Good Hygiene Practices
Help Fight Sickness and Malnutrition

Nutrition Education Module 4

Learning Objectives:
1. Discuss the importance of personal hygiene to health;
2. Enumerate the basic personal hygiene practices; and
3. Identify three (3) types of worms and its prevention.

Poor hygiene is the most common cause of diarrhea and intestinal worm infection.

Handwashing with soap is very cost-effective to fight sickness and malnutrition.

Benefits of good personal hygiene:
1. Promotes good health
2. Helps feel good
3. Maintains a healthy smile
4. Helps maintain strong and healthy gums
5. Minimizes the risk of infection
6. Prevents the spread of bacteria and viruses

Proper grooming and healthy personal habits help ward off illnesses and make a person feels good. Make it a habit!

Health is a spectrum of good practices. One of these is good personal hygiene, which is essential to promote health.

Page 1 of 6: Good Hygiene Practices Help Fight Sickness and Malnutrition
What are the effects of poor hygiene?

Poor hygiene practices allow bacteria and parasites to live in our hands and other parts of the body. When a person eats, drinks, or touches his mouth with unclean hands, bad organisms can enter the digestive system and cause diarrhea, intestinal worm infection, or inflammation of the intestines.

Figure 1. Link of poor hygiene to malnutrition
Adapted from Generation Nutrition: Prevention Fact Sheet 01
**Diarrhea** is a disease characterized by experiencing more than three (3) liquid stools per day. It is usually caused by accidentally swallowing bacteria from feces with food and drinks. This happens when hands are not properly washed before eating or the food and drink are prepared with water contaminated with feces.

If diarrhea is left untreated for two (2) weeks or more, the affected child will not be able to absorb enough nutrients needed for growth and health. Furthermore, if diarrhea affects a child repeatedly, he may lose fluids (dehydration) and nutrients causing weakness. His intestines will also become inflamed and blunt resulting to poor absorption of nutrients even after diarrhea has been resolved. This results to undernutrition which is one of the causes of frequent illness, and even death, among children.

**Intestinal worm infection usually causes mild discomfort (like itching) but if left untreated, presence of parasitic worms in the body may lead to several health issues such as:**

1. Poor absorption of nutrients because worms compete with the body for food;
2. Bleeding in the intestine resulting to anemia;
3. Diarrhea;
4. Loss of appetite and pain in the abdomen;
5. Obstruction in the intestine when worms have become too many; and
6. Destruction of tissues and organs they invade

Poor absorption of nutrients, diarrhea and blood loss cause malnutrition and anemia even if a child seems to eat adequate amounts of food. Loss of appetite, abdominal pain and obstruction in the intestine reduce the actual food intake of an infected child contributing to further weight loss and undernutrition. The health of a child worsens when the parasitic worms destroy the tissues and organs they live in. Because of undernutrition and poor health, an infected child fails to attend and perform well in school. His physical and mental development is impaired.

This type of infection may also occur among pregnant women, which poses negative outcomes like: low birth weight babies, impaired milk production, and increased risk of death for the mother and the baby.

**Quick facts**

As per 2015 report of WHO, there are 2.6 million deaths per year among children below five years old and nearly half of this is related to undernutrition.

Poor hygiene practices may also cause intestinal worm infection. Parasitic worms come from the feces of infected individuals and animals. The small worms or the eggs may be swallowed or may enter the body through the skin when a person walks barefoot on soil where there are feces. Worms may also come from the meat of infected animals. Hence, it is important to ensure that meat dishes, like all other food items, are adequately cooked to kill them.
In summary, poor hygiene is the most common cause of diarrhea and intestinal worm infection. These health problems may not immediately result to death but according to WHO, 50% of undernutrition cases are related to repeated diarrhea and intestinal worm infection. Undernutrition may not only lead to death; it also results to low intellectual ability and economic productivity entrapping its victims into a life of poverty.

Roundworms lay eggs in the gut and then hatch and grow into mature worms that also lay more eggs. These eggs are then passed out in the feces. The adult worm will continue to live in the gut and when it dies, it will also be passed out in the stool.

Know More About Your Enemy: 3 Common Types of Worm

Parasitic infection is common in children with poor hygiene practices and comes in contact with soil and dirt during playing. The 3 main types of worms that affect humans are called threadworms (sometimes known as the pinworm), roundworms, and tapeworms.

Figure 1 Threadworms also known as pinworms

Threadworms are spread mainly by contact with infected people, poor hygiene, and ineffective or lack of handwashing. The eggs can lay under the finger nails until passed on. They cause itchy anus and genitals and can be seen in the feces or on the toilet paper after wiping.

Figure 2 Roundworms

Tapeworms are far more common in animals than humans but transmission is still possible through consumption of undercooked and infected meats. Tapeworms are usually flat and ribbon-like made up of segments. These worms can lay eggs and multiply, too. Suffering with tapeworms is not normally serious initially, but if left untreated can cause hunger and loss of weight.

Figure 3 Tapeworms
In summary, poor hygiene is the most common cause of diarrhea and intestinal worm infection. These health problems may not immediately result to death but according to the 2015 report of the WHO, 50% of all cases of undernutrition are related to repeated diarrhea and intestinal worm infection. Undernutrition may not only lead to death; it also results in low intellectual ability and economic productivity entrapping its victims into a life of poverty.

Simple practices in reducing risks of acquiring diseases, especially intestinal worm infection:

1. Cook meat thoroughly.
2. Wash all fruits and vegetables before serving.
3. Always use slippers or shoes.
4. Build a sanitary toilet and use this properly.
5. As with all treatments for worms, all the family should be treated in case of cross-contamination and any pet feces should be examined for the same reason.

Basic Personal Hygiene Habits

Poor hygiene is the most common cause of diarrhea and intestinal worm infection. It is important to maintain cleanliness of one’s self. Studies prove that hand washing is the most effective way of reducing the risk of acquiring diarrhea and intestinal worms. It should be done regularly, most especially during these situations:
- Before preparing or eating food
- After using the toilet
- After coughing or sneezing
- After handling garbage to prevent the spread of bacteria and viruses

Other good hygiene habits to maintain health and good nutrition:

Trim your nails
Keep your finger and toenails trimmed to prevent worm eggs and bacteria from hiding underneath.

Bathe Regularly
Clean your body with soap and shampoo your hair.

Brush and Floss
Brush teeth after meals or twice a day and floss daily. Brushing minimizes the accumulation of bacteria, which can cause tooth decay and gum diseases. Visit the dentist every 6 months for check-ups and cleaning.

Sleep tight
Get plenty of rest. Sleep 8-10 hours to keep refreshed and ready to take on the day every morning.
Self-assessment Questions

Multiple Choices: Choose the correct answer.

1. These are very small white parasites that look similar to a tiny piece of white cotton.
   a. Threadworms
   b. Roundworms
   c. Tapeworms

2. These are larger parasites and can grow up to 30 cm in length
   a. Threadworms
   b. Roundworms
   c. Tapeworms

3. These worms are far more common in animals than in humans but transmission is still possible through consumption of undercooked and infected meats.
   a. Threadworms
   b. Roundworms
   c. Tapeworms

4. This is the most common reason for the spread of worms.
   a. Hand washing
   b. Poor hygiene
   c. Trimmed finger nails

5. It is the most effective way of reducing the risk of developing worms.
   a. Hand washing
   b. Poor hygiene
   c. Trimmed finger nails

References:
www.thehealthsuccesssite.com
www.everydayhealth.com
www.ehow.com
www.doctormol.com
www.drbody.com
www.betterusbetterfuture.com
healthylife.blogspot.com
www.faqs.org
health.howstuffworks.com
healthmeup.com
www.simcoemuskokahealth.org

http://en.wikipedia.org/wiki/Parasitic_disease
www.washadvocates.org
Figure 1: http://www.nhs.uk/Conditions/Threadworms/PublishingImages/Z1800225-Threadworms_342x198.jpg
http://static.squidoo.com/resize/squidoo_images/-1/draft_lens4139642/module32680372photo_1242000276Pinworms.jpg

Figure 2:
http://www.pmel.noaa.gov/eoi/nemo/explorer/bio_gallery/biogallery-imageF.00031.jpeg

Figure 3:
http://jh3.ggpht.com/_Na1pgA0cvZ0/SggwPiu0kbl/AAAABAAAAQU/e8x9VutLxOc/tapeworm-human-large%5B3%5D.jpg
http://www.dogchatforum.com/images/tworm.jpg