

PPZ30

HEALTH FOR LIFE



LESSON 6

Lesson 6 – Stress and Your Health

Stress: What Is It?

Although we all talk about stress, it often isn't clear what stress is really about. Many people consider stress to be something that happens to them, an event such as an injury or a promotion. Others think that stress is what happens to our bodies, minds and behaviours in response to an event (e.g. heart pounding, anxiety, or nail biting). While stress does involve events and our response to them, these are not the most important factors. Our thoughts about the situations in which we find ourselves are the critical factor. **STRESS** may be considered as any physical, chemical, or emotional factor that causes bodily or mental tension and that may be a factor in disease causation. It is the reaction of the body and mind to everyday challenges and demands. In plain English, stress is the "wear and tear" our bodies experience as we adjust to our continually changing environment.

When something happens to us, we automatically evaluate the situation mentally. We decide if it is threatening to us, how we need to deal with the situation, and what skills we can use. If we decide that the demands of the situation outweigh the skills we have, then we label the situation as "stressful" and react with the classic "stress response". If we decide that our coping skills outweigh the demands of the situation, then we don't see it as "stressful".

Everyone sees situations differently and has different coping skills. For this reason, no two people will respond exactly the same way to a given situation. Additionally, not all situations that are labelled "stressful" are negative. The birth of a child, being promoted or moving to a new home may not be perceived as threatening. However, we may feel that situations are "stressful" because we don't feel fully prepared to deal with them. Some situations in life are stress-provoking, but it is our thoughts about situations that determine whether they are a problem to us.

How we perceive a stress-provoking event and how we react to it determines its impact on our health. We may be motivated and invigorated by the events in our lives, or we may see some as "stressful" and respond in a manner that may have a negative effect on our physical, mental and social well-being. If we always respond in a negative way our health and happiness may suffer. By understanding ourselves and our reactions to stress-provoking situations, we can learn to handle stress more effectively. We hope that this booklet will help you to build better coping skills for managing stress.



SUPPORT QUESTION – Stress Test

Go to one of the following websites and take the stress test:

http://www.cmha.ca/english/info_centre/stresstest.htm

http://library.thinkquest.org/13561/english/stress_test.html

<http://www.ppmhc.org/StressTest/stresstest.htm>

<http://www.mhasp.org/help/stress-test.html>

What Causes Stress?

To understand stress, we need to look at the events that occur, our thoughts about them, and the way we respond. **STRESSORS** are situations that are considered stress-provoking.

There are many major events that occur in our lives: moving, leaving school, changing jobs, and experiencing losses. These "life events" can be stress-provoking. We also face many "daily hassles". These are events that occur routinely. They also contribute to the levels of stress that we experience. Daily hassles include events such as being stuck in traffic, deadlines, conflicts with family members, and dealing with busy city life. Between life events and day-to-day hassles, we are faced with many stress-provoking situations each day. Our attitude towards these situations determines our response. Coping effectively requires an understanding of the situations we perceive to be stressful.



Types of Stressors

Biological Stressors – illness, disabilities or injuries

Environmental Stressors – poverty, pollution, crowding, disasters

Cognitive Stressors – your perception of a situation

Personal Behaviour Stressors – negative body reactions caused by smoking, drinking, drugs or inactivity

Life Situation Stressors – death, divorce, relationships, friends etc.

Good Stress?

But not all stress is bad -- some stress is good. In fact, everyone needs stress in their lives; without it, life would be dull and unexciting. Stress adds flavour, challenge and opportunity to life. Stress can pump you up, give you energy, supply that zest for living. Stress is an unavoidable part of life. The challenges caused by stress help to develop new skills and behaviour patterns. The problems occur, however, when stress becomes excessive. It can become destructive and can turn into distress. Too much stress on your mind and body can make you feel miserable, worried, sad and ill.

Contrary to popular belief, stress is not the pressure from the outside--the divorce, the death, the burned supper, the vacation, the isolation. Those are **stressors**. Your response to those situations constitutes **stress**.

What causes stress to be good or bad?

Our thoughts, feelings and beliefs about a situation can make stress good (pleasant) or bad (unpleasant). For example, Nicole's mother informed her that they will be moving to a new city. Moving to a new place is a stressor that will automatically cause Nicole some stress since it is a "change".

If Nicole is excited and happy about the move, then this will be considered a good stressor for her. On the other hand, if Nicole is sad and scared about the move, then this will be considered a bad stressor for her.

Situations that cause us to feel happy, excited, surprised, etc, can be called good stressors, and situations that cause us to feel sad, scared, mad, etc, can be called bad stressors.



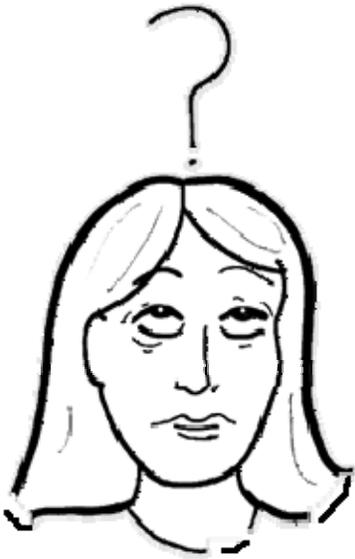
SUPPORT QUESTION – Good & Bad Stressors

What is a good (happy, excited, etc) stressor for you?

What is a bad (sad, scared, etc) stressor for you?

The Stress Response

If we decide that a situation is stressful, we put into play the body's "fight or flight" reaction, causing the release of adrenalin, a natural body chemical. This starts the first stage of the stress response.



We each have a particular way of responding to stress. Some of us have physical signs such as muscle tension and difficulty sleeping (insomnia). Others may have more emotional reactions, such as outbursts of crying or anger. Understanding your response to stressful situations is one of the first steps in developing your ability to lower your stress levels.

Knowing what you do when you are under stress is the first step. To cope with stress, you need to know when it is happening. These signs of stress can give you clues you can use to change your response to stress. The next time you feel that you are getting "stressed", take the time to check your body, your emotions and your behaviour. If you recognize some of your usual signs of stress, then you have a clue that you need to do something to cope.

Are YOU Stressed?

Stress is a part of all our lives. It is especially likely to happen when you're experiencing changes--either happy or upsetting changes.

You may be feeling a lot of stress now if:

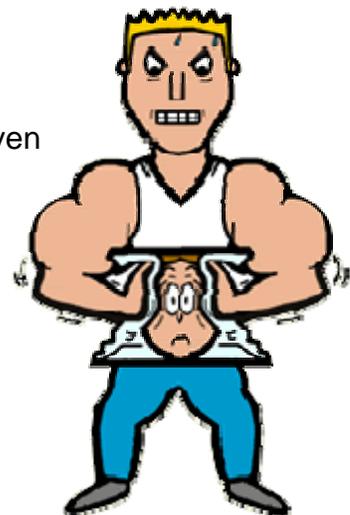
- You're experiencing--or facing--a change in schools.
- Your physical development is behind or ahead that of most of your classmates.
- There are problems at home: parents fighting, an alcoholic parent, a serious illness in the family, money worries, a parental separation or divorce, psychological or physical abuse from a parent or sibling.
- Someone close to you died in the past year--a grandparent, parent or other close relative, a special friend, or a pet.
- Everyone in your life seems to expect a lot of you now--from the coach at P.E. to all your teachers and your parents.
- You're feeling a lot of conflicting things: sometimes loving and sometimes feeling close to hating your parents; wanting to be on your own, but sometimes secretly wishing you could be a little kid and totally taken care of again; feeling close to, yet competitive with, a good friend; wanting to be a good person, but feeling that, lots of times, you fall short.

What are other things that may cause you to experience stress?

- Having a job
- Extra-curricular activities that are time consuming
- Not fitting in to a social group
- School expectations
- Parent expectations
- Being unable to prioritize things -- it all seems important
- Being pushed & pulled by different classes
- Lack of preparedness from middle school

There are other causes of stress too, some of which may not even seem stressful.

- Burning the supper
- Living with divorce
- Hosting a party
- Receiving a promotion
- Moving
- Losing a child
- Going on vacation
- Living alone



Signs of Stress

The signs of stress can be physical or mental. Some people call this "storing" stress in the body (physical) or in the mind (mental).

Common physical symptoms of stress include:

- Rapid heartbeat.
- Headache.
- Stiff neck and/or tight shoulders.
- Backache.
- Rapid breathing.
- Sweating and sweaty palms.
- Upset stomach, nausea, or diarrhea.

You also may notice signs of stress in your thinking, behaviour, or mood. You may:

- Become irritable and intolerant of even minor disturbances.
- Feel irritated or frustrated, lose your temper more often, and yell at others for no reason.
- Feel jumpy or exhausted all the time.
- Find it hard to concentrate or focus on tasks.
- Worry too much about insignificant things.
- Doubt your ability to do things.
- Imagine negative, worrisome, or terrifying scenes.
- Feel you are missing opportunities because you cannot act quickly



PERSONAL CAUSES OF STRESS

When you're under stress, you may start feeling overwhelmed: you have too much to do in too little time, you can't possibly do everything you feel you must do. You may feel angry, unfairly judged, and impatient with yourself and others. You may feel you don't have enough time to have fun or to be with the people you most enjoy. You may cry and get upset about small things. You may worry about *everything!*

Teenagers face a specific kind of stress. It could be problems at home--with parents, with siblings, an alcoholic parent, divorce--or it could be problems at school--pressure from your teachers, pressure from your friends, or pressure from your parents to do well.

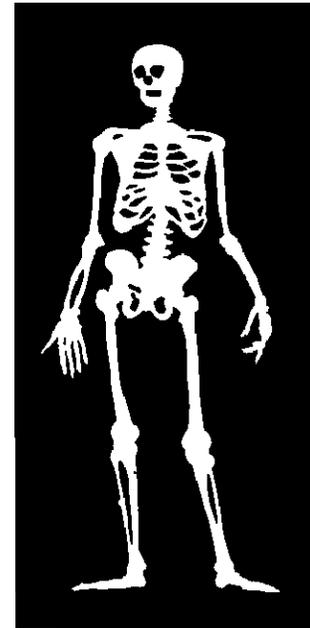


SUPPORT QUESTION – Personal Stress

What day-to-day hassles or life events have you experienced recently?

Other stresses teens face may include:

- High competition for jobs - the feeling that there are no jobs out there
- Education choices - after high school, paying for college
- Stress of living at home, but yet feeling old enough to be on your own
- Financial pressures - part time work is scarce and parents don't have as much money as they did 20 years ago
- Disfunctional families - teens from divorced families, alcoholic, or abusive families
- Blended families - teens may feel out of place
- Life Events – pregnancy, moving, marriage, major illness
- Physical Stressors - excessive noise, physical injury, lack of rest, drug use, excessive dieting or exercise
- Daily Hassles - time pressures, responsibilities, deadlines



THE BODY'S STRESS RESPONSE

Many people suffering from excessive stress have symptoms of poor health. People with very high stress levels have feelings of being tense or anxious. In addition, headaches, stomach complaints or symptoms that mimic old illnesses are common.

- 1 – Alarm – the body & mind go into alert – body prepares for “flight or fight”
- 2 – Resistance – continued exposure to a stressor – either “fight” or “flight” actually takes place
- 3 – Fatigue – a tired feeling takes over that lowers your level of activity due to prolonged stress

Physical Fatigue – sore muscles

Psychological Fatigue – response to too many responsibilities (overworked, depression, constant worry, isolation)

Pathological Fatigue – tiredness brought on by overworking the body's defenses in fighting disease – brought on by anemia, the flu, being overweight & poor nutrition. Prolonged or repeated stress can lead to stress-related illnesses that can be relatively harmless or even fatal

Coping With Stress

There is no single right way of coping with a given situation. Each of us must figure out what works best for us. What works best will depend, in part, on your coping style. There are three main styles. None of these styles is better than the other and some people use a mixture of them.

The first step in coping is to know yourself. Begin by deciding which of these may be your style.

Task-oriented: you may feel comfortable analyzing the situation and taking action to deal directly with the situation.

Emotion-oriented: you may prefer to deal with your feelings and find social supports.

Distraction-oriented: you may use activities or work to take your mind off the situation. Keep this style in mind as you read the information on coping skills.

Common Coping Responses for Stress

We all find ways of coping with stress. Coping mechanisms may or may not be effective or harmless.

Positive coping responses

- Listening to music
- Playing with a pet
- Laughing or crying
- Going out with a friend (shopping, movie, dining)
- Taking a bath or shower
- Writing, painting, or other creative activity
- Praying or going to church
- Exercising or getting outdoors to enjoy nature
- Discussing situations with a spouse or close friend
- Gardening or making home repairs
- Practicing deep breathing, meditation, or muscle relaxation



Negative coping responses

- Criticizing yourself (negative self-talk)
- Driving fast in a car
- Chewing your fingernails

- Becoming aggressive or violent (hitting someone, throwing or kicking something)
- Eating too much or too little, or drinking a lot of coffee
- Smoking or chewing tobacco
- Drinking alcohol
- Yelling at your spouse, children, or friends
- Taking a recreational drug to calm yourself
- Avoiding social contact

All coping responses have limitations. They may:

- Not be available on a regular basis or often enough to do the most good.
- Not produce the complete relaxation that is best for undoing the harmful effects of stress.
- Sometimes lead to new kinds of stress (such as a vacation that becomes hectic, or a highly competitive sports activity).
- Stop being effective because of overuse.

Stress & Your Health

In an attempt to cope with stress, some people drink too much alcohol, abuse drugs, blame others (e.g. spouse or parent), and may become physically violent, most often with family members.

Physical (psychosomatic) Effects are a physical reaction that results from stress rather than from an injury or illness. Problems include: headaches, asthma, high blood pressure & weakened immune system. Although the relationship between stress and heart disease is still being investigated, preliminary evidence suggests that stress may contribute to the development of heart disease and stroke. It is thought that certain individuals with high levels of stress or prolonged stress may:

*have higher blood cholesterol

*experience increases in blood pressure

*have blood platelets that are more likely to clot (clump together inside the blood)

Stress and Your Brain AND Body

Neurotransmitters send and receive messages between brain cells. There are two kinds of messengers: "happy" messengers (cheerful and enthusiastic messages) and "sad" messengers (cheerless and silencing messages).

Too much stress causes the happy messengers to eventually begin to fail. Sad messages overtake happy ones, causing a chemical imbalance. This chemical imbalance is **OVERSTRESS**. Everyone experiences short durations of overstress.

The three "happy" messengers are: *Serotonin, Noradrenalin, and Dopamine*.

Your body clock is located in a supply of Serotonin in the Pineal Gland in the brain. Your body clock coordinates your body functions to the same rhythm. For example, it sets your physiology for sleeping and waking-up.

Your body clock also controls the secretion of the chief stress fighting hormone Cortisol. Disruption of your Cortisol cycle makes sleeping more difficult.

Serotonin is often the first happy messenger to malfunction under stress. Thus, lack of restful sleep is usually the first symptom of overstress.

Noradrenalin sets our energy levels, and makes us feel energized. Failure of this happy messenger causes overstressed people to feel as though they don't have the energy to do much of anything.

the

And
fail.

loss

This



Dopamine is located adjacent to where Endorphin is released in brain. And so there is a link, so that when Dopamine function declines, so does Endorphin function. Endorphins regulate pain. so, pain increases when stress causes the Dopamine function to

Dopamine also operates your Pleasure Center. Thus, when stress incurs on your Dopamine function, it can also result in a of pleasure in normally pleasurable affairs.

natural reaction is known as the **STRESS RESPONSE**. Working properly, the body's stress response enhances a person's ability to perform well under pressure. But the stress response can also cause problems when it overreacts or fails to turn off and reset itself properly.

Your **STRESS TOLERANCE** determines the amount of stress you can handle before your happy messengers begin to fail. Stress tolerance is hereditary.

10% of our population has inherited low stress tolerance. This means that 1 out of every 10 persons feels overly stressed all of the time.

Inherited low stress tolerance will begin to occur in these years as a teenager.

Properly handling overstress is essential, especially NOW. The teen years are the best time to start combating this problem. If overstress is not dealt with now, and you are of the 10% of our population which has inherited low stress tolerance, you may face a lifetime of a losing struggle against stress.

Those of us who experience overstress sometimes use substances to temporarily make us feel better. Some of these substances which can temporarily restore balance by chemically boosting the happy messengers are:

- sugar
- caffeine
- alcohol
- solvents
- drugs
- tobacco

Another booster is our own adrenalin. Ways of stimulating your own adrenaline are by over-working or thrill-seeking hobbies.

HOWEVER, these happy messenger boosters don't work well. They do not maintain balance between the stressors and the boosters. This leads to a roller-coaster of good and bad feelings.

First of all, the minute changes in chemical levels can not ACCURATELY be adjusted by consuming happy messenger boosters. Second of all, these boosters cause a roller coaster to start. After your happy messengers are temporarily boosted, they experience a fall. The higher the boost, the greater the fall. And finally, another problem with happy messenger boosters is that your body adapts to them quickly. Once they are adapted to, the more of them you'll need to experience the desired effect.

Side effects of boosters WORSEN the problem of overstress:

 **Sugar** highs lead to sugar lows. Too much sugar WORSENS overstress.

 **Alcohol** can cause liver failure and bleeding complications, as well as a greater risk of violence and fatal traffic accidents. Alcohol WORSENS overstress.

 **Tobacco** can damage your lungs and arteries, and may cause cancer. Tobacco WORSENS overstress.

 **Caffeine** can cause abnormal heart rhythms. Caffeine WORSENS overstress.

 **Illegal drugs** can cause convulsions, overdoses, even death. Illegal drugs WORSEN overstress.

Mental/Emotional & Social Effects include: difficulty concentrating, mood swings, risk of substance abuse and violence. Depression and anxiety may be the result of chronic stress. If mental health problems are ignored, they can develop into serious mental illnesses. Clinical depression, left untreated, leads to suicide in 15% of cases. Anxiety disorders take a variety of forms, ranging from general anxiety to panic attacks. Anxiety can become severe and disabling.

Chronic Stress – stress associated with long-term problems that are beyond a person's control. Further, it is known that stress-filled lifestyles make it difficult for a person to make or maintain resolutions to lead a healthy life. Instead of exercising to relieve stress, some people respond by overeating, eating unhealthy foods, excessive alcohol consumption or smoking. Such negative reactions to stress merely increase the risk of developing heart disease and stroke. Becoming aware of your stressors and learning how to deal effectively deal with them will enable you to get on the right track for a healthier lifestyle.

Managing Your Stress

Some ways of lowering your stress load are:

1. Define your sleeping hours and stick to them. (This will help re-set your Body Clock.)
2. Take a break! (Let your body have a chance to heal itself.)
3. Say "No" more often when others request your time.
4. Change is stressful, so it at all possible, postpone major changes in your environment until your stress level has been reduced.
5. Take time off. Work or school more than 40 hours a week can be stressful.
6. Start a stress-relieving diet. Avoid sugar highs, eat more vegetables, take multi-vitamin and mineral supplements. Eat a nutritious meal or snack
7. Avoid things that trigger your allergies and environmental toxins.
8. Exercise daily
9. Avoid prescriptive medicines designed to force sleeping or tranquilizing. Talk to your doctor before making any changes in your medication.
10. Take deep breaths/Practice deep breathing exercises
11. Watch your thoughts/think positive
12. Find time to relax and cool out
13. Pray or read something inspirational
14. Visualize what you want to happen
15. Use pressure points to reduce headaches
16. Talk problems over with a friend or counsellor
17. Don't dwell on your weaknesses
18. Feel proud of your accomplishments
19. Do muscle tension relaxation exercises
20. Punch a pillow, scream or kick a can
21. Prepare for tests early
22. Eat a nutritious meal or snack
23. Take one thing at a time
24. Set realistic goals
25. Stop worrying about things that may never happen
26. Learn from your mistakes
27. Forgive yourself and others
28. Get involved with things you like to do
29. Make time for fun
30. Do something for others



Stress Hardiness

Ever notice that certain people seem to adapt quickly to stressful circumstances and take things in stride? They're cool under pressure and able to handle problems as they come up. Researchers have identified the qualities that make some people seem naturally resilient even when faced with high levels of stress. Some people seem less affected by stressful situations and more resilient in adjusting to change. This quality is called **STRESS HARDINESS**. Personality factors that stand out in stress-hardy people include:

- **Having a strong commitment** to self, work, family, and other values. A strong sense of commitment allows people to see problems through without being too disrupted by stress.
- **Having a sense of control** over their lives. They know they cannot control every detail of their lives (for instance, the supervisor's personality), but they see where they do have control, such as their reaction to their supervisor's personality.
- **Generally seeing change as a challenge** rather than a threat. Change is inevitable. When change is viewed as a threat, stress levels rise. By viewing change as a challenge, stress-hardy people avoid the stress associated with threats.
- **Participating in activities that promote creativity** and their own uniqueness.
- **Having a strong network of support and close relationships**. Believing you are alone in the world makes the effects of everyday stress much worse.



SUPPORT QUESTION – Stress Hardiness

To determine your stress hardiness, read the following statements. Which set of statements comes closer to describing the way you view the world and your place in it?

High level of stress hardiness

- Trying my best at work makes a difference sooner or later.
- I usually wake up eager to start the day.
- I would sacrifice financial security in my work if another opportunity that was really challenging came along.
- I believe an average citizen can have an impact on politics.
- I'm a free person who makes a valuable contribution to the world.
- Encountering new situations is an important priority in my life.



Low level of stress hardiness

- Sometimes all I can do in a relationship is hope for the best. People don't change.
- My work doesn't really make a difference in the world.
- I prefer a predictable routine every day; change usually is unpleasant for me.
- Without the right breaks, it is hard to be successful in my field.
- Getting close to people puts me at risk of being obligated to them.
- When I have free time, I like to do nothing at all.

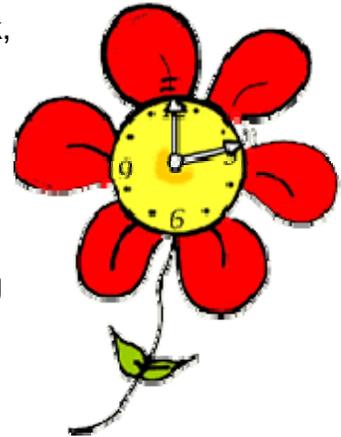
Avoiding Unnecessary Stress

Since stress is unavoidable in life, it is important to find ways to decrease and prevent stressful incidents and decrease negative reactions to stress. Following are activities to help you do this.

Managing time

Time management skills can allow you more time with your family and friends and possibly increase your performance and productivity. This will help reduce your stress. To improve your time management:

- Save time by focusing and concentrating, delegating, and scheduling time for yourself.
- Keep a record of how you spend your time, including work, family, and leisure time.
- Prioritize your time by rating tasks by importance and urgency. Redirect your time to those activities that are important and meaningful to you.
- Manage your commitments by not over- or under-committing. Don't commit to what is not important to you.
- Deal with procrastination by using a day planner, breaking large projects into smaller ones, and setting short-term deadlines.
- Examine your beliefs to reduce conflict between what you believe and what your life is like.



Build healthy coping strategies

It is important that you identify your coping strategies. One way to do this is by recording the stressful event, your reaction, and how you cope in a stress journal. With this information, you can work to change unhealthy coping strategies into healthy ones—those that help you focus on the positive and what you can change or control in your life.

Lifestyle

Some behaviours and lifestyle choices affect your stress level. They may not cause stress directly, but they can interfere with the ways your body seeks relief from stress.

Try to:

- Balance personal, work, and family needs and obligations.
- Have a sense of purpose in life.
- Get enough sleep, since your body recovers from the stresses of the day while you are sleeping.
- Eat a balanced diet for a nutritional defence against stress.
- Get moderate exercise throughout the week.
- Limit your consumption of alcohol.
- Don't smoke.

Social support

Social support is a major factor in how we experience stress. Social support is the positive support you receive from family, friends, and the community. It is the knowledge that you are cared for, loved, esteemed, and valued. More and more research indicates a strong relationship between social support and better mental and physical health.³

Changing thinking

When an event triggers negative thoughts, you may experience fear, insecurity, anxiety, depression, rage, guilt, and a sense of worthlessness or powerlessness. These emotions trigger the body's stress response, just as an actual threat does. Dealing with your negative thoughts and how you see things can help reduce stress.



- Thought-stopping helps you stop a negative thought to help eliminate stress.
- Disproving irrational thoughts helps you to avoid exaggerating the negative thought, anticipating the worst, and interpreting an event incorrectly.
- Problem solving helps you identify all aspects of a stressful event and find ways to deal with it.

You can also change your communication style and begin to communicate in a way that makes your views known without making others feel put down, hostile, or intimidated. This reduces the stress that comes from poor communication.

Humour and Stress

Adopting a humorous view towards life's situations can take the edge off everyday stressors. Not being too serious or in a constant alert mode helps maintain the equanimity of mind and promote clear thinking. Being able to laugh stress away is the smartest way to ward off its effects.

A sense of humour also allows us to perceive and appreciate the incongruities of life and provides moments of delight. The emotions we experience directly affect our immune system..

What Laughter Can Do Against Stress And Its Effects:

- Laughter lowers blood pressure and reduces hypertension. It provides good cardiac conditioning especially for those who are unable to perform physical exercise.
- Reduces stress hormones
- Laughter cleanses the lungs and body tissues of accumulated stale air as it empties more air than it takes in. It is beneficial for patients suffering from emphysema and other respiratory ailments.
- It increases muscle flexion, relaxation and fluent blood circulation in body.
- Boosts immune function by raising levels of infection-fighting T-cells, disease-fighting proteins called Gamma-interferon and disease-destroying antibodies called B-cells.
- Laughter triggers the release of endorphins—body's natural painkillers.
- Produces a general sense of well-being.

Ways to Use Humour to De-Stress

1. Take moment and take deep breathe and think about something funny you have experienced. Go ahead---laugh out loud!
2. Need outside stimulus? Buy one of those tickle me toys, when you squeeze the stuffed animal it giggles and shakes all over. Go ahead and laugh, its contagious!
3. Since self-humour can never get you in a situation where someone accuses you



of making fun of them, think about how your stressful day must look to the outside world, As you were running around getting the kids ready, search for the car keys, running into the store changing lanes at the grocery store check out three times to find the fastest one, then sprinting through the parking lot. Would your day make a great cartoon?

4. Tell a funny story even if it is the same one you have told many times before, getting others to laugh will get you to laugh too.
5. Buy a joke book and keep it handy to read if you are feeling really stressed. Read a few jokes. Humour can help free the mind so you can free the body of stress. Truly giggle your tension away.

Post-traumatic Stress Disorder (PTSD)

Posttraumatic stress disorder (PTSD) is a very strong stress reaction that can develop in people who have lived through an extremely traumatic event.

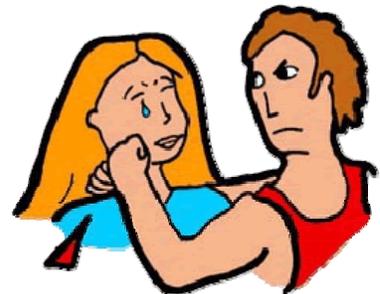
You don't have to be hurt to experience PTSD - for some people, simply witnessing or being threatened with great physical harm is enough to trigger it. Events that can lead to PTSD involve feelings of helplessness, fear, or horror, and a sense that life or safety is in danger.

It's normal to be stressed out and anxious after going through something traumatic. Strong emotions, jitters, and trouble sleeping, eating, or concentrating may all be part of a normal and temporary reaction to an overwhelming event. So might frequent thoughts and images of what happened, nightmares, or fears. Getting the right care and support after a traumatic experience can help these symptoms run their course and subside in a few days or weeks and allow a person to move on.

But when a person has PTSD, the symptoms of a stress reaction are intense and last for longer than a month. For some people, the symptoms of PTSD begin soon after the trauma. Other people may have a delayed reaction that comes months - or even years - later. Delayed PTSD symptoms can be triggered by different things, such as the anniversary of an event or seeing someone who was involved in the situation.

PTSD was first brought to public attention by war veterans and was called 'shell shock' or 'battle fatigue'. However, it can result from any traumatic event that is witnessed by a person, occurred in a person's life, or happened to a friend or family member of that person. Such events include:

- physical abuse
- sexual abuse
- sexual molestation
- ritual abuse
- family violence
- dating violence
- kidnapping or abduction
- serious accidents (e.g., car or train wrecks)
- natural disasters (e.g., floods earthquakes, the 2004 Tsunami)
- violent attacks (e.g., assault, rape, torture, bullying, being mugged)
- witnessing acts of violence or destruction (e.g., school violence, September 11th)



How Is PTSD Treated?

Unfortunately PTSD often doesn't just go away on its own. Without treatment, some symptoms of PTSD can last for months or years, or they may come and go in waves. The right treatment and support, however, can help people of all ages to recover from PTSD.



Key Questions for Lesson 6 (100 marks)

Please answer these questions on your own paper. If you choose to word process your answers please use double spacing and at least 12 pt font.



KEY QUESTION # 39 – Lesson 6 ... Important Terms (10 marks)

Read through your class notes and write the definition for each of the following terms:

- | | |
|-------------------------|--------------------------|
| 1. Stress | 2. Stressors |
| 3. Physical fatigue | 4. Psychological fatigue |
| 5. Pathological fatigue | 6. Overstress |
| 7. Stress Response | 8. Stress tolerance |
| 9. Chronic stress | 10. Stress hardiness |



KEY QUESTION # 40 – Effects of Stress and YOU (30 marks)

1. In what ways is stress necessary for life
2. List five (5) situations you think cause teens to feel stressed. Next to each situation, write down why you think that particular situation is a source of stress for teens.
3. List three (3) ways stress can have a positive effect on teens.
4. List the five (5) types of stressors and give an example of each.
5. Why is it important to practice healthy behaviours and protect yourself from prolonged or excessive stress?
6. List five (5) things in your life right now that cause you stress.
7. How do YOU know when YOU are stressed? (include both physical & mood signs of stress)
8. Describe the three (3) stages of the body's response to stress.
9. List two (2) ways to protect yourself from stress.
10. List three (3) jobs you think would be high stress and low stress? Explain your answer.
11. Understanding friends give each other support and encouragement during stressful times. How have your friends helped you with stressors in your life?
12. What are the kinds of stressors your parents face? How are they different and/or the same as the stressors you face?
13. (a) Do YOU think that young men and women react differently to stress?

- (b) What factors do YOU think cause stress for men?
 (c) What factors do YOU think cause stress for women?
14. “Going to college after high school is less stressful than getting a job and being on your own”. Think about the young adults you know. Is it true that staying in your hometown and getting a job is always less stressful than going away to college? Explain.
15. What might be the long-term effects of unhealthy ways of managing stress?



KEY QUESTION # 41 – Stress Case Studies (6 marks)

Directions: Read each case study below. Use the information from this lesson to write a brief response to each message.

Case #1 – To help reduce the effects of stress, Jonelle drinks milk, fruit juice or water instead of pop. Why is this, an effective stress management technique?

Case #2 – Alex has a big biology test on Thursday. As he is heading to his room to study, his friend Kirk calls and ask him to go to the arcade. Use the techniques discussed in this lesson to help Alex balance his activities and manage his stress.

Case #3 – What healthy alternatives would you suggest to a teen who is thinking about using drugs to deal with stress? Explain the importance of alternatives to substance abuse. (refer to lesson 3 for help)



KEY QUESTION # 42 – How to Survive Teen Stress (15 marks)

Directions: Your task for this question is to create a “How to Survive Teen Stress” flyer advising teens on ways to manage the stress of one of the following life events:

| | | |
|-----------------------------|--------------------------|-------------------------|
| moving to a new high school | not making a sports team | getting a failing grade |
| winning a major award | receiving a scholarship | |

- Be sure that your flyer has a clear title
- Make sure you have used correct spelling, grammar and punctuation
- Apply ALL knowledge & answers in a well-crafted flyer
- Use subheadings, pictures, colour, desktop publishing etc.



KEY QUESTION # 43 – Humour and Stress (15 marks)

1. Your class notes suggest that humour is a good way to deal with stress. Your task is to gather a collection of five (5) stress-relieving jokes.
- glue each joke to a sheet of paper

- underneath each joke state why that particular joke will help you deal with stress in the future
2. “First thing in the morning, I had to find where my three-year-old hid my keys” is a statement that many people can relate to. The experience is both stressful and humorous.
- (a) Give three (3) examples of times when you, your family or your friends experienced what could be described as “stressful” yet humorous or unusual events.
 - (b) What could these events teach you about humour and stress?

**KEY QUESTION # 44 – Reducing Stress in YOUR Life (6 marks)**

Many everyday situations can cause stress. Everything from traffic jams, crowds, noise, waiting in the lines, strained relationships and poor working conditions can cause physical, mental or emotional tension. Learning how to cope with stress can help you in all areas of your life.

1. Describe some of your favourite stress relievers, such as running, talking with a friend or playing a musical instrument.
2. What are some stress relievers that you could use at work or school?
3. What specific changes can YOU make in your life right now that would help you respond more effectively to stress?

**KEY QUESTION # 45 – Looking at Positive Stress (9 marks)**

When you experience negative stress, you may feel angry, disappointed and frustrated. On the other hand, positive stress may make you feel alert and focused. You may also feel excited and challenged.

List three (3) situations when you experienced positive stress. For each situation answer the following:

- (a) What happened to your self-confidence when you felt more alert and focused in the face of positive stress?
- (b) How did your friends or family help you with the experience?
- (c) What advice would you give other your age regarding your own experiences with positive stress?

**KEY QUESTION # 46 – Post Traumatic Stress Disorder (9 marks)**

Post traumatic stress disorder may occur in the aftermath of a crisis.

1. If a crisis were to happen in your family, what could members of your family do to support each other?
2. If a crisis were to happen in your community, what could members of your community do to support one another?
3. If a crisis were to happen in another country, what could members of your family, community and home country do to support each other?

PPZ30

HEALTH FOR LIFE



LESSON 7

Lesson 7 – Mental Health

CAMH – Centre for Addiction and Mental Health – Canada

The Centre for Addiction and Mental Health (CAMH) is Canada's leading addiction and mental health teaching hospital. CAMH succeeds in transforming the lives of people affected by addiction and mental illness, by applying the latest in scientific advances, through integrated and compassionate clinical practice, health promotion, education and research.

CAMH is a leader, not only in research and care, but also in innovative education about mental health and substance abuse. Their research and clinical programs work side-by-side with their education, health promotion and publishing programs. This allows us them turn their discoveries and best practices into knowledge that they can transfer to the general public, clients and families, as well as to health professionals and organizations -- throughout Ontario, across Canada and around the world.

Talking About Mental Illness (TAMI) is an awareness program for senior high school students on mental health and mental illness. The program features classroom instruction by the teacher and a presentation by individuals telling their stories about what it is like to live with mental illness. According to the CAMH, stigma continues to be a huge problem for people living with mental illness. It undermines a person's sense of self, relationships, well-being and prospects for recovery. Communities are proving they can make a difference through education and awareness programs. The program described in **Talking about mental illness** helps to increase awareness about mental illness and the stigma that surrounds it.

What Is Stigma?



The term **STIGMA** refers to any attribute, trait or disorder that causes a person to be labelled as unacceptable different from “normal” people. Individuals with mental illness – such as schizophrenia, bipolar disorder and depression – have a double burden. Not only must they cope with disabling disorders, but they must also contend with people’s negative attitudes toward those disorders. Stigma is not just a matter of using the wrong word or action. Stigma is about disrespect. It is the use of negative labels to identify a person living with mental illness. Stigma is a barrier. Fear of stigma, and the resulting discrimination, discourages individuals and their families from getting the help they need.

Do you know that stigma is not a matter of using the wrong word or action?
Do you know that stigma is about disrespect and using negative labels to identify a person living with mental illness?
Do you know that stigma is a barrier that discourages individuals and their families from seeking help?
Do you know that many people would rather tell employers they committed a petty crime and served time in jail, than admit to being in a psychiatric hospital?
Do you know that stigma can result in inadequate insurance coverage for mental health services?
Do you know that stigma leads to fear, mistrust, and violence against people living with mental illness and their families?
Do you know that stigma can cause families and friends to turn their backs on people with mental illness?
Do you know that stigma can prevent people from getting access to needed mental health services?

DO'S

Do use respectful language
Do emphasize abilities, not limitations.
Do tell someone if they express a stigmatizing attitude.

DON'TS

Don't portray successful persons with disabilities as super human.
Don't use generic labels such as retarded, or the mentally ill.
Don't use terms like crazy, lunatic, manic depressive, or slow functioning.

Terms Related to Stigma

Stereotypes of people with mental illness are just as inaccurate and dehumanizing as stereotypes of women, racial minorities, people with physical and developmental disabilities and people from other diverse groups.

A **STEREOTYPE** is a person or thing that conforms to an unjustifiably fixed impression.

PREJUDICE is a preconceived opinion.

DISCRIMINATION is an unfavourable treatment based on prejudice.



SUPPORT QUESTION – Free Association Activity

List all the words and phrases that come to mind when YOU think of mental illness or a person with mental illness.

Mental Health and Illness

MENTAL HEALTH is a state of being. It refers to how one is able to cope with the demands and stress of day-to-day living. Everyone has times when they feel depressed, get unreasonably angry or over excited. Some may feel that everything and everybody is out to get them or that they just can't cope. These are considered normal reactions to certain situations. When a person has good mental health, they are able to identify their issue or problem, choose a way to change it and move on.

MENTAL ILLNESS is a disturbance in thoughts and emotions that decreases a person's capacity to cope with the challenges of everyday life. Mental illnesses can take many forms, just as physical illnesses do. Mental illnesses are still feared and misunderstood by many people, but the fear will disappear as people learn more about them. Mental illness is a general term for a group of illnesses. A mental illness can be mild or severe, temporary or prolonged, most can be treated. Mental illness can come and go in episodes through a person's life. Some experience their illness only once and fully recover. For others, it is prolonged and recurs over some time. If you, or someone you know, has a mental illness, there is good news: all mental illnesses can be treated.

Why Do We Stigmatize Mental Illness?

Most people learn what they know about mental illness from the media. We are exposed to daily radio, T.V. and newspaper accounts that present people with mental illness as violent, criminal, dangerous, comical, incompetent and fundamentally different from other people. These inaccurate images perpetuate unfavourable stereotypes, which can lead to the rejection, marginalization and neglect of people with mental illness. News stories sometimes highlight mental illness to create a sensation in a news report, even if the mental illness is not relevant to the story. Advertisers use words like 'crazy' to convey that their prices are unrealistically low and to suggest the consumer can take advantage of them.

The myths of mental illness

Mental illness is common. Statistics show that one in every six Canadians will have a mental health problem at some point in their lives. Mental illnesses account for a large percentage of hospital stays every year. Yet, in spite of the fact that every Canadian knows someone who has been, or will be, affected by mental illness, few people know very much about it.

It is human nature to fear what we don't understand. As such, mental illness is feared by many people and, unfortunately, still carries a stigma (a stigma is defined as a mark or sign of disgrace). Because of this stigma, many people hesitate to get help for a mental health problem for fear of being looked down upon. It is unfortunate that this happens because effective treatment exists for almost all mental illnesses. Worse, the stigma experienced by people with a mental illness can be more destructive than the illness itself.



There are many myths about mental illness. Until people learn the truth, they will continue to deny that mental illness exists at all or to avoid the topic entirely. How much do you know about mental illness? Here are some of the common myths - and truths.

- **People with mental illness are violent and dangerous.** The truth is that, as a group, mentally ill people are no more violent than any other group. In fact, they are far more likely to be the victims of violence than to be violent themselves.
- **People with mental illness are poor and/or less intelligent.** Many studies show that most mentally ill people have average or above-average intelligence. Mental illness, like physical illness, can affect anyone regardless of intelligence, social class or income level.
- **Mental illness is caused by a personal weakness.** A mental illness is not a character flaw. It is an illness, and it has nothing to do with being weak or lacking will-power. Although people with mental illness can play a big part in their own recovery, they did not choose to become ill, and they are not lazy because they cannot just 'snap out of it.'
- **Mental illness is a single, rare disorder.** Mental illness is not a single disease but a broad classification for many disorders. Anxiety, depression, schizophrenia, personality disorders, eating disorders and organic brain disorders can cause misery, tears and missed opportunities for thousands of Canadians.

Recognizing the Problem

Words Can Hurt - Words like 'crazy', 'cuckoo', 'psycho', 'wacko' and 'nutso' are just a few examples of words that keep the stigma of mental illness alive. These words belittle and offend people with mental health problems. Many of us use them without intending any harm. Just as we wouldn't mock someone for having a physical illness like cancer or heart disease, it is cruel to make fun of someone with a mental illness.

Use the STOP criteria to recognize attitudes and actions that support the stigma of mental illness. It's easy. Just ask yourself if what you hear:

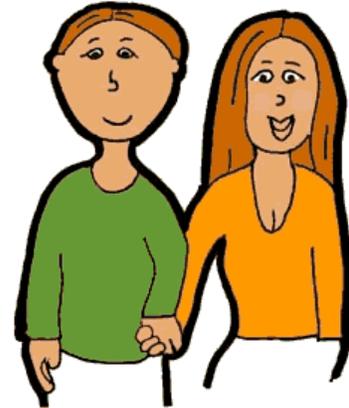
- **Stereotypes** people with mental illness (that is, assumes they are all alike rather than individuals)?
- **Trivializes** or **belittles** people with mental illness and / or the illness itself?
- **Offends** people with mental illness by insulting them?
- **Patronizes** people with mental illness by treating them as if they were not as good as other people?

If you see something in the media which does not pass the STOP criteria, speak up! Call or write to the writer or publisher of the newspaper, magazine or book; the radio, TV or movie producer; or the advertiser who used words which add to the misunderstanding of mental illness. Help them realize how their words affect people with mental illness.

Other things you can do

All of us can help the way people think about mental illness.

Start with yourself. Be careful about your own choice of words. Use accurate and sensitive words when talking about people with mental illness. Your positive attitude can affect everyone with whom you have contact.



Try to influence all the people in your life constructively. Whenever you hear people say things that show they do not really understand mental illness, use the opportunity to share with them some of the information that you have.

We have already changed the way we refer to women, people of colour and people with physical disabilities. Why stop there?

Violence and Mental Illness

Today's media reports about mental illness, there is a tendency to emphasize a supposed link between violence and mental illness. News stories regularly suggest that there is a strong connection between mental illness and crime. But the majority of people who are violent do not suffer from mental illnesses. In fact, people with a mental illness are more likely to be the victims, rather than the perpetrators of violence.

Because the media often quotes dramatic statistics to underscore their case, a look at the broader picture is essential. For example, studies have found that the rate of violence (defined as threatening, hitting, fighting or otherwise hurting another person) for people with mental illness is 3 to 5 times the rate of the general public. On its own, this is a worrying figure. But it is similar to how much more violent men are than women. Recent studies have showed that alcohol and substance abuse far outweigh mental illness in contributing to violence. A 1996 Health Canada review of scientific articles

found that the strongest predictor of violence and criminal behaviour is not major mental illness, but past history of violence and criminality.

Re-shaping beliefs is not an easy task. But it is important to correct the misleading information about this issue, because it leads to intolerance and negatively impacts the lives of people with mental illness and our society as a whole. Learning the facts about violence and mental illness is an important first step in building realistic attitudes about this complex issue.

Mental Health Statistics

(source: http://www.camh.net/printable/addictionmentalhealthstatistics_pr.html)

Did you know.....

- As many Canadians suffer from major depression as from other leading chronic conditions including heart disease. Four per cent of those Canadians surveyed reported having symptoms of depression as compared to 5 per cent with heart disease. (Statistics Canada: CCHS 2003)
- Only 32% or two thirds of Canadians experiencing feelings and symptoms consistent with a surveyed mental disorder or substance dependence sought help from a health care professional. (Statistics Canada: CCHS 2003)
- 31% of 15 to 24 year-olds have experienced a mental health problem
- 27% have anxiety problems
- 7.5 % have affective problems
- 15 to 24 year-olds are more likely to have social phobias and bipolar disorder
- Teenagers between the ages of 15 to 24 are the least likely to use any resources for problems concerning their mental health or use of alcohol or illicit drugs. (Statistics Canada: CCHS 2003)
- According to the World Health Organization five of the 10 leading causes of disability are related to mental disorders.
- The overall prevalence rates for mental health disorders and substance dependencies are about the same for women as for men -- 1.4 million women or 11 per cent of the total surveyed compared to 1.2 million for men or 10 per cent of the total surveyed. (Statistics Canada: CCHS 2003)
- Ratio of Ontarians who experience a mental illness in their lifetime: 1 in 5. 22% of Ontarians have experienced at least one mental health problem in their lifetime(Health Canada)
- Women are more likely than men to experience a mental health problem, specifically anxiety or depression
- Men are more likely to experience antisocial personality disorder
- Older people experience depression more often than younger people
- Mental disorders (especially depression) are more common among people who are separated, divorced or widowed
- 52% of Ontarians whose parents have experienced a mental health problem also experience a mental disorder.



SUPPORT QUESTION – Mental Illness “Dos and Don’ts”

Brainstorm ideas about ways of talking about, and behaving toward, people with mental illness that are inappropriate, stigmatizing and disempowering. Create a list of suggestions for more respectful language and behaviour.

Types of Mental Illnesses

Mood Disorders

MOOD DISORDERS ARE PERSISTENT CHANGES IN MOOD CAUSED BY BIOCHEMICAL IMBALANCES IN THE BRAIN. Mood Disorders affect 1 in 10 Canadians. People may experience feelings of hopelessness, changes in eating patterns, disruptive sleep patterns, chronic fatigue, and sometimes thoughts of death or suicide. The highs and lows of life are experienced with greater intensity, and for longer periods, by people with mood disorders. People with these disorders may experience depressive episodes (feeling very "low") or manic episodes (feeling very "high"), or both. Mood disorders are among the most common mental disorders.

Depression is a clinical term used by psychiatrists to describe a period of time when a person feels very sad to the point of feeling worthless, hopeless and helpless. Everyone experiences unhappiness at some time in his or her life, and many people may become depressed temporarily when things do not go as they would like. When a depressed mood persists however, and begins to interfere with everyday living, it may be the sign of a serious state of depression that requires professional help.

Seasonal affective disorder (SAD) is a subtype of major depression characterized by onset at a certain time of year, usually the winter. First defined in 1984, SAD is also called 'seasonal depression,' 'winter depression,' or 'major depression with a seasonal pattern.' Each of these terms refers to a subtype of major depressive disorder.

Bipolar disorder (also sometimes called manic depressive illness) is another depressive condition that involves periods of major depression mixed with periods of mania. **Mania** is the term for abnormally high mood and extreme bursts of unusual activity or energy.

Postpartum Depression For every woman, having a baby is a challenging time, both physically and emotionally. It is natural for many new mothers to have mood swings after delivery, feeling joyful one minute and depressed the next. These feelings are sometimes known as the 'baby blues', and often go away within 10 days of delivery. However, some women may experience a deep and ongoing depression which lasts much longer. This is called postpartum depression.



SUPPORT QUESTION – Mental Illness Support

How would you hope to be treated if you or a member of your family had a mental illness? How would you want to be supported?

Anxiety Disorders

Anxiety is a natural part of life, and most of us experience it from time to time. The word "anxiety" usually refers to worry, concern, stress, or nervousness. For most teens, anxiety is limited to particular situations such as tests, important dates (like the prom), or driving lessons. Feeling anxious can sometimes be a good thing. Anxiety can actually help you by motivating you to prepare for a big test or by keeping you on your toes in potentially dangerous situations. Occasional anxiety isn't something to be concerned about.

ANXIETY DISORDERS ARE ASSOCIATED WITH FEELINGS OF ANXIOUSNESS, COMBINED WITH PHYSIOLOGICAL SYMPTOMS THAT INTERFERE WITH EVERYDAY ACTIVITIES. But for some teens, anxiety is a constant factor in their lives. When a person has an anxiety disorder, it interferes with their ability to function normally on a daily basis. Anxiety disorders can cause teens to suffer from intense, long-lasting fear or worry, in addition to other symptoms. Anxiety Disorders affect 1 in 10 Canadians

Panic Disorder - As the name suggests, panic disorder is expressed in panic attacks which occur without warning, accompanied by sudden feelings of terror. Physically, an attack may cause chest pain, heart palpitations, shortness of breath, dizziness, abdominal discomfort, feelings of unreality and fear of dying. Sometimes a person having a panic attack mistakenly feels he may be dying or having a heart attack. The panic symptoms are caused by over activity of the body's normal fear response.

Agoraphobia is an intense fear of having a panic attack. People with agoraphobia have had a panic attack before, and worry so much about having another that they avoid going anywhere they think it could possibly occur. They are often left with very few places they feel comfortable going outside their own home.

Phobias - Phobias are divided into two categories: social phobia, which involves fear of social situations, and specific phobias, such as fear of flying, blood and heights.

Social Phobia - People with social phobia feel a paralyzing, irrational self-consciousness about social situations. They have an intense fear of being observed or of doing something horribly wrong in front of other people. The feelings are so extreme that people with social phobia tend to avoid objects or situations that might stimulate that fear, which dramatically reduces their ability to lead a normal life. Teens with social anxiety may feel too nervous to raise their hand or talk in class. They may fear making a mistake, saying the wrong answer, or looking foolish. They may feel extremely shy and anxious in situations where they have to interact with others, such as parties, the lunch table, or when they meet new people. They may be overly self-conscious about their clothes or hair, worrying that they might be criticized or teased, or that they might stand out or be

noticed. With an extreme form of social anxiety called selective mutism, some kids and teens may be too anxious to talk at all in certain situations.

Specific Phobias - Fear of flying, fear of heights and fear of open spaces are some typical specific phobias. People suffering from a specific phobia are overwhelmed by unreasonable fears, which they are unable to control. Exposure to feared situations can cause them extreme anxiety and panic, even if they recognize that their fears are illogical.

Post-Traumatic Stress Disorder - A terrifying experience in which serious physical harm occurred or was threatened can cause post-traumatic stress disorder. Survivors of rape, child abuse, war or a natural disaster may develop post-traumatic stress disorder. Common symptoms include flashbacks, during which the person re-lives the terrifying experience, nightmares, depression and feelings of anger or irritability.

Obsessive-Compulsive Disorder - This is a condition in which people suffer from persistent unwanted thoughts (obsessions) and / or rituals (compulsions) which they find impossible to control. Typically, obsessions concern contamination, doubting (such as worrying that the iron hasn't been turned off) and disturbing sexual or religious thoughts. Compulsions include washing, checking, organizing and counting. With OCD a teen may, for example, have constant worry and fear about illness or germs, and may become stuck in a pattern of washing and cleaning that becomes time-consuming, distressing, and feels impossible to control. The worries (obsessions) with OCD are unrealistic, but are frightening to the person who has them. For example, a teen with illness obsessions may worry that just by reading about an illness or driving past a hospital he could become ill.

Generalized Anxiety Disorder -Characterized by repeated, exaggerated worry about routine life events and activities, this disorder lasts at least six months, during which time the person is affected by extreme worry more days than not. The individual anticipates the worst, even if others would say they have no reason to expect it. Physical symptoms can include nausea, trembling fatigue, muscle tension, or headache. Teens with GAD may worry about school, health or safety of family members, the future, and whether they'll become ill or injured. They may always think of the worst that could happen. Along with the worry and dread, they may have physical symptoms, too, such as chest pain, headache, tiredness, tight muscles, stomach aches, or even vomiting. GAD can result in missed school days and avoidance of social activities.

Psychosis

PSYCHOSIS IS THE ACTIVE STATE OF EXPERIENCING HALLUCINATIONS OR DELUSIONS AND CAN BE ORGANIC (MENTAL ILLNESS) OR DRUG-INDUCED.

Schizophrenia is the most serious form of mental illness and affects approximately one in 100 Canadians. Schizophrenia often appears when the body is undergoing the hormonal and physical changes of adolescence. People who have schizophrenia may have mixed-up thoughts, delusions (false or irrational beliefs), hallucinations (seeing or hearing things that do not exist) and exhibit unusual behaviour. The symptoms appear in late adolescence and early adulthood. In males the average age of onset is 18, in women 25.

The term schizophrenia comes from two Greek words: "schizo" which means split and "phrenia" which means mind. People who suffer from the illness do not, however, have a split or multiple personalities. Schizophrenia has always had a strong biological basis, making it more of a neurological disorder like Alzheimer's, but in truth the illness is still a mystery. Most of what is known about schizophrenia has been learned in the last twenty years, particularly the last ten with the development of brain imaging technology, like MRI and PET scans.

Eating Disorders

When most people hear of someone with an eating disorder they almost automatically assume the person has a problem with food. Eating disorders are not a sign that a person has a problem with food, rather eating disorders are actually only the symptoms of underlying problems in that person's life. **EATING DISORDERS ARE A WAY OF COPING WITH DEEPER PROBLEMS THAT A PERSON FINDS TOO PAINFUL OR DIFFICULT TO DEAL WITH DIRECTLY.** They are complex conditions that signal difficulties with identity, self-concept and self-esteem. Eating disorders cross cultural, racial and socio-economic boundaries, and affect men and women. Eating Disorders are most common in young females and include Anorexia Nervosa (drastic weight loss due to fasting and excessive exercise) and Bulimia (binge eating followed by self-induced vomiting and the abuse of laxatives).

Eating disorders can be difficult to detect. The media glamourization of so-called ideal bodies, coupled with the view that dieting is a normal activity, can obscure a person's eating problems. It can be difficult for a person with an eating disorder to admit they have a problem. Knowing how to support someone with an eating disorder is also a challenge. Treatment is available - it can be a long process, but an eating disorder can be overcome. If you think that you, or someone you know, has an eating disorder, it is important to learn the facts. Gaining an understanding of these conditions is the first step in the journey to wellness.

Anorexia Nervosa, Bulimia Nervosa And Binge-Eating

Three chronic eating disorders have been identified:

Anorexia nervosa is characterized by severe weight loss due to extreme food reduction. People with anorexia have an intense fear of being fat. When a person has anorexia, he or she hardly eats at all - and the small amount of food that is eaten becomes an obsession. A person with anorexia may weigh food before eating it or compulsively count the calories of everything. It is not unusual for a person with anorexia to also exercise excessively in an attempt to lose weight.

A unique feature of anorexia is not only the strong desire to be very thin, but also the altered body perception that goes with it. Even though they might be shedding pounds at a dangerous rate, people with anorexia don't see themselves as thin. A person with the condition can look in the mirror and actually see a fat person.

Symptoms include:

- refusal to keep body weight at or above the normal weight for one's body type
- dieting to extremes, usually coupled with excessive exercise
- feeling overweight despite dramatic weight loss
- loss of menstrual periods
- extreme preoccupation with body weight and shape

Bulimia nervosa results in frequent fluctuations in weight, due to periods of uncontrollable binge eating, followed by purging. Bulimia is a bit different from anorexia because the person with bulimia doesn't avoid eating. Instead, he or she eats a large amount of food then gets rid of it quickly by vomiting or taking laxatives. This is commonly known as "binge and purge" behavior. Like anorexia, bulimia tends to affect girls and young women more than guys. Unlike anorexia, you can't always tell by looking whether a person has bulimia. In fact, someone with bulimia may appear average or even above average in weight.

As well as a preoccupation with body image, symptoms include:

- repeated episodes of bingeing and purging, usually by self-induced vomiting, abuse of laxatives, diet pills and/or diuretics - methods which are both ineffective and harmful
- eating beyond the point of fullness

Binge-eating disorder, or compulsive eating, is often triggered by chronic dieting and involves periods of overeating, often in secret and often carried out as a means of deriving comfort. Binge eating, also called compulsive overeating, is different from normal appetite increases or overeating now and then. Teens with a binge eating problem eat unusually large amounts of food and don't stop eating when they become full. They binge not just from time to time,

but regularly. And binge eating involves more than just eating a lot - with binge eating, a person feels out of control and powerless to stop eating while he or she is doing it. That's why binge eating is also called compulsive overeating. With binge eating, a person may feel a compulsion (a powerful urge) to overeat.

Teens with a binge eating problem may overeat when they feel stressed, upset, hurt, or angry. Many find it comforting and soothing to eat food, but after a binge they are likely to feel incredibly guilty and sad about the out-of-control eating. Teens who binge eat may do so to deal with (or avoid dealing with) difficult emotions. For this reason, some say binge eating is about having an unhealthy relationship with food.

Symptoms include:

- periods of uncontrolled, impulsive or continuous eating
- sporadic fasts or repetitive diets

Personality Disorders

A **PERSONALITY DISORDER** IS A PATTERN OF INNER EXPERIENCE AND BEHAVIOUR THAT IS SIGNIFICANTLY DIFFERENT FROM THE INDIVIDUAL'S CULTURE; IS PERVASIVE AND INFLEXIBLE; IS STABLE OVER TIME; AND LEADS TO DISTRESS OR IMPAIRMENT. Personality disorders usually begin in adolescence or early adulthood. A personality disorder is identified by a pervasive pattern of experience and behaviour that is abnormal with respect to any two of the following: *thinking, mood, personal relations, and the control of impulses.*

The character of a person is shown through his or her personality -- by the way an individual thinks, feels, and behaves. When the behaviour is inflexible, maladaptive, and antisocial, then that individual is diagnosed with a personality disorder.

Most personality disorders begin as problems in personal development and character which peak during adolescence and then are defined as personality disorders.

Personality disorders are not illnesses in a strict sense as they do not disrupt emotional, intellectual, or perceptual functioning. However, those with personality disorders suffer a life that is *not* positive, proactive, or fulfilling. Not surprisingly, personality disorders are also associated with failures to reach potential.

Antisocial Personality Disorder: Lack of regard for the moral or legal standards in the local culture, marked inability to get along with others or abide by societal rules. Sometimes called psychopaths or sociopaths.

Avoidant Personality Disorder: Marked social inhibition, feelings of inadequacy, and extremely sensitive to criticism.

Borderline Personality Disorder: Lack of one's own identity, with rapid changes in mood, intense unstable interpersonal relationships, marked impulsively, instability in affect and in self image.

Dependent Personality Disorder: Extreme need of other people, to a point where the person is unable to make any decisions or take an independent stand on his or her own. Fear of separation and submissive behaviour. Marked lack of decisiveness and self-confidence.

Histrionic Personality Disorder: Exaggerated and often inappropriate displays of emotional reactions, approaching theatricality, in everyday behaviour. Sudden and rapidly shifting emotion expressions.

Narcissistic Personality Disorder: Behaviour or a fantasy of grandiosity, a lack of empathy, a need to be admired by others, an inability to see the viewpoints of others, and hypersensitive to the opinions of others.

Obsessive-Compulsive Personality Disorder: Characterized by perfectionism and inflexibility; preoccupation with uncontrollable patterns of thought and action.

Paranoid Personality Disorder: Marked distrust of others, including the belief, without reason, that others are exploiting, harming, or trying to deceive him or her; lack of trust; belief of others' betrayal; belief in hidden meanings; unforgiving and grudge holding.

Schizoid Personality Disorder: Primarily characterized by a very limited range of emotion, both in expression of and experiencing; indifferent to social relationships.

Schizotypal Personality Disorder: Peculiarities of thinking, odd beliefs, and eccentricities of appearance, behaviour, interpersonal style, and thought (e.g., belief in psychic phenomena and having magical powers).

Attention Deficit Hyperactivity Disorder (ADHD) affect adults and children. Individuals with ADHD have difficulty understanding themselves and others. As a result, they can be irritable, demanding, hostile, fearful or manipulative. Typically, someone with ADHD is consistently distracted or has trouble concentrating,

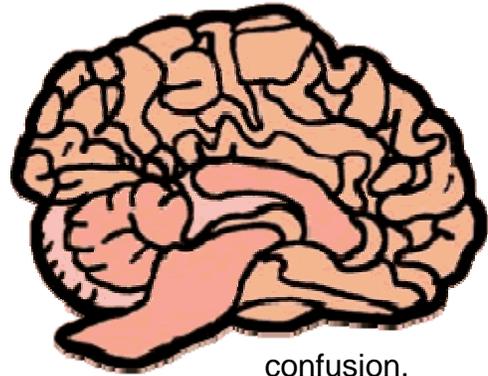
Dissociative Identity Disorder: Formerly known as “multiple personality disorder,” is the presence of two or more distinct identities that alternately control a person’s behaviour. It reflects a failure to make connections between identity, memory and consciousness. Known by the general public as “split personality,” there is now a controversy as to whether or not it is a real diagnosis.

Personality disorder test

http://www.4degrez.com/misc/personality_disorder_test.mv

ORGANIC BRAIN DISORDERS

Organic Brain Disorders affect 1 in 10 Canadians. This is a general term that refers to physical disorders that cause a decrease in mental function, usually not including psychiatric disorders. Also known as: chronic organic brain syndrome; OBS; organic mental disorder



Symptoms vary with the specific disease. In general, organic brain syndromes cause varying extent of delirium (severe, short term losses of brain function), agitation, and dementia (long-term, often progressive, losses of brain function). They are usually the result of physical brain injury or disease such as Alzheimer Disease, AIDS Dementia Complex or damage to the brain from strokes and accidents. The most common symptom of organic brain disorders is memory loss and confusion.

Disorders associated with OBS include, but are not limited to:

- Degenerative disorders:
 - Creutzfeldt-Jacob disease
 - Huntington disease
 - Multiple sclerosis
 - Pick's disease
 - Senile dementia/Alzheimer's type
- Cardiovascular disorders:
 - Arrhythmias
 - Cardiac infections (endocarditis, myocarditis, etc.)
 - Hypertensive brain injury
 - Stroke
- Trauma-induced brain injury:
 - Chronic subdural hematoma (blood clot causing pressure on brain)
 - Concussion
 - Intracerebral & Subarachnoid hemorrhage
- Respiratory conditions -- may cause or aggravate OBS
 - Hypoxia (decreased oxygen in the body)
 - Hypercapnia (increased carbon dioxide levels in the body)
- Infections
 - Any acute or chronic infection
 - Septicemia (presence in the bloodstream of toxic by-products caused by infection)
 - Meningitis
 - Encephalitis

- Drug and alcohol related conditions
 - Intoxication, drug abuse, or alcohol use
 - Long-term effects of alcohol, Wernicke-Korsakoff syndrome
 - Alcohol withdrawal state
 - Withdrawal from drugs (especially sedative-hypnotics and corticosteroids)
- Parkinson's disease

Youth and Mental Illness

There are different kinds of mental illness that are commonly seen in adolescence, all of which have significant effects on a teen's day to day living. Some of these include:

Adolescents and depression:

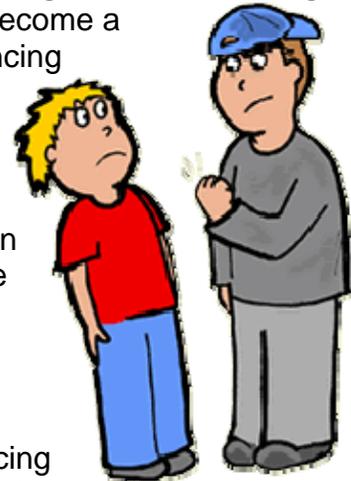
Many teens feel down and blue at times, but for some these feelings do not seem to go away. The symptoms can be there day and night and life can become a chore. These teens may not realize that what they are experiencing are symptoms of a potentially treatable disease.

Adolescents and suicide:

Suicidal thinking and behaviour often go hand in hand with depression in adolescence. Suicide is the second most common killer of Canadian teens. While some suicidal behaviour may be impulsive, all indicators of suicidal thoughts and actions should be taken seriously.

Adolescents and anxiety:

Many physical symptoms (e.g., headaches, stomach aches, racing heart) can be associated with anxiety in adolescents. Feelings of and dread can become so intense that they keep you from going to school, from being in a group, and from many activities that would not be a problem otherwise. Anxiety can be tied to a past trauma (e.g., car accident, incident of abuse), an identifiable source (e.g., snakes, heights), or present in everything one does.



fear

Adolescents and risk-taking behaviour:

Accidents represent the number one cause of death in Canadian teens and much of this can be traced to different types of risk-taking behaviour. Risk taking is a broad category of behaviours that includes among others: alcohol and substance abuse, unprotected sex, thrill seeking, and delinquent behaviours. Such behaviours are often symptomatic of various mental illnesses and may result in some of the real tragedies of adolescence. As well, if a person engages in one risk-taking behaviour they are likely to engage in more than one.

Adolescents and eating disorders:

Two psychiatric eating disorders, anorexia nervosa and bulimia, are on the increase among Canadian teenage girls. They also occur in boys but much less often. Both disorders are characterized by a preoccupation with food, and a feeling of lack of control over aspects of one's life. The teenager with anorexia nervosa is often perfectionistic but suffers from low self-esteem and an irrational belief of being overweight, regardless of how thin he or she becomes. Teenagers with bulimia binge on huge quantities of food and then purge their bodies of dreaded calories by self-induced vomiting, laxative use, and often excessive exercising.

Eating disorders can have fatal consequences, and adolescents with these disorders are typically very good at avoiding being discovered. Denying the presence of their problem delays much needed help.

Adolescents and conduct disorders:

Conduct disorders are a complicated group of behavioural and emotional problems in adolescence. These teens have great difficulty following rules and behaving in a socially acceptable way. The major problem is in the expression of anger. They are often aggressive to peers and adults, and may lie, steal, destroy property and be sexually inappropriate.

Risk-taking behaviours are common in this group, including the full range of suicidal behaviour. They frequently have other contributing problems including school failure and negative family and social experiences. Conduct disorders can co-occur with adolescent depression and attention deficit disorder.

What Causes Mental Illness?

Although the exact cause of most mental illnesses is not known, it is becoming clear through research that many of these conditions are caused by a combination of genetic, biological, psychological and environmental factors. One thing is for sure -- mental illness is not the result of personal weakness, a character defect or poor upbringing, and recovery from a mental illness is not simply a matter of will and self-discipline.

Heredity (genetics): Many mental illnesses run in families, suggesting that the illnesses may be passed on from parents to children through genes. Genes contain instructions for the function of each cell in the body and are responsible for how we look, act, and think, etc. But, just because your mother or father may have a mental illness doesn't mean you will have one. Hereditary just means that you are more likely to get the condition than if you didn't have an affected family member. Experts believe that many mental conditions are linked to problems in multiple genes -- not just one, as with many diseases -- which is why a person inherits a susceptibility to a mental disorder, but doesn't always develop the condition. The disorder itself occurs from the interaction of these genes and other factors -- such as psychological trauma and environmental stressors -- which can influence, or trigger, the illness in a person who has inherited a susceptibility to it.

Biology: Some mental illnesses have been linked to an abnormal balance of special chemicals in the brain called neurotransmitters. Neurotransmitters help nerve cells in the brain communicate with each other. If these chemicals are out of balance or are not working properly, messages may not make it through the brain correctly, leading to symptoms of mental illness. In addition, defects in or injury to certain areas of the brain also have been linked to some mental conditions.

Chemical Imbalance: There is growing evidence that mental illness may be partially caused by a chemical imbalance in the brain. Many people respond well to medications that address such an imbalance and many of the symptoms of their illness are reduced or eliminated.

Environmental Stressors: Certain stressors -- such as a death or divorce, a dysfunctional family life, changing jobs or schools and substance abuse -- can trigger a disorder in a person who may be at risk for developing a mental illness.

Substance Abuse: There is no clear causal relationship between substance use and the development of mental illness. People who have mental illness may use alcohol and other drugs to relive some symptoms of their illness. However, substance use may actually worsen symptoms and delay proper diagnosis and treatment. There are also cases in which substance use has induced psychotic behaviour, both because of the chemical effect of the drug and because the drug unmask a pre-existing mental illness.

Psychological Trauma: Some mental illnesses may be triggered by psychological trauma suffered as a child, such as severe emotional, physical or sexual abuse; a significant early loss, such as the loss of a parent; and neglect.

Other Illnesses: People with conditions such as Alzheimer's, Parkinson's, dementia and brain damage (from strokes or accidents) experience memory loss and confusion. People can also develop chronic depression in conjunction with debilitating physical illness or illnesses that alter their level of functioning.

Mental Illness Treatments

When someone first starts to develop symptoms of mental illness, contact a doctor or a community mental health service for help. Sometimes the symptoms can be so confusing for the person that they do not realize they are ill. In this case, family or friends can visit the doctor to discuss what can be done.

Biological Treatments

MEDICATIONS - Medications are the main form of treatment for people seriously affected by mental illness. Different types of medication treat different types of mental illness:



- **Antidepressant medications** - about 60 to 70 per cent of people with depression respond to initial antidepressant treatment. In addition to depression, these medications are now used (in combination with psychological therapies) to treat phobias, panic disorder, obsessive compulsive disorder and eating disorders.
- **Antipsychotic medications** - are used to treat psychotic illnesses (for example, schizophrenia and bipolar disorder). The first antipsychotic medications were developed in the 1950s and allowed most people with a mental illness to keep living in the community, rather than spend many years in a psychiatric hospital. In recent years, new antipsychotic medications have been developed that have fewer side effects (for example, stiffening and weakening of the muscles and muscle spasms) than the traditional antipsychotic medications.
- **Mood stabilizing medications** - are helpful for people who have bipolar disorder (previously known as manic depression). Lithium carbonate can help reduce the recurrence of major depression and can help reduce the manic or 'high' episodes.

ELECTROCONVULSIVE THERAPY (ECT) - is still used, although less frequently than in the past. It can be a highly effective treatment for severe depression, where other treatments have not been effective. After the person is given a general anesthetic and muscle relaxant, an electrical current is passed through their brain.

Psychosocial Interventions

Effective treatment involves more than medications. Treatment may also involve:

PSYCHOTHERAPY – is often used in conjunction with medication to treat mental illness. Psychotherapy is a general term used to describe a form of treatment based on “talking work” done with a therapist. The aim of talk therapy is to relieve distress by expressing feelings; to help change negative attitudes, behaviour and habits; and to promote constructive ways of coping.

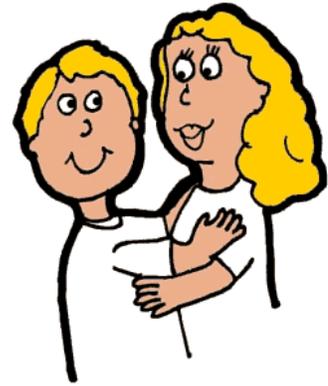
- **Community support** - including information, accommodation, help with finding suitable work, training and education, psychosocial rehabilitation and mutual support groups. Understanding and acceptance by the community is very important.
- **Psychological therapy** - this treatment is based on the idea that some of the problems related to mental illness occur because of the way people react to, think about and perceive things. It can reduce the distress associated with symptoms and can even help reduce the symptoms themselves.
- **Hospitalization** - this only occurs when a person is acutely ill and needs intensive treatment for a short time. It is considered better for a person's mental health to treat them in the community, in their familiar surroundings.

- **Involuntary treatment** - this can occur when the psychiatrist recommends someone needs treatment but the person doesn't agree. In general, people receive involuntary treatment to ensure their safety, or that of others.
- **Self-help Groups** – self help organization, run by clients of the mental health system and their families, and provide an important part of treatment for people with mental illness and their families. Self-help groups offer the chance to meet informally with other people who understand the same issues and challenges. These groups can reduce a sense of isolation and provide opportunities to learn from other group members' experiences. Volunteering and sharing the wisdom gained by living with mental illness can be an empowering experience for others.

Support Strategies

Here are some strategies for supporting someone with a mental health problem:

- ✓ Be supportive and understanding.
- ✓ Spend time with the person. Listen to him or her.
- ✓ Never underestimate the person's abilities.
- ✓ Encourage the person to follow his or her treatment plan and seek out support services
- ✓ Become informed about mental illness
- ✓ If you are a close friend or family member of someone who has a mental illness, make sure you get support as well. Crisis training, self-help and/or individual counselling will help you become a better support person.
- ✓ Put the person's life before your friendship. If you think the person needs help, especially if she or he mention having thoughts of suicide, don't keep it a secret (even if the person may have asked you to). Tell his or her parents or someone else who can help.



SUPPORT QUESTION – Mental Illness Quiz

Test your mental health knowledge by taking the following quiz:

1) Mental health is defined as:

- a) a constant feeling of contentment
- b) striking a balance in all aspects of your life - social, physical, spiritual, economic, mental
- c) achieving a period of 12-18 months without a psychotic episode

2) Mental illness is:

- a) a single, rare disorder
- b) a broad classification for many disorders.

3) Who is most likely to get a mental illness?

- a) poor, uneducated people
- b) people with stressful jobs
- c) Mental illness can affect anyone, regardless of intelligence, social class or income level.

4) Mental illness is caused by:

- a) personal weakness or frailty
- b) it is hereditary
- c) Mental illness can affect anyone, regardless of intelligence, social class or income level.

5) Violence is often associated with mental illness - true or false?

- a) True: the general public is more often at risk
- b) False: people with mental illness are more likely to be the victims, rather than the perpetrators of violence

6) Depression and bipolar disease are collectively known as:

- a) Anxiety disorders
- b) Mood disorders
- c) Personality disorders

7) Panic attacks and phobias are collectively known as:

- a) Pan-phobic disorders
- b) Anxiety disorders
- c) Fear-based conditions

8) SAD stands for:

- a) Simple Anxiety Defect
- b) It is a short form for 'sadness'
- c) Seasonal Affective Disorder, a type of depression that follows a seasonal pattern

9) Anorexia nervosa and bulimia are mental illnesses - true or false?

- a) True: these are eating disorders where food issues mask mental health problems
- b) False: intense dieters are just looking for attention

10) Eating disorders are not dangerous - true or false?

- a) True: a change in diet will solve the problem
- b) False: left untreated, eating disorders have a high risk of mental and physical illnesses that can cause death

11) Schizophrenia refers to:

- a) a mental illness that results in split personality
- b) a mental illness with symptoms that include hallucinations, delusions, social withdrawal and thought disorders

12) Post-traumatic stress disorder is:

- a) a one-time reaction to a very difficult experience
- b) a recurring anxiety disorder resulting from the trauma of an unexpected, shattering event

13) A phobia is:

- a) a strong dislike of some thing or some activity
- b) an irrational, illogical fear that has a powerful intrusive effect on a person's life

14) The two main types of phobias are:

- a) Agoraphobia and arachnophobia
- b) Specific phobia and social phobia

15) Social phobia is:

- a) an excessive fear of social or performance situations
- b) a resistance to gatherings of more than 5 people
- c) a dislike of hosting social get-togethers

16) Eating disorders only affect women:

- a) True: women are more vulnerable to media images of thin females
- b) False: men develop eating disorders, too, though in smaller numbers than women

17) Agoraphobia is:

- a) fear of the supermarket
- b) fear of the outdoors
- c) fear of being in places or situations which would be difficult to escape from

18) What is cognitive-behaviour therapy, or CBT?

- a) a form of treatment for some mental illnesses which includes exposure therapy and anxiety management training
- b) lectures that provide people with detailed information about their mental illness and how they should behave

19) Clinical depression is:

- a) sadness or disappointment
- b) depression brought on by frequent trips to a hospital or dental clinic
- c) severe feelings of worthlessness, sadness and emptiness that last for several weeks and begin to interfere with a person's work and social life

20) Postpartum depression is:

- a) the sleep deprivation suffered by many parents in the first few months caring for a new baby
- b) a severe depression affecting new mothers that can last for some months after childbirth

21) "Manic" depression is also known as:

- a) the highs and lows
- b) bipolar affective disorder
- c) the blues

22) Stigma refers to:

- a) a plan of treatment agreed to by patient and doctor
- b) societal prejudice that can prevent people in need from speaking out or seeking help

23) You should never mention suicide to a depressed person - true or false?

- a) True: You could put the thought into the mind of a vulnerable person
- b) False: Just saying the word will not cause a person to attempt suicide

24) There is very limited treatment for mental illness - true or false?

- a) True: mental illness is always a life sentence
- b) False: a person's quality of life can be improved with treatments such as psychotherapy, cognitive behavioural therapy, medication, occupational therapy and social supports

25) The anxiety disorder involving persistent thoughts, ideas or images and repetitive behaviours is called:

- a) obsessive-compulsive disorder, or OCD
- b) repetitive syndrome
- c) panic disorder

Answer Key:

| | | | | |
|------|------|------|------|------|
| 1 b | 2 b | 3 c | 4 c | 5 b |
| 6 b | 7 b | 8 c | 9 a | 10 b |
| 11 b | 12 b | 13 b | 14 b | 15 a |
| 16 b | 17 c | 18 a | 19 c | 20 b |
| 21 b | 22 b | 23 b | 24 b | 25 a |



Key Questions for Lesson 7 (100 marks)

Please answer these questions on your own paper. If you choose to word process your answers please use double spacing and at least 12 pt font.



KEY QUESTION # 47 – Lesson 7 ... Important Terms (15 marks)

Read through your class notes and write the definition for each of the following terms:

- | | |
|---------------------------|-----------------------------|
| 1. CAMH | 2. TAMI |
| 3. Stigma | 4. Stereotype |
| 5. Prejudice | 6. Discrimination |
| 7. Mental Health | 8. Mental Illness |
| 9. Mood Disorders | 10. Anxiety Disorders |
| 11. Psychosis | 12. Eating Disorders |
| 13. Personality Disorders | 14. Organic Brain Disorders |
| 15. Schizophrenia | |



KEY QUESTION # 48 – Analysis of Media Coverage (10 marks)

The purpose of this activity is to highlight the role media plays in influencing public understanding and perception of mental illness and to help you evaluate media messages about mental illness.

Directions: Collect one (1) article from a newspaper or magazine that discusses mental illness or provides an account of an incident involving a person with mental illness. It would be VERY effective if you can find coverage of the same story or event from different newspapers or magazines.

1. Cut out your article & mount your article on a piece of blank paper (2 marks)

(Note: If you do not include a copy of the article for this assignment you will receive a mark of “zero” for the entire key question. The article must be included with your answer.)

2. Read the article and answer the following in complete sentences:
 - (a) List examples of stigmatizing or stereotypical images and language used in the article (4 marks)
 - (b) For each stigmatizing or stereotypical images and language used, write down alternative ways or reporting the story that would not perpetuate stereotypes of people with mental illness (4 marks)

Useful website: <http://mason.gmu.edu/~owahl/MEDIA.HTM>



KEY QUESTION # 49 – What is Stigma? (10 marks)

The purpose of the following questions is to explore the concept of stigma, its causes and its impact.

1. Write down the definition of “stigma” from your dictionary. Be sure to write the dictionary name down too.
2. What are some of the negative things you have heard about people with mental illness?
3. What are some of the positive things you have heard about people with mental illness?
4. Why do YOU think people with mental illness are stigmatized?
5. (a) List one (1) other health conditions or social issues that have been stigmatized throughout history. (ex: unwed motherhood)
(b) What factors have contributed to changing public perceptions around some of these conditions or issues?
6. What do YOU think influences perceptions about people with mental illness?
7. How do YOU think stigma affects the lives of people with mental illness?



KEY QUESTION # 50 – Famous People with Mental Illness (20 marks)

Purpose: To emphasize that mental illness is not a barrier to achievement. People with mental illness are just like the rest of us, they live ordinary lives; they have families, jobs, bills to pay, talents, challenges and so on. There are also people who have a harder time dealing with their mental illness and don’t function as well as the presenters or the famous people you will see on the list in class. This may be due to factors such as lack of support, lack of affordable housing or treatment as well as stigma.

Directions: Read through the list below and pick-put the names you recognize. Select one (1) famous person to research. Once you have made your selection, complete the following information:

| | | |
|---------------------|-------------------|-----------------|
| Drew Carey | Jim Carrey | John Cleese |
| Frances Ford Copola | Ashley Judd | Anthony Hopkins |
| Margot Kidder | Joan Rivers | Winona Ryder |
| Charles Shultz | Damon Wayans | Robin Williams |
| Vincent van Gogh | Elizabeth Manley | Monica Seles |
| Darryl Strawberry | Agatha Christie | Charles Dickens |
| F. Scott Fitzgerald | Ernest Hemmingway | Larry King |
| Mark Twain | Virginia Woolf | Charles Darwin |
| Sigmund Freud | Stephen Hawking | Kurt Cobain |
| Sheryl Crow | Janet Jackson | Elton John |

| | | |
|----------------------|-------------------------|--------------------|
| Sarah McLaughlan | Alanis Morissette | Axl Rose |
| Paul Simon | Princess Diana | Napoleon Bonaparte |
| Ludwig van Beethoven | Hans Christian Anderson | |

- What is the famous person's occupation?
- What is the famous person "known for"? (a movie, a book, a sport, a song etc.)
- How old is the famous person? Where did he/she grow up?
- What is the famous person's mental illness? Describe and briefly define the mental illness.
- How has/does the famous person cope or deal with his/her mental illness?

Evaluation:

Biography & Definition - general background (10)
 - mental illness information (10)



KEY QUESTION # 51 – Mental Health Awareness Pamphlet (45 marks)

Directions: Design a pamphlet that will create awareness about mental health that teenagers will understand. By using your class notes, the Internet or your local library gather information and create a three fold pamphlet that includes the following information:

- What is stigma? (1 mark)
 - Difference between mental health & mental illness (2 marks)
 - Myths of mental illness (3 marks)
 - Types of Mental Illness (5 marks each = 25 marks)
 - Mood Disorders (depression, SAD, Bipolar, Postpartum)
 - Anxiety Disorders (panic disorder, phobias, OCD, GAD)
 - Psychosis (schizophrenia)
 - Eating Disorders (anorexia, bulimia, binge eating)
 - Personality Disorders (pick any 5)
 - Causes of mental illness (5 marks)
 - Treatments for mental illness (4 marks)
 - Other - mental health statistics & support strategies (5 marks)
- Be sure that your pamphlet has a cover page
 - Make sure you have used correct spelling, grammar and punctuation
 - Apply ALL knowledge & answers in a well-crafted pamphlet
 - Use subheadings, pictures, colour, desktop publishing etc.
 - Ask yourself before you submit it for marks "Is my pamphlet neat, colourful?" and "Is all the required information present?"

PPZ30

HEALTH FOR LIFE



LESSON 8

Lesson 8 – Health Canada

Health Care for All

Canada has a predominantly publicly financed health care system. Our national health insurance program is achieved through thirteen interlocking provincial and territorial health insurance plans, linked through adherence to national principles set at the federal level.

The Canada Health Act establishes criteria and conditions related to insured health care services and extended health care services that the provinces and territories must meet in order to receive the full federal cash contribution under the Canada Health and Social Transfer (CHST). The aim of the Canada Health Act is to ensure that all eligible residents of Canada have reasonable access to medically necessary insured services on a prepaid basis, without direct charges at the point of service.

The federal government, the ten provinces, and the three territories have key roles to play in the health care system in Canada.

The federal government is responsible for:

- setting and administering national principles or standards for the health care system through the Canada Health Act
- assisting in the financing of provincial health care services through fiscal transfers;
- delivering direct health services to specific groups including veterans, native Canadians, persons living on reserves, military personnel, inmates of federal penitentiaries and the Royal Canadian Mounted Police;
- Fulfilling other health-related functions such as health protection, disease prevention, and health promotion.

The provincial and territorial governments are responsible for:

- managing and delivering insured health services
- planning, financing, and evaluating the provision of hospital care, physician and allied health care services, and
- managing some aspects of prescription care and public health.



Health Canada

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. Health Canada is committed to improving the lives of all of Canada's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system.

What Do They Do?

In partnership with provincial and territorial governments, Health Canada provides national leadership to develop health policy, enforce health regulations, promote disease prevention and enhance healthy living for all Canadians. Health Canada ensures that health services are available and accessible to First Nations and Inuit communities. It also works closely with other federal departments, agencies and health stakeholders to reduce health and safety risks to Canadians.

Through its administration of the Canada Health Act, Health Canada is committed to maintaining this country's world-renowned health insurance system which is universally available to permanent residents, comprehensive in the services it covers, accessible without income barriers, portable within and outside the country and publicly administered.

Each province and territory administers its own health care plan with respect for these five basic principles of the Canada Health Act.

Many factors including family history, social or financial status, physical environment and personal lifestyle choices influence individual health. By making Canadians more aware of dangers to their health, protecting them from avoidable risks and encouraging them to take a more active role in their health, Health Canada fosters a healthier population and contributes to a more productive country.

Health Promotion

Health Canada's mission is to help Canadians maintain and improve their health. One of the ways this is accomplished is through health promotion. Health promotion is giving people the tools to improve their own health - tools in the form of information and health programming to help people take care of themselves. Health Canada's Health Promotion Online is a wellspring of online health information targeted to the Canadian health promotion community but accessible by individuals and health professionals around the world.

The following is an abridged list of Health Canada programs that promote positive health activities and illness prevention measures.

- Aboriginal Head Start Program
- Canada Prenatal Nutrition Program
- Canada's Drug Strategy (1998)
- Child, Youth and Family Health
- Community Action Program for Children
- First Nations and Inuit Health Community-Based Programs
- Great Lakes Health Effects Program
- National Clearinghouse on Family Violence
- Population Health Approach
- Population Health Fund
- Smoking cessation programs in Canada, inventory
- St. Lawrence River Vision 2000
- Vitality Program (Healthy Lifestyle)



Current Health Promotion Campaigns

Encouraging Canadians to take a more active role in their health is one way that Health Canada helps the people of Canada maintain and improve their health. Health Canada has many useful health promotion resources and guides that will aid health professionals and community leaders.

Eat well. Be active. Have fun.



You can prevent type 2 diabetes. Type 2 diabetes is one of the fastest growing diseases in Canada, and around the world. It is estimated that two million Canadians have diabetes and one-third of those affected are unaware they have the disease. But there is good news. You can prevent the onset of type 2 diabetes by making some simple lifestyle changes, which include healthy eating, regular physical activity, and maintaining a healthy weight. Visit **Health Canada's Diabetes Web site**.

Second-hand smoke in the workplace



Heather Crowe never smoked. But she worked in smoky restaurants. Now Heather has lung cancer. Visit the Health Canada Tobacco Control Program's Web site **GoSmokefree.ca/heather** and find out more about our health promotion campaign concerning second-hand smoke in the workplace.

You and Me, Smokefree



Youth may think they've heard it all before: smoking causes cancer; smoking makes your fingers turn yellow. But there are a few facts youth might not have heard before: who benefits from the sale of tobacco products, how smoking affects your environment and that even young smokers can suffer from respiratory effects. It's all there on the new Web site, **You and Me, Smokefree**.

Health Status

HEALTH STATUS refers to the state of health of an individual, group, or population, measured against an accepted standard. The most commonly used indicators of health status are life expectancy and infant mortality. Today, the average Canadian can expect to live well into his or her seventies. The life expectancy of a Canadian child born in 2001 is 79.7 years (82.2 for women, 77.1 for men). This is the longest it has ever been, reflecting lower mortality rates in most age groups, particularly infants.

The gap in life expectancy between the sexes narrowed from 5.2 years in 2000 to 5.1 years in 2001, which continues a two-decade long trend. From 1979 to 2001, life expectancy for women advanced 3.4 years, whereas for men it improved by 5.7 years.

| Life expectancy at birth, by sex, by provinces | | |
|--|-------|---------|
| | Males | Females |
| | years | |
| Canada | | |
| 1920-22 | 59 | 61 |
| 1930-32 | 60 | 62 |
| 1940-42 | 63 | 66 |
| 1950-52 | 66 | 71 |
| 1960-62 | 68 | 74 |
| 1970-72 | 69 | 76 |
| 1980-82 | 72 | 79 |
| 1990-92 | 75 | 81 |
| 1990-92 | | |
| Newfoundland and Labrador | 74 | 80 |
| Prince Edward Island | 73 | 81 |
| Nova Scotia | 74 | 80 |
| New Brunswick | 74 | 81 |
| Quebec | 74 | 81 |
| Ontario | 75 | 81 |
| Manitoba | 75 | 81 |
| Saskatchewan | 75 | 82 |
| Alberta | 75 | 81 |
| British Columbia | 75 | 81 |
| Source: Statistics Canada. Last modified: 2005-02-17. | | |

In 2001, there were 219,538 deaths in Canada. That total was up 0.7% from 2000, continuing its general rise because of a growing and aging population. In fact, there were 12% more deaths in 2001 than in 1991, 28% more than 1981 and 40% more than 1971.

The death rate in Canada remained at 7.1 deaths per 100,000 people in 2001 because the Canadian population grew faster than the number of deaths.

| Selected leading causes of death, by sex | | | | | |
|---|-------------------|--------------|--------------|--------------|----------------|
| 1997 | | | | | |
| | <u>Number</u> | <u>%</u> | <u>Total</u> | <u>Males</u> | <u>Females</u> |
| | Rate ¹ | | | | |
| All causes | 215,669 | 100.0 | 658.7 | 844.0 | 521.6 |
| Cancers | 58,703 | 27.2 | 181.5 | 229.7 | 148.5 |
| Diseases of the heart | 57,417 | 26.6 | 173.0 | 230.8 | 129.7 |
| Cerebrovascular diseases | 16,051 | 7.4 | 47.8 | 52.8 | 43.9 |
| Chronic obstructive pulmonary diseases and allied conditions | 9,618 | 4.5 | 29.0 | 44.5 | 20.1 |
| Unintentional injuries | 8,626 | 4.0 | 27.6 | 37.8 | 17.9 |
| Pneumonia and influenza | 8,032 | 3.7 | 23.7 | 31.5 | 19.2 |
| Diabetes mellitus | 5,699 | 2.6 | 17.4 | 20.6 | 14.8 |
| Hereditary and degenerative diseases of the central nervous system | 5,049 | 2.3 | 15.0 | 16.7 | 13.9 |
| Diseases of arteries, arterioles and capillaries | 4,767 | 2.2 | 14.3 | 19.5 | 10.6 |
| Psychoses | 4,645 | 2.2 | 13.6 | 13.3 | 13.4 |
| Suicide | 3,681 | 1.7 | 12.0 | 19.5 | 4.9 |
| Nephritis, nephrotic syndrome and nephrosis | 2,654 | 1.2 | 8.0 | 11.0 | 6.1 |
| Chronic liver diseases and cirrhosis | 2,030 | 0.9 | 6.4 | 8.9 | 4.2 |
| Neurotic disorders, personality disorders and other nonpsychotic mental disorders | 1,163 | 0.5 | 3.5 | 4.8 | 2.5 |
| HIV infection | 626 | 0.3 | 2.0 | 3.6 | 0.5 |

¹ Age-standardized mortality rate per 100,000 population.
Source: Statistics Canada, Health Statistics Division.
 Last modified: 2005-02-17.

Enhancing The Health Of Canadians

Health Canada recognizes that health depends on more than a good health care system. Factors such as income, education, social support networks, the environment, and employment and working conditions determine health and well-being. The Department focuses on this wide range of personal and collective circumstances when developing strategies to promote health and prevent disease.



Such a comprehensive population health approach emphasizes positive health activities and illness prevention measures. The results are long-term benefits for Canadians and reduced pressures on the health care system. Health Canada works with provincial and territorial governments and other interested partners to expand knowledge of factors affecting the health of the general population and specific at-risk groups such as children, seniors, women and First Nations peoples.

Safeguarding The Health Of Canadians

Health Canada collaborates internationally and with its provincial and territorial counterparts to protect the health of Canadians against current and emerging health threats.

Through its Health Intelligence Network, the Department works with other levels of government and the health care system in the surveillance, prevention, control and research of disease outbreaks across Canada and around the world. It also monitors health and safety risks related to the sale and use of drugs, food, chemicals, pesticides, medical devices and certain consumer products. In addition, Health Canada negotiates agreements regarding hazardous materials in the workplace, performs medical assessments for pilots and air traffic controllers and conducts environmental health assessments.

The Health of Canada's Youth

Over the last 100 years, Canada's infant mortality rate has declined dramatically. In 1901, 134 of every 1,000 infants—roughly 1 in 7—died in their first year. By 2001, that rate had declined to 5.2 per 1,000, meaning only 1 in every 192 babies died before his/her first birthday.

In 1999, the leading causes of infant death were perinatal causes, such as obstetrical complications and prematurity, and congenital anomalies. Boys are less likely to survive their first year than girls. In 2001, there were 5.8 deaths per 1,000 live births for infant boys compared with 4.6 per 1,000 for infant girls.

Aboriginal children are almost twice as likely to die in their first year of life compared with other Canadian children and the risk of death increases for Aboriginal children after the newborn phase. The leading causes of death among Aboriginal babies are sudden infant death syndrome and congenital anomalies, followed by deaths due to respiratory conditions, including pneumonia.

Women under the age of 20 and over the age of 44 are more likely to give birth to an infant with low birth weight, which is a factor that can impair an infant's chance of survival. In 2001, 5.5% of all infants born in Canada were underweight—less than 2.5 kilograms—at birth.

The number of births by teenaged mothers has declined since the 1970s; by 1995, this number was down 60% from two decades earlier. The fertility rate fell from 17.3 births for every 1,000 women aged 15 to 19 in 2000 to a new low of 16.3 in 2001.

For women aged 45 and older, the birth rate has declined steadily and dramatically over the last 80 years: 6.6 in 1921, 2.4 in 1961, and 0.3 in 2001.

Infants who make it past their first year usually lead healthy lives well into adulthood. Sometimes, however, unintentional injuries and suicide end the lives of Canadian youth. In 2001, there were 3,643 deaths among children and youth under 20 years of age. The largest proportion of these deaths, 28%, was due to accidents and suicide. Accidents are the leading cause of death among children and youth, accounting for 784 deaths in 2001. Two out of three of those were transport accidents. Among this age group in 2001, suicide was responsible for 6.4% of deaths, down from 9.5% in 2000. After accidents and suicide, the next two leading causes of death among children and youth were conditions originating during the perinatal period, and congenital malformations, deformations and chromosomal abnormalities. Together, these causes were responsible for 1,473 deaths in 2001—over 90% of which occurred before the age of one.

Health Canada Today

Health standards and practices have changed considerably over the past 100 years. The last century produced thousands of scientific and technological advances that have improved public health. Many infectious diseases once prevalent in this country—including smallpox and typhoid fever—have been eliminated.

Today, we look at health differently. We now consider that well-being is influenced by factors such as physical fitness, nutrition, the environment and our own genes. There is also a growing recognition that our health is greatly affected by the socio-economic conditions in which we live, learn, work and play.



Medicine today is about more than just treating the sick—it is increasingly about finding innovations to prevent illness in the first place. And Canadians are educating themselves better about their health by using sources of information not available 100 years ago, such as the Internet, and health programs and advice columns in the media. Canada has been recognized internationally for its efforts to promote health, and Canadians largely think of themselves as healthy people. Compared with people in most other countries, we live longer and suffer from fewer chronic illnesses and disabilities as we age. Despite recent stresses on our health care system, Canadians in general continue to enjoy universal access to insured medical health services.

But it's not the same for all Canadians—differences exist from coast to coast. Factors such as age, sex, place of residence, and socio-economic status can have a notable impact on well-being. Indeed, a 1998 United Nations report on health recognized that Canada has an enviable standard of living, but that not everyone in the country has an equal opportunity to enjoy it.

Ontario Health Insurance Plan – O.H.I.P.

A resident of Ontario must have a **health card** to show that he or she is entitled to health care services paid for by OHIP. The Ministry of Health and Long-Term Care pays for a wide range of services, however, it does not pay for services that are not medically necessary, such as cosmetic surgery.

Most of your Ontario health benefits are covered across Canada. The province or territory you are visiting will usually bill the Ontario Ministry of Health and Long-Term Care directly for hospital and physician services. In Quebec, you may have to pay for physician services and then submit your receipt to your local ministry office for payment.

Eligibility

Ontario residents are eligible for provincially funded health coverage (OHIP). To be eligible for Ontario health coverage you must:

- be a Canadian citizen or have immigration status as set out in Ontario's *Health Insurance Act*, and
- make your permanent and principal home in Ontario, and
- be physically present in Ontario 153 days in any 12-month period.

OHIP coverage normally becomes effective three months after the date you establish residency in Ontario. The ministry strongly encourages new and returning residents to purchase private health insurance in case you become ill during the OHIP waiting period.

What's Covered by OHIP

OHIP covers a wide range of health services. A brief description of insured services follows below.

Physicians

OHIP covers all essential diagnostic and treatment services provided by physicians. This includes home visits and services provided in hospitals, where appropriate. Physicians may bill you for uninsured services. These include transferring files to another physician, telephone consultations, certificates of fitness to work, physical examinations for schools or camps, and cosmetic procedures. Physicians may also bill you if you miss an appointment.

Podiatrists, Chiropractors and Osteopaths

Services provided by podiatrists, chiropractors and osteopaths are partially covered under OHIP. The ministry pays part of the costs for these services. You must pay for the extra costs. Ask your health care provider about the costs before you receive the services.

Physiotherapy

The Ministry of Health and Long-Term Care pays for physiotherapy services provided in :

- Hospitals;
- Approved Schedule 5 physiotherapy clinics;
- Physicians offices that offer physiotherapy, and
- Community Care Access Centres (CCACs).



age 65 and over.

Dental Services in Hospital

OHIP only pays for some dental surgery, including fractures or medically necessary jaw reconstruction, when done in hospital.

You must pay the cost of dental services in a dentist's office. The exception is the Children in Need of Treatment program (CINOT), managed by public health units. CINOT provides basic urgent care to children checked at school by dental professionals.

Eye Care

OHIP insures optometry services every two years for persons 20 to 64 and once a year for those under 20 and

Northern Health Travel Grants

You may be eligible for Northern Health Travel grants to help pay transportation costs if you live in northern Ontario and must travel long distances for specialty medical care.

Services in Other Canadian Provinces and Territories

Most of your Ontario health coverage benefits can be used across Canada. The province or territory you are visiting will usually bill Ontario for services.

If you have to pay for health services you receive in another part of Canada, such as chiropractors, optometrists, podiatrists and osteopaths, or doctors' services in Quebec, you can submit your receipts to your local OHIP office to be reimbursed.

Prescription drugs from pharmacies, ambulance services and long-term care services provided in other provinces and territories are not covered by the Ontario Ministry of Health and Long-Term Care.

Services Outside Canada

For people traveling outside Canada, OHIP covers a set fee rate for emergency health services. Emergency health services are those given in connection with an acute, unexpected condition, illness, disease or injury that arises outside Canada and requires immediate treatment. Ambulance services are not covered.

If you travel out-of-country for elective medical services that are available in Ontario and/or can be arranged ahead of time, you are not covered.

It is important to get private health insurance when you travel. Health care services outside Canada can cost much more than the ministry pays. For more information, contact a private insurance company directly.

Trillium Drug Program

The Trillium Drug Program helps people who have high drug costs in relation to their income. Once an application is approved, the program covers :

- approximately 2,800 quality-assured prescription drug products;
- approximately 170 limited-use drug products;
- some nutritional and diabetic testing products.

You can apply to the Trillium Drug Program if :

- your private insurance that does not cover 100 per cent of your prescription drug costs;
- you have valid Ontario Health Insurance (OHIP) coverage, and
- you are not eligible for drug coverage under the Ontario Drug Benefit (ODB) Program.



The program has an annual deductible that is based on individual and family size.

income

Trillium application kits are available at your local pharmacy or by calling the Ministry of Health and Long-Term Care INFOline at 1-800-268-1154.

Disease

A **DISEASE** is a change away from a normal state of health to an abnormal state in which health is diminished.

An **INFECTIOUS DISEASE** is a disease caused by a microorganism and therefore potentially infinitely transferable to new individuals. They are illnesses caused by organisms that enter the body and damage tissue

PATHOGENS are disease-causing organisms (ex. Bacteria & viruses)

Your **IMMUNE SYSTEM** is the bodily system that produces antibodies that resist disease - not as well developed yet in children.

ANTIBODIES help destroy pathogens

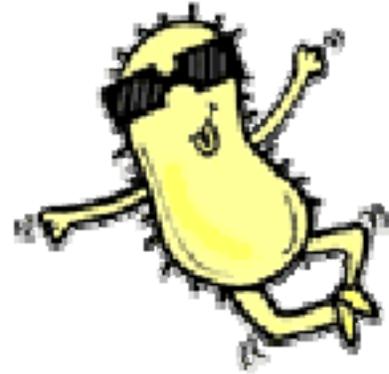
Diseases have diverse causes, which can be classified into two broad groups: communicable and non-communicable. Communicable diseases can spread from one person to another and are caused by microscopic organisms that invade the body. Non-communicable diseases are not communicated from person to person and do not have, or are not known to involve, infectious agents. Some diseases, such as the common cold, and come on suddenly and last for no more than a few weeks. Other diseases, such as arthritis, are chronic, consistent for months or years, or reoccur frequently.

Every disease has certain characteristic effects on the body. Some of these effects, include fever, inflammation, pain, fatigue, dizziness, nausea, and rashes, are evident to the patient. These symptoms offer important clues that help doctors and other health care professionals make a diagnosis. Many times, the symptoms point to several possible disorders. In those cases, doctors rely on medical tests, such as blood examinations and X rays, to confirm the diagnosis.

Communicable Diseases

COMMUNICABLE DISEASES are infectious diseases passed from person to person

- spread easily
- pathogens are present in fluids from nose, mouth, lungs & eyes as well as feces, urine & blood
- everything touched - toys, drinking glasses, bedding, food, books & other people are sources of illness



Communicable diseases are caused by microscopic organisms. Physicians refer to these disease-causing organisms as pathogens. Pathogens that infect humans include a wide variety of bacteria, viruses, fungi, protozoans, and parasitic worms. Also, it has been theorized that some proteins called prions may cause infectious diseases.

Types of Communicable Diseases:

| | | |
|---------------------------|---------------------------|------------------------|
| Rabies | Hepatitis A | Hepatitis B |
| Hepatitis C | Chicken Pox | Pertussis |
| Chlamydia | Fifth Disease | Syphilis |
| Tetanus | Gonorrhea | Mumps |
| Giardiasis | Scabies | Scarlet Fever |
| Ringworm | Influenza | Roseola |
| Conjunctivitis (Pink Eye) | Hand, Foot, Mouth Disease | Headlice (Pediculosis) |
| Rubella (German Measles) | | |

Invasive Meningococcal Disease (Meningitis)
Strep Throat – Invasive group A streptococcal Disease

NON-COMMUNICABLE DISEASES

NON-COMMUNICABLE DISEASES are infectious diseases which do not pass from person to person

- transmitted by food, animals & insects
- can also be genetic disorders
- ex. Ear infections & diaper rash

The distinction, not spread from person to person, is important since it implies not only that:

- individuals carrying the disease are not likely to spread the disease to others
- whatever led to the infection in such an individual likely did not include person to person contact



Types of Non-Communicable Diseases:

| | | |
|----------------------------|---------------------|---------------------------|
| Albinism | Alzheimer's Disease | Rheumatoid Arthritis |
| Bronchial Asthma | Celiac Disease | Cerebral Palsy |
| Emphysema | Epilepsy | Hypothyroidism |
| Multiple Sclerosis | Muscular Dystrophy | Parkinson's Disease |
| Progeria | Scoliosis | Spinal Bifida |
| Tourette Syndrome | Poison Ivy | Achondroplasia (Dwarfism) |
| Inflammatory Bowel Disease | | |

The Fight against Disease in Canada

(Source: Statistics Canada)

By the dawn of the 1900s, advances in medicine allowed doctors to step up the battle against the diseases that have plagued humankind, particularly communicable diseases such as diphtheria, typhoid fever and scarlet fever.

The struggle to eradicate these microscopic menaces was not easy. As late as 1929, a public health report noted an epidemic of typhoid fever in Ontario and more than 400 cases of diphtheria across the country. Even the dreaded smallpox was still a threat, with 200 cases reported in Canada in 1928.

With the vaccines available today thanks to medical and drug research, such diseases are now almost non-existent. Canadian children are inoculated against polio, tetanus, diphtheria, measles, rubella, mumps and pertussis (whooping cough) while vaccination for hepatitis B is mandatory for all children when first entering school in Canada. Moreover, public health authorities routinely advise Canadians to be vaccinated against several other diseases such as influenza type B.

However, even as some of the older threats to human health have been controlled, new or different infectious diseases are emerging to challenge modern medicine and our public health system as never before. For example, the SARS (Severe Acute Respiratory Syndrome) outbreak in 2003 originated in China and then spread to Canada and other nations around the world. SARS is a respiratory illness caused by a previously unknown type of corona virus. Normally, corona viruses cause mild to moderate upper respiratory symptoms, such as the common cold. But SARS is new, so there are still many unanswered questions about this often deadly illness.

During the 1980s and 1990s, human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) emerged as a worldwide health concern. AIDS is caused by HIV. From 1985 to 2003, over 55,000 Canadians were reported to be diagnosed with HIV. Due to improved treatment, the median time from HIV infection to AIDS diagnosis now exceeds 10 years and people are living longer with AIDS; however, AIDS is fatal and there is no cure.

Since the mid-1980s, the pattern of HIV/AIDS infection has changed significantly in Canada. At that time, the disease mostly affected men who had sex with men. However, the proportion of women with HIV has increased considerably in the last decade. In 2003, women accounted for 25.3% of positive reports among adults, an increase from 8.9% in the period from 1985 to 1993. At the same time, the proportion of adult positive HIV test reports attributed to injecting drug use has gradually declined to 11.8% in 2003 from a high of 33.7% in 1996.



Men who have sex with men continue to account for the largest number and proportion of positive HIV test reports. This proportion decreased from close to 75% in the period from 1985 to 1994. In the mid- to late- 1990s, the proportion dropped and remained close to 37% until there was a slight increase to 44.4% in the years from 2000 to 2003. The diverse heterosexual exposure category has steadily increased from 7.5% before 1995 to 36.9% in 2003. In 2002, men who had sex with men accounted for 41.5% of positive HIV tests, an increase from 36.1% in 2001. Heterosexual exposure accounted for 29.9% of positive HIV tests in 2002, from 32.6% in 2001. This represented a dramatic climb from 9.1% from 1985 to 1996.

An infectious virus that is carried in the blood like HIV is hepatitis C, a disease that affects approximately 240,000 Canadians. The number of people with hepatitis C is increasing rapidly in Canada and around the world, primarily among those sharing needles and other drug equipment.

Although the hepatitis C virus has existed for a long time, it was only identified in 1989. Of the more than 5,000 newly infected Canadians each year, up to 70% experience no symptoms. For some, symptoms may not appear for 20 or 30 years. Approximately 15 to 20 percent of people infected recover from the infection. However, the majority progress to a chronic infection. The course of the disease in the chronic phase is slow and may last a lifetime. Up to 20% of those infected develop cirrhosis, which severely damages the liver. A smaller percentage develop liver cancer.

Tuberculosis (TB) is another serious communicable disease. When the cure for tuberculosis was discovered in 1948, doctors were optimistic that the disease could be eradicated by 2000. Although Canada has one of the lowest tuberculosis rates in the world, TB continues to be a concern.

However, not all groups of Canadians are equally at risk. Immigrants from countries where TB is common accounted for 62% of the 1,704 new cases seen in Canada in 2001. Canadian-born Aboriginal people are also at higher risk. They have an infection rate of 24.3 per 100,000 people, whereas Canadian-born non-Aboriginals have a rate of 1.1. Moreover, 2001 marked the first time that the proportion of cases among Canadian-born Aboriginals surpassed the proportion among Canadian-born non-Aboriginals (18% and 16% respectively). In Nunavut, 97% of TB cases occurred in the Aboriginal population, where the infection rate was 47.5 per 100,000 people.

Diseases formerly regarded as exclusively tropical are also finding their way to Canada. The incidence of imported malaria in Canada has increased steadily since the early 1990s. Malaria remains an important concern for travelers returning from tropical regions, and this disease accounts for illness and deaths in Canadian travelers. There appears to be a cyclical pattern of imported malaria, with notable peaks occurring every four to five years. During the last peak, in 1997, there were 1,029 malaria cases reported in Canada; a 65% decrease was seen the following year with only 368 cases reported. In 2000, fewer than 400 malaria cases were reported.



Key Questions for Lesson 8 (100 marks)

Please answer these questions on your own paper. If you choose to word process your answers please use double spacing and at least 12 pt font.



KEY QUESTION # 52 – Health Care for All (15 marks)

1. How is the health care system in Canada financed?
2. What is the Canada Health Act?
3. What is the federal government responsible for?
4. What are the provincial and territorial governments responsible for?
5. What is Health Canada (remember from Lesson 1)?
6. What does Health Canada provide?
7. What does Health Canada enforce?
8. What does Health Canada promote?
9. What does Health Canada enhance
10. What is Health Canada committed to?
11. How does Health Canada foster a healthier population?
12. Recall from Lesson 1 – what are the goals of Health Canada for individuals, families and communities?
13. What is Health Canada's mission?



KEY QUESTION # 53 – Health Promotion Campaigns (20 marks)

Health Canada has three current health promotion campaigns, they are:

Eat well. Be active. Have fun.
Second-hand smoke in the workplace
You and Me, Smokefree

By using the Internet or your local phone book, contact one (1) of these programs and record the following information.

- (a) Full name of the organization/program:
- (b) Full mailing address and/or Web address:
- (c) How does the program work?
- (d) What services does the program offer?
- (e) What are the “goals” of the program?
- (f) What are some specific achievements of the program? (success stories)
- (g) How long has the program been in operation? Explain the programs history.



KEY QUESTION # 54 – Lesson 8 ... Important Terms (10 marks)

Read through your class notes and write the definition for each of the following terms:

- | | |
|------------------------------|--------------------------|
| 1. Health Status | 2. OHIP |
| 3. Disease | 4. Infectious Disease |
| 5. Pathogens | 6. Immune System |
| 7. Antibodies | 8. Communicable Diseases |
| 9. Non-Communicable Diseases | 10. Vaccine |



KEY QUESTION # 55 – O.H.I.P. (5 marks)

1. What must all residents of Ontario have to show he or she is entitled to health care services?
2. Who is eligible for OHIP?
3. What is covered by OHIP?



KEY QUESTION # 56 - Disease Assignment (25 marks each = 50 marks total)

Directions: Select a ONE communicable and ONE non-communicable disease from the list provided in your class notes. Your task is to create a one-page (8 ½ X 14) information page (FACT SHEET) about your selected disease. Make sure you include the following information and subheadings:

- Definition – What it is?
- How is it transmitted? How do you “catch” or “get” it?
- A Brief history of the disease
- List any New Trends (new treatments or drugs)
- Risk Groups – Who is most likely to “catch” or “get” it? Why?
- Prevention
- Any other interesting facts

STYLE:

- | | | |
|-----|----------------------------|------------|
| (1) | Organization & Subheadings | (2 mark) |
| (2) | Spelling/Grammar | (2 mark) |
| (3) | Neatness | (3 marks) |
| (4) | Colour & Creativity | (3 marks) |
| (5) | Correct Information | (15 marks) |

PPZ30

HEALTH FOR LIFE



LESSON 9

Lesson 9 – Food Safety & Nutrition Labelling

Food Safety

Canada has one of the safest and most plentiful food supplies in the world. Farmers, government inspectors and food companies work together to provide us with the highest quality food. According to the Ontario Ministry of Health, food prepared in the home is one of the primary causes of food poisoning in Ontario.

FOOD POISONING happens when food comes in contact with bacteria. This bacteria, too small to be seen by the eye, grows best in warm, moist food such as eggs, dairy products, meat, poultry, fish and shellfish. Symptoms range from upset stomach to death. Fortunately, you can prevent food poisoning by storing, handling and cooking these foods carefully.

The Danger Zone - Keep Out!

Bacteria can't grow when food is stored below 4°C (40°F) and they are destroyed at temperatures above 60°C (140°F).

Food safety's about more than keeping your hands away from a whirring food processor blade - it means knowing how to avoid spreading bacteria, safe shopping, and more. Check out these facts on safe food preparation.



Start at the Supermarket

You have your shopping list in one hand and that shopping cart with the bad wheel in the other. But where should you start and how do you know which foods are safe? Take a peek at these tips:

- Make sure you put refrigerated foods in your cart last. For example, meat, fish, eggs, and milk should hit your cart after cereals, produce, and chips.
- When buying packaged meat, poultry (chicken or turkey), or fish, check the expiration date on the label (the date may be printed on the front, side, or bottom, depending on the food). **Don't** buy a food if it has expired or if it will expire before you plan to use it.
- Don't buy fish or meat that has a strong or strange odour. Follow your nose and eyes - even if the expiration date is OK, pass on any fresh food that has a strange smell or that looks unusual.
- Place meats in plastic bags so that any juices do not leak onto other foods in your cart.
- Separate any raw meat, fish, or poultry from vegetables, fruit, and other foods you'll eat raw.
- Ground beef should be red, not any shade of brown.
- Eyeball eggs before buying them. Make sure that none of the eggs are cracked and that they are all clean. Eggs should be grade A or AA.

Don't slow down your cart for these bad-news foods:

- fruit with broken skin (bacteria can enter through the skin and contaminate the fruit)
- unpasteurized ciders or juices (they can contain harmful bacteria)
- prestuffed turkeys or chickens

In the Kitchen

After a trip to the market, the first things you should put away are those that belong in the refrigerator and freezer. Keep eggs in the original carton on a shelf in the fridge (most refrigerator doors don't keep eggs cold enough).

Ready to cook but not sure how quickly things should be used, how long they should cook, or what should be washed? Here are some important guidelines:

- Raw meat, poultry, or fish should be cooked or frozen within 2 days.
- Thaw frozen meat, poultry, and fish in the refrigerator or microwave, never at room temperature.
- Cook thawed meat, poultry, and fish immediately - don't let it hang around for hours.
- Cook meat until the center is no longer pink and the juices run clear or until it has an internal temperature of at least 160 degrees Fahrenheit (71 degrees Celsius).
- Cook crumbled ground beef or poultry until it's no longer pink or until it has an internal temperature of at least 160 degrees Fahrenheit (71 degrees Celsius).
- Cook chicken and other turkey until it's no longer pink or until it has an internal temperature of at least 180 degrees Fahrenheit (82 degrees Celsius).
- Scrub all fruits and veggies with plain water to remove any pesticides or dirt.
- Remove the outer leaves of leafy greens, such as spinach or lettuce.
- Don't let eggs hang out at room temperature for more than 2 hours.
- Make sure that you cook eggs thoroughly - no runny stuff.



Clean Up

Even though the kitchen might look clean, your hands, the countertops, and the utensils you use could still contain lots of bacteria that you can't even see. Yuck! To prevent the spread of bacteria while you're preparing food, check out the following:

- Always wash your hands with hot water and soap before preparing **any** food.
- Wash your hands after handling raw meat, poultry, fish, or egg products.
- Keep raw meats and their juices away from other foods in the refrigerator and on countertops.
- Never put cooked food on a dish that was holding raw meat, poultry, or fish.
- If you use knives and other utensils on raw meat, poultry, or fish, you need to wash them before using them to cut or handle something else.

- If you touch raw meat, poultry, or fish, wash your hands. **Don't** wipe them on a dish towel - this can contaminate the towel with bacteria, which may be spread to someone else's hands.
- Use one cutting board for raw meat, poultry, and fish, and another board for everything else.
- When you're done preparing food, it's a good idea to wipe down the countertops with a commercial cleaning product. Don't forget to wash the cutting board in hot, soapy water and then disinfect it with a commercial cleaning product. You can also mix together 1 teaspoon (5 millilitres) chlorine bleach and 1 quart (about 1 litre) of water and store the solution in a spray bottle. Of course, keep the solution and the ingredients out of the reach of your younger brothers and sisters!

Storing Leftovers Safely

Your dinner was a success and you're lucky to have some left over. Here are some tips on handling leftovers:

- Put leftovers in the fridge as soon as possible. If you leave leftovers out for too long at room temperature, bacteria can quickly multiply, turning your delightful dish into a food poisoning disaster.



one- or two-

- Store leftovers in containers with lids that can be snapped tightly shut. Bowls or tins are OK for storing leftovers, but be sure to cover them tightly with plastic wrap or aluminum foil to keep the food from drying out.
- Eat any leftovers within 3 to 5 days or freeze them. **Don't** freeze any dishes that contain uncooked fruit or veggies, hard-cooked eggs, or mayonnaise.
- If you're freezing leftovers, freeze them in portion servings, so they'll be easy to take out of the freezer, pop in the microwave, and eat.
- Store leftovers in plastic containers, plastic bags, or aluminum foil. Don't fill bowls all the way to the top; when food is frozen, it expands. Leave a little extra space - about 1/2 inch (about 13 millimetres) should do it.
- Eat frozen leftovers within 2 months.

Food Poisoning (Food Borne Illness)

Food-borne illness is usually an uncomfortable experience, and some cases are deadly. But most can be avoided.

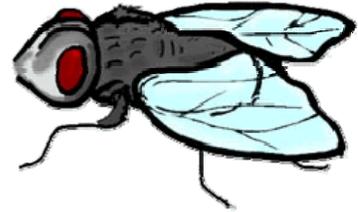
In most cases, food poisoning can be traced back to the kitchen and consumers can take some simple steps to avoid getting sick. Hand-washing, refrigeration and disposal of expired or questionable foods can go a long way to preventing food-related illness.

In most cases of food borne illness (food poisoning), symptoms resemble intestinal flu and last a few hours to several days. But in cases of botulism, or when food poisoning strikes infants, the ill, the elderly, or those with compromised immune systems, life-threatening complications can result.

Microscopic organisms that cause food borne illness are everywhere-in the air, soil, water, and in human and animal digestive tracts. Most are capable of growing undetected in food because they do not produce an "off" odour, color, or texture. The only way these microbes can be prevented from causing human illness is by handling and storing food safely.

Sources Of Disease Causing Bacteria (Food Poisoning)

1. **Humans** – can carry disease in their intestinal tract (Salmonella) or on their person (Staphylococcus) found in the nose, throat, pimples, cuts, burns etc. Humans with no obvious disease symptoms can spread pathogens. They are called carriers.
2. **Animals** – carry organisms in their intestinal tract
Poultry, wild animals and food animals carry Salmonella
3. **Insects and Rodents** – may be carriers or the source of bacteria (ex – roaches may eat contaminated food, then pass on the organism through their droppings or leave pathogens behind after walking over food or a counter.)



Methods of Transmission

DIRECT TRANSMISSION – organism goes directly from the source to the food

- rodent droppings on food
- an individual with an infected cut on a finger can transfer the Staph pathogen to food
- a person can sneeze over or onto food

INDIRECT TRANSMISSION

- a person sneezes onto a plate then serves food on it
- water is contaminated, then is used for drinking, washing veggies, utensils etc.
- improperly cleaned cutlery

CROSS CONTAMINATION

Cross contamination occurs when bacteria and viruses are transferred from a contaminated surface to a one which is not contaminated. The bacteria and viruses can come from people, work surfaces or equipment, and other foods. For example, it can happen when bacteria from the surface of raw meat, poultry and raw vegetables with visible dirt (such as unwashed potatoes), are transferred onto ready to eat food, such as green salads, rice or pasta salads, cooked meats or poultry or even fruit. The bacteria

on the raw food are killed when the food is cooked, but the ready to eat food gets eaten without further cooking - bacteria and all.

- raw egg on hands, then cutting bread for toast
- cracking egg on counter or bowl side



SUPPORT QUESTION – Signs of Food Poisoning

Describe the time you or someone you know got food poisoning? What were the symptoms? How long did it last? What were the long-term effects?

Common Bacteria Causing Food Borne Illness

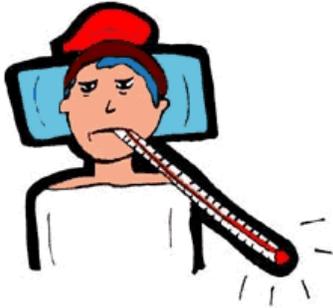
Food Intoxication

- staphylococcus “food intoxication”
- occurs when bacteria grow in food & give off a waste product called a toxin (poison)
- symptoms vary & are usually severe & occur quickly – from 1-8 hours after eating
- may last several days and could be fatal
- found in meat, chicken, eggs, milk, cream or any moist, protein rich food
- bacteria are found naturally & harmlessly on hands, in noses & in throats of 40 to 50% of all people
- a person with an infection may show no noticeable effects
- found in infected cuts, scrapes, burns & pimples
- the toxin this bacteria produces is not destroyed by heat so cooking infected foods will not make it safe

Food Infection

- Salmonella & E. coli are bacteria that cause it
- occurs when foods containing a large number of living harmful bacteria which grow in the human intestinal tract
- symptoms – upset stomach with violent diarrhea, cramps, fever, nausea & vomiting
- symptoms occur between 4 & 48 hours, lasting from 2 to 6 days
- bacteria widely spread in the environment – can be carried by chickens, turkeys, eggs, shellfish or milk products (foods with a neutral pH)

DIFFERENCES BETWEEN FOOD INFECTION & FOOD INTOXICATION



appear, & the illness will take longer to disappear

1. in food infection living pathogens are consumed & cause illness
2. in food intoxication the waste products (toxin) that certain bacteria give off into the food are consumed
3. the body always reacts to what had been consumer
4. the amount of time before the symptoms appear 7 the symptoms themselves vary
5. the body reacts to the toxin as if it had been poisoned & attempts to reject it as quickly as possible
6. infections usually take longer before the symptoms

Common Types of Food Poisoning

- | | |
|-------------------------------------|-------------------|
| 1. Salmonella | 7. E. coli |
| 2. Botulism (Clostridium botulinum) | 8. Shigella |
| 3. Bacillus Cereus | 9. C. Perfringens |
| 4. Staphylococcus Aureus | 10. Hepatitis "A" |
| 5. Mycotoxins | 11. Campylobacter |
| 6. Cyclosporiasis | 12. Toxoplasmosis |

The "Danger Zone"

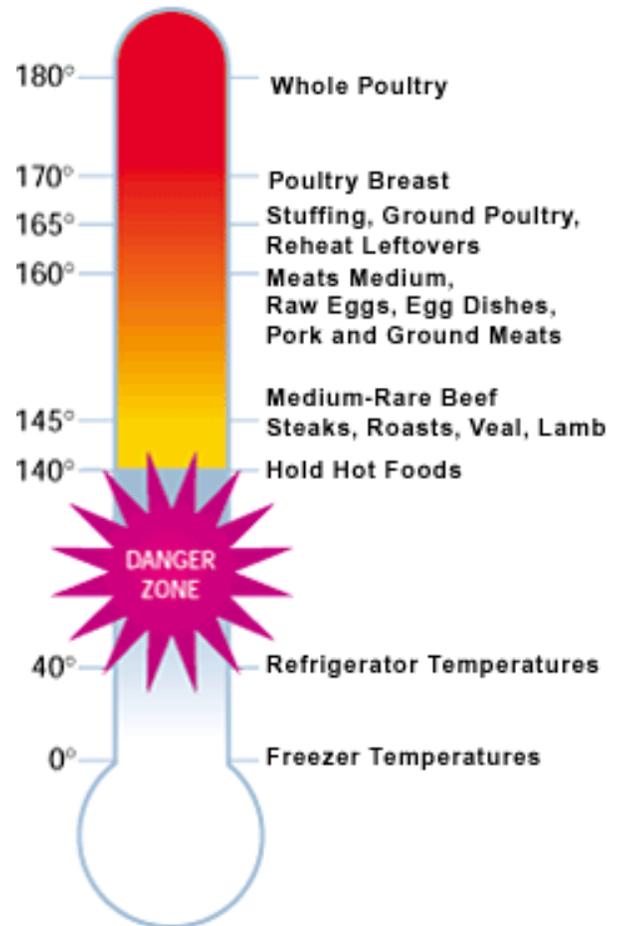
Bacteria, or other germs, need time, food and moisture (or wetness) to grow; but they won't grow when the temperature of the food is **colder than 40° F or hotter than 140° F**. The temperatures in between 45° and 140° are in the "Danger Zone." Keep potentially hazardous foods out of the "Danger Zone!" For example, when food is left in the "Danger Zone", bacteria can grow fast, and make poisons that can make your family very sick.

Food Safety Implication:

Some bacteria can double their numbers within minutes and form toxins that cause illness within hours. That's why it's important to keep food below or above the temperatures at which bacteria can grow. Usually this is below 40° F (4° C) or above 140° F [60° C]).

Food Safety Precautions:

- Cook food to safe internal temperatures (see the Safe Cooking Temperatures chart at right). Use a food thermometer to check.
- Keep hot foods hot. Maintain hot cooked food at 140° F (60° C) or above.
- Reheat cooked food to 165° F (74° C). Never let the temperature fall below 140° F (60° C).
- Keep cold foods cold. Store food in the refrigerator (40° F [4° C] or below) or freezer (0° F [-18° C] or below).
- Don't leave food out at room temperature for more than 2 hours.



Recommended Safe Cooking Temperatures

Potentially Hazardous Foods - (Foods That Can Make You Sick) (Foods That Satisfy All the Requirements for Pathogens to Grow)

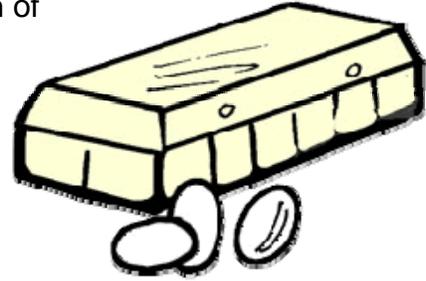
MEAT & POULTRY

- flesh is made of protein
- flesh is rich in vitamins, minerals & *moisture*
- if not stored at fridge temperature, or lower, will be overgrown with microbes
- carry pathogens like Salmonella in & on their bodies, particularly in feces = easy to spread

- must be handled with great care, stored properly and not allowed to contaminate other food
- meat grinders, cutting boards & drippings may also carry pathogens

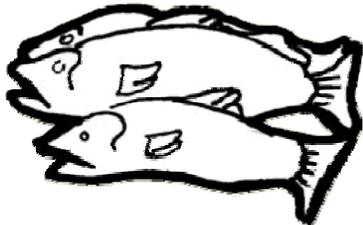
DAIRY PRODUCTS

- milk is a rich satisfying food for pathogens
- also good food for infants & the elderly
- foods made with milk (cream cheese) are particularly hazardous
- only properly aged, hard cheeses are safe from growth of pathogenic bacteria, but they may contain moulds
- must always be refrigerated



EGGS

- are perfect for pathogens to survive & reproduce in
- are vulnerable to salmonella
- egg shell may be contaminated by feces from hen, soil or pen or the workers hands
- shell should not come into contact with interior
- must be refrigerated & protected
- powdered eggs are for baking only
- inspect all eggs and check for imperfections
- egg foods (Hollandaise sauce, custards, salads) are often a source of food poisoning



FISH & SHELLFISH

- mainly protein
- spoil rapidly & should be stored well below the danger zone

COOKED VEGETABLES & CEREALS

- raw veggies are too hard for microbes to use
- after cooking, become soft & can support many pathogens
- cereals are safe when dry, but after cooking become vulnerable to pathogens

OTHER FOODS

- **protein, vitamins, minerals, moisture & neutral pH are hazardous**
- pathogens from worker's hands, contaminated utensils, work surfaces and raw food items can easily contaminate foods such as sandwiches, rolled meats, salads, casseroles, meat pies, chopped meats, cream-filled pastries etc.
- if left in the danger zone for several hours will become heavily contaminated with pathogens and/or toxins
- home canned foods should not be used in a commercial food establishment

Less Hazardous Foods

(pathogens can't grow in them, other microbes may grow, so they can still spoil)

SAFER FOODS: Dry

- ⇒ not enough moisture for growth of pathogens
- ⇒ are not sterile since bacteria/spores could be there
- ⇒ can be hazardous if they become wet, are added to moist foods, or are prepared in water (milk powder, noodles, cereal etc.)

SAFER FOODS: Sour (Acidic)

- ⇒ acid foods have low pH so pathogens can't grow
- ⇒ acidity can be neutralized by high protein food (meat, eggs)



SAFER FOODS: Sweet or Salty

- ⇒ only 60% sugar and 9% salt foods are considered safe
- ⇒ few foods contain a high concentration of salt & still taste good (pickled herring)
- ⇒ 60% sugar foods (jams & jellies)



SUPPORT QUESTION – Cross Contamination

How can using different cutting boards for raw meats and raw vegetables help protect you from food borne illness?

The Cycle of Transmission

FOOD

- ⇒ some foods are likely to be contaminated no matter how carefully they are handled (ex. Poultry & salmonella)
- ⇒ if the food handler has picked up the disease causing organisms (on hands, clothing etc) he or she might carry the bacteria directly to some other food
- ⇒ “Hitchhikers” may also be left on a work surface or utensil (“the environment”) which later contaminates food
- ⇒ in both cases the food handler was the link in the cycle of transmission

THE ENVIRONMENT

- ⇒ anything other than food or the food handler
- ⇒ many ways it can be contaminated (fly walks on counter & leaves dropping behind)

- ⇒ in most cases it becomes contaminated by humans (sneezes onto work counter)
- ⇒ transmission by the food handler may be indirectly
- ⇒ food handler is the important link as he/she can control the environment

THE FOOD HANDLER

- ⇒ humans are the single most important source of food contamination WHY???
- (1) bacteria are carried both on and in the body (skin, hair, intestines, mouth, pimples) and even healthy people with no obvious symptoms can be a carrier
- (2) the food handler may transmit the organisms to other people, the environment and food by touching, sneezing and moving food and utensils from place to place
- (3) the food handler is the most important link in the cycle of transmission of food borne diseases

The Cycle of Transmission: Breaking the Links

The link can be broken by paying attention to:

DRESSING & GROOMING

1. Uniforms & Aprons

- ☞ “the environment” may be contaminated by the food handler, food or other parts of the environment
- ☞ should be clean, a light colour (as the dirt will show up more readily)
- ☞ should be comfortable – otherwise additional adjusting or “touching” is needed
- ☞ should be changes as often as necessary – wash when dirty!!!



2. Hair Control

- Human hair is routinely & heavily contaminated with microbes
- The presence of hair in food is unattractive (each person loses about 8 hairs per day)
- A hair restraint reduces the chances of hair falling into food = there is no such thing as “clean hair”!!!

3. Hands & Fingernails

- Even after washing hands for 30 seconds, there are still a number of bacteria on the hands
- The reason that hands are not sterile after washing is that bacteria are hidden in the pores, folds & crevices in the skin – very difficult to remove by normal hand washing
- Fingernails are a special problem – dirt & debris lodge under them – should be kept trimmed & clean

4. Hand Jewellery

- Most (rings) are soil collectors and are difficult to keep clean = food contamination

5. Awareness of Personal Habits

There are many bad habits which should be avoided...

- <a> unguarded cough or sneeze = always use a tissue
- licking fingers to pick up a piece of paper
- <c> smoothing a goatee or playing with hair
- <d> biting fingernails
- <e> smoking = saliva on hands
- <f> chewing on a toothpick
- <g> opening bags y blowing into them
- <h> double dipping or dipping fingers into food then into mouth
- <l> using a tasting spoon to stir food



6. Nose Contact

- Rubbing & picking the nose may leave germs such as Staphylococcus on the fingers
- Always use a tissue, never a cloth handkerchief

7. Boils, pimples, cuts & pierced ears which are infected, are areas filled with bacteria, therefore any hand contact or scratching should be avoided

8. Not washing hands after toilet or urinal use because the food handler is: too rushed to bother, unaware or uncaring

Proper Methods of Hand Washing & Drying

Why is hand washing so important?

Hand washing takes only 15 seconds and yet it is the **MOST** important thing that you can do to reduce the spread of disease and to keep you from getting sick. When hands are washed using soap and warm running water, dirt, oils, and germs are loosened and removed from the surface of your skin.

What happens if you do not wash hands frequently?

Frequent hand washing removes germs that may have been picked up from other people, from contaminated surfaces, or from animals and animal waste. If contaminated hands are not thoroughly washed, these germs can infect you when you touch your eyes, nose, mouth or open sores. In turn, your unwashed hands can spread germs directly to other people or to the surfaces that they touch.

When should you wash your hands?

Germs are too small to be seen with the naked eye. Therefore, frequent and thorough hand washing is strongly recommended:

- Whenever hands are visibly dirty
- Before, during and after food preparation
- Before eating, and before feeding a child/patient
- After using the bathroom
- After handling animals or animal waste
- After sneezing, coughing or blowing your nose into a tissue
- After handling garbage
- After changing a baby's diaper
- Before and after administering first aid or contact with bodily fluids
- More frequently when someone in your home is sick



What is the correct way to wash your hands?

Wet hands with warm water and apply liquid or clean bar soap. If bar soap is used, the soap should be placed on a rack, allowing it to drain between uses. Rub hands vigorously together and scrub all surfaces for a minimum of 15 seconds. The soap, combined with the scrubbing action, helps dislodge and remove germs.

Rinse hands under warm running water. Point hands down and rinse from wrists to fingertips.

Dry hands with a clean towel or paper towel. Taps should be turned off using the towel.

The Durham Region Health Department - Hand washing Procedure Poster



SUPPORT QUESTION – Is It Something That I Ate?

Several hours after eating dinner, you begin to feel nauseous and feverish and you have some stomach cramps. What type of problem might these symptoms suggest?

Food Labelling

The food label is one of the most important and direct means of communicating product information between buyers and sellers. It is one of the primary means by which consumers differentiate between individual foods and brands to make informed purchasing choices. Knowing how to read labels on packages will help you determine quality, nutrient content and ingredients

A label serves three primary functions.

- It provides basic product information (including common name, list of ingredients, net quantity, durable life date, grade/quality, country of origin and name and address of manufacturer, dealer or importer).
- It provides health, safety, and nutrition information. This includes instructions for safe storage and handling, nutrition information such as the quantity of fats, proteins, carbohydrates, vitamins and minerals present per serving of stated size of the food (in the Nutrition Facts table), and specific information on products for special dietary use.
- It acts as a vehicle for food marketing, promotion and advertising (via label vignettes, promotional information and label claims such as "low fat", "cholesterol-free", "high source of fibre", "product of Canada", "natural", "organic", "no preservatives added", and so on).

New Regulations published on January 1, 2003, made nutrition labelling mandatory on most food labels; update requirements for nutrient content claims; and permit, for the first time in Canada, diet-related health claims for foods. Improved nutrition labelling on most pre-packaged foods; science-based health claims and defined nutrient-content claims can help consumers make informed choices about the foods they buy and eat. These regulations coupled with education are very significant supports to improved public health in Canada.



Most pre-packaged foods will have **NUTRITION FACTS**. This is designed so that nutrition information will be easier to find and easier to read. Some products will also carry **NUTRITION CLAIMS**. Most nutrition claims highlight a specific nutrient in a food, such as fat or fibre. These types of nutrition claims are referred to specifically as nutrient content claims. Some nutrition claims reinforce the role of healthy eating as part of a lifestyle that can reduce the risk of developing a chronic disease, such as heart disease or cancer. These types of nutrition claims are referred to specifically as diet-related health claims. **LIST OF INGREDIENTS** - virtually all pre-packaged foods must include a list of ingredients by weight, from most to least (those with the most weight are listed first). The ingredient list helps to identify sources of the nutrients and their relative importance in the food. This list is an important source of allergy information.

Nutrition Labelling

In Canada information panels must be placed on packages of food that are intended for sale ... it's the LAW! INCLUDES: serving size per container, calories, nutrients, percent daily value, nutrient advice, ingredients lists, food additives & sugar and fat substitutes etc.

Nutrition Facts - To Help You Make Informed Food Choices

The "Nutrition Facts" table is easy to find, easy to read and on more foods.

* Information in the Nutrition Facts table is based on a specific amount of food. Compare this to the amount you eat.

** Use % Daily Value to see if a food has a little or a lot of a nutrient.

With the nutrition information on food labels you will be able to:

- Compare products more easily
- Determine the nutritional value of foods
- Better manage special diets
- Increase or decrease your intake of a particular nutrient

| Nutrition Facts | |
|------------------------------|-----------------|
| Per 125 mL (87 g)* | |
| Amount | % Daily Value** |
| Calories 80 | |
| Fat 0.5 g | 1 % |
| Saturated 0 g + Trans 0 g | 0 % |
| Cholesterol 0 mg | |
| Sodium 0 mg | 0 % |
| Carbohydrate 18 g | 6 % |
| Fibre 2 g | 8 % |
| Sugars 2 g | |
| Protein 3 g | |
| Vitamin A 2 % | Vitamin C 10 % |
| Calcium 0 % | Iron 2 % |



Nutrition Information on Food Labels

Use Nutrition Facts, the list of ingredients and nutrition claims to help you make informed food choices.

Nutrition Claims

The Government sets rules that must be met before a nutrition claim can be made on a label or advertisement.

A claim highlights a nutrition feature of a food. Look for one of these words:

- | | |
|----------------|---------------------|
| Free | low |
| Less | more |
| Reduced | lower |
| very high | light/lite |
| source of | high source of |
| good source of | excellent source of |

A claim may also highlight a relationship between diet and disease. For example:

A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer.

A healthy diet low in saturated and trans fats may reduce the risk of heart disease.

Nutrient Content Claims:

“GOOD SOURCE” “HIGH IN” – this statement regarding a vitamin or mineral means that the food contains at least 15% of the daily value (23% for Vit. C)

“EXCELLENT SOURCE OF” “VERY HIGH IN” – this statement regarding a vitamin or mineral means that the food contains at least 25% of the daily value (50% for Vit. C)

“Durable Life” – the length of time that an unopened product will maintain the qualities that it is recognized as having if stored properly such as taste and nutritional value

“Best Before” Dates – must be on foods with a durable life of 90 days or less
- indicate the date up to which the unopened product will keep its durable life

“Packaged On” Dates – must be on foods with a durable life of 90 days or less that are packaged at a retail store such as cold meats

| Keyword | What they mean |
|------------------------|--|
| Free | an amount so small, health experts consider it nutritionally insignificant |
| Sodium free | - less than 5 mg sodium |
| Cholesterol free | - less than 2 mg cholesterol, and low in saturated fat (includes a restriction on <i>trans</i> fat) - not necessarily low in total fat |
| Low | always associated with a very small amount |
| Low fat | - 3 g or less fat |
| Low in saturated fat | - 2 g or less of saturated and <i>trans</i> fat combined |
| Reduced | at least 25% less of a nutrient compared with a similar product |
| Reduced in Calories | - at least 25% less energy than the food to which it is compared |
| Source | always associated with a "significant" amount |
| Source of fibre | - 2 grams or more fibre |
| Good source of calcium | - 165 mg or more of calcium |
| Light | when referring to a nutritional characteristic of a product, it is allowed only on foods that are either "reduced in fat" or "reduced in energy" (Calories) - explanation on the label of what makes the food "light"; this is also true if "light" refers to sensory characteristics, such as "light in colour" |

Ingredient List

Ingredients in the food are listed by weight from most to least. The ingredient list is a source of information for people with allergies or for people who avoid certain ingredients based on their beliefs.

How to Read Labels

Although some people may be concerned about just one part of the nutrition label, looking at the whole picture can give you the info you need to make smart food choices. To make good choices, you need to have a handle on many different parts of the label, including food label claims, calorie measurements, serving size, percent daily values, minerals and vitamins, nutrients, and fat percentages.

- **Serving Size**

At the top of each food label you'll see a serving size amount. The serving size is the amount of the food you would need to eat to get the amount of listed nutrients. These quantities are based on the amount people generally eat according to standards set by the FDA. Serving sizes are not necessarily recommended amounts, but common ones. All of the nutritional information on the package is based on one listed serving size.

Remember that the package may contain several servings. For example, if you eat a whole bag of chips that contains three servings, you have eaten three times the amount of calories and other nutrients listed on the package for one serving.

- **Calories**

A calorie is a unit of energy that measures how much energy food provides to your body. The number given on the food label indicates how many calories are in one serving. Although calorie requirements vary for each person depending on age, weight, gender, and activity level, food labels are based on a diet of 2,000 calories a day.

- **Calories from Fat**

The second number, calories from fat, tells the total number of calories in one serving that comes from fat. The label lists fat so that people can carefully monitor the amount of fat in their diets. Dietitians generally recommend that no more than 30% of calories come from fat over the course of the day. That means if the food you eat over the course of a day contains 2,000 calories total, no more than 600 of these calories should come from fat.

| Nutrition Facts | |
|---|-------------------------|
| Serving Size 2 crackers (14 g) | |
| Servings Per Container About 21 | |
| Amount Per Serving | |
| Calories 60 | Calories from Fat 15 |
| % Daily Value* | |
| Total Fat 1.5g | 2% |
| Saturated Fat 0g | 0% |
| Trans Fat 0g | |
| Cholesterol 0mg | 0% |
| Sodium 70mg | 3% |
| Total Carbohydrate 10g | 3% |
| Dietary Fiber Less than 1g | 3% |
| Sugars 0g | |
| Protein 2g | |
| Vitamin A 0% | • Vitamin C 0% |
| Calcium 0% | • Iron 2% |
| * Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs: | |
| | Calories: 2,000 2,500 |
| Total Fat | Less than 65g 80g |
| Sat Fat | Less than 20g 25g |
| Cholesterol | Less than 300mg 300mg |
| Sodium | Less than 2400mg 2400mg |
| Total Carbohydrate | 300g 375g |
| Dietary Fiber | 25g 30g |

- **Percent Daily Values**

Percent daily values, like serving sizes, are based on an average adult who consumes 2,000 calories a day. Percent daily values are listed in the right-hand column in percentages, and they tell you how much of a certain nutrient you will get from eating one serving of that food. Your daily goal is to eat 100% of each of those nutrients. If a serving of a food has 25% vitamin D, then that food is providing 25% of your daily vitamin D needs if you eat 2,000 calories per day. Percent daily value is most useful for figuring out whether a food is high or low in certain nutrients. If a food has 5% or less of a nutrient, it is considered to be low in that nutrient. A food is considered a good source of a nutrient if the percentage is between 10% and 19%. If the food has more than 20% of the daily value, it is considered high in that nutrient.

- **Total Fat**

This number indicates how much fat is in a single serving of food and is usually measured in grams. Although eating too much fat can lead to obesity and related health problems, our bodies do need some fat every day. Fats are an important source of energy - they contain twice as much energy per gram as carbohydrate or protein. Fats provide insulation and cushioning for your skin, bones, and internal organs. Fat also carries and helps store certain vitamins (A, D, E, and K). But because eating too much fat can contribute to health problems, including heart disease, no more than 30% of your daily calorie intake should come from fat.

- **Saturated Fat and Trans Fat**

The amount of saturated fat appears beneath total fat. Some manufacturers may already be reporting the amount of trans fat in their foods, although this number may not be separated from total fat on some food labels because manufacturers have until 2006 before the FDA requires that trans fats must be listed separately (in the U.S.A.). Saturated fat and trans fat raise cholesterol and increase a person's risk for developing heart disease. Both saturated and trans fats are solid at room temperature (picture them clogging your arteries!). Saturated fat usually comes from animal products like butter, cheese, whole milk, ice cream, and meats. Trans fats are naturally found in these foods, too. But they are also in vegetable oils that have been specially treated, or hydrogenated, so they are solid at room temperature - the fats in stick margarine, for example. If the label does not list trans fat, look in the ingredient list for words such as "hydrogenated," "partially hydrogenated," or "shortening" to tip you off on whether the food you are eating contains trans fats.

- **Unsaturated Fat**

Unsaturated fats are also listed under total fat. These are fats that are liquid at room temperature. Foods high in unsaturated fat are vegetable oils, nuts, and fish. Unsaturated fats are often called "good fats" because they don't raise cholesterol levels like saturated fats do.

- **Cholesterol**

Cholesterol is listed under the fat information - it's usually measured in milligrams. Cholesterol is important in producing vitamin D, some hormones, and in building many other important substances in the body. Cholesterol can become a problem if the amount in the blood is too high, though. This can increase the risk of developing **atherosclerosis** (pronounced: ah-thuh-ro-skluh-ro-sis), a blockage and hardening of arteries that can lead to a heart attack or stroke later in life.

Most of the cholesterol a person needs is manufactured by that person's liver. However, dietary sources such as meat and poultry, eggs, and whole-milk dairy products, also contribute to a person's cholesterol level.

- **Sodium**

Sodium, a component of salt, is listed on the Nutrition Facts label in milligrams. Small amounts of sodium are necessary for keeping proper body fluid balance. Sodium also helps with the transmission of electrical signals through nerves. Too much sodium can worsen water retention and high blood pressure in people who are sensitive to it. Almost all foods contain small amounts of sodium because it adds flavour and helps preserve food. Many processed foods contain greater amounts of sodium. The USDA generally recommends that people take in less than 2,400 milligrams per day.

- **Total Carbohydrate**

This number, listed in grams, combines several types of carbohydrates: dietary fibres, sugars, and other carbohydrates. Carbohydrates are either simple (called sugars) or complex (called starches). Carbohydrates are the most abundant source of calories on earth. The best sources of carbohydrates are cereals, rice, potatoes, breads, pastas, fruits, and vegetables. Carbohydrates should be your primary source of energy, providing 50% to 60% of your total calorie intake per day.

- **Dietary Fibre**

Listed under total carbohydrate, dietary fibre itself has no calories and is a necessary part of a healthy diet. High-fibre diets promote bowel regularity, may help reduce the risk of colon cancer, and can help reduce cholesterol levels.

- **Sugars**

Also listed under total carbohydrate on food labels, sugars are found in most foods. Starchy foods, such as pretzels and pasta, are high in complex carbohydrates and are part of a healthy diet. Snack foods, candy, and soda often have large amounts of simple sugars. Although carbohydrates have just 4 calories per gram, the high sugar content in snack foods means the calories can add up quickly, and these "empty calories" usually contain few other nutrients.

- **Protein**

This listing tells you how much protein is in a single serving of a food and is

usually measured in grams. Most of the body - including muscles, skin and the immune system - is made up of protein. If the body doesn't get enough fat and carbohydrates, it can use protein for energy. Foods high in protein include eggs, milk, soybeans, meat, poultry, fish, cheese, yogurt, and nuts. Protein should make up about 10% to 20% of a teen's daily calorie intake.

- **Vitamin A**

Vitamin A usually appears first on a food label's list of vitamins and minerals. The amount of vitamin A (as well as the amounts of other vitamins and minerals in a serving of food) is usually listed as a percent daily value. Vitamin A is important for good eyesight and helps maintain healthy skin. It's found in orange vegetables, such as carrots and squash, and in dark green, leafy vegetables.

- **Vitamin C**

Vitamin C is found in citrus fruits, other fruits, and some vegetables. The body uses vitamin C to build and maintain connective tissues, heal wounds, and fight infections.

- **Calcium**

Calcium has a lot of uses in the body, but it is best known for its role in building healthy bones and teeth. Milk and other dairy products, such as yogurt and cottage cheese, are excellent calcium sources. It's estimated that 70% of teens in the United States don't get enough calcium every day. It takes 3 to 4 cups (3/4 to 1 litre) of milk to meet a person's requirement for the recommended daily amount of calcium.

- **Iron**

Iron helps your body produce new, healthy red blood cells. Red blood cells carry the oxygen we need in our bodies, so it's important to get plenty of iron. Teenage girls need extra iron to compensate for iron lost in the blood during menstruation. Red meat is the best source of iron, but you can get some iron from iron-fortified cereals, raisins, and dark green, leafy vegetables.

- **Calories per Gram**

These numbers show how many calories are in 1 gram of fat (9 calories), carbohydrate (4 calories), and protein (4 calories). This information is usually printed on food labels for reference.



SUPPORT QUESTION – Food Labelling

What does the Percent Daily Value (% daily value) column of a food label tell you?

Canada's Food Guide Revisited

Nutrition Labelling and Healthy Eating - Making the Leap to Food

Remember from LESSON 2 - Canada's Guidelines for Healthy Eating ...

Enjoy a VARIETY of foods.
 Emphasize cereals, breads, other grain products, vegetables and fruit.
 Choose lower fat dairy products, leaner meats and foods prepared with little or no fat.
 Achieve and maintain a healthy body weight by enjoying regular physical activity and healthy eating.
 Limit salt, alcohol and caffeine.



Translated into a Guide to Action

Canada's Food Guide to Healthy Eating ...

is a flexible guide that suggests a way of eating for people over the age of 4 and gives advice on how to choose foods.

The Science: The Nutrition Recommendations

Energy intake consistent with maintenance of healthy body weight
 Essential nutrients in amounts recommended
 No more than 30% of energy as fat and no more than 10% as saturated fat
 55% of energy as carbohydrate from a variety of sources
 Sodium content of the diet should be reduced
 No more than 5% of total energy as alcohol, or 2 drinks daily, whichever is less
 No more caffeine than the equivalent of 4 regular cups of coffee per day
 Fluoridate community water supplies containing less than 1 mg/L to that level

The Label-Healthy Eating Link

Nutrition labelling is a practical tool that helps Canadians choose foods. It provides nutrient-specific information about pre-packaged foods so that consumers can compare similar products and make informed choices.

Some Canadians may need to **limit** their intake of a nutrient, such as fat, saturated fat, trans fat, sodium ... and others may need to **increase** their intake of a nutrient, such as fibre, vitamin A, calcium, iron....

Linking the label information to food guide messages can help focus consumers' attention on healthy eating, as a whole, and prevent them from getting caught up in making choices only based on a particular nutrient.

From the food guide ...

"... Enjoy a variety of foods from each group every day"

Eat different kinds of foods, prepared in different ways.
Explore a wide range of foods with different tastes, textures and colours.
Variety ensures an adequate intake of essential nutrients.

"... Enjoy eating well, being active and feeling good about yourself"

Healthy bodies come in a variety of shapes and sizes. Achieve and maintain a healthy body weight by enjoying regular physical activity and healthy eating. Energy and nutrient needs vary, depending on age, body size, gender and activity level, and special conditions such as pregnancy and breastfeeding. Portion sizes influence the number of Calories and amount of fat consumed.

Food label element: Nutrition Facts

Some helpful information: nutrient information, including Calories, is based on a specific amount of food

"... Choose lower fat foods more often"

Each of the four food groups includes foods that contain fat.
Eat lower fat foods from each group every day.
Choose smaller amounts of higher fat foods.

Food label element: Nutrition Facts

Some helpful information: fat, saturated fat, *trans* fat

Food label element: Nutrition Claims

Some helpful information: low fat, reduced in saturated fat, *trans* fat-free; health claim on saturated and *trans* fats and heart disease

Food label element: Ingredient List

Some helpful information: sources of fat

"... Grain Products"

Choose whole grain and enriched grain products more often.
Whole grain products, such as whole wheat, oats, barley or rye, are suggested because they are high in starch and fibre.

Food label element: Nutrition Facts

Some helpful information: fibre, sugars, iron, fat, saturated fat, *trans* fat, sodium

Food label element: Nutrition Claims

Some helpful information: source of fibre, high in iron

Food label element: Ingredient List

Some helpful information: sources of whole grains, such as oats and whole wheat flour; enriched grains will also include nutrients which have been added back to them (iron, niacin, riboflavin, thiamin and folic acid)

"... Vegetables and Fruit"

Choose dark green and orange vegetables and orange fruit more often. These foods are higher than other vegetables and fruit in certain key nutrients like vitamin A and folate.

Fresh, frozen and canned are all good choices.

Food label element: Nutrition Facts

Some helpful information: fibre, vitamin A, vitamin C, sodium

Food label element: Nutrition Claims

Some helpful information: source of fibre/iron, excellent source of vitamin A/vitamin C; health claim on vegetables and fruit and reduced risk of some types of cancer; health claim on potassium, sodium and reduced risk of high blood pressure

Food label element: Ingredient List

Some helpful information: check list of ingredients when consuming prepared foods; check if vegetables and fruit are near the beginning of the list

"... Milk Products"

Choose lower fat milk products more often.

Take advantage of the wide variety of lower fat milk products as a way to lower total dietary fat, particularly saturated fat.

Food label element: Nutrition Facts

Some helpful information: fat, saturated and trans fats, calcium, vitamin D

Food label element: Nutrition Claims

Some helpful information: good source of calcium, low in fat; health claim on calcium, vitamin D and regular physical activity and reduced risk of osteoporosis; health claim on saturated and trans fats and heart disease

Food label element: Ingredient List

Some helpful information: other ingredients, such as salt (sodium) added to cheese



"... Meat and Alternatives"

Choose leaner meats, poultry and fish, as well as dried peas, beans and lentils more often.

To lower your fat while increasing your intake of starch and fibre, choose foods like beans, peas or lentils.

Food label element: Nutrition Facts

Some helpful information: fat, saturated and *trans* fats, cholesterol, sodium

Food label element: Nutrition Claims

Some helpful information: low in fat, good source of iron; health claim on saturated and trans fats and heart disease

Food label element: Ingredient List

Some helpful information: other ingredients such as sources of added fat

"... Other Foods are foods and beverages that are not part of any food group."

Some of these foods are higher in fat or Calories, so use these foods in moderation.

They include foods that are mostly fats and oils; foods that are mostly sugar; high-fat and/or high-salt snack foods; beverages, such as water, tea, coffee, alcohol and soft drinks; herbs and spices; and condiments.

Food label element: Nutrition Facts

Some helpful information: Calories, fat, saturated and trans fats, sugars and sodium

Food label element: Nutrition Claims

Some helpful information: reduced in Calories, low in fat, lower in sodium - health claim on potassium, sodium and reduced risk of high blood pressure

Food label element: Ingredient List

Some helpful information: if fats, salt or sugars are near the beginning, then see Nutrition Facts

A Healthy YOU!

Healthy eating is one part of making a healthy you. A combination of eating well, being active and having a zest for life will enhance your quality of life.



Enjoy eating well.

This is a positive approach to food.

Use healthy eating tools such as *Canada's Food Guide to Healthy Eating*, Nutrition Facts, list of ingredients and nutrition claims to help select a variety of foods.

Enjoy being active.

Get active your way - build physical activity into your daily life. Use tools such as the active living guides to help integrate physical activity into your life.

Feeling good about yourself.

Appreciate and respect yourself.

**Key Questions for Lesson 9 (100 marks)**

Please answer these questions on your own paper. If you choose to word process your answers please use double spacing and at least 12 pt font.

**KEY QUESTION # 57 – Lesson 9 ... Important Terms (10 marks)**

Read through your class notes and write the definition for each of the following terms:

- | | |
|------------------------|--------------------------|
| 1. Food poisoning | 2. Danger Zone |
| 3. Direct Transmission | 4. Indirect Transmission |
| 5. Cross Contamination | 6. Food Intoxication |
| 7. Food Infection | 8. Nutrition Facts |
| 9. Nutrition Claims | 10. List of Ingredients |

**KEY QUESTION # 58 – Food Safety (35 marks)**

5. There are many steps one must follow to ensure his or her food is safe. List two (2) tips for each of the following areas: (8 marks)
 - a. in the supermarket
 - b. in the kitchen
 - c. clean-up
 - d. storing leftovers
2. List the three (3) main sources of food poisoning.
3. Brainstorm a list of the ways a food borne illness can be spread DIRECTLY?
4. Brainstorm a list of the ways a food borne illness can be spread INDIRECTLY?
5. What is the difference between food Intoxication and Food Infection?
6. Copy the “Danger Zone” thermometer into your notebook.
7. What five (5) main categories of foods are “Potentially Hazardous”? For each, describe WHY they are “Potentially Hazardous”. (5 marks)
8. Where do pathogens come from?
9. List the three (3) “Less Hazardous Foods”.
10. Define “the environment”. How can “the environment” be contaminated?
11. List the ways that the food handler is a link in the cycle of transmission.
12. Why is personal hygiene so important?
13. What’s the most important hygienic practice for food handlers in breaking the cycle of transmission?
14. How does clothing contribute to the transmission of disease?
15. Why is hair control important?
16. Are hands sterile after washing? Why or why not?
17. List personal habits you should avoid.
18. Describe the proper procedure for hand washing. (6 marks)

19. List the times when a food handler's hands should be washed



KEY QUESTION # 59 – Food borne Illness Posters (30 marks)

Research TWO (2) of the following food borne diseases using the Internet, the library, encyclopedias etc..

| | |
|------------------------------------|-----------------|
| Salmonella | E. coli |
| Botulism (Clostridium botulinum) | Shigella |
| Bacillus Cereus | C. Perfringens |
| Staphylococcus Aureus | Hepatitis "A" |
| Mycotoxins | Campylobacter |
| Calicivirus, or Norwalk-like virus | Giardia lamblia |
| <i>Listeria</i> | Norovirus |

Your small poster project is to cover the following topics:
(3 marks each for each poster)

- (1) General information & description of the disease
- (2) Type of microorganism that causes the disease and sub-species
- include a diagram of the microorganism
- (3) Symptoms
- (4) Sources / causes / Incidence (how widespread is the disease)
- (5) Prevention

Criteria for marking this project are as follows:

Evaluation: (15 marks each poster = 30 marks total)

- ⇒ Information is accurate and thorough (point form is acceptable)
- ⇒ Poster is interesting to look at
- ⇒ Poster is colourful, creative, neatly organized and has a catchy title
- ⇒ Poster is easy to read
- ⇒ Poster includes all required information with correct spelling

**KEY QUESTION # 60 – Food Labelling (10 marks)**

1. What is a food label?
2. What are the three (3) primary functions of a food label?
3. What is nutrition labelling?
4. (a) What are nutrition claims?
(b) List five (5) words used in nutrition claims
(c) Go to your kitchen cupboard or refrigerator and find three (3) products with “Nutrient Content Claims” on them. List the name of each product. Beside the name, write the nutrient content claim.
5. What is an ingredient list?
6. List ten (10) things that are commonly found on food labels.
7. Explain how nutrition labelling is a practical tool that helps Canadians choose foods.

**KEY QUESTION # 61 – Food & Nutrient Labelling Assignment (15 marks)**

Directions:

1. Find a food product in the kitchen which includes “Nutrition Facts”.
2. Divide a white sheet of paper into two.
 - (a) On the left side draw/sketch the FRONT of the food product package. Be as accurate as possible and use the appropriate colours. Try to copy the package front as closely as you can to the original.
 - (b) On the right side draw/sketch the BACK of the food product package. Be as accurate as possible and use the appropriate colours. Try to copy the package front as closely as you can to the original. Be sure to include the ingredient list too.

(note: if you have trouble, only copy the English words and exclude the French)

PPZ30

HEALTH FOR LIFE



LESSON 10

Lesson 10 – Complimentary Medicine

Complimentary Medicine

Have you ever sipped chamomile tea to calm an upset stomach or taken a vitamin C pill when you felt a cold coming on? Have you had a massage or been to a chiropractor? If so, then you've had some experience with alternative medicine.

You might not think twice about taking a vitamin or indulging in a relaxing massage, but these and other practices were not always as much a part of health care in the United States as they have become in the past few decades. In fact, not long ago most alternative medical practices were considered bizarre. They were denounced by the medical establishment and laughed at by the public.



But as Canadians traveled and read about healing practices in other countries, and as immigrants brought their medical traditions to this country, the public and the medical establishment have taken another look at alternative medicine. People have experimented with some alternative practices, and researchers have studied their usefulness. As a result, many forms of alternative medicine have been accepted by mainstream doctors, and some people have become wildly - and sometimes unwisely - enthusiastic about alternatives to conventional medicine.

COMPLEMENTARY MEDICINE includes any treatment that is not a part of the traditional medicine or practice of your primary health system. What is complementary in one culture is often traditional and standard practice in another. For example, acupuncture, though a traditional part of medical practice in China for centuries, is considered alternative or complementary in the Canada. People often use complementary medicine to maintain or improve wellness and quality of life, prevent disease, or treat specific health problems. Complementary medicine, which addresses not only the physical but also the mental and spiritual aspects of health, blends science and nature, addresses both the mind and the body, and can help improve health or maintain wellness. For these reasons it appeals to many.

One of the central concepts of complementary medicine is to give thought and care to the whole person (**holistic**) rather than provide treatment for a specific disease or symptom. Many complementary treatments have their historical roots in eastern cultures where the emphasis is on maintaining good health. A holistic approach may be most appealing for people with chronic illness, those who are focused on wellness and disease prevention, or those who want to make lifestyle changes to improve quality of life.

You may be concerned about the lack of evidence-based research to support the safety and effectiveness of many complementary therapies. Some treatments, such as humour therapy, prayer, or massage, are clearly low- or no-risk for almost anyone. Other treatments carry greater risks. Certain herbs and supplements or non-traditional nutritional programs, for example, are not well-tested and may not be safe or effective. Most complementary therapies fall somewhere in between these extremes. Self-education, partnering with your primary care doctor, and the diligent use of common sense are important factors to consider when deciding whether to try complementary medicine.

There are several terms used to describe related facets of complementary medicine:

- **Integrative medicine** is the appropriate combination of conventional and complementary treatments in which the best of both worlds are brought together for the optimal outcome.
- **Alternative medicine** often implies using a therapy in place of conventional treatment.

What is Complementary Medicine used for?

Some form of complementary medicine can be used for almost any health concern or condition. The most common reasons people use complementary medicine in the U.S. are to help manage long-term (chronic) health conditions and to enhance quality of life through wellness efforts.

Should I use Complementary Medicine?

Before using complementary medicine, think about what motivates you. Seeking a "cure" through complementary medicine can be disappointing or even harmful to your health. Set realistic expectations and beware of false or exaggerated claims. Many complementary therapies can improve health and quality of life, but if a medicine or therapy sounds too good to be true, it probably is.

Consider choosing a primary doctor who is receptive to complementary medicine. Consult your primary doctor for help in making decisions about using complementary therapies. He or she can alert you to any potentially dangerous interactions between standard and complementary therapies.



SUPPORT QUESTION – I Think I Have Heard of

List all the alternative and complimentary medicines / therapies you have heard of.

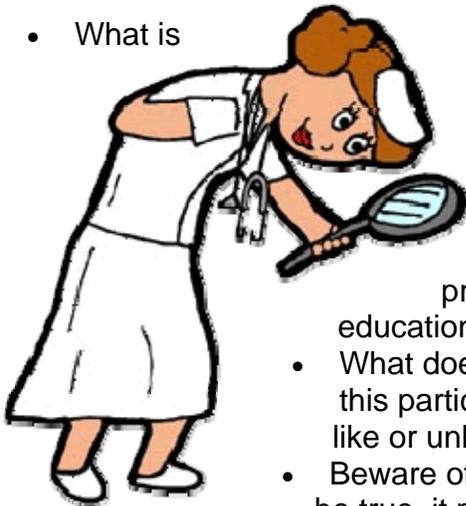
Trying Complementary Medicine

There are some important issues to consider when making a decision to try a complementary therapy.

Think about your attitude and what motivates you. Why you are considering complementary medicine? Are you looking for a cure? Or are you looking for greater comfort and improved quality of life? Seeking a cure through complementary medicine may be disappointing and potentially harmful to your health. Discuss your expectations with the practitioner to make sure they are realistic.

Use your common sense when considering the following:

- What is



the practitioner's level of expertise? Check with provincial and local medical licensing agencies and departments of consumer affairs or your local Better Business Bureau to see whether the practitioner is licensed and in good standing. Talk to others who have had experience with this practitioner. Visit the practitioner and ask questions about his or her education, training, licenses, certification, and insurance.

- What does the evidence show? Have studies been done on this particular therapy? Are they good studies? How are you like or unlike the people in the study?
- Beware of false or exaggerated claims. If it sounds too good to be true, it probably is. It is not possible for any single type of treatment to be a cure-all. Use your good judgment and critical thinking skills when evaluating what might work well for you.
- Is the treatment safe? What are the risks? Do you have other health conditions or are you undergoing any other treatments that may be negatively affected by this therapy?

Your primary care doctor may be able to help you make informed decisions about complementary medicine. You might assume that your doctor will not endorse complementary medicine, but more and more doctors are realizing that complementary medicine can work well with conventional medicine to help people feel better and improve health and quality of life. Your doctor may be able to refer you to some qualified complementary medicine providers.

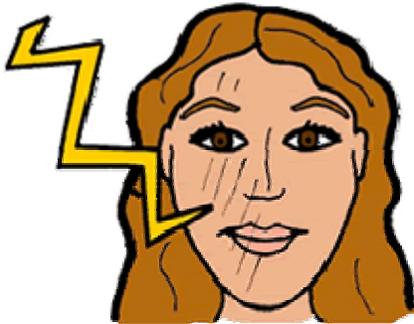
If you do decide to try complementary medicine, it is very important for your own safety to tell your primary care doctor. Keep in mind that most studies of alternative therapies were done on adults, not young people. So their safety and effectiveness in kids and teens, whose bodies are still growing and changing, has not been determined. Even if your doctor is not comfortable with your decision, he or she must be aware of any potential for dangerous interactions among different therapies. Your conventional

treatments should work at minimum safely, and at best synergistically, with complementary treatments.

What are the Risks of Complementary Medicine?

While facilities, medications, and practitioners of conventional medicine are closely monitored and regulated in Canada, complementary medicines and therapies may be subject to less testing and regulation. Many practitioners of complementary therapies are extensively educated in their field, but the opportunities for education, licensing, and training in these disciplines may be limited in Canada.

The greatest risk involved with using complementary medicine is missing a necessary or possibly lifesaving diagnosis or treatment from a practitioner of conventional medicine. It is always best to get as much information as possible—on both



complementary and conventional treatments—and then make an informed decision in consultation with your primary health professional.

Other risks associated with complementary therapies include the potential for dangerous interactions with conventional therapies, a lack of evidence on the effectiveness of many complementary therapies, and the fact that the expense of many complementary therapies may not be covered by health insurance.

What are the Benefits of Complementary Medicine?

A unique benefit of complementary medicine is in the holistic approach of many of its practitioners. While a visit to a conventional doctor typically lasts about 10 to 15 minutes, many complementary medicine practitioners take an hour or more to learn about your lifestyle, background, habits, and medical complaint in order to get a more complete picture of your overall health. This personal approach makes many people feel better about beginning a course of treatment.

A person who uses a complementary therapy to treat a condition often benefits from a sense of empowerment. In seeking care outside conventional medicine, you are taking a more active role in your health care, and that can make you feel more in control of your health.

Science has shown that your emotional state can affect your health. Since complementary therapies often emphasize the connection between mind and body, many people respond well to a treatment that addresses their sense of well-being as well as the physical aspects of their conditions.

The Right Therapy for Me ... Types of Complementary Medicine

Complementary medicine takes many forms—many of which come with unique risks and benefits. This section describes several widely used and more commonly available treatments. Use this information to help you learn about different treatments and how they might work for you and for your assignment.

Alternative Medical Systems

As the name implies, an alternative medical system is more than just one type of treatment - it is an entire system of theory and practice. Examples of alternative medical systems include eastern medicine, Ayurveda, homeopathic medicine, and naturopathic medicine.

- Homeopathy
- Naturopathy
- Chinese medicine
- Traditional osteopathy
- Ayurveda

Mind-Body Interventions

Mind-body techniques are based on the belief that the mind can affect the body's functions and symptoms.

- Aromatherapy
- Hypnosis
- Prayer
- Guided imagery
- Meditation
- Music therapy
- Biofeedback
- Tai chi and qi gong
- Yoga
- Autogenic training
- Humour therapy
- Light therapy



Biologically Based Therapies

These treatments rely on things found in nature, including foods and herbs. Herbal therapies made from a plant or a combination of plants often come in the form of teas, capsules, and extracts. About one third of Canadian adults regularly take some sort of herb, anything from a cup of chamomile tea to Echinacea to fight a cold. Herbal medicines are extracts from plants and flowers used to prevent and treat illness. Herbal remedies have been used for a wide range of conditions, from headaches to depression, PMS to insomnia. Most health food stores contain hundreds of bottles or packages of tablets containing various herbal preparations.



- Herbal and natural supplements
- Antioxidants
- Ephedra
- Echinacea
- Probiotics
- Kava
- Saw palmetto
- St. John's wort
- SAM-e
- Milk thistle
- Ginkgo biloba
- Tea tree oil
- Chromium
- Capsaicin
- Glucosamine and chondroitin
- Valerian
- Rye grass pollen extract
- Beta-sitosterol plant extract
- Alternative diet programs
- Chelation therapy
- Hydrotherapy
- Coenzyme Q10
- Chamomile

A word of caution

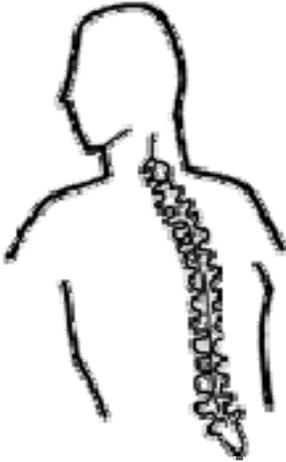
Although there is some scientific evidence showing that certain herbs have health benefits, much of the information is limited to individual reports. Most have not yet undergone the same testing and approval procedure as prescription and over-the-counter medications.

If you're considering buying a herbal product, talk to your pharmacist or doctor first. Many herbs can affect prescription and non-prescription medications and should not be taken by people with certain medical conditions.

Make sure you know:

- if there is evidence to support the use of the herb
- if the herb can interact with other medications or vitamins
- what side effects are associated with the herb
- what medical conditions the herb should not be used in
- how to take and store the herb properly

Manipulative and Body-Based Methods



The treatments in this category focus on moving or realigning body parts.

- Bodywork
- Chiropractic treatment
- Massage therapy
- Osteopathy

Energy Therapies

People who work with energy therapies attempt to affect fields of energy that surround and pass through the body. Practitioners of therapeutic touch believe that by placing their hands on or near a patient's body they can direct energy and correct disturbances. And bioelectromagnetics is an emerging area of study that uses pulsed energy or magnetic fields to alter the body's electromagnetic fields and cure illness.

- Acupuncture
- Healing touch
- Reiki
- Magnetic field therapy
- Transcutaneous electrical nerve stimulation (TENS)
- Qi gong



SUPPORT QUESTION – I Have Tried

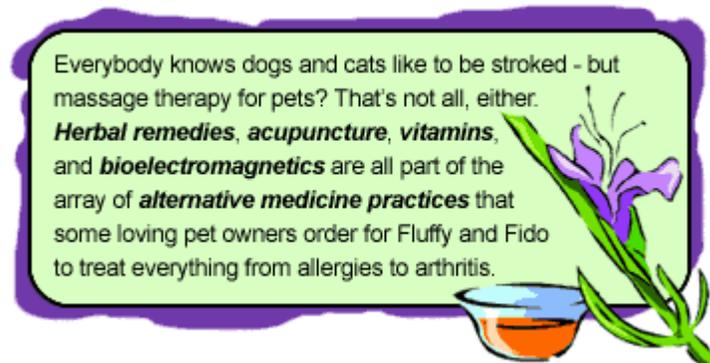
List all the alternative and complimentary medicines / therapies you (or a family member) have tried. What were the results?

What Is Alternative Medicine?

ALTERNATIVE MEDICINE describes health products, practices, and approaches that are not part of conventional medicine. But in the same way that an alternative band can be outside the establishment one year and part of the mainstream the next, the list of once alternative healing practices accepted by conventional medicine changes frequently, as new therapies and treatments are found to be effective. This makes alternative medicine an expanding, changing field of health care, as well as a booming business.

What is the difference between "complementary" and "alternative" medicine?

ALTERNATIVE MEDICINE is used *instead of* conventional medicine - for example, using St. John's Wort (a herbal remedy) for mild-to-moderate depression instead of conventional anti-depressant medications. **COMPLEMENTARY MEDICINE**, however, is used *in combination with* conventional medicine - for example, using acupuncture and massage combined with pain relievers (for chronic pain), or using yoga and deep breathing combined with anxiety medications (for panic attacks). The combination of conventional and complementary medicine is often called **INTEGRATIVE MEDICINE**. This combination should be used on the advice of a physician and pharmacist, as there are some combinations of herbal products and traditional medications that can be dangerous.



SUPPORT QUESTION – Herbal Remedies

What herbal remedies are most common and popular in Canadian society today?



Key Questions for Lesson 10 (75 marks)

Please answer these questions on your own paper. If you choose to word process your answers please use double spacing and at least 12 pt font.



KEY QUESTION # 62 – Lesson 10 ... Important Terms (8 marks)

Read through your class notes and write the definition for each of the following terms:

- | | |
|----------------------------|---------------------------------|
| 1. Complementary Medicine | 2. Integrative Medicine |
| 3. Alternative Medicine | 4. Alternative Medical Systems |
| 5. Mind-Body Interventions | 6. Biologically Based Therapies |
| 7. Manipulative Methods | 8. Energy Therapies |



KEY QUESTION # 63 – Complimentary Medicine and YOU (7 marks)

1. What is holistic medicine?
2. What is complimentary medicine used for?
3. What four (4) facts should you consider before trying complimentary medicine?
4. What are the risks associated with complimentary medicine?
5. What are the benefits associated with complimentary medicine?



KEY QUESTION # 64 – Culture and Complimentary Medicine (10 marks)

Cultural differences are seen in the treatment of ailments and illnesses. Some religious and cultural traditions dictate the types of medical intervention that members of that faith or culture should accept. Canada has the benefit of many different cultures living together and sharing the wisdom and learning of their homelands.

Directions: Investigate which cultures or religions are represented in or near your community. Select one and record the following information:

- (a) health traditions of that culture
- (b) alternative medicines used by that culture
- (c) home remedies used by that culture
- (d) other factors that might influence the health of people growing up in that particular culture or religion.

**KEY QUESTION # 65 – Types of Complimentary Medicine (75 marks)**

Directions: Research **ONE (1) method of EACH TYPE of COMPLIMENTARY MEDICINE** (Alternative Medical Systems, Mind-Body Interventions, Biologically Based Therapies, Manipulative Methods & Energy Therapies) listed in your class notes. (Ex: Alternative Medical Systems = Homeopathy, Mind-Body Interventions = Yoga etc.)

Write sentences or short paragraph answers to the following questions:
(15 marks each = 75 marks total)

- a) What is the theory/belief behind the method? (3 marks)
- b) What is the origin of the method? (3 marks)
- c) Which cultures practice the method? (2 marks)
- d) Is the method used to prevent or treat illness? Explain and provide and example. (4 marks)
- e) Is the method practiced in Canada? (1 mark)
- f) Is the method covered under the Ontario Health Insurance Plan (OHIP)?
(1 mark)
- g) Does the Ontario College of Physicians approve or disapprove of the method? (1 mark)
- h) Include a bibliography

Your answers will be assessed for:

- accuracy of information
- relevance of information to question
- clarity of writing
- sufficiency of detail to show your understanding

Try these websites to get started:

http://www.holistic-online.com/herb_home.htm
<http://www.naturalhealers.com/questions.htm>
<http://dmoz.org/Health/Alternative/>
<http://www.india-herbs.com/>

You are now FINISHED Unit 2. Congratulations!!!

**It is now time to write your Mid-Term Exam and then
proceed to Lesson 11.**