

Lesson 7

Taking Care of Yourself



Key Terms

ampule
bivouac
chlorine
disinfect
dysentery
galvanized
hygiene
iodine
lice
personal hygiene
purified
sanitation

What You Will Learn to Do

- Analyze the impact sanitation and hygiene has on health

Linked Core Abilities

- Apply critical thinking techniques

Skills and Knowledge You Will Gain Along the Way

- Recognize the benefits of maintaining good hygiene habits
- Explain how to keep clean in field conditions
- Explain the correlation between physical fitness and hygiene
- Identify possible results of poor sanitation
- Detail procedures of disinfecting water
- Explain how to guard against food poisoning and the spread of germs through waste
- Define the key terms contained in this lesson

Key Note Terms

hygiene – practices or conditions that aid in good health; the science that deals with maintenance of good health and the prevention of infection and disease

sanitation – the promotion of hygiene and prevention of disease by working to keep a clean and healthy environment.

Key Note Term

personal hygiene – an individual's practice of taking care of him or herself in order to maintain good health

Introduction

Exercise, rest, and good **hygiene** and nutrition can help you stay healthy and avoid many illnesses and infections. In other words, you can prevent disease and injury by taking good care of yourself. You learned about the importance of nutrition and exercise to your health in the previous lesson. This lesson covers the importance of good hygiene habits. In particular, it discusses hygiene and **sanitation** when attending JROTC summer camp or camping on your own, with friends, or family. In these cases, you may not have the modern conveniences of clean, running water or indoor plumbing, but you must still know how to take care of yourself to help prevent illness and maintain good health.

Personal Hygiene

Most likely, there are certain habits that you perform routinely at the start of each day. You are probably so accustomed to doing them that you do not give them a second thought. First, you wake up after resting your body during the night. Then you shower if you did not shower the night before, wash your face, and comb your hair. It is now time for breakfast—some toast and cereal perhaps. And, last but not least, you brush your teeth and leave for school.

Now, stop for a minute and think about the activities that we have just described. They involve rest, nutrition, and cleanliness, three elements that are important to maintaining good health and are a part of **personal hygiene**.

It is easy for most of us to practice personal hygiene in our homes where there are sinks, showers, toilets, and clean water, all of which help with sanitation. In some situations, however, practicing personal hygiene and maintaining sanitary conditions take more effort and require greater care. For example, if you are camping, you may have to work harder at hygiene and sanitation depending on conditions at your campsite. Also, when you are staying in close quarters with several other people, like at JROTC summer camp, hygiene and sanitation become extremely important. The poor sanitation or hygiene habits of one person can lead to a disease or illness that affects an entire group.

Personal hygiene is important to maintain your personal health and establish your health image to other people. A neat, clean, physically fit person illustrates a healthy image and a positive leadership posture.

Principles of Hygiene

It is not always simple to apply the basic principles of personal hygiene. It takes a conscience effort to follow these principles and to stay healthy.

Field Sanitation

The following story illustrates the importance of maintaining all aspects of health and sanitation when out in the field.

On Togatabu Island in 1942, the 14th Artillery and the 404th Engineer Battalions were part of a task force preparing to attack Guadalcanal. Fifty-five percent of the engineers and 65 percent of the artillerymen contracted a disease called “Filariasis,” transmitted by mosquitoes. Both units had to be medically evacuated without seeing any enemy action because they were not combat ready. The use of insect repellent and insecticides and the elimination of standing water would have prevented the spread of this disease.

Often in military history, the health of the troops influenced the course of battle more than strategy or tactics. “Historically, in every conflict in which the United States has been involved, only 20 percent of all hospital admissions have been from combat injuries. The other 80 percent have been from diseases and nonbattle injuries.” (*Field Hygiene and Sanitation*, FM 21-10)

Hand Hygiene

Hand washing needs to be second nature. It is important to wash your hands after contact with an animal, after using the toilet, before eating or touching a person at risk from infection. A good routine needs to include removing of any jewelry, wetting hands with warm water, using an anti-bacterial soap if available, washing vigorously for at least 30 seconds, rinsing hands, and drying hands on a clean towel or using a hand drying machine. Figure 1.7.1 demonstrates that hand hygiene is also important in the field.

Oral Hygiene

After each meal or at least twice a day, you need to eliminate food particles and dental plaque as well as clean your gums. Visiting the dentist twice a year is also recommended. Use fluoride toothpaste and brush up and down in a light circular



Figure 1.7.1: Washing your hands is essential, particularly in the field.

Courtesy of Corbis Images.

motion, in front, behind and across the top of the teeth for at least three minutes. Avoid putting objects and fingers in your mouth as well as sugar and sweets that encourage germ proliferation.

Personal Hygiene

A dirty body is a hotbed for developing germs. Dust, sweat, and other secretions, and warmth are all factors which encourage germs to multiply. A shower with effective soap and shampoo should follow any physical activity. Showering daily is necessary to maintain good personal health. Clean clothes should be worn and underwear changed daily; the fabric in clothes is a breeding ground for many germs. Imagine how you would feel if you did not bathe for a week. Now imagine how others would feel about having to be around you during that time. Uncleanliness or disagreeable odors affect the morale of others, so the solution is for everyone to take personal responsibility for their own hygiene.

Nasal Hygiene

Nasal secretions are highly contagious. Runny noses and sneezing are sources of germ dissemination. Frequent nose blowing using a disposable paper tissue clears the nostrils and limits the spread of germs. Repeated blowing of the nose can cause irritation, so use a soft tissue and blow softly.

Food Hygiene

Food poisoning is on the rise. Some of these cases can be linked to the food processing industry and centralized distribution of food. You can reduce your risk of food poisoning by following simple yet effective hygiene practices. High-risk foods include eggs and egg products, poultry, (particularly chicken), and food eaten raw. It is estimated that 50 percent of domestic food poisoning cases are due to poor hygiene in the home. Refrigeration is a means of reducing the spread of germs and not the elimination of germs. Refrigerators need to be cleaned on a regular basis. Food that needs refrigeration needs to be kept at the recommended temperature; food that does not need to be kept refrigerated should be stored as indicated on the packaging, and the date indications on food packaging should be followed.

Cooking food is an excellent way of keeping germs from spreading. Cooking food at sufficiently high temperature will eliminate many germs. Rigorous hygiene is also required in the kitchen. Always wash hands before handling food. Wash frequently any cloths and towels used in the kitchen. Avoid using wooden chopping blocks, salad bowls and spoons because nicks or cracks can create an ideal place for germs. Kitchen utensils should not be used to prepare different dishes unless they have been cleaned in between. Table and worktops should be cleaned with an anti-bacterial product between preparing different types of food. You should also watch for the country of origin of the food you eat; note the best before dates on food labels; and use the most effective practices in food preparation.

Pet Hygiene

Most people today spend a great deal of time with a pet or pets. Our pets carry a number of germs as well as affect allergy sufferers. However, it is easy to apply simple rules of hygiene without affecting the bond between people and pets. Animals

need to be cleaned regularly. Also it is essential to disinfect a pet's scratch or bite with an antiseptic. Clean everything that your pet touches on a regular basis. Floor areas used by an animal should also be cleaned, paying particular attention to allergen traps such as carpets and bedding. Hands should always be washed after touching an animal.

Adapted from the Institut Pasteur's Web site at <http://www.hygiene-edu.com/en/learn/topics.htm>, January 4, 2005.

Stay Physically Fit

People who are physically fit are less likely to get sick or injured, so participate regularly in a fitness program. Physical fitness training will also help you become adjusted to a field environment. Remember to use caution when exercising in extremely hot or cold weather particularly if you are going to run long distances (Figure 1.7.2).

Get Enough Sleep

The average person needs eight hours of sleep a night. Make sure you get enough sleep so you have the energy to effectively complete the required tasks of your day. You may have a harder time sleeping when you are away from home, bunking with others, or camping. Follow these suggestions to get as much rest as possible.



Figure 1.7.2: Staying physically fit will help you succeed in the field.

Courtesy of David Madison.

- Sleep as much as you can before going someplace where you may not be able to sleep comfortably or as much as you should.
- Take catnaps whenever you can but expect to need a few minutes to wake up fully.
- When in the field, follow your leader's instructions and share tasks with other cadets so everyone gets time to sleep.
- After going without sleep, catch up as soon as possible.
- Learn and practice techniques to relax yourself quickly.

If you have not gotten enough sleep in the field and are required to remain awake and alert, try these suggestions:

- Play mental games or talk with other cadets to stay alert during dull watches or critical jobs such as driving at night.
- Take short stretch breaks or do light exercises in place.
- Do not trust your memory; write things down. Double check your communications and calculations.
- Watch out for your mind playing tricks (like seeing things that are not there) when you are very tired; check strange observations before acting.

Learn to Reduce Stress

Stress begins in the mind but causes physical reactions in the body. Although stress can be beneficial in small doses by supplying you with bursts of energy to complete a project on time or compete in an important game, stress that continues over long periods of time can weaken your immune system and lead to exhaustion and illness. People under too much stress may not care for themselves properly or be able to complete tasks effectively.

To keep yourself healthy and efficient, you must learn to relax and reduce stress. The following hints may help:

- Maintain a positive attitude.
- Do not try to do more than is possible or take on tasks for which you are not prepared.
- Talk with friends or family when you encounter difficulties.
- Take time each day to do something that you enjoy, even if it is only for 15 minutes.
- Do not worry about things that are out of your control but concentrate on what you *can* do.
- Exercise regularly.
- Recognize that stress is a normal reaction to many situations, like taking a test, giving a speech, or participating in field training.
- Take a deep breath, relax, and do not let stress interfere with accomplishing the task at hand.

To help reduce stress in a group or among friends or fellow cadets, give each other moral support if things are tough at home, school, or in the unit. Welcome new replacements into your group and be active in establishing friendships. By building a feeling of esprit de corps, you can minimize stressful feelings of loneliness and isolation. When in the field, attempt to care for other cadets and work together to provide everyone food, water, sleep, shelter, protection from heat, cold, and poor sanitation.

Basic Principles of Sanitation

Poor sanitation can contribute to conditions that may result in diarrhea and **dysentery**. Intestinal diseases are usually spread through contact with bacteria and germs in human waste, by flies and other insects, or in improperly prepared food and water supplies.

Use Purified Water

When you are staying outdoors, in the field, or traveling in foreign countries with questionable water supplies, use only water that is **purified** (see Figure 1.7.3). Fill your canteen with treated water at every chance. To treat or **disinfect** water, bring it to a boil for 5 to 10 minutes. When heated water is not available, disinfect water using one of the following methods:

Key Note Terms

dysentery – any of several intestinal disorders usually caused by infection and characterized by stomach pain and diarrhea with passage of mucous and blood

purified – free from undesirable elements or impurities; cleaned

disinfect – to destroy harmful germs; to purify



Figure 1.7.3: Always use purified water in the field.

Courtesy of Burke/Triolo Productions/Botanica/Getty Images.

Key Note Term

iodine – a nonmetallic element having important medical uses

Key Note Terms

ampule – a small, sealed glass container that holds one dose of a solution, usually a medicine, to be administered by injection

chlorine – a gaseous greenish-yellow element used as a bleach and disinfectant in water purification

Key Note Term

galvanized – coated with zinc

Key Note Term

bivouac – a temporary camp or shelter

The Preferred Method: Iodine Tablets

1. Fill a one-quart canteen with the cleanest water available.
2. Put one **iodine** tablet in the water; two in cold or cloudy water. Double these amounts in a two-quart canteen.
3. Place the cap on the canteen, wait 5 minutes, then shake. Loosen the cap and tip the canteen over to allow leakage around the canteen threads. Tighten the cap and wait an additional 25 minutes before drinking.

Treating with Chlorine

1. Fill a one-quart canteen with the cleanest water available.
2. Mix one **ampule** of **chlorine** with one-half canteen cup of water. Stir the mixture with a clean device until the contents dissolve. Take care not to cut your hands when breaking open the glass ampule.
3. Pour one canteen capful of the chlorine solution into your quart of water.
4. Replace the cap on your canteen and shake. Slightly loosen the cap and tip the canteen over to allow leakage around the threads. Tighten the cap and wait 30 minutes before drinking.

Another Alternative: Tincture of Iodine

1. Fill a one-quart canteen with the cleanest water available.
2. Add five drops of 2% Tincture of Iodine to the water. If the water is cold or cloudy, add 10 drops.
3. Mix thoroughly by shaking the canteen. Slightly loosen the cap and tip the canteen over to allow leakage around the threads. Tighten the cap and wait 30 minutes before drinking.
4. Very cloudy or cold water may require prolonged contact time. Let it stand several hours or overnight if possible.

Guard Against Food Poisoning

Wash your hands for at least 30 seconds after using the bathroom or before touching food. Inspect all cans and food packages prior to using them and throw away any cans with leaks, bulges, or holes. Do not eat foods or drink beverages that have been prepared in **galvanized** containers, which may result in zinc poisoning. When camping or in the field, wash your mess kit in a mess kit laundry or with treated water or disinfectant solution.

Bury Your Waste

On a march, personal disposal bags should be used if available; if not available personal cat holes can be used. Always dispose of your waste immediately to prevent flies from spreading germs from waste to your food and to keep unwanted animals out of your **bivouac** area. Chemical toilets should be used in bivouac area.

Keep Your Body and Uniform Clean

Bathe every day, if possible, or at least once a week. A daily bath or shower helps maintain cleanliness and prevent body odor, common skin diseases, and infection. When you are in the field, however, bathing daily may not be possible. In this case, make sure you take a full shower at least once a week (or at the earliest opportunity) and use a washcloth daily to wash

- **Your face**
- **Your armpits**
- **Your genital area**
- **Your feet**
- **Other areas where you sweat or that become wet, such as between your thighs or, for females, under the breasts**

Powders, such as talcum powder, help to keep your skin dry when in the field. Apply it to places where you tend to sweat and to your feet and inside your socks each morning, especially if you have had prior foot infections. Change to clean clothing regularly. Protection of your feet is extremely important and requires daily attention (see Figure 1.7.4).

Good personal hygiene practices reduce infestation of insects such as body **lice** and mites. Make sure the clothing you wear in the field is loose and does not restrict circulation. Avoid wearing nylon undergarments. Wear cotton, which is more absorbent and allows the skin to dry. Wash your uniform frequently or at least once a week. Use the quartermaster laundry or a stream, lake, or washbasin. Air-dry uniforms, especially underwear and socks.

Key Note Term

lice – small, wingless, parasitic insects that live on warm-blooded animals, especially in hair, and suck the animal's blood



Figure 1.7.4: Cleaning and protecting feet in the field is an important part of personal hygiene.

Courtesy of Michael DeYoung/Corbis Images.

Other Instructions for the Field

There are other precautions that you can take to ensure your health and well-being while in the field and ensure the health of those around you.

Follow Medical Advice: Take medications that help prevent diseases such as antimalaria pills. Use any medication that is prescribed by medical personnel.

Protect Yourself at Night: Use your bed net when sleeping and ensure that it is in good repair. Always follow label directions and precautions with using DoD-approved insect spray.

Wash Your Mess Kit/Eating Utensils: Protect yourself from diarrhea by washing your mess kit/eating utensils. Use a mess kit sanitation center or use treated water or disinfectant solution.

Domestic and Wild Animals or Birds: Do not handle or approach animals in the field. Unless approved by veterinary personnel, do not collect or support with food and shelter any stray or domestic animals in the unit area.

Poisonous Plants: Avoid contact with poisonous plants by properly wearing the uniform and avoid areas where poisonous plants grow. Only eat plants that have been approved by medical personnel.

Conclusion

Practicing good personal hygiene and sanitation are common sense actions that everyone should perform. They are particularly important in the field where cadets have a responsibility to both themselves and others, and leaders must plan and enforce preventative measures.

Remember, correct cleanliness habits, regular exercise, good nutrition, and adequate amounts of rest and relaxation can directly affect a person's well-being. By practicing these preventative measures, you can significantly reduce time lost due to illness and injuries.

The following lesson deals with a common problem in today's world—stress. Knowing how to control stress can help with your emotional and physical health.

Lesson Review

1. How do you keep clean in the field?
2. What is the correlation between physical fitness and hygiene?
3. What are some results of poor sanitation?
4. Describe one method of disinfecting water.