Toolbox

My Diabetes Medicines

Class of Medicine	Name of your Medicine	How much you take (dosage)	When you take it (when, how often)

Where Can You Do Your Exercise?

Outdoors

Exercise outdoors when the weather is appropriate. It is important to make sure that you have measured your walking route. See your options on how to measure your route below.

Indoor/Outdoor Track

- A walking track can help you measure your distance for walking/running
- You will need to know how many laps around the track is equal to a mile or kilometer

Fitness/Gym/Recreation Facility

- Your local recreation centre or local gym will have all the exercise equipment you need for your program (e.g., treadmills, stationary cycles, elliptical machines, weight machines)
- You may consider getting an annual or part-time membership to meet your needs. Your Diabetes Team can provide you with instructions on how to use these alternatives safely and provide you with appropriate exercise prescription guidelines for use with these machines
- Try to look for a Heart Wise Exercise facility
  - Fitness facilities with this symbol is like a check-mark for you to know that their programs:
    - Encourage regular aerobic activity
    - Incorporate a warm-up and cool-down with all their exercise
    - Allow you to exercise at a safe level and have different options for your exercise

Where Can You Do Your Exercise?

Mall

- Mall walking is a great free alternative. A variety of measured mall maps are available to you in the centre. They can also be accessed on line at: **http://www.takechargeonline.ca/resources/alumni-exercise/walking-maps**

Home Exercise Equipment

If you already have, or are thinking about buying a piece of home exercise equipment, speak to your Diabetes Team. They can provide you with an exercise prescription to use on exercise equipment to substitute or replace your outdoor walking program.

Rating Scales

Rating of Perceived Exertion Scale (RPE)	
6	
7	Very very light
8	
9	Very light
10	
11	Fairly light
12	
13	Somewhat hard
14	
15	Hard
16	
17	Very hard
18	
19	Very very hard
20	

- Use the Rating of Perceived Exertion Scale (RPE) to rate how much effort you are using during your exercise
- Record this on your exercise diary

Rating of Perceived Pain Scale (RPP)	
0	Nothing at all
0.3	
0.5	Extremely weak (just noticeable)
1	Very weak
1.5	
2	Weak
2.5	
3	Moderate
4	
5	Strong
6	
7	Very strong
8	
9	
10	Extremely Strong

- Use the Rating of Perceived Pain Scale (RPP) if you experience pain during your exercise
- Record this on your exercise diary

Pulse Taking

Where to find your pulse:

1. Wrist - below the base of the thumb (Radial Artery Pulse)
   - Place 2 to 3 fingers on your wrist below the base of your thumb
   - Apply light pressure until you feel a heartbeat

2. Neck below the angle of the jaw (Carotid Artery Pulse)
   - Place 2 to 3 fingers on the side of your neck beside your Adam's apple in the hollow area
   - Be careful you do not press too hard; there is a risk of becoming lightheaded

How to count your pulse:

- You will need something to time yourself counting. Use a stopwatch or a second hand on your watch
- Count the number of beats you feel while you time yourself for 10 seconds

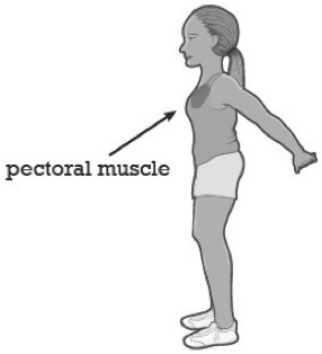
When to take your pulse:

- Before you exercise (at rest) (before you warm up)
- Immediately at the end of your exercise (exercise rate) (before you cool down)

Stretches

1. Chest Stretch (Pectoral Muscle)

- Stand with your feet shoulder width apart
- Relax your shoulders and make sure they are not hunched up
- Clasp your hands behind your back (if you cannot clasp them, then place them behind your back)
- Looking straight ahead, open up the chest and squeeze your shoulder blades together
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort



2. Shoulder Stretch (Deltoid Muscle)

- Stand with your feet shoulder width apart, arms by your side
- Relax your shoulders and make sure they are not hunched up
- Take one arm and bring it across your chest
- Take the other arm and place it on your elbow to help hold it in position
- Ensure your arm is across your chest and not across your neck
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite shoulder

Stretches

3. Thigh Stretch (Quadricep Muscle)

- Using a wall for support, stand sideways to the wall
- Take hold of your ankle, foot, sock, or pant leg as you bend your leg back from the knee (see figure)
- The knee should be facing down toward the floor and in line with the leg that is planted on the floor
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite thigh

4. Hamstring Stretch

- Using a wall or table for support, stand sideways to it
- Put all of your body weight on one leg and bend that leg
- Take the opposite leg and place the heel on the floor or on a small step with the toes pointed up. Keep this leg straight
- From this position, bend forward from the waist – you will feel a stretch in the back of the upper leg that is straight
- Hold the stretch while continuing to breathe for 15-30 seconds.
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite hamstring

Stretches

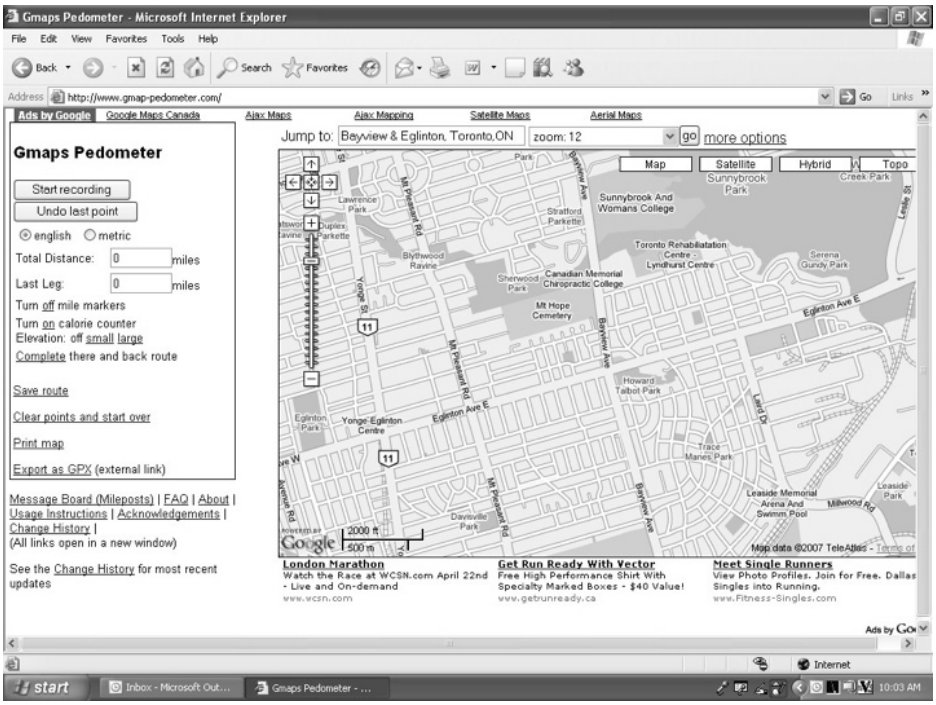
5. Calf Stretch

- Using a wall for support, face the wall standing with both feet close to it. Place your hands on the wall at chest height
- Take a step back with one leg keeping that leg straight and lean into the wall keeping the front leg bent
- Ensure both feet are facing forward
- As you lean into the wall, you will feel a stretch in the calf of the back leg
- Hold the stretch while continuing to breathe for 15-30 seconds
- Ensure you feel a stretch, not pain/discomfort
- Repeat to stretch the opposite calf

Measuring Your Walking Route

If your exercise prescription includes walking and/or running, there is a certain distance that is included. How do you know if you have walked that distance? There are a few ways to measure your walking route:

- Use the odometer on your car to measure the route
- Use an indoor or outdoor track. You will need to know how many laps around the track is equal to a mile or kilometer
- If walking in a mall, find the mall-map on our website at **http://www.uhn.ca/PatientsFamilies/Health_Information/Health_Topics/Documents/TRI_ Walking_Maps_Combined_Walking_Maps-D5895.pdf**
- Use a surveyor's measuring wheel to measure your distance. Talk to your Diabetes Team about borrowing the wheel from the program
- Go to this website **www.gmap-pedometer.com**. You can find the outdoor location of your route and measure it online. The website page will look like this:



Measuring Your Walking Route

Follow these instructions to measure your route on the Gmaps Pedometer Website:

- In the "Jump To" box, type in the exact address, city, postal code or the closest intersection to your walking route and click on "go".
- Use the + or – zoom level to find the exact starting point of your walking route. Use the up, down, left or right arrows to look at points on the map that aren't visible on the screen.
- Once you have found your starting point, press the "Start recording" button on the left side of the screen and then double-click on the starting point of your walking route on the map. Double-click the map every time you turn a corner. You should see a red teardrop-shaped icon on the screen while mapping your route.
- As you click on points, the "Total distance" box on the left side of the screen should be adding up the miles.
- If your course is a "there-and-back" route, click the "Complete there and back route" link on the left side of the screen once you reach the midpoint.
- If you make a mistake, simply click on the "Undo last point" box. To make a new route, click on "Clear points and start over" link.
- Routes can be saved and printed.
- In the top right hand corner of the map you can click on the "Map", "Satellite", "Hybrid" or "Topo" boxes to view different types of map images.

Running Shoes

The best footwear for this program is **running shoes**. Cross trainers, court or walking shoes are not a good choice. We all have individual supportive and cushioning needs. The running shoe category is the best one to offer all these features.

Most of these shoes are colourful. Get assessed by an experienced professional to determine your footwear needs.

Features of the Running Shoe

The uppers are typically a synthetic/nylon mesh combination. These materials offer the most breathability and flexibility and are very light weight.

The midsole will look (and feel) different, depending on your supportive requirements. Feet that need support (low arch or flat feet) will have two or more different densities of material and/or a more firm medial (inside of the foot) device to support your foot though the stride. Feet that require cushion (high arch or ridged feet) will have single density, soft midsoles.

Every good shoe in the running category will come with removable insoles. This allows for the use of orthotics and also the occasional washing.

Running Shoes

Remember, they are made of light weight foam that will shrink if you wash them in hot water. Wash them in cold water and by hand only.

What to Keep in Mind When Purchasing Footwear

Have your feet and gait (your walking stride) observed by a qualified salesperson. Call ahead of time and ask if there is someone that can "check my gait". If they do not offer the service, call somewhere else. Be sure the salesperson watches you walk or run in the shoes. This will determine if a shoe is over correcting or under correcting your step. Without a gait analysis during the fitting process, it's just guesswork.

Do not be fooled by a really soft, cushy feel. The softer the midsole, the less support the shoe has. Although some feet do require a highly cushioned shoe (high arched, rigid foot types), most people fall into categories that require more stability. Softer midsoles also tend to wear out more quickly.

Fit is important. Do not settle for a shoe that is too roomy or tight fitting. Shoes are now available in a variety of widths to meet the needs of the widest or narrowest of feet. An ideal fit will be roomy in the toe box. This will allow your toes to spread comfortably and when "toeing" off in your stride. If a shoe is too snug around your toes, you run the risk of blistering or bruising. Aim for approximately 1 cm or ½ inch width of space between your longest toe and the end of the shoe. This extra space will also allow for swelling as you exercise, especially on those warmer days.

Shoes will last 6 to 12 months or 800 to 1200km. This will vary according to your foot strike and/ or your weight.

Buying Exercise Equipment

Exercise equipment is great to use when the weather is too cold or too hot. Before buying the equipment ask yourself the following questions:

- What is my current fitness level now?
- What is my goal?
- Is the item safe for me to use?
- How much do I want to spend?
- Does the item have a warranty?
- How does this item compare to other equipment?

Talk to your diabetes team to help answer these questions.

Below is a list of various types of exercise equipment and information about what you should consider before buying.

Treadmills

Price:
Treadmills vary in price. The difference in price is based on durability the extra features included (e.g., computer programming, hear rate monitors, etc.). The durability and construction of the treadmill is most important.

Motor:
It is important that the treadmill you purchase has a motor. Do not buy a manual treadmill. Manual treadmills make you drive the belt forward. The motor on the treadmill should be at least a 1.5 horse power motor. Turn on the motor of the treadmill and listen to much noise and vibration it makes. This will be important for you when you are listening to music or the TV while exercising!

Buying Exercise Equipment

Belt Widths and Lengths:
The width of the belt is important for safety and comfort. Usually the width ranges from 17” to 22” and the lengths from 45” to 60”.

Emergency Shut Off:
The treadmill you choose should have an emergency shut off. This allows the treadmill to shut off if you fall.

Computer Feedback and Control Panel:
The control panel of the treadmill should display speed, distance and time. Pre-programmed workouts may be an option that most treadmills have. They are not necessary.

Heart Rate Monitors:
Some treadmills have contact heart rate monitors. You hold on to a hand-rail and the treadmill reads your heart rate and displays it on the control panel. It is not as accurate as taking it on your own or through the use of a transmitter type heart rate monitor.

Stationary Bikes

Price:
Prices ranges for stationary bikes depend on how many features are included.

Bike Styles:
Choose a bike style best for you. This will depend on your comfort and any joint/muscle problems you have.

Upright Style: set up and look is very similar to traditional outdoor bikes.

Buying Exercise Equipment

Recumbent Style: these bikes have a wider chair/seat with a back support and the pedals are out in front of you unlike the upright bike where the pedals are below you. This style of bike is becoming more popular as the comfort of the seat is greater.

Control Panel Features:
You should be able to determine 1) the speed at which you are pedaling (revolutions per minute (RPM), kilometers per hour (KMPH) or miles per hour (MPH)), 2) the distance covered, 3) the time of cycling, and 4) what level/ tension you are working at.

Other important features:

- Foot straps
- Adjustable seat height so when seated, there is a 15 degree bend in your knee on extension
- Seat tilt

Elliptical Machines

This machine is a great alternative for those wishing to have a non-impact aerobic work-out. It mimics walking or running and offers the option of incorporating the use of arm work as well.

Style:
It is important to try out the machine before buying. The size of machines and comfort can be different from each other. Some elliptical machines offer forward movement as well as backward movement.

Buying Exercise Equipment

Control Panel Features:
ou should be able to determine 1) the speed at which you are moving (revolutions per minute (RPM), kilometers per hour (KMPH) or miles per hour (MPH)), 2) the distance covered, 3) time of exercise, and 4) the level of intensity at which you are working.

Resistance Training Equipment

There is a variety of equipment for resistance training. The following options can be purchased:

- **Dumbbell weights** or "free weights" are common pieces of equipment to use for resistance training. They can be purchased in different materials, including rubber, cast iron or plastic. They can also be purchased as a fixed or adjustable weight.

- **Resistance training machines** are the pieces of equipment usually found in a gym. They incorporate a weight stack and pulley system that gives you resistance against a fixed movement. These machines can be purchased for home use as well.

An exercise band

- **Exercise bands** can be used for resistance training and may be a good choice if you do not have a lot of room to store equipment. If you need to, you can travel easily with this equipment. Each band colour equals a certain amount of resistance. The lighter the colour, the less resistance on the band. The darker the colour, the more resistance there is on the band.

Buying Exercise Equipment

Heart Rate Monitors

Monitoring your heart rate during exercise is important to make sure you are working at a safe intensity. Manually checking your heart rate is usually done by feeling your pulse on your wrist or neck and counting the beats you feel over 10 seconds. Sometimes this can be challenging. A heart rate monitor may be used instead. A belt with a transmitter is worn around your chest and sends the information to a watch that you wear on your wrist. You simply glance at your watch during your workout to know your heart rate. These monitors are very accurate. If you have an arrhythmias (irregular heart rhythms), it may not be accurate. Speak to your diabetes team before purchasing one.

UHN Cardiovascular Prevention and Rehabilitation

Toronto Rehab, Rumsey Centre, 347 Rumsey Road
(416) 597-3422 ext. 5200 Fax (416) 425-0301
Toronto Western Hospital, 399 Bathurst Street
(416) 603-5200 Fax (416) 603-5573

Name: _____

Class Day and Time: _____

Exercise Prescription: _____

Aerobic Training Diary

Date (month and day)	Type of Exercise	Distance (miles)	Duration (minutes and seconds)	10 second pulse		RPE (number)	Symptoms or Comments or Other Activities
				Before Exercise	After Exercise		

My Action Plan:

- What do I want to do?
- What will I really be able to do this week?

My plan will include:

- What I am going to do
- When I am going to do it
- Where I am going to do it
- How Much I am going to do it
- How Often I am going to do it

This week I will

- _____ (what)
- _____ (when)
- _____ (where)
- _____ (how much)
- _____ (how often)

My confidence rating that I can do this plan is:

1 2 3 4 5 6 7 8 9 10

not confident at all totally confident

Rating of Perceived Exertion **(RPE)**

6
7 Very, Very Light
8
9 Very Light
10
11 Fairly Light
12
13 Somewhat Hard
14
15 Hard
16
17 Very Hard
18
19 Very, Very Hard
20

Resistance Training Diary

	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
Exercises	**Dumbbell Row**	**Half Squat or Leg Extension**	**Bicep Curl**	**Leg Curl**	**External Rotation or Lateral Raise**	**Heel Raise or Toe Press**	**Chest Fly or Wall Push up**	**Abdominal Curl or Seated Curl**	**Triceps Extension**	**Bird Dog**
Other Exercise										
Date:										
Weight										
Reps & #Sets										
RPE										
Date:										
Weight										
Reps & #Sets										
RPE										
Date:										
Weight										
Reps & #Sets										
RPE										

Medical Visits & Medicine Changes: List any changes in your medicine, hospital visits (emergency), doctor visits, lab tests etc.

Visits & Reason	Date	Name of Service or Test or Procedure

Name of Medicine	Date of Change	Dose (how much?) & Frequency (how often?)

Exercise Blood Sugar (Glucose) Diary

Date	Time	Blood Sugar (glucose) Before Exercise	Blood Sugar (glucose) After Exercise	Comments
Example: 04/25	10:00 am	9.8	7.2	

If exercise is new for you

- Monitor your blood sugar levels before and after exercise for 6 or more exercise sessions

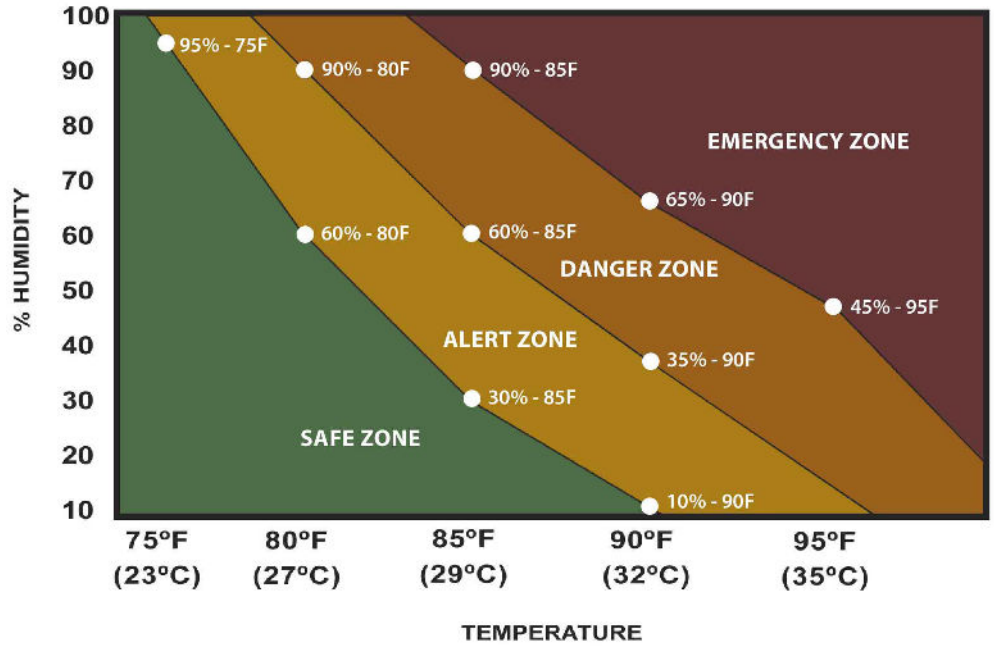
If you have been exercising consistently over the past couple of months you may consider monitoring your blood sugar levels before and after exercise if:

- You are experiencing difficulty managing your blood sugar OR
- You are trying a new exercise prescription

Heat Safety & Air Quality Index

Heat Safety Index

To use this scale, look for the air temperature along the bottom of the scale and the percentage of humidity along the left-hand border. The intersecting points will identify one of four zones.



Your Action Steps for Exercise for Each Heat Safety Zone

Safe	Alert	Danger	Emergency
• Exercise as usual • Safe to exercise outdoors	• Decrease your exercise • Watch for symptoms	• No outdoor exercise	• Avoid going outdoors

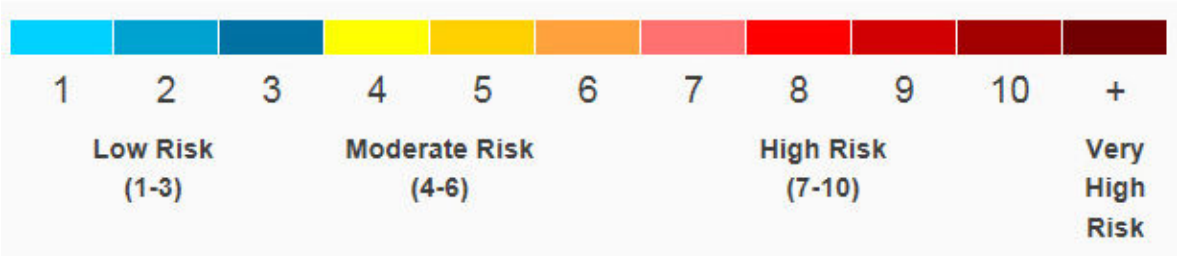
Heat Safety & Air Quality Index

Air Quality Health Index

When you check the weather report for air quality, look for:

- The Air Quality Health Index (AQHI)

Air pollution can be measured by the AQHI. This index tells you the level of common air pollutants. In Ontario, the range for the index is 0 to 10. The lower the number, the better the air quality. If you live outside of Ontario, go to your local public health website to find out how your area lists the air quality index.



Heat Safety & Air Quality Index

Your Action Steps for Exercise for Each Air Quality Range:

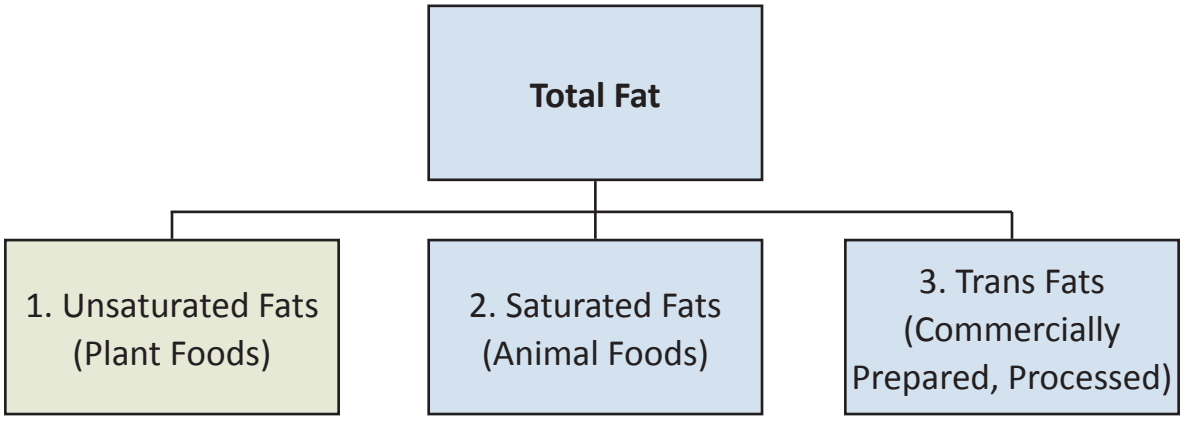
Low Risk 1 to 3	Moderate Risk 4 to 6	High Risk 7 to 6	Very High Risk 4 to 6
• Exercise as usual • Safe to exercise outdoors	• Decrease your exercise intensity • Watch for symptoms • Consider rescheduling your outdoor exercise	• No outdoor exercise • Exercise in an air conditioned environment only	• Avoid going outdoors

The Weather Network or Environment Canada can give you up to date weather conditions (including the air quality) for the day:

www.theweathernetwork.com or **www.weather.gc.ca/forecast** or **www.airqualityontario.com**

Getting the Facts on Fats

There are 3 main types of fat:



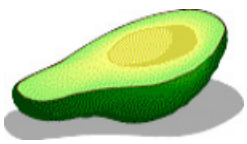
1. Unsaturated Fats:

- Found in plant foods and oils made from these plants
- Help lower LDL (bad) cholesterol
- Help reduce your chances of getting heart disease, having a heart attack or stroke

Examples of food that contain unsaturated fats include:

- Olive oil and olives
- Canola oil
- Natural peanut butter
- Peanut oil and peanuts
- Avocado
- Almonds
- Cashews






Getting the Facts on Fats

- **Omega-3** fats are a type of unsaturated fat that are important for health. Omega-3 fats can lower triglycerides (a type of fat in your blood). High triglyceride levels put you at risk for heart attack or stroke. Examples of food that contain omega-3 unsaturated fats include:

- Walnuts
- Ground flaxseed & flaxseed oil
- Hemp seeds and hemp hearts
- Chia seed
- Canola oil
- Fatty fish: mackerel, trout, salmon, unsalted herring, sardines





2. Saturated Fats:

- Found in all animal products
- Found in tropical oils (such as cocoa butter, palm oil, coconut and coconut oil, and palm kernel oils)
- Raise LDL (bad) cholesterol in your blood

Getting the Facts on Fats

Foods High in Saturated Fat	Changes You Can Make
Marbled or fatty meats such as: • Corned beef, brisket • Regular ground beef, short or spare ribs • Skin on chicken & turkey, chicken wings • Bacon (all kinds) • Sausages • Goose or duck • Breaded or battered foods • High fat luncheon meats	• Choose leaner meats such as: – Beef: round, sirloin, chuck or loin – Ground beef: extra lean – Lamb: leg, arm or loin – Pork: tenderloin, leg or shoulder – Veal: all trimmed cuts • Replace luncheon meats with lower sodium canned fish or chicken/turkey packed in water • Remove the skin from chicken & turkey • Eat a smaller amount of meat • Include fish more often • Eat meat less often. Cook with dried peas, beans, lentils or tofu
High Fat Dairy Foods • Whole milk (3.5%) • High fat cheeses with more than 20% M.F. (milk fat). • Yogurts with more than 2% M.F • Butter • Cream (any type)	• Eat lower fat dairy products – Cheeses with less than 15% M.F – Have 1% or skim milk – Low fat plain or fat-free, low sugar fruit yogurt • Choose non-hydrogenated margarine or olive oil and avocado as a spread

Getting the Facts on Fats

3. Trans Fats:

- Mainly found in processed foods that have partially hydrogenated vegetable oils
- Raise LDL (bad) cholesterol and lower HDL (good) cholesterol in your blood. These fats are not healthy. They can increase your chances of getting heart disease, having a heart attack or stroke. Eat as little trans fats as possible.

Foods With Trans Fats	Changes You Can Make
Found mostly in commercially prepared (made at a factory), processed food items: • Crackers and Cookies • Cakes, pie crusts, pastries, donuts • Vegetable shortening, hard margarine • French fries, potato & corn chips • Deep-fried restaurant or fast foods	Replace commercially prepared, processed foods with healthy choices: • Fruit & ¼ cup nuts • Raw veggies and hummus • Low fat, low sugar yogurt • Whole grain crackers & ricotta cheese

Vision, Goal, Action Planning Worksheet

See Your Vision

- Describe your best self
- What do you want to feel like in the future?
- What do you want to look like in the future?
- What do you want to be doing differently in future?

Set Your Goal

- What do you have to do to achieve your vision?
- What change in your life has to happen?
- Are you ready to make this change?
- A good goal is specific, measurable, achievable, realistic and is timely

Build Your Action Plan

- How are you going to achieve your goal?
- Each week, ask yourself:
  - What am I going to do?
    - When am I going to do it?
    - Where am I going to do it?
    - How much am I going to do it?
    - How often am I going to do it?
- Each week ask, what went well? What did not go as planned?
- Problem-solve when your plan does not go as planned

Vision, Goal, Action Planning Worksheet

My Vision

My Goal

My Action Plan

- This week I will:
- _____(What)
- _____(When)
- _____(Where)
- _____(How much)
- _____(How often)
- My confidence rating that I can do this plan is:

1 2 3 4 5 6 7 8 9 10

not confident at all totally confident

Check in with yourself next week to see how your action plan went.

Problem solve for things that did not go as planned. Then build your next action plan.

My Weekly Action Plan

Ask yourself: What do I want to do?
What will I realistically be able to do this week?

My plan will include:

What I am going to do
When I am going to do it
Where I am going to do it
How Much I am going to do it
How Often I am going to do it

This week I will _____(what)

_____(when)

_____(where)

_____(how much)

_____(how often)

My confidence rating that I can do this plan is:

1	2	3	4	5	6	7	8	9	10
Not confident at all									Totally confident

Remember:

- If your rating is 7 or higher, that is great. You believe you can do this.
- If your rating is less than 7, then you may want to learn more about the area you wish to target, or do more to prepare yourself to work on that area. Taking smaller steps towards your goals may also help you feel more confident and ready to achieve your action plans. For example, you may adjust the different parts of your action plan such as “how much” or “how often”.

Books and Websites

General Resources

- Canadian Diabetes Association: **www.diabetes.ca**
- Cardiac College: **www.cardiaccollege.ca**
- Heart and Stroke Foundation: **www.heartandstroke.ca**
- Eat Right Ontario: **www.ontario.ca/eatright**
  – Call 1-877-510-5102 to talk to a Registered Dietitian for free
- Dietitians of Canada: **www.dietitians.ca**
- Health Canada (Food Guide, Label Reading): **healthycanadians.gc.ca**
- Loblaws in-store Registered Dietitians: **www.loblaws.ca**

Glycemic Index

- The University of Sydney: **www.glycemicindex.com**

Sodium

- Sodium: **www.sodium101.ca**
- Find out how much sodium you consume
  Go to: **www.projectbiglife.ca/sodium/**

Food Labels

- Health Canada (Food Guide, Label Reading): **www.healthycanadians.gc.ca**

Books and Websites

Pulses & Lentils

- US Dry Pea & Lentil Council **www.pea-lentil.com**
- Pulse Canada **www.pulsecanada.com**
- Canadian Lentils **www.lentils.ca**

Cookbooks

- Spilling the Beans – by Julie Van Rosendaal, Sue Duncan
- The New Moosewood Cookbook – by Mollie Katzen
- The New Becoming Vegetarian – by Brenda Davis, RD & Vesanto Melina, MS, RD, BPC.
- Becoming Vegan – by Brenda Davis, RD & Vesanto Melina, MS, RD, BPC.

Feel Well Books

- Mind over Mood Workbook by Dennis Greenberger
- Depressed and Anxious: The Dialectical Behaviour Therapy Workbook for overcoming Depression and Anxiety by Thomas Marra