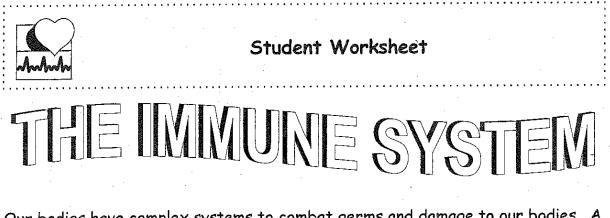
W-5.1 examine the impact of physical activity, nutrition, rest and immunization on the immune system



Our bodies have complex systems to combat germs and damage to our bodies. A blood clot will close a cut. Mucus in our nasal passage and small intestine will stop germs from getting through. Tears and sweat with their powerful chemicals kill germs and acid in the stomach will kill germs in our food.

<u>Our defence from infection comes from our immune system.</u> We have two kinds of white blood cells that attack harmful germs. Lymphocytes produce antibodies that defeat the germs while phagocytes eat them. Antibodies are chemicals that stop germs from multiplying or they slow them down so that phagocytes can eat them. A network of thin tubes called the lymphatic system also help the body fight disease.

There are four stages of disease. The first stage is infection. The germs enter the body and get past the defenses. During the second stage, incubation, the germs multiply. The third stage is when symptoms develop. The fourth and final stage occurs when the immune system defeats the disease.

Man-made medicines and drugs will help the body systems fight disease as well. When we get immunized against disease, vaccines cause the body to make antibodies. These antibodies help to get rid of germs that cause disease.

Because the immune system in a healthy body will be better able to fight disease, it is important to follow good health practices. Good health practices include washing your hands before you eat and after you visit the bathroom. Wash cuts with soap and water. Visit the doctor and dentist regularly. Be careful not to eat food that is not cooked or washed properly. Drink safe water. Physical activity, nutrition and rest also play an important role in the immune system's ability to fight disease.



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Student Worksheet Answer the following questions.

1. Name some of the defenses that our bodies have to combat disease.

2. Describe the four stages of disease.

3. What will help your body fight disease better, skipping rope or watching television? Why?

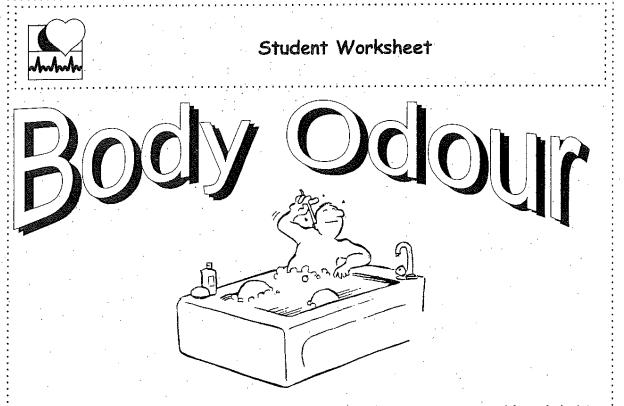
4. What will help your body fight disease better, eating an apple or eating a donut? Why?



	Student Worksheet MMA Answer the following questions.
	What will help your body fight disease better staying up until midnight
	playing video games or going to bed at 9:00 after going for a walk and takin
	a bath. Why?
• .	Why is it important to wash fruit and vegetables before eating them?
•	How does immunization help the immune system?
•	How does washing a cut with soap and water help the immune system?
	Be Wise -

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W-5.2 assess the importance of regular hygiene practices during adolescence; e.g., control of body odour, control of acne, maintenance of fresh breath



Children are well aware that regular, bathing or showering is a good heath habit. As children approach adolescence it becomes even more essential in order to control body odour.

Perspiration or sweating is the body's way to deal with the heat generated from exercise or heat in the environment. The body has two forms of sweat glands. One type of gland produces sweat without destruction of the cells of the glands. Some of these glands are found on the palms and the soles of the feet. This type of gland opens on the surface of the skin. The other type of sweat gland is found in the armpit. Here the sweat contains protein and carbohydrates that when acted upon by bacteria on the skin, take on an odour. These glands empty into hair follicles.

A deodorant is an agent that covers or absorbs foul odours without limiting perspiration.

- 1. What is the difference between the sweat glands found on the soles of the feet and the sweat glands found in the armpits?
- 2. Why do you think adolescent children may have an increase in body odour?

3. How does deodorant help to reduce body odour?



Student Worksheet



Most of the changes that take place in girls and boys during adolescence are caused by hormones. Hormones are substances that are made by certain organs called glands.

What causes oily skin? Why does it appear during adolescence? Oil is produced in the body by oil glands. These glands are bigger around the nose than any other area of the face. Other concentrations of oil glands are found on the neck, chest and back-areas. The amount of oil that an individual makes is determined by genetics. The oil gland is acted upon by hormones. During adolescence there is a surge in the level of hormones in the body. This creates a problem of oily skin where previously there may have been none.

Acne is a skin disorder marked by inflammation of skin glands and hair follicles and by pimple formation. Bacteria trapped in the skin glands and hair follicles is crucial for the development of acne. Dirt and oil on the surface of the skin may increase the clogging of pore openings. The first step toward proper care and treatment of acne lies in the diagnosis of the type of acne.

- 1. Why is some people's skin oilier than other people's skin?
- 2. What can you do to control oily skin and/or acne?
- 3. Do you think all adolescent children will get acne? Why or why not?



Student Worksheet

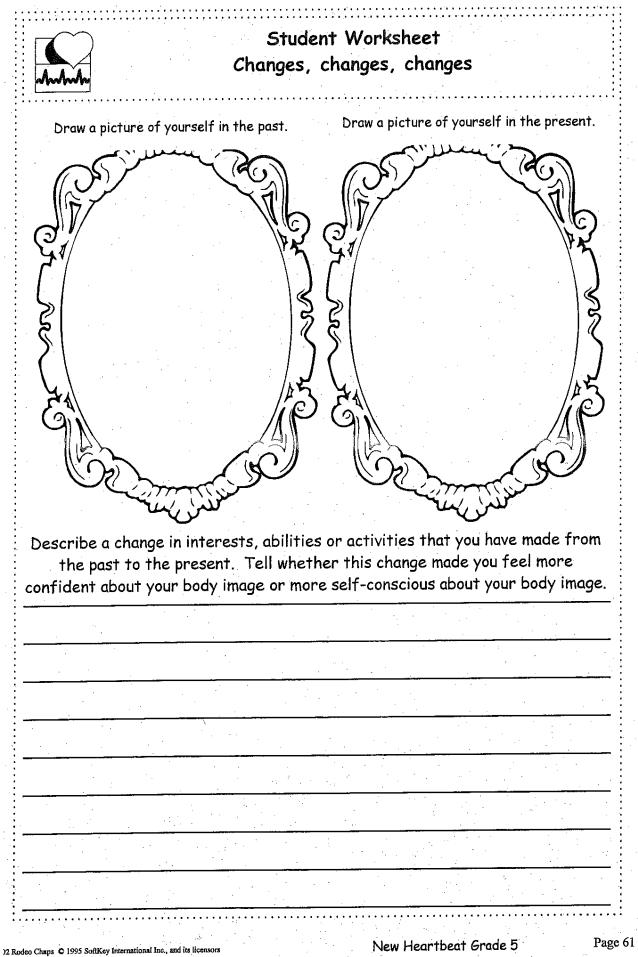


Halitosis is another name for bad breath. Poor dental care, a build-up of plaque, the food we eat (garlic, onions, curry), tooth decay, sinus problems, gastric disturbance, nervous conditions and a coating on the tongue are all causes of halitosis.

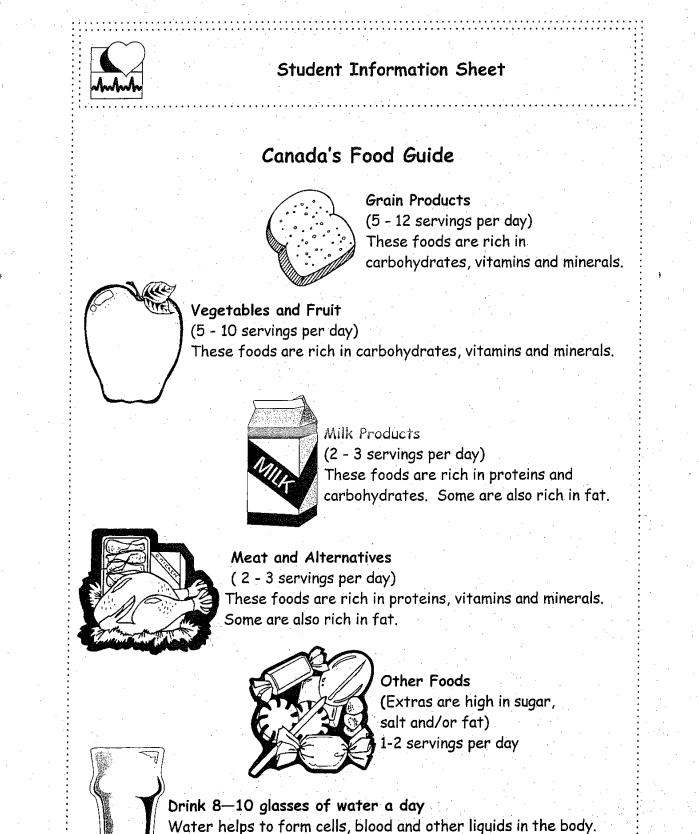
To prevent halitosis one needs to have good oral hygiene practices. We need to brush our teeth and tongue. Floss our teeth. Visit the dentist regularly. Eat a balanced diet. Get plenty of rest. The foods that cause bad breath will just have to be a choice.

How can you tell someone politely that they have bad breath? Make up a cartoon strip to show how you would do it.

W-5.4 examine the impact that changes in interests, abilities and activities may have on body image

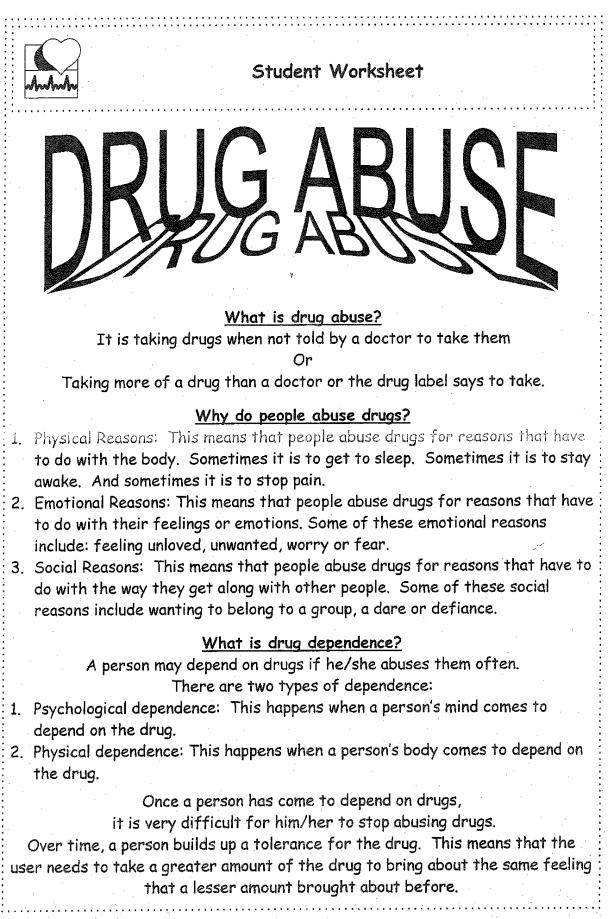


W-5.5 examine ways in which healthy eating can accommodate a broad range of eating behaviours; e.g., individual preferences, vegetarianism, cultural food patterns, allergies/ medical conditions, diabetes



Student Worksheet Plan a nutritious, cultural breakfast for a/an ____ Choose foods from all the food groups. Show the serving sizes. Use the Canada Food Guide to help you to make wise choices. Breakfast Grain Products Milk Products Vegetables and Fruits Meats and Alternatives Extras Page 67 New Heartbeat Grade 5 2002 Rodeo Chaps © 1995 SoftKey International Inc., and its licensors

W-5.6 examine and evaluate the impact of caffeine, alcohol and drugs on personal health/wellness; e.g., physical, emotional, social



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