

# AEROBIC EXERCISE PLAN

## Step 1: WARM UP

Aerobic exercise starts warming up your body to work out safely. The warm-up is a must-do before starting aerobic exercise — it allows your blood vessels to relax, open up and increase the blood flow to your heart and muscles, including the heart muscle.

### How to warm up safely

- Warm up for AT LEAST 5 MINUTES.
- Begin slow-and-easy to get your body working
  - If you walk for your exercise, then walk at a slow pace for a minimum of 5 minutes.
  - If you exercise on a stationary bike, then start out slowly with little or no resistance.

## F.I.T.T. FOR AEROBIC EXERCISE

### Frequency (How often?)

Aim to exercise most days of the week

### Intensity (How hard?)

The Rate of Perceived Exertion (RPE) is how hard you feel your body is working. It is based on how you physically feel during exercise and in this case, talking is the measure. If you can't talk without gasping, you are working too hard (see chart).

**Aerobic exercise should NOT be very hard.** For those just starting an exercise program, begin with an RPE of 3 (the yellow zone on the chart). That means the exercise is a little more difficult than easy, but not what you would say is hard. It is a medium level of exercise for you.

If you are starting with a higher fitness level, aim for moderate to hard RPE of 3 to 5 (yellow zone). The goal is to build up to 30 minutes. Pace yourself. If you are working in the red zone (RPE 6-10) you are working too hard. Get back to the yellow zone.

RPE	How it feels	What you can do
0.5	Very, very easy	Sing
1	Very easy	You have enough breath to sing
2	Easy	
3	Moderate	Talk
4	Somewhat hard	You have enough breath to talk or speak
5	Hard	
6		GASP
7	Very hard	You cannot say more than 4-6 words without gasping
8		You cannot say more than 2-3 words without gasping
9	Very, very hard	
10	Maximum	You cannot talk at all

## Time (How long?)

Exercising 150 minutes each week is good for your heart health.

- How long you work out each session depends on your fitness level and how hard you exercise. The goal is 30 to 60 minutes of aerobic exercise a session.
- If that is too much, you can break your exercise time down into smaller blocks of time, for example, three 10-minute walks in a day add up to 30 minutes of walking.

## Step 2: TYPE (WHAT KIND OF EXERCISE?)

### JUST STARTING TO EXERCISE? BEGIN BY WALKING

For many people, it is easy to start with walking. Below is an example of a walking program. Walk in the hallway, walk the length of your driveway, walk in the mall, walk a block, walk for 10 minutes. **Remember you are starting slow and easy.** You may need to plan rest areas or places to stop and sit along the way. This program can be used for biking, stationary bike, water walking and swimming .

At home	Warm up	Training period	Cool down
<b>Week 1</b> Every second day		10-minute walk at an easy pace	
<b>Week 2</b> Every Second day	5-minute easy walk	10-minute walk at a faster pace 5-minute easy walk	5-minute easy walk and stretches
<b>Week 3</b> 4 times a week	5-minute easy walk	15-minute walk at a faster pace	5-minute easy walk and stretches
<b>Week 4</b> 4 times a week	5-minute easy walk	20-minute walk at a faster pace	5-minute easy walk and stretches
<b>Weeks 5-6</b> At least 5 days a week	10-minute easy walk	25-30 minute walk at a faster pace Start to pump or swing arms Walk up gentle hills leaning slightly forward	5-minute easy walk and stretch for each walk

There are many types of aerobic activities you can do, **depending on your fitness level**, joint health, ability and interest. Here are some examples of activities you can start — or return to — as your fitness improves.

- Walking
- Bicycling / stationary bike
- Jogging / running
- Cross country skiing on flat ground
- Yoga
- Fitness / aerobic classes
- Aqua fit / swimming

## LISTEN TO YOUR BODY

### Safety tip

**Your starting point is where you are right now. Increase your activity slowly, steadily and safely.**

The best way to know if you are doing an exercise safely is to “listen to your body”. You know when things are wrong in your body or breathing. The following information can help you decide if the way you feel is **NORMAL** or not during exercise.

During slow and steady exercise it is <b>NORMAL</b> to feel:	During slow and steady exercise it is <b>NOT NORMAL</b> to feel:
Comfortable	Pain, pressure or heaviness in your chest, neck, jaw, shoulder, arm or back (angina symptoms)
Aware of your own breathing, but not out of breath	Dizzy or light headed
Able to talk	Cold and clammy
Slightly tired	An overwhelming or unusual sense of fatigue or weakness
Dry or slightly sweaty	Nauseated or sick to your stomach
Relaxed	A sense of anxiety or foreboding

You should not be working too hard during exercise. Remember the information about RPE on pages 57 — you should be working in the yellow zone, not the red zone.



1. If you are feeling **NOT NORMAL** symptoms, **STOP** the exercise.
2. If the symptoms do not go away within a few minutes, **CALL 9-1-1** or your local emergency number.

## ANGINA DURING EXERCISE

Angina is a warning sign (see pages 4-7). **A small number of people** with angina are told by their doctor to take nitroglycerine 5-10 minutes before they start each exercise session. Ask your doctor or pharmacist if using nitroglycerin before exercising is right for you.



If you have been prescribed nitroglycerin and you feel angina during exercise:

1. Sit or lie down and take your normal dosage of nitroglycerin.
2. If angina does not go away after 5 minutes, repeat the dose and rest for 5 minutes more.
3. If no relief, use a third dose and **IMMEDIATELY** call 9-1-1 or your local emergency number. Do not drive yourself to the hospital.

## Step 3: COOL DOWN

To **safely** end your exercise program, cool down for at least five minutes of slow, gentle exercise. The blood that has been used in the exercising muscles will flow evenly throughout the body and not pool in the working muscles.

### How to cool down safely

Cool down for at least five minutes — aim to get back to an RPE of 1-2.

- If you were walking or cycling, then slow down until it feels easy.
- Finish with gentle stretching while your muscles and joints are still warm. (See Stretching program, page 74)

# RESISTANCE EXERCISE PLAN

Resistance exercise (strength training) makes your muscles stronger and helps you exercise for longer. This makes it easier for you to do everyday things like climb stairs, lift groceries and do the things you need to do at work.

## WHEN IS IT SAFE TO BEGIN RESISTANCE EXERCISE?

You should have received information about when to start resistance exercise from your cardiologist, cardiac surgeon or family doctor. If you haven't, go back and ask for it.

Always wait until your resting blood pressure is under control, before you start resistance exercise.

### General guidelines

Speak to your doctor before starting resistance exercise if:

- You have an aneurysm, hernia, eye complication due to diabetes, joint pain that doesn't go away, are frail, or have any other health issues.
- You have had a recent surgery or heart attack.

After a **heart attack** you should:

- Start resistance exercise when your healthcare team tells you it is safe to do so.

After **angioplasty** without a heart attack, you should:

- Not lift anything over 5 pounds or lift light weights until your healthcare team tells you it is safe to do so.

After **open heart surgery**, you may need to:

- Wait up to 12 weeks before beginning to exercise. When your healthcare team tells you it is safe, start very slowly using either your own body weight (as shown in the photos on page 65) or a light band, or a light weight. Listen to your body (see page 59). You should feel comfortable during the exercise.
  - Do not strain — progress gradually as your strength improves.
  - Do not rush — this takes time.
  - Stop if you feel angina, or if your body feels wrong.

## Safety tip

Always breathe regularly when exercising and don't hold your breath. Resistance exercise should be about moving the muscles and returning to a starting position. Exercises that cause you to strain to hold a position or lift too heavy a weight may make you hold your breath and increase your blood pressure.

### Tip

Remember to count:  
Lift 1-2-3, breathe in  
Lower 1-2-3, breathe out

## Step 1: WARM UP

A warm-up allows your blood vessels to relax, open up and increase the blood flow to your heart and muscles including the heart muscle. A warm-up of at least five minutes will get your body ready so you can exercise safely.

### How to warm up safely

- Warm up for at least 5 minutes.
- Before you start your resistance training, begin with an aerobic exercise at a slow easy pace. For example:
  - Walk at a slow pace for at least 5 minutes.
  - Exercise on a stationary bike, slowly, at an easy pace with little or no resistance.

## F.I.T.T. FOR RESISTANCE EXERCISE

### Frequency (How often?)

- 2-3 times per week with a rest day between sessions
- It is okay to do resistance training and aerobic workouts in the same day

### Tip

Your muscles will likely feel sore when you begin resistance training. This is normal.

## Intensity (how hard?)

The Rate of Perceived Exertion (RPE) is how hard you feel your body is working. It is based on the physical way your body feels during exercise.

Aim to work in the 3-5 RPE range (yellow zone in the chart below).

Resistance exercise should be a bit difficult, but not a lot.

If you are just starting an exercise program, begin with an RPE of 3. You should be easily able to do 2 or 3 repetitions of your exercise (repetitions are explained below under "Time").

If you have a well-developed fitness level, begin with a moderate to hard RPE of 3 to 5 (the yellow zone on the chart below).

The goal is to build up to 30 minutes. Pace yourself by working up to that bit by bit.

If you are in the red zone (RPE 6-10), you are working too hard. Get back to the yellow zone.

Your exercise effort		How hard?	
0	Nothing at all	Light effort	You can easily do 5-10 more repetitions
0.5	Very, very easy		
1	Very easy		
2	Easy		
3	Moderate	Moderate effort	You can easily do 2-3 more repetitions
4	Somewhat hard		
5	Hard		
6		Hard effort	It is hard to finish the last 2-3 repetitions
7	Very hard		
8			
9	Very, very hard		
10	Maximum		

## Time (How long?)

A Repetition or rep: Doing 1 complete exercise movement (1 arm curl)

A Set: Finishing a certain number of repetitions (10-15 curls)

For example two sets of 10 reps:

1. Do 10 arm curl exercises (1 set of 10 reps)
2. Rest 15-30 seconds
3. Do another 10 arm curl reps (another set).

Start with one set of 10 reps. Once you work up to two sets of 10-15 reps of each exercise, it will take you about 30 minutes to complete the program in this booklet.

## Tip

To gain strength, muscle mass and staying power, you must progress in your program. When you are able to perform 10-15 reps easily, increase the weight by one to two pounds or use a stronger resistance band (see below).

## Step 2: TYPE (What kind of exercise?)

Strength training exercises don't need a lot of equipment. Some use an inexpensive resistance exercise band, which can be found at most sporting goods stores. They come in different tension levels (light, medium, heavy). There are a few important things to know about using exercise bands:

- Before using the band, check it for tears or small holes.
- Make sure you have a firm but comfortable hand grip on the band.
- Adjust the length of the band so you have the right tension — loose enough so that you are able to go through the full range of motion while exercising, and tight enough to give you resistance.
- You can change the tightness (resistance) by adjusting your hand position on the band. If the exercise feels too easy, hold the band closer to the centre to shorten its length, or fold the band in half, doubling it, for even more resistance. For less resistance, hold it closer to the ends.
- If you are attaching or anchoring the band to an object, give the band a few tugs to make sure it is attached to something that won't move, such as a heavy piece of furniture, or buy a "door attachment" from the sporting goods store. Before you start, give the band a few tugs to test it.

Follow the resistance exercise plan on pages 65-73 of this chapter.

## Step 3: COOL DOWN

Walk slowly around the room for five minutes to allow your heart rate to return to resting and keep the blood moving, so it doesn't pool in the working muscles and make you feel dizzy.

### How to cool down safely

- Cool down for at least five minutes — aim to get back to an RPE 1-2.
- It's good to stretch after you have cooled down while your muscles and joints are still warm.
- See pages 74-77 in this chapter for stretching exercises.

# STRENGTH TRAINING PROGRAM

Follow these 10 exercises in the order they are shown here. They start with the large muscles and move to the small ones. Sometimes there are two options for each exercise. Choose one or the other of the options when provided.

## 1. Seated squat (hips, thighs and buttocks)



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1. Start with sitting on a chair with feet, shoulder-width apart, toes in front of knees and arms crossed across your chest.

2. Lean forward and stand up. Feel your weight on your heels, not your toes.

3. Slowly sit back down  
4. Do 10-15 reps, 1-3 sets.

To make this exercise harder, do the squat without sitting back down in the chair between reps (half squat). You may also hold a small weight in each hand.

**Tip** Move slowly, with control and remember to breathe.

## 2. Chest press (chest, shoulders and upper arms)



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1. Lie on your back on the floor with knees bent and feet flat on the floor.
2. Hold a weight in each hand.
3. Start with your elbows bent, on the ground.
4. Push the weight slowly up towards the ceiling and then slowly lower to the start position.
5. Do 10-15 reps, 1-3 sets.

**OR**

### Chest press with resistance band



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1. Sit in a chair.
2. Wrap resistance band around upper back and under the armpit. Hold a handle in each hand.
3. Push forward, straightening your arms.
4. Slowly go back to the start position.
5. Do 10-15 reps, 1-3 sets.

### 3. Dumbbell row (upper back)



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1. Stand at the side of a chair or low table.
2. Place one foot in front of the other, knees slightly bent.
3. Place the palm of your hand close to the chair on the flat surface. Hold weight in the opposite hand.
4. Start the lift with your arm hanging directly below your shoulder, palm facing in.
5. Pull the weight straight up, keeping it in line with your shoulder.
6. Slowly go back to start position.
7. Do 10-15 reps, 1-3 sets.
8. Move to the other side of the chair and change arms.

**OR**

### Standing or seated row with resistance band



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1. Loop the band around a stable piece of furniture or door handle, at your chest height.
2. Stand with feet, shoulder-width apart, one foot slightly in front of the other for stability.
3. Hold the band with your arms straight out.
4. Step back to create tightness or tension in the band. Pull your hands towards your chest, squeeze your shoulder blades together.
5. Slowly go back to start position.
6. Do 10-15 reps, 1-3 sets.

#### 4. Leg curl (hamstrings)

1. Stand behind a chair, using back of chair for support and balance.
2. Keeping your thighs in line with each other, slowly bend one leg at the knee, moving your heel towards your butt. Keep your support leg slightly bent.
3. Slowly lower your foot back to the ground.
4. Do 10-15 reps, 1-3 sets.
5. Change to the other leg.



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**OR**

#### Leg curl with resistance band)

1. Stand behind chair.
2. Place exercise band around one ankle, and step on the band with the opposite foot.
3. With one hand on the chair for support, lift the heel with the band, towards the butt. Keep your knees together and the other leg firmly on the floor.
4. Do 10-15 reps, 1-3 sets.
5. Change to the other leg.



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## 5. Heel raise (calf muscles)

1. Stand with your feet shoulder width apart.
2. Raise your heels off the floor lifting your body to stand on the balls of your feet, not on your toes. Count "1.2.3. Lift. 1.2.3. Lower."
3. Slowly lower your heels back to the floor.
4. Do 10-15 reps, 1-3 sets.



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To make this exercise harder, stand with your heels over the edge of a stair.



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## 6. Bicep curl (front of arm)



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1. Sit or stand, holding a weight in each hand with your arms at your sides, palms facing forward.



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2. Bend your elbows and lift the weight, keeping elbows tucked close to your sides.
3. Lower the hands slowly back to starting position.
4. Do 10-15 reps, 1-3 sets.

**OR**

### Seated bicep curl with resistance band



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1. Place your feet in the middle of the resistance band. Hold an end in each hand.



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2. Pull the band towards your shoulders, with elbows tucked close to your sides.
3. Lower the hands slowly back to start position.
4. Do 10-15 reps, 1-3 sets

**Tip** Keep your elbows tucked to your sides.

## 7. Tricep press (back of the arm)



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1. Lie on your back with your knees bent, feet flat on the floor.
2. Hold the weights and raise your arms straight above your shoulders.
3. Bending at the elbows slowly lower the weights towards your ears. Your elbows will point up to the ceiling.
4. Slowly straighten your elbows, lowering the weights back to the start position.
5. Do 10-15, 1-3 sets.

### OR Tricep wall press

1. Stand a few feet away from the wall. Place palms flat on the wall at shoulder level.
2. Bend elbows at the same time and lean towards the wall.
3. Slowly push away from the wall back to start position.
4. Do 10-15 reps, 1-3 sets.



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## 8. Abdominal exercise (stomach)



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1. Sit at the front of a chair. Cross your arms over your chest.
2. Tighten stomach muscles by pulling in your belly button.



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3. Slowly press forward as far as comfortable.
4. Slowly return to start position.
5. Do 10-15 reps, 1-3 sets.

**OR**

### Seated crunch with resistance band



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1. Sit in a chair with the band wrapped around the back for the chair. Hold the ends of the band in front of you.
2. Tighten stomach muscles by pulling in your belly button.



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3. Slowly press forward, as far as is comfortable.
4. Slowly return to start position.
5. Do 10-15 reps, 1-3 sets.

### 9. Bridge (stomach, butt and thighs)

1. Lie on your back, knees bent and feet flat on the floor.
2. Slowly lift your hips and butt off the floor to form a bridge. Keep your shoulders on the floor.
3. Tighten your stomach muscles and tuck your “tailbone” under.
4. Slowly lower your hips back to the start position.
5. Do 10-15 reps, 1-3 sets.

**Tip** Tuck your tail. Tighten your tummy.



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### 10. Four point (stomach and back)

1. Get on hands and knees (four points). Look at the floor; do not arch your neck.
2. Lift one back leg and push it straight out behind you.
3. Hold for three counts and lower back down.
4. Do the same with the other leg.
5. Do the same with your arms.
6. Do 10-15 reps, 3 sets.

**Tip** To make the exercise harder, lift one arm and the opposite leg together (for example right leg, left arm).

**Tip** Don't skip your cool down!



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# STRETCHING AND RANGE OF MOTION EXERCISE PLAN

Stretching is an important part of exercise. Stretching exercises are done after the cool down of both aerobic or resistance exercise. Your muscles and joints are still warm and you can stretch safely.

## Tip

- Hold each stretch for approximately 15-30 seconds.
- Remember to breathe during your stretches.
- During your stretches, you may feel a gentle pull, but you should never feel pain.
- You can stretch every day.

### 1. Neck stretch

1. Tilt your head to the right. Your ear moves toward your shoulder.
2. Press your left hand down.
3. Hold the stretch for 15-30 seconds.
4. Tilt your head to the left and press your right hand down.
5. Hold the stretch for 15-30 seconds.



### 2. Neck stretch

1. Slowly turn your head to the right until you feel a slight stretch.
2. Do not tip or tilt your head forward or backward.
3. Hold the stretch for 15 to 30 seconds.
4. Repeat stretch to the left.



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### 3. Chest stretch

1. Hold your arms out at shoulder height, with your palms facing forward.
  2. Slowly move your arms back and squeeze your shoulder blades together. Stop when you feel a stretch across the chest.
  3. Hold the position for 15 to 30 seconds.
- \* Caution: This chest stretch may NOT be suitable for everyone. If you had open heart, bypass or valve surgery, check with your doctor before doing it.



### 4. Upper back and shoulder stretch

1. Stretch your arms out in front of you at chest height, interlace your fingers, then turn your hands so your palms face away from you.
2. Gently press the palms away from the body. You should feel a stretch in your neck and upper back and along your shoulders.
3. Hold the position for 15 to 30 seconds.



### 5. Hips and butt stretch

1. Sit in a chair with your feet flat on the floor. Rest your right ankle on your left knee.
2. Place one hand on your ankle and one on your knee.
3. Lean forward slowly until you feel a stretch along the outside of your right hip and butt.
4. Hold for 15-30 seconds.
5. Repeat stretch with the other leg.



### 6. Hamstring stretch

1. Sit at the front of a chair.
2. Place your right leg in front of you, heel on the floor. Do not lock your knee.
3. Slowly lean forward at the hips, keeping your back straight.
4. Hold the stretch for 15 to 30 seconds.
5. Repeat stretch with your left leg.



### 7. Upper leg stretch

1. Hold on to back of chair or the wall for support.
2. Bend your right knee and grasp your right ankle (or your pant leg for an easier hold). If you can't reach your foot or leg, loop a towel around your ankle.
3. Gently pull your heel up toward your butt.
4. Hold for 15 to 30 seconds.
5. Repeat stretch with your other leg.

### OR

1. Lie on your side on the floor with legs straight and knees together. Rest your head on your arm.
2. Bend top knee. Reach behind and grab your foot. You can hold your pant leg for an easier hold.
3. Gently pull your leg back until you feel a stretch in the front of your thigh.
4. Hold position for 15 to 30 seconds.
5. Repeat stretch on your other side.



## 8. Hip stretch



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1. Lie on your back with your legs together. Bend knees, feet flat on the floor. Keep both shoulders on the floor during the stretch.

2. Slowly lower one knee to the side, as far as you can. Keep your feet close together and try not to move the other leg.
3. Hold position for 15 to 30 seconds.
4. Bring knee back up slowly.
5. Repeat stretch with your other leg.

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## 9. Calf stretch

1. Stand with your palms flat against the wall at shoulder height.
2. Place one foot in front of the other.
3. Bend your front knee and lean forward until you feel a stretch in your calf at the back of your leg.
4. Hold position for 15 to 30 seconds.
5. Repeat stretch with other leg.

## WHY IS ACTIVE LIVING IMPORTANT?

Active living means **MOVING YOUR BODY**. You need 30 to 60 minutes of medium (moderate) exercise most days. What about the other 23 hours in the day?

Sitting too much increases your risk of heart disease, diabetes and death at a younger age. This is true for people of all ages, body weights and exercise levels. When you sit for a long time, blood flows more slowly in your body. Also your body stores more blood sugar as fat. This can lead to weight gain and worsen your risk factors, such as high blood pressure and high blood cholesterol.

Be as active as you can:

- Take the stairs instead of an elevator.
- Park farther from the door.
- Get up from sitting every half hour and walk for a few minutes.
- Stand up and walk when you talk on the phone.
- Stand up and walk during commercials when you watch TV.

Every step helps you improve your heart health and feel better.

## TECHNOLOGY AND EXERCISE

The world of technology offers many tools that can help you achieve your exercise goals. Technology moves fast, so check your local store to learn about the newest devices. Here are a few tools that may interest you.

### **Pedometers and odometers**

Pedometers count your steps. Odometers measure the distance you cycle. Use them to keep track of your daily activity level. Find these tools at your local sporting goods or running stores or online.

### **Fitness and health trackers**

You wear these small devices on your wrist. They record your exercise, activity and sleep. Find these devices in electronic stores, running stores and online.

### **Applications (Apps)**

You can find many apps in your phone's app store to download onto your phone. Apps can track your heart rate, distance, food and sleep. Some are free and others can be purchased.

### **Internet**

The Internet can be a great source of the newest fitness technology. It helps you find groups or organizations that can link you with others of similar interests. The Internet is also a source of information on local resources.