

## PREOPERATIVE INSTRUCTIONS FOR TOTAL KNEE REPLACEMENT

### Anatomy of the Knee

The knee is a joint consisting of the femur (thigh bone), tibia (shin bone), patella (kneecap), muscles, ligaments, and meniscal cartilage (meniscus) all working together for smooth movement of the joint. The muscles provide strength and help create movement. Ligaments are bands of tissue that connect the bones in the joint and provide stability. Meniscus is tissue that works as a shock absorber. When the knee is damaged, it becomes swollen, stiff, and painful, often as a result of the cartilage wearing away or becoming rough. This causes the bones to rub together rather than gliding easily over each other. The end result can be arthritis in which the entire joint becomes inflamed and painful.



### Surgical Procedure: Total Knee Arthroplasty

The artificial knee or prosthesis replaces the worn-out parts of the original knee with its own smooth-surfaced components. Its main parts include the tibial component, which covers the top of the shin bone; the femoral component, which covers the end of the thigh bone; and the patellar component, which covers the back of the kneecap. The surgeon will make an incision on the front of your knee, where he will clear away any damaged bone and shape the bone surface to hold the prosthesis. The various components of the prosthesis are then put into place and tested to make sure they fit properly. After the parts are correctly aligned, they will be attached to the thigh bone, shin bone, and kneecap.



### Instructions for after your knee replacement:

1. **Ice:** Apply ice to the knee for 15-20 minutes at a time. This can be repeated several times throughout the day to reduce pain, swelling, and inflammation.
2. **Elevation:** The involved leg will benefit from regular elevation to allow gravity to assist in decreasing swelling. Lie down and place the involved leg on several pillows so that it is above the heart. This can be done in conjunction with icing.
3. **Compression:** This technique is used primarily to decrease swelling by applying compressive stockings or elastic wraps (ex. ACE wrap) to the involved leg. Begin wrapping the leg below the knee near the foot or ankle, maintaining mild tension throughout the process. Wrap upward toward the hip.
4. **Assistive devices:** After surgery you will require the use of a walker or crutches. They are used to reduce or eliminate body weight that would normally be born by the involved leg. In your initial physical therapy sessions, you will be taught how to walk with the assistive device. Gradually you will bear more and more weight on the involved leg. Let your physical therapist instruct you on the proper use of the crutches or walker so that you will be safe and maintain good balance.
5. **Wound care:** It is important to keep the incision clean to allow proper healing. Apply alcohol or hydrogen peroxide daily. Do not get the wound wet until after the staples are removed and the incision has closed. The staples will be removed 10-14 days after surgery. Please notify your doctor if you or your physical therapist notices any signs of infection.
6. You will follow up with the doctor 2-6 weeks after surgery. Consult with the doctor or nurses to find out when your follow-up appointment will be.
7. **Follow the instructions set forth in your protocol.**