straight ahead. “Toeing-in” and “toeing-out” are inefficient ways of walking and may aggravate or contribute to leg/hip joint problems.
- Always warm up (and cool down) with 5 minutes of slow walking. Stretch slowly afterwards to improve flexibility and reduce the likelihood of muscle soreness.
- Monitor your speed with the “talk test.”
- Walk safe. Watch for dogs, cars, and bicycles. Face oncoming traffic. Do not assume drivers see you.
- Compete only with yourself. Individuals of similar ages and build vary widely in their capacity for exercise. Focus on steadily improving your own performance, not walking farther or faster than someone else.
Guidelines for a sample walking program

No one can tell you exactly how far or how fast to walk at the start, but the following guidelines can help you develop a plan for making walking a regular habit. If you’ve been inactive for a long time, give yourself time to get into shape. Build up slowly using these guidelines as goals—otherwise you might be tempted to push yourself too far too quickly so that walking for exercise stops being enjoyable.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Warm up (walk slowly)</th>
<th>Target zone exercising (walk briskly)</th>
<th>Cool down (walk slowly)</th>
<th>Total time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session A</td>
<td>5 minutes</td>
<td>5 minutes</td>
<td>5 minutes</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Session B</td>
<td>Repeat above pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session C</td>
<td>Repeat above pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Continue with a MINIMUM of three exercise sessions per week

<table>
<thead>
<tr>
<th>Week 2</th>
<th>Warm up (walk slowly)</th>
<th>Target zone exercising (walk briskly)</th>
<th>Cool down (walk slowly)</th>
<th>Total time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 3</td>
<td>5 minutes</td>
<td>Walk briskly 7 minutes</td>
<td>5 minutes</td>
<td>17 minutes</td>
</tr>
<tr>
<td>Week 4</td>
<td>5 minutes</td>
<td>Walk briskly 9 minutes</td>
<td>5 minutes</td>
<td>19 minutes</td>
</tr>
<tr>
<td>Week 5</td>
<td>5 minutes</td>
<td>Walk briskly 11 minutes</td>
<td>5 minutes</td>
<td>21 minutes</td>
</tr>
<tr>
<td>Week 6</td>
<td>5 minutes</td>
<td>Walk briskly 13 minutes</td>
<td>5 minutes</td>
<td>23 minutes</td>
</tr>
<tr>
<td>Week 7</td>
<td>5 minutes</td>
<td>Walk briskly 15 minutes</td>
<td>5 minutes</td>
<td>25 minutes</td>
</tr>
<tr>
<td>Week 8</td>
<td>5 minutes</td>
<td>Walk briskly 18 minutes</td>
<td>5 minutes</td>
<td>28 minutes</td>
</tr>
<tr>
<td>Week 9</td>
<td>5 minutes</td>
<td>Walk briskly 20 minutes</td>
<td>5 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Week 10</td>
<td>5 minutes</td>
<td>Walk briskly 23 minutes</td>
<td>5 minutes</td>
<td>33 minutes</td>
</tr>
<tr>
<td>Week 11</td>
<td>5 minutes</td>
<td>Walk briskly 26 minutes</td>
<td>5 minutes</td>
<td>36 minutes</td>
</tr>
<tr>
<td>Week 12</td>
<td>5 minutes</td>
<td>Walk briskly 28 minutes</td>
<td>5 minutes</td>
<td>38 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walk briskly 30 minutes</td>
<td>5 minutes</td>
<td>40 minutes</td>
</tr>
</tbody>
</table>

Source: “Exercise and Your Heart” National Institutes of Health (1981)

REMEMBER—If you are looking for a path to fitness, you can walk there!

For more information visit these Web sites:

Iowa State University Extension to Families, Nutrition—http://www.extension.iastate.edu/healthnutrition/
Iowa State University Extension Publications—http://www.extension.iastate.edu/store/

Flexibility helps to prevent injuries and improve simple motions of everyday life. Being flexible allows for better movement and reduced pain in joints, making it easier to perform daily activities.

It is important to warm your muscles before stretching. Also, remember to stretch after the cool-down portion of each workout.

- Do not bounce into a stretch or during a stretch. Movements should be in slow and steady.
- Mild discomfort when stretching is normal. But you should never feel pain. If you do, it means you are stretching too far and you need to reduce the stretch so it doesn’t hurt.
- Always breathe throughout the stretch; never hold your breath.
- Avoid locking your joints in place during stretches. (Example: Try to avoid locking elbows and knees.)
- Hold each stretch for 15-30 seconds. Repeat each stretch 2-4 times, trying to extend farther each time.

### Upper Back & Side Stretch
Lace your fingers and push your hands away from your chest, rolling your shoulders forward. Then, press your hands straight up in the air and to the left and right sides.

### Shoulder Stretch
Bring your arm across your body and stretch out the back part of your shoulder while keeping the thumb pointed down. Make sure you are not pressing directly on the elbow with the opposite hand. Repeat with the other arm.

### Triceps Stretch
Lift your arm straight up in the air and bend at the elbow. Gently press the elbow back with the opposite hand. Lift your head and look straight ahead. You should feel a stretch in the back part of the upper arm. Repeat with the other arm.

### Hamstring Stretch
Hold on to the back of a chair or countertop and bend forward at the hips, keeping your back and shoulders straight and your knees together. You should feel a stretch in the back of your thighs.

### Quadriceps Stretch
Hold on to the back of a chair or countertop and slowly pull your right ankle toward your buttocks, keeping your back and shoulders straight, knees together. You should feel a stretch in the front of your thigh.

### Calf Stretch
Put both hands on the wall and press one leg back straight, keeping your front knee bent. You should feel a stretch in your calf muscle.
Building muscle helps:
- Build strong bones
- Control your body fat
- Reduce your risk of injury
- Improve your sleep and your sense of well-being.

Begin strength training gradually, using proper techniques. This will prevent injuries while giving you the greatest benefit. Work up until you can do these exercises 15 times in a row, three times, with a rest in between.

**Bicep Curl** works the front part of upper arm.

- Sit straight up in a chair and place one end of the band under your right foot. Hold the other end with your right hand, palm facing up.
- Keeping your elbow close to your rib cage, bend the elbow to raise the hand up to shoulder height.
- Count 1-2 seconds on the way up, give a slight hold for 1 second at the top, and count 3-4 seconds on the way down.
- Repeat with the other arm.

**Triceps Extension** works the back side of upper arm.

- While seated or standing, grip one end of the band in your right hand and drape the band over your right shoulder behind your back.
- Reach around to your lower back with your left hand and grab the bottom end of the band – reach up band until it is snug or develops a small amount of tension in the band between your hands.
- Keeping your palm facing your head and your elbow in line with the shoulder and by the ear, extend the elbow and lift hand toward the ceiling and back down.
- Count 1-2 seconds up, hold for 1 second and count 3-4 seconds down.
- Repeat with the other arm.
Lateral Shoulder Raises work the shoulder.

- Sit on one end of your stretch band and grab the other end with the nearer hand, with your palm facing down.
- Sitting straight in your chair and facing forward, keep a slight bend in the arm and raise your arm to shoulder height straight out to the side and back down.
- Count 1-2 seconds up, hold for 1 second, count 3-4 seconds down.
- Repeat with the other arm.

You can also perform the shoulder raise to the front and back working the front and back parts of the shoulder.

Chest Press works the chest.

- Put the band around your shoulders like a shawl with the band on the outside of your shoulders. Wrap the ends of the band around your hands.
- With your palms facing downward, stretch both arms straight out in front of your chest and try to push your hands together so they touch, then bring your hands back toward your chest.
- Count 1-2 seconds out, hold for 1 second while your hands touch, count 3-4 seconds back to your chest.

Muscles need to rest between workouts. You can alternate days between upper body and lower body exercises, or you can do both upper and lower body exercises on the same day. Do strength training exercises 2-3 times each week with 1-3 days rest between training sessions.
Everyone can do strength exercises, you just have to choose your level of intensity.

Gradually increase the intensity of your workout by:
- increasing the number of times you do the exercise (number of repetitions or sets)
- increasing the resistance (increase the weight, shortening the stretch band or use a heavy band).

Work up until you can do 3 sets of 15 repetitions (total of 45) of these exercises.

**Frankenstein Walk works the thigh and buttocks muscles.**

- Stand and place both of your feet on the stretch band, shoulder width apart.
- Hold one end of the band in each hand.
- Keep a tight grip on the band with your knees slightly bent.
- While keeping space between your feet and knees, walk forward, backward, and shuffle side to side.
- Repeat walking in various motions until you feel fatigued. Take a few seconds to rest and repeat 1-2 more times.

**Chair Squat works the hamstring, quadriceps, and buttocks muscles.**

- While sitting straight in a chair, stand and sit using the arm rests or table for support. Start with 2 sets of 3 repetitions.
- **Second Progression:** Repeat the same exercise, but do not use the arm rests or table for support.
- **Third Progression:** Repeat the same exercise, but allow yourself to barely touch the chair, or hover over the chair as you perform the sitting motion.
- **Fourth Progression:** Repeat the same exercise motion, but this time take away the chair and perform the squat using the chair or a table for support.
Reverse Leg Lifts works the buttocks muscles.

- Stand behind a chair with your back and neck straight, holding onto the chair for support with your feet slightly apart.

- Slowly lift one leg straight backwards keeping your knee straight and without pointing your toes or bending your upper body forward.

- Lift the leg backwards for 1-2 seconds, hold for 1 second, and release the leg back down for 3-4 seconds.

- Repeat with the other leg, starting out with 2 sets of 6 repetitions.
Since stress is here to stay, everyone (adults and children) need to develop methods to relax. Relaxation is needed to lower blood pressure, respiration, and pulse rate, as well as release muscle tension, and ease emotional strain.

Deep breathing techniques and exercise help you feel successful and in control. Try to practice deep breathing once a day and build up to 5-10 minutes a day.

There are many variations of deep breathing. They all involve breathing slowly and deeply and can all be done sitting in a chair. Include your children in your deep breathing sessions. It will help them relax, also.

<table>
<thead>
<tr>
<th>Ocean Breath</th>
<th>Snake Breath</th>
</tr>
</thead>
<tbody>
<tr>
<td>For thousands of years the ocean has breathed against the shores of country after country.</td>
<td>When they are coiled and resting, snakes look around calmly, and when they move, they are slow and smooth.</td>
</tr>
<tr>
<td>Learn this breath while seated in a comfortable cross-legged position on the floor or seated in a chair with your feet on the floor.</td>
<td>Sit up tall. Take a deep breath in, filling up your whole body.</td>
</tr>
<tr>
<td>Inhale and exhale deeply through the mouth. On the exhales, begin to tone the back of the throat, slightly constricting the passage of air. Imagine that you are fogging up a pair of glasses.</td>
<td>Pause and breathe out slowly and smoothly making a hissing sound for as long as you can.</td>
</tr>
<tr>
<td>Once you are comfortable with the exhale, begin to apply the same toning of the throat to the inhales. This is where the name of the breath comes from: it sounds like the ocean. (It also sounds like Darth Vader.)</td>
<td>Repeat for 3-5 rounds, feeling yourself slow down and become calmer each time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elephant Breath</th>
<th>Bunny Breath</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elephants shower themselves with their own trunks. Choose something to shower yourself with—sparkles, love, laughter, strength.</td>
<td>Bunnies are very alert. Keep yourself awake and alert with this cleansing breath.</td>
</tr>
<tr>
<td>Stand with your feet wide part. Link your hands and dangle your arms in front of you like an elephant trunk.</td>
<td>Sit on your shins with your back straight, shoulders wide and chest lifted (or sit cross legged or in a chair if that feels better).</td>
</tr>
<tr>
<td>Inhale through your nose as you raise your arms high above your head and lean back.</td>
<td>Keeping your chin down, take three big sniffs, one right after the other.</td>
</tr>
<tr>
<td>Exhale though your mouth as you swing your arms down through your legs.</td>
<td>Then exhale on a long release, as though you are sighing out through your nostrils.</td>
</tr>
<tr>
<td>Repeat for 3 rounds.</td>
<td>Repeat for 5 to 7 rounds.</td>
</tr>
</tbody>
</table>