Open Heart Surgery

The following is information specific for those patients who have had open heart surgery. This includes coronary artery bypass grafting (CABG), valve replacement or repair, atrial septal defect repair, and left ventricular aneurysm repair. This information is designed to answer your questions about the surgery, disease process, and your recovery. It is important to remember that everyone is different. Therefore, everyone’s surgery and recovery is different.

You have had open-heart surgery. For the surgeon to be able to get to your heart muscle, it was necessary to saw through your sternum (breastbone) and then spread the ribs apart. This is why you may be experiencing pain throughout your chest and shoulders. The surgeon either uses a vein from your leg or an artery from your chest wall to bypass blocked coronary arteries. One end of the bypass graft is sewn to the aorta and the other end to the coronary artery below the blockage. The blockage is not removed. Oxygen-rich blood is now able to flow through the bypass graft to your heart muscle. The surgeon closes the sternum by placing stainless steel wires around the breastbone in several places. These wires function as a cast and hold the sternum together while healing occurs over the next eight weeks. These wires are not removed. The skin is closed with suture material that is not visible and will dissolve over time. Under the tab titled “About Heart Disease” you will find information on how the heart works, coronary artery disease, and angina.

Coronary artery disease is the primary reason for open-heart surgery. Certain risk factors will increase your chance of coronary artery blockages. Your new bypass grafts are also prone to blockages. The bypasses usually do not last a lifetime. You must modify your risk factors to prolong the life of the bypass grafts. The section titled “Risk Factors” provides you with some information about risk factors, but we would like to provide you with some additional information.

Some risk factors you have no control over:

- A family history of coronary artery disease.
- Men have a greater risk as well as women past menopause.
- Your risk increases with age.

Risk factors that can be eliminated or controlled:

- Smoking
- Lack of exercise
- Overweight
- Elevated blood pressure
- Diet high in animal fat and cholesterol
- Elevated blood cholesterol levels
- Diabetes
- Stress and tension

**Smoking:** Since you have been in the hospital you have been forced to quit smoking. This is a perfect time to quit forever. **Smoking is one of the worst things you can do to your heart.** What it does to your heart and arteries are listed under the “Risk Factors” section. This includes all tobacco products such as cigarettes, cigars, pipes, and smokeless tobacco. You should also avoid second-hand smoke. Here are some ideas to help you quit:

- Ask family members and friends not to smoke around you.
- Change habits that make you want to smoke.
- Take one day at a time.
- Chew gum or eat hard candy.
- Contact Smoke Stoppers. This will offer you a support group.

**Lack of exercise:** This is another risk factor you can control. Please refer to the “Risk Factors” section for more information about how lack of exercise affects the heart.

To help you control this risk factor, you began **Phase 1 cardiac rehabilitation** immediately after surgery and this continues for the next six weeks. This consists of a walking program and the exercises you learned in class. You should continue your walking at home starting at a quarter mile or less and gradually build up your distance to what your body can tolerate. You will also need to continue your exercises from exercise class twice a day for the next six weeks. See the “Physical Activity” and the “Recovering from Heart Disease” section for tips on exercising.

Some additional tips we want to include are:

- It takes time to get your strength back after surgery. Take your time and build up slowly.
- Exercise when you are rested.
- Warm up before you exercise and cool down after exercising.

**Benefits of Phase 1 cardiac rehabilitation are:**

- Increased strength, flexibility, and endurance
- Assist in the healing of your incisions
- Will help control your pain
- Help avoid cigarette smoking
- Gives you more energy
- Improves your self-image
- Helps control stress
- Improves the ability to fall asleep quickly and rest well
With shortened hospital stays, you and your family may have more questions on heart disease and lifestyle changes. **Phase 1.5 cardiac rehabilitation** is designed to answer these questions and provide support until you enter Phase 2 of a cardiac rehabilitation program.

Phase 1.5 cardiac rehab is a free program offered to you at Samaritan North Health Center. The program consists of two, one hour education sessions. To participate in this program, please call 279-5738 to register. The benefits of Phase 1.5 cardiac rehab are:

- Develop or expand knowledge regarding your particular condition and the treatment process.
- You will be able to identify possible causes of chest pain and treatment options.
- Provides emotional support and discuss expectations after a cardiac event.
- You will be able to identify your risk factors and provide strategies to modify these factors.
- Encourage enrollment into a Phase 2 cardiac rehab program

The next step in controlling this risk factor is to ask your doctor about **Phase 2 cardiac rehab**. This program usually starts four to six weeks after surgery and with your doctor’s permission. In Phase 2, your monitored exercise routine in the Cardiac Rehab unit will be under the direct supervision of a registered nurse and an exercise physiologist.

The program offers a full range of exercise options and equipment, including treadmills, bicycles, rowing machines, Nordic track machines, stair steppers, and a variety of free-standing weight machines which target specific muscle groups. Most programs will provide additional education on controlling your risk factors and modifications. Phase 2 rehab will provide you with the exercise program you will need to continue for the rest of your life to maintain a state of wellness through heart healthy practices.

The benefits of Phase 2 rehab are as follows:

- Continuation of the benefits from Phase 1 rehab.
- Raises your HDL or “good cholesterol” level
- Control weight
- Tones your muscles
- Helps control your appetite
- Will help you feel better emotionally

Setting exercise goals - Once you have recovered from your surgery, you should set a goal to get 30 – 45 minutes of moderate exercise 3 – 5 times each week.

**Overweight**: This risk factor can also be controlled. The heavier you are the harder your heart has to work. To help control this risk factor you will need to maintain your low cholesterol, low fat diet. Exercise on a regular basis and don’t overeat.
**Elevated blood pressure:** See “Risk Factors” section for information on high blood pressure.

**Diet high in fat and cholesterol:** See “Nutrition” section and the brochures in the sleeve of this notebook for information on how to modify your diet.

**Diabetes:** See “Risk Factors” section for information on diabetes.

**Stress and Tension:** See “Risk Factors” section for information on how stress affects your life. See “Recovering from Heart Disease” section for stress management techniques.

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**Side Effects from Surgery**

You have been through a life-altering experience and are now feeling things you may not be able to explain. We would like to take this opportunity to reassure you that these experiences are the normal phases of recovery.

**Sore Throat:** You may have a sore throat, hoarse voice, and difficulty swallowing from the tubes that were in your nose and mouth after surgery. These tubes caused irritation to your throat. The sore throat and hoarse voice should go away in a couple of weeks. If you feel as if you are getting things stuck in your throat, remember to chew your food well and only take one pill at a time.

**Appetite:** Many patients experience a decrease in their appetite. This can be related to several factors. The medications you received during and after surgery may cause your food to taste like metal. As the medications leave your system, this will improve. You are also not using as much energy after surgery as your body has needed in the past. As you recover and your activity level increases, so will your appetite. It is important to remember that even when you don’t have much of an appetite, your body will need foods high in protein and vitamin C to aid in the healing process.

**Weight Gain:** During surgery, you received large amounts of fluid that can cause swelling. This fluid may have caused you to gain 5 – 10 pounds of water weight. You may receive medications to help remove this extra fluid.

**Sleeping:** You may not be sleeping very well right now. The hospital is a noisy and busy place. When you do sleep, you may experience nightmares and hallucinations. The hallucinations and nightmares can be caused by medications received during and/or after surgery for pain control. As the medications change, the hallucinations and nightmares should go away.
**Hot Flashes:** As your body goes through changes after surgery, you may experience hot and cold flashes. These hot and cold flashes are due to the body’s internal thermostat trying to regulate itself. During these periods, it is best to control your hot and cold flashes by adding or removing blankets rather than adjusting your room temperature.

**Atrial Fib:** Because of the manipulation during surgery, your heart muscle is prone to becoming irritable and irregular. You may experience an irregular heartbeat called atrial fibrillation or atrial fib. This occurs in approximately 30 – 40 percent of the patients. Medications are given to help control the irregularity and rate. As your heart heals, it becomes less sensitive and your risk for developing atrial fib decreases. You will usually be on the medications to control your heart rate for a couple of months.

**Post-op blues:** Having open heart surgery puts a lot of stress on your body. It will take some time to build up your strength. You may notice that you will have good and bad days. We call these the “post-op blues”. The blues do not only occur in the hospital but may also be experienced at home. The physical component to the blues is feeling as if you have no energy to do anything. Many patients describe this feeling as if they have “been run over by a truck”. On the bad days, it is important to remember to keep your activity level up and increase your activities on the days you are feeling better. The other component to the blues is the feeling of depression. Many patients describe this as a feeling of being able to cry at the drop of a hat. Please see “Recovering from Heart Disease” section for further information on your emotional recovery.

**After Your Surgery**

Recovery from your surgery will continue for at least the next eight weeks. The following information will help guide you in your recovery. If you have specific questions that are not addressed here, you will need to contact your cardiologist or family doctor.

**Driving/Traveling:** You may return home by car. For your safety, always wear both your lap and shoulder harness. The seat belt will help prevent re-injury to the sternum in the event of an auto accident. Forceful contact with the dashboard, steering wheel, or air bag may cause re-injury. It may increase your comfort to place a soft pillow or blanket under the shoulder strap of your seat belt. You are permitted to drive in one month. This not only allows the sternum time to heal but also to gives you time to regain your strength and flexibility. You should NOT operate any vehicle while taking prescription pain medication. If you will be driving or riding long distances, you will need to stop every hour or two to walk around. This will improve circulation to your legs, which will help prevent blood clots. While sitting in the car, it is helpful to do leg exercises and foot pumps. Do this by pointing and flexing your feet.

**Stairs:** If you live on a second floor, or have a bedroom or bathroom on a second level, you are able to walk up and down stairs. For the first week, you may want to limit
yourself to two flights of stairs a day. Gradually, you will be able to increase this as your strength and stamina improve. If you get tired or become lightheaded, sit down on the stairs and rest.

**Incentive Spirometer:** You will be sent home with your plastic breathing machine, called an “incentive spirometer”. You have been using this regularly while in the hospital, and it is important to continue using this at home. This machine helps re-expand your lungs and prevent complications such as pneumonia. It is recommended you use this machine at least five times a day for the next month. Each time you use the incentive spirometer, you need to do ten repetitions of slow, deep breaths with a short rest between each breath.

**Incisions:** You should notice your incisions are improving every day. You may have bruising along your incision lines. The bruising will slowly fade. You may notice a knot at the top of the sternum. This is part of the normal healing process and will go away in the next couple of months. Once the incisions have healed, you will have a thin scar along your sternum and a little thicker scar down your leg. It is normal to have discomfort through the chest and back. Some things that may decrease discomfort include: use of a heating pad on low for back and shoulder soreness, good posture, performing your post-op exercises, and taking your prescribed pain medication. Keep in mind, too much inactivity will delay healing and increase soreness.

**Pain:** You may be experiencing incisional pain. Some people have a difficult time telling the difference between the incisional pain and chest (angina) pain. If you are experiencing pain that is similar to the pain you had before surgery, it may be angina and therefore, you should take your nitroglycerin tablets as directed. If the pain is different and related more to movement, please take the pain medication prescribed for you after surgery. The incisional pain from surgery should decrease as you recover. If your prescribed pain medication is not helping your incisional pain, please notify your doctor.

**Incision Care:** Gently wash your incisions with soap and water twice a day. Use a clean wash cloth, suds it, wash your chest incision, and then your leg incision. You may then use this washcloth on the rest of your body. Do not reuse this same washcloth on your incisions. This will prevent the spreading of any bacteria to your clean incisions. Gently dry off your incisions with a soft, clean towel. Again, do not use the same towel on your incisions after you have dried the rest of your body. It is best to wash your incisions again later in the day, using a clean washcloth and towel, being careful to use the same technique described above. It is best to use a liquid antibacterial soap, rather than a bar of soap. A bar of soap often sits in scummy water that has bacteria in it that could get into your incisions. Once your incisions are completely healed, you may return to using bar soap if you choose. Check your incisions every time you wash. You should notice your incisions are looking better every day. If you notice any drainage, any increase in redness, swelling or tenderness, or a temperature over 101, you will need to notify your surgeon. Take your temperature at the same time each day for the
next two weeks. Do not take a tub bath, use a hot tub, or go swimming for two months after your surgery. This will allow time for your incisions to completely heal.

**T.E.D Hose:** You will be sent home with two pair of T.E.D. hose. These are elastic stockings that will help blood return to your heart. They help prevent blood clot from forming and help reduce swelling. You need to wear these hose for the next two weeks, unless otherwise instructed by your physician. You can take them off at night. You will need help getting your hose on and off. The reason for this is that the pulling is more than ten pounds of pressure on your sternum. To care for your hose, simply wash them by hand in warm water with a mild soap and allow them to air dry. You may put them in the washer, but not the dryer. The dryer will damage the elastic and cause the hose to not be effective.

**Visitors:** The day you go home, it is not a good idea to have any visitors. By the time you are discharged from the hospital and reach your home, you will realize you are exhausted. Try to keep visiting to a minimum for the first couple of weeks. A good rule of thumb is tow visits per, thirty minutes per visit. You can gradually increase the number and length of visits you can tolerate. Family and friends mean well, but you will need your rest periods. Do not be afraid to excuse yourself from your company when you need to rest.

**Sleep and Rest:** You may find you become tired very easily. Even daily routines will wear you out. This is normal. Plan to take a couple of rest periods during the day, especially during the first two weeks at home. Resting between activities will prevent you from becoming overtired. Make sure to sleep six to eight hours per night. Your body needs this time to heal and to regain strength.

**Sternal healing:** Your sternum (breastbone) requires eight weeks to heal completely, just like any other broken bone. All your restrictions after surgery are related to sternal healing time. This is the reason you cannot lift, push, or pull anything weighing more than ten pounds for the next eight weeks. A gallon of milk weighs about eight pounds, so use that as a guide. Some examples of activities which you should not do for now because of the amount of pressure on your sternum are: taking out the trash, carrying laundry, pushing the grocery cart, pushing the vacuum cleaner, mopping the floor, or mowing the lawn. To enjoy your children and/or grandchildren, sit down and let them come to you. Your doctor will gradually increase the amount of weight you can lift and the activity you can do.

**Work:** The doctor will also make the final decision about when you can return to work. This varies from person to person depending on the type of work you do and the amount of stress on the sternum. Generally, you will be off at least eight weeks. Just remember that recovery is different for each person. Not only does your sternum need time to heal but your body also needs time to build strength. It is wise to have a good balance between activity, recreation, and rest. For the first couple of weeks at home, your emphasis should be on doing the same activities you did in the hospital. You should try and increase your activities every day. Be
realistic about the goals you set. Don’t try and overdue, but also don’t underdo. Listen to your body. Your body will tell you when to stop.

Some of the dos and don’ts we would like to review are as follows:

- No digging for the next two months.
- No riding a bike outside for the next two months. However, if you have a stationary bike you enjoy riding, you are permitted to do so. If the bike has moveable arms, do not use the arm movements for the next two months. Take the tension off the bike pedals. Start at five minutes or less and gradually build your time and tension.
- Golfing- you can putt in two weeks, chip in a month, and a full swing in two to three months.
- You can fish. Keep in mind you have a ten-pound weight limit. Most fishing should be done from the dock unless you have someone who can handle a boat for you.
- Sexual intercourse – Please refer to the section “Recovering from Heart Disease” for instructions.
- As you begin to feel better, it would be a good idea to begin doing small household chores. You may do dishes, dust furniture, fold clothes (as long as someone carries the basket for you), and set the table.
- No mowing or raking the yard for the next two months. This also includes riding lawn mowers. Riding lawn mowers are bouncy and may cause your sternum to shift while steering.
- The only restriction you will have for the rest of your life is no more shoveling snow. The combination of cold temperatures and the heavy pushing and lifting may place too much demand on your heart and bypasses. Use of a snow blower needs to be cleared through your cardiologist.

After the first couple of weeks at home, you will begin feeling like resuming some of your previous activities. You may feel overwhelmed by the restriction, but keep in mind there are so many things you can still do while recovering. These may include shopping, going to dinner, going to the movies, needlework, crafts, and playing cards. Remember, listen to your body. Rest when you need to.

**Physician follow-up appointments:** You will be seeing your family doctor in 7-10 days; your cardiologist in 7-10 days; and your surgeon in four weeks. You will continue to see your family doctor and cardiologist throughout the rest of your life. You will see the surgeon only once as long as your incisions and sternum are well healed. **It is your responsibility to make these appointments.** It is helpful to write down any questions you might have so you can discuss these questions at your appointment. When you see your cardiologist, please remember to ask for about Phase II cardiac rehab. This can be the key to your recovery and the road to your future.
Medications

You will be given verbal and written information about the medicines that you will be taking at home before you are discharged from the hospital. Keep in mind that some of the medications you will be taking at home may be new and different from those that you were taking when you came to the hospital. Please ask your nurse or doctor if you have any questions about your medications. This notebook provides general information about many of the medications you may have been taking while in the hospital. This information will tell you:

- Name of the drugs (these are only examples of some of the drugs)
- What it does (why you are taking it)
- How to take the drug
- When to take the drug
- Side effects

You should become familiar with your medications, the reason you are taking the medication, how much of the medicine you are taking, and how often you take it. It is helpful to write them all on a paper and carry it in your wallet. You may also want to give a copy to your spouse or children.

If you forget and miss a pill, do not take two the next time. Do not let anyone else take your medications. Keep all medications away from children. Always check the expiration date. If your medication is expired, dispose of it by flushing it down the toilet.

Do not mix your medications with alcohol. If you are diabetic, you will need to talk with your doctors to verify if you are permitted to drink alcohol. If you are not diabetic, the doctors permit you to drink in moderation. Drinking alcohol in moderation means no more than two cans of beer in one day, no more than two glasses of wine in one day, or no more than one ounce of liquor in one day.

**Nitroglycerin:** You may have been given a prescription for nitroglycerin when you were discharged from the hospital. Nitroglycerin is to be used if you develop chest pain (angina). We hope that you will not have to use it. There is a slight chance that your bypasses could spasm, causing angina (chest pain). What chest pain tells you is that the heart needs more oxygen than it is getting. The nitro works to open up the arteries of the heart so the muscle will receive more oxygen. If you have chest pain, take a pill out and place it under your tongue and wait five minutes. Do not swallow the pill. Once the tablet is placed under your tongue, you will have a tingling sensation and may have a bitter taste. If you are still having the chest pain after five minutes, repeat the process with another nitro tablet. You may take a **total of three pills five minutes apart. If you are still having chest pain five minutes after the third pill, CALL 911.** Even if you do obtain relief from the nitro, you need to notify your cardiologist of the chest pain. Keep your nitroglycerin with you at all times. Protect your nitroglycerin from heat and
light. Always check the expiration date before taking it. Sit or lie down before taking your nitroglycerin as it may cause you to get lightheaded and dizzy. It may also cause a headache.

**Diuretics:** These types of drugs are used to treat swelling (also called edema) and to decrease blood pressure. These medications work by helping your body get rid of excess fluid. While you are taking these medications, you will urinate more frequently that you are used to. It helps to take these medications before 6:00 PM so that you are able to rest at night without getting up to go to the bathroom. Many of these medications cause the body to lose potassium, so eat foods rich in potassium like oranges, bananas, tomatoes, and raisins. If you have problems with your kidneys, and are being cared for by a kidney specialist, please check with that doctor before eating many foods high in potassium. Diuretics may upset your stomach, so take them with food or milk.

**Coumadin:** This drug is used to prevent blood clots from forming. Before your discharge, you will be given detailed information about this drug. A pharmacist will come to your room to give you written material and answer any questions and concerns that you may have about your coumadin dose. Keep in mind that dose changes are common and that blood work is required to inform your physician of the drug’s effect. While you are taking coumadin, your blood does not clot as fast as normal. Be very careful using tools, razors, and knives, because if you cut yourself or are involved in an accident, you will bleed more than a normal person would.

**Pain Medication:** There are many types of pain medications available. You will be given a prescription for pain medication when you are discharged. This pain medication is usually a mild narcotic in combination with Tylenol (acetaminophen), or it may only be a mild narcotic. While you are in the hospital, you have pain medication available. Do not hesitate to take it when you are uncomfortable. Many patients are concerned about addiction, but this is not a problem as you are receiving limited doses. As you feel better and heal, your pain will decrease and you will not need pain medication as frequently. Pain medications with narcotics will cause drowsiness, and may cause constipation and upset stomach. Take these medications with food and be sure to drink plenty of water. If you are taking an over the counter cold medication, be aware that many of these products contain Tylenol or acetaminophen. It is important not to take too much Tylenol in one day, or your liver could be damaged. If you are taking pain medication and over the counter cold medication, please check with your pharmacist to see if you are taking too much Tylenol (acetaminophen).

**Digoxin:** This drug is also called Lanoxin and is a medication to help your heart. It is used to treat an irregular heartbeat. Digoxin slows the heart rate. If while taking this drug you notice unusual tiredness, blurred vision, and nausea, vomiting, or diarrhea notify your physician. Take this medication at the same time every day and on an empty stomach.
**Aspirin:** This drug is used to decrease inflammation, relieve pain, and to help prevent blood clots. Keep in mind that many over the counter products also contain aspirin, so check with your physician or pharmacist before taking any over the counter products. Store aspirin in a cool dry place—not your bathroom. Take aspirin with food to avoid stomach upset.

**Vitamins:** You may have been taking vitamins prior to your surgery, and while in the hospital you took a vitamin with iron. Your physician may or may not want you to continue this medication at home. Vitamins that contain iron often cause constipation, so you should drink plenty of water.

**Calcium channel blockers, ACE inhibitors, and beta-blockers:** Some types of calcium channel blockers are: Cardizem, Cynacirc, Cardene, Procardia, Norvasc, and Verapamil. Examples of ACE inhibitors are Capoten, Altace, Vasotec, and Prinivil. Examples of beta-blockers are Inderal, Tenormin, Corgard, and Lopressor. All of these drugs are used for treating high blood pressure. You may take a drug belonging to each group, or you may only be take one group type. Do not be alarmed if these are not the same medications and dose that you were taking before surgery. The ACE inhibitors can cause a cough and impair taste. Take ACE inhibitors on an empty stomach. Drugs in the beta-blocker class cause constipation and fatigue. Take beta-blockers and calcium channel blockers with food. Check with your pharmacist to see if your medication is long acting or sustained release. Long acting and sustained released forms should not be crushed, chewed, or the capsules opened.

Taking your medication and being knowledgeable about why and how much medication you take is your responsibility. Your pharmacist can give you valuable information about your medications and interactions with other medications.

**Valve Replacement or Repair**

There are four heart valves that direct blood flow through the heart chambers and out to various parts of the body. The two valves that are more prone to disease/damage are the mitral valve and the aortic valve. Normally, the heart valves are smooth structures that open and close to regulate blood flow. Birth defects, infection, rheumatic fever, or scarlet fever can damage these valves. Two terms used when talking about poorly functioning valves are “stenosis” and “insufficiency”. Stenosis describes when the valves are hard to open. Insufficiency describes when the valves do not close properly.

Some complications from a poor valve or valves can include not getting enough blood through the heart chambers or blood pooling in the heart chambers. This will cause the heart to work harder and can cause heart failure. The abnormal valves can cause an irregular heartbeat, blood clots to form in the heart, shortness of breath, swelling, coughing, or extreme fatigue.
To correct the problem with your valve, it is either replaced or repaired. If it is replaced, either a mechanical or tissue valve will replace it. You should know the valve you have replaced and the type of replacement valve used. Your doctor will be able to give you this information. After a valve replacement, you may be sent home on a medication called coumadin. This is to help prevent blood clots from forming around your new valve. You may be required to take coumadin for the rest of your life. From time to time you will need to have a blood test to regulate your dose of coumadin. Your cardiologist or family doctor will monitor this. You should always take this medication exactly as prescribed by your doctor. If you notice any of the following symptoms, you should contact your doctor right away:

- Black bowel movement—iron supplements may cause this, but it could mean that you have blood in your stool.
- Pink or red urine
- Excessive bruising or unexplained swelling
- Nose bleeds
- Bleeding gums
- Vomiting blood or fluid that looks like coffee grounds.

You should not take aspirin or aspirin products without your physician’s permission. Always check over the counter medications with the pharmacist to make sure it does not contain aspirin. We encourage you to purchase and wear a medic alert bracelet that indicates you have had a valve replacement and are on a blood thinner.

Because you have had a valve replacement, you are at risk for the infection called bacterial endocarditis. This infection can further damage or destroy heart valves. For this reason, it is important to take antibiotics before seeking certain medical treatment:

- Dental work: notify your dentist of your valve replacement. Your dentist will need to prescribe antibiotics before dental work is done.
- Any major or minor surgery
- Any procedure that may cause trauma to body tissue: bladder exams and some rectal and colon exams are examples.

Symptoms of bacterial endocarditis are similar to the flu. So, if you have flu-like symptoms (fever, sweating, chills, loss of appetite, tiredness) that do not subside in a couple of days, please contact your doctor.