INTRODUCTION TO TOTAL HIP REPLACEMENT

A GUIDE TO YOUR NEW TOTAL HIP
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# Table of Contents

**Pre-Operative Checklist**  
**Post-Operative Checklist**  
**Introduction**  
**Before Surgery**  
  - Initial Consultation  
  - Insurance and x-rays  
  - Preoperative Medical Clearance  
  - Autologous Blood Donation  
  - Iron and Vitamin C  
  - Anti-inflammatories, Aspirin, Vitamins  
  - Pre-Operative Instructions  
  - Hospital Pre-Admission  
**Day of Surgery**  
**Surgery**  
**After Surgery**  
**Recovery at Home**  
  - Dislocation Precautions  
  - Blood Clot Prevention  
  - Weight Bearing Restrictions  
  - Elevated Toilet Seat  
  - Reachers  
  - Pain Control  
  - Seating  
  - Stairs  
**Home Preparation**  
  - Bathroom  
  - Bed  
  - Cupboards  
  - Drawers and Closets  
**Self Preparation**  
  - Dental Appointments  
  - Exercise  
  - Grooming  
  - Sleeping  
  - Finances  
  - Dealing with Fear and Anxiety  
  - Clothing  
**What to Take to the Hospital**  
**Post-Operative Care**  
**Pet Care**  
**Resuming Normal Activities**  
  - Showering  
  - Tub and Jacuzzi  
  - Leaving the House  
  - Driving  
  - Shoes and Socks
# A Guide To Your New Total Hip

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling</td>
<td>24</td>
</tr>
<tr>
<td>Security</td>
<td>25</td>
</tr>
<tr>
<td>Sexual Relations</td>
<td>25</td>
</tr>
<tr>
<td>Returning to Work</td>
<td>25</td>
</tr>
<tr>
<td>Activities that should be avoided</td>
<td>25</td>
</tr>
<tr>
<td>POST-OPERATIVE APPOINTMENT</td>
<td>26-27</td>
</tr>
<tr>
<td>ADDITIONAL READING</td>
<td>27</td>
</tr>
<tr>
<td>APPENDIX A (Risks of Surgery)</td>
<td>28-30</td>
</tr>
<tr>
<td>APPENDIX B (Post-op Exercises)</td>
<td>31-33</td>
</tr>
<tr>
<td>APPENDIX C (Sports Recommendations)</td>
<td>34</td>
</tr>
<tr>
<td>APPENDIX D (Prophylactic Antibiotics)</td>
<td>35</td>
</tr>
<tr>
<td>APPENDIX E (Blood Thinners)</td>
<td>36</td>
</tr>
<tr>
<td>MORE INFORMATION ABOUT DR. SWANSON</td>
<td>37</td>
</tr>
<tr>
<td>DESERT ORTHOPAEDIC RESEARCH FOUNDATION</td>
<td>38-41</td>
</tr>
</tbody>
</table>
A Guide To Your New Total Hip

Date of Surgery: __________________

<table>
<thead>
<tr>
<th>When</th>
<th>Done</th>
<th>Date</th>
<th>Task</th>
</tr>
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<tbody>
<tr>
<td>Now</td>
<td>□</td>
<td></td>
<td>Make pre-operative medical clearance appointments as soon as possible with Primary Care Physician, Cardiologist etc. Chest x-ray and EKG should be done within 90 days of surgery, blood work no sooner than 30 days prior. Take “Preoperative Medical Consultation” form to your doctor so they can order appropriate testing.</td>
</tr>
<tr>
<td>Now</td>
<td>□</td>
<td></td>
<td>Prepare house, arrange for transportation home from hospital and assistance for 3-5 days at home.</td>
</tr>
<tr>
<td>Now</td>
<td>□</td>
<td></td>
<td>Submit any disability or FMLA papers to be completed as soon as possible. Allow 10 days to complete forms. There is a $10.00 charge per form.</td>
</tr>
<tr>
<td>14 days Prior to Surgery</td>
<td>□</td>
<td></td>
<td>Call Centennial Hills Hospital to schedule a pre-admit appointment, 702-369-7710.</td>
</tr>
<tr>
<td>10 days Prior to Surgery</td>
<td>□</td>
<td></td>
<td>Stop taking aspirin and all anti-inflammatory medications - Advil, Aleve, Motrin, etc. Stop taking Plavix with approval from cardiologist. Ask your cardiologist or medical doctor about when to stop other blood thinners (such as Effient or Pradaxa). (See Appendix D for complete list.)</td>
</tr>
<tr>
<td>7 days Prior to Surgery</td>
<td>□</td>
<td></td>
<td>Pre-operative medical clearance with your Primary Care Physician (and Cardiologist if applicable) should be completed. Call Dr. Swanson’s staff at 386-1191 to confirm receipt of test results from your PCP (and Cardiologist). If not received, tell your PCP to fax them to Dr. Swanson’s staff at 731-0741, or pick them up and bring to your History and Physical (H&amp;P) appointment with Dr. Swanson’s staff.</td>
</tr>
<tr>
<td>5 days Prior to Surgery</td>
<td>□</td>
<td></td>
<td>Stop taking Coumadin (blood thinning medication) with approval from prescribing physician.</td>
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</tbody>
</table>
### A Guide To Your New Total Hip

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3-5 days Prior to Surgery</strong></td>
<td>Attend History and Physical (H&amp;P) appointment with Dr. Swanson’s Physician Assistant. <strong>Bring a list of medications and dosages that you are taking.</strong> Check with your Primary Care Physician that your pre-op medical tests have been sent to our office. If test results have not been received pick up a copy to bring to this appointment. If we do not have your test results at your H&amp;P appointment, your surgery may be cancelled.</td>
</tr>
<tr>
<td><strong>1-3 days Prior to Surgery</strong></td>
<td>Pre-admit at the hospital. Bring the admitting papers you received at your H&amp;P appointment, your driver’s license, insurance card(s), and a list of medications that you take to the hospital.</td>
</tr>
<tr>
<td><strong>1-2 days Prior to Surgery</strong></td>
<td>Our office will contact you with your surgery time. Plan on being at the hospital at least 2 hours prior to your surgery time.</td>
</tr>
<tr>
<td><strong>Night Prior to Surgery</strong></td>
<td>Nothing to eat or drink ten hours prior to surgery (not even a sip of water, except for essential medications—see below).</td>
</tr>
<tr>
<td><strong>Morning of Surgery</strong></td>
<td>Take essential medications with a sip of water (blood pressure, heart, lung medication). Do NOT take your diabetes medication.</td>
</tr>
<tr>
<td><strong>Morning of Surgery</strong></td>
<td>Arrive at hospital at least 2 hours prior to scheduled surgery time.</td>
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</tbody>
</table>
### Post-Operative Checklist

<table>
<thead>
<tr>
<th>When</th>
<th>Done</th>
<th>Date</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Discharge</td>
<td></td>
<td></td>
<td>Request your operative report with implant labels from the hospital medical records department.</td>
</tr>
<tr>
<td>Discharge</td>
<td></td>
<td></td>
<td>At the time of discharge from the hospital you will be given discharge instructions from Dr. Swanson. These instructions will provide individualized information about allowed weight bearing, wound care, medications, precautions, and exercises.</td>
</tr>
<tr>
<td>Discharge</td>
<td></td>
<td></td>
<td>You will be discharged with several pieces of equipment including an elevated toilet seat/shower seat, crutches or walker, reacher/grabber, and elastic compression stockings.</td>
</tr>
<tr>
<td>Discharge to 6 weeks post-op</td>
<td></td>
<td></td>
<td>You will be discharged with a pair of compression stockings used to reduce the risk of blood clots. You are required to wear these stocking as much as possible for 6 weeks. You may take them off for 1-2 hours at a time if uncomfortable, but you likely will need assistance getting them back on.</td>
</tr>
<tr>
<td>Discharge - 6 weeks post-op</td>
<td></td>
<td></td>
<td>Take iron pill as directed to replenish your blood count or alternately eat an iron rich diet with red meat and dark green vegetables. Iron and pain pills can be constipating so be sure to use a laxative or stool softener if needed.</td>
</tr>
<tr>
<td>24-48 hours after discharge</td>
<td></td>
<td></td>
<td>You will be discharged to the care of a home health care agency that will provide nursing and physical therapy in your home. A nurse and a physical therapist should come to your home within 24-48 hours after your discharge. If not, CALL OUR OFFICE.</td>
</tr>
<tr>
<td>2-3 days after discharge</td>
<td></td>
<td></td>
<td>To prevent blood clots, most patients are discharged on Xarelto, aspirin, Coumadin, or some other type of blood thinner for 4-6 weeks. If you were prescribed Coumadin to take post-operatively, the home health care nurse will be required to draw your blood 2-3 days after discharge so that your blood levels can be monitored by a physician. The nurse will continue to regularly draw blood as directed by the doctor to ensure therapeutic blood levels.</td>
</tr>
</tbody>
</table>
# A Guide To Your New Total Hip

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Action</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td><strong>3-5 days after discharge</strong></td>
<td>□_______</td>
<td>When your incision is <em>no longer draining</em>, you may take your first shower. Do not use Neosporin or any other ointment. Simply remove the bandage and let soapy water run over the incision. Then gently pat dry (do not vigorously rub incision initially). You may cover with a sterile bandage or leave the incision open if there is no drainage. If your incision is still draining 3-5 days after discharge, call Dr. Swanson’s office immediately to schedule an appointment so that the doctor can check the wound. If the area around the incision is red or hot the doctor will want to check the incision also.</td>
</tr>
<tr>
<td><strong>10-14 days after surgery date</strong></td>
<td>□_______</td>
<td>If your incision was closed with stitches or staples the Home Health Care nurse should remove those 10-14 days after the date of your surgery.</td>
</tr>
<tr>
<td><strong>4 weeks Post-op</strong></td>
<td>□_______</td>
<td>Follow-up appointment with Dr. Swanson.</td>
</tr>
</tbody>
</table>
| **Call Dr. Swanson’s office immediately at 731-1616 if you experience any of these symptoms** |                                                                  | - Unexplained, significant increase in pain  
- The wound looks red, swollen, inflamed, or is draining fluid that is not clear yellow or pink  
- The wound is still draining after 4-5 days post-op  
- Recurrent temperatures above 100.5  
- Swelling does not resolve with several hours of elevation or after a night’s sleep  
- Pain or tenderness in one or both legs with an area of warmth and/or red or discolored skin  
- Fall or injure leg  
- Problems with medication |
Hip arthritis is a common affliction among patients over the age of 60 and is becoming more common in younger patients. It can progress into a disabling condition limiting one’s ability to carry out normal activities of daily living or recreation. When symptoms become severe, a total hip replacement, which replaces the arthritic hip with an artificial “ball-in-socket” joint, can alleviate symptoms and allow a patient to return to full, pain-free activities.

Minimally invasive total hip replacement allows a patient to return to normal activities in approximately half the time of traditional total hip replacement surgery. Developed in part by Dr. Swanson, this technique has been shown to have many advantages over traditional total hip replacement surgery.

Minimally invasive total hip replacement, using a titanium prosthesis implanted without cement, replaces the arthritic hip through an incision approximately one-third the length of a traditional incision. This, combined with immediate full weight-bearing, results in a more rapid recovery. The traditional total hip replacement requires an incision measuring 8-10 inches in length, often 6 weeks on crutches or walker, and typically 3 months to recover. With the minimally invasive hip procedure, an incision of 3 ½-4 inches is used, full weight-bearing is allowed from day 1, and patients generally return to normal activities by 3-4 weeks.
A Guide To Your New Total Hip

Dr. Swanson's research has shown that minimally invasive total hip replacement minimizes surgical time and anesthesia, reduces blood loss, and lessens postoperative pain. Because the surgery is performed without bone cement (which has been shown to potentially cause breathing problems, blood clots, and even death), and by minimizing surgical time, anesthesia, and blood loss, many complications can be avoided.

BEFORE SURGERY

Initial Consultation
Nearly every patient undergoing total hip replacement with Dr. Swanson is a candidate for the minimally invasive technique. The incision length used is based on patient size and weight and may vary from 3 inches in the very thin, petite patient to 5 inches in the large, heavy patient. Most patients require a 3.5 to 4 inch incision. During your initial consultation, Dr. Swanson will explain the technique including its potential risks and complications. (See Appendix A). In addition, Dr. Swanson will explain the benefits to you of the minimally invasive surgical technique and the latest developments in pain management to ensure your comfort after surgery. Dr. Swanson will make every effort to schedule your surgery at a convenient time for you. However, keep in mind that his surgery schedule is often filled 6-8 weeks in advance.

Insurance and x-rays
If Dr. Swanson does not have your latest x-rays, bring a copy of your most recent x-rays to his office. Otherwise, we will take new x-rays when you arrive. Dr. Swanson will review your x-rays during your initial consultation. If surgery is recommended, Dr. Swanson will submit his report to the insurance company. Dr. Swanson's staff will handle the insurance authorization needed for surgery.

Preoperative Medical Clearance
All patients over 50, and younger patients with any health problems, will be required to get clearance for surgery from a medical doctor prior to surgery. Dr. Swanson’s staff will help you arrange your pre-operative medical clearance appointments either with your regular primary care physician or with one of our pre-op medical doctors. We will also give you the paperwork to take to your medical doctor when you schedule your surgery. Call and schedule an appointment to see your medical doctor as soon as possible so as not to cause a delay or postponement of your surgery if your doctor requires additional pre-operative testing.

Patients under the care of a cardiologist should also make an appointment with their cardiologist immediately. Chest X-rays and EKG’s are valid for 90
A Guide To Your New Total Hip

days prior to surgery. Blood work should be done within 30 days of your surgery. Note: patients must fast 10 hours prior to having some blood tests; ask your medical doctor.

Take the instruction form entitled “Preoperative Medical Consultation” to your doctor at the time of your appointment. A young person without health complications may only be required to have the standard hospital admission blood tests, chest x-ray and EKG which must be done within 30 days of surgery.

All patients will undergo a “type and screen” in the rare event that a blood transfusion is required. Using Dr. Swanson’s mini-incision surgical technique, blood transfusions are required in less than 5% of patients. The type and screen must be done at the hospital within 72 hours of surgery.

**Autologous Blood Donation**

You can pre-donate blood prior to your surgery so that if a blood transfusion is required, you will receive your own blood rather than blood from the blood bank. This is called “Autologous Blood Transfusion.” Only rarely is a blood transfusion necessary for a standard, minimally invasive total hip replacement due to the fact that very little blood is lost during this surgery. Additionally, if your autologous blood is not needed for your surgery, it will be discarded; it cannot be used for other patients. However, if you are having both hips replaced within 6 weeks of each other or if Dr. Swanson suspects a bleeding problem, he may recommend that you donate 1-2 units of blood for your surgery. You can begin donation 6 weeks prior to surgery. Most private insurance companies DO NOT cover the cost, which is approximately $400 per unit of blood. However, Medicare typically does cover the cost. Most patients undergoing uncomplicated total hip replacement probably do NOT need to donate autologous blood. In the rare event that a blood transfusion is required, the blood supply is now considered quite safe with regard to HIV, hepatitis, and other infectious agents.

If you or Dr. Swanson decide that you should pre-donate autologous blood, Dr. Swanson’s staff will give you an order sheet to bring with you to the blood bank. United Blood Service will transfer the donated blood to the hospital prior to your surgery. By donating early in the 6-week period, your body will have time to rebuild your blood count prior to surgery. Drink plenty of water 1-2 hours before giving blood, as it will help hasten the procedure and prevent light-headedness after donation. Schedule a 1½ hour period to complete your blood donation. If you are donating out of state, special arrangements for blood transportation must be arranged. There will be an extra cost for the transportation.
Iron and Vitamin C
You should use an iron supplement after blood donation or if otherwise directed by Dr. Swanson or your medical doctor to replenish your body’s iron stores to help produce new red blood cells. Take an over-the-counter iron supplement such as Ferrous Sulfate, or Ferrous Gluconate, 325 milligrams 3 times daily beginning the first day of donation and continue until surgery. Ferrous Gluconate is used by many people who cannot tolerate Ferrous Sulfate. Product literature states that it is more easily absorbed by the body and does not cause as much constipation as Ferrous Sulfate. Vitamin C, 1000-1500 milligrams each day is recommended to facilitate iron absorption by your gastro-intestinal tract. Many people find iron to be constipating. The use of a gentle laxative such as Colace, Senokot, or Manna Cleanse may be helpful. In any event, don’t overlook this aspect of your preparation for surgery if you donate autologous blood as you will be stronger and have more energy post-operatively if you avoid anemia.

Anti-inflammatory Medication, Aspirin, and other Blood Thinners
Do not take any aspirin or anti-inflammatory medications for 10 days prior to surgery (and that means NOT EVEN ONE PILL). These include Aleve, Advil, Motrin, Ibuprofen, Naprosyn, Mobic, Voltaren, Relafen, Daypro, etc. All of these medications thin the blood and may cause excessive bleeding during surgery. Other blood thinners, such as Coumadin (warfarin), Plavix, Pradaxa, Effient, or Persantine will also need to be stopped prior to surgery. Ask Dr. Swanson how long before surgery to stop these medications. In general, Coumadin must be stopped 5 days prior to surgery, and Plavix 10 days prior to surgery. Vitamin E and other herbal supplements such as St. John’s Wort, Kava-Kava and Ginko Biloba may also cause thinning of the blood and should be discontinued 2 week prior to surgery. (See Appendix E – Blood Thinners – for a complete list.)

Pre-Operative Instructions and Hospital Orders
Three to five days prior to surgery, you will meet with one of Dr. Swanson’s assistants for a History and Physical Examination. Bring a list of your medications and the milligram dosages with you. Also, bring a copy of your medical history, including all medical problems, prior surgeries, and previous surgical problems to this appointment. Call the office where pre-surgery tests were done (usually your primary care physician) to make sure they were forwarded to Dr. Swanson’s office prior to this appointment, or pick up the test results and bring them in yourself. If your pre-operative tests are unavailable or your medical clearance has not been completed, your surgery may be postponed.
Hospital Pre-Admission
Dr. Swanson does surgery at Centennial Hills Hospital in Las Vegas. Centennial Hills Hospital has an excellent rating with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Dr. Swanson has established a total joint replacement program and surgical team with whom he works consistently at Centennial Hills Hospital. Dr. Swanson’s team will take care of obtaining insurance authorization.

Two weeks prior to your surgery call Centennial Hills Hospital to make an appointment to pre-admit (702-369-7710). During your History and Physical exam appointment, you will be given instructions about your pre-admissions appointment at the hospital. The pre-admission process at Centennial Hills Hospital may take about 90 minutes. Please bring the following items:

- Physician Admission/Preoperative Order Form
- Insurance card(s)
- Photo ID (driver’s license, military ID, etc.)
- List of current medications
- Pre-Anesthesia form, completed (received at H&P appointment)
- Autologous Donation Card (if self-donation was done)

DAY OF SURGERY
You will need to arrive at the hospital a minimum of 2 hours prior to surgery. One of Dr. Swanson’s staff will call you 1-2 days before surgery to let you know what time your surgery is scheduled for. **Your surgery time often cannot be predicted precisely. If preceding cases take less time than expected, your surgery may be moved up slightly. Conversely, if preceding cases take longer than expected, your surgery may be slightly delayed.** Try to remain calm if your surgery does not begin right on schedule. Remember to ensure the best results possible, Dr. Swanson will not rush your surgery or any other patient’s surgery. Therefore it is imperative that you be patient and understand that any delay in your surgery is due to the additional care taken with surgeries preceding yours, just as Dr. Swanson will do with your surgery.

**You should have nothing to eat or drink (even water) ten hours before your scheduled surgery time.** Your stomach must be completely empty for surgery to minimize the risk of stomach contents entering the lungs while anesthetized. If you are on medication for your heart, lungs, or blood pressure, take them with a sip of water the morning of surgery. Diabetes medication generally should NOT be taken the morning of surgery.
A Guide To Your New Total Hip

After checking into the hospital you will be prepared for surgery. Blood may be drawn, an IV started for intravenous fluids, and you will sign a surgical consent. The anesthesiologist will ask you questions about your health, medical problems, and previous anesthesia. You will most likely have a “general anesthesia” where you are asleep through the entire procedure, supplemented with a spinal anesthetic to minimize the amount of general anesthesia you will need and to ensure that you wake up comfortably. The anesthesiologist’s job is to keep you safe through surgery. He will be with you throughout the entire case, carefully monitoring your vital functions, during the entire procedure.

SURGERY

Minimally invasive total hip replacement takes approximately an hour. Once it is over, you will wake up in the recovery room. The nurses may seem very busy, taking your vital signs and blood pressure, monitoring any drainage from the surgical site, checking the functioning of your leg, and making sure that you are comfortable. The spinal anesthetic will allow you to wake up comfortably, although your legs may feel numb at first. Don’t worry; this is normal. You will receive a pain medication pump (PCA—Patient Controlled Analgesia) to allow you to administer yourself pain medicine through your IV if you have any discomfort. We will do everything possible to ensure that you are not in pain after surgery.

AFTER SURGERY

When you are awake and feeling comfortable, you will be transported to the orthopedic ward for the next 2-3 days. You may be allowed to sit up to eat dinner the evening of surgery and even take a few steps on your new hip if you desire.

The Physical Therapist will first see you the afternoon of surgery or the following morning. You will learn specific exercises to begin strengthening your muscles and work on getting in and out of bed, in and out of a chair, walking, and even stair climbing if you have stairs at home. Most patients are encouraged to place full weight on the hip from day one. The therapist will teach you some very simple precautions to follow to minimize dislocation risk. These are most important during the first 6 weeks after surgery and are much less rigid than previously used after total hip replacement. You will use a walker or crutches for balance and support initially. As soon as you feel comfortable, you can progress to using a cane. Two or three days after surgery, you may find yourself able to do one or two laps around the nurses’ station, once or twice daily, and work on ascending and descending
A Guide To Your New Total Hip

stairs. PT's will continue working with you until you are released from the hospital.

Almost all patients go home by the 2nd or 3rd post-operative day. Most are able to get in and out of bed independently, visit the bathroom, and walk the hallway with the aid of a walker or crutches, or even a cane. In general, most patients are quite independent by the time they leave the hospital and will need only minimal assistance with some basic activities of daily living after discharge—such as meals, cleaning, or hygiene. A home nurse and home Physical Therapist will assist you and assess your progress 3 times weekly once you go home.

Rarely, a patient may need to go to a rehabilitation center for a few days after leaving the hospital if walking and general mobility are not considered safe for discharge home by the 3rd or 4th post-op day, or if no one is available to provide any assistance at home for the first few days after leaving the hospital.

RECOVERY AT HOME

Once home, you will continue to work on exercises learned in the hospital. You can walk as much as you find comfortable, but don’t overdo it. Your body will take time to heal. Follow the general dislocation precautions you have learned, particularly during the first 6 weeks when soft tissues are healing. When you are able to walk without the use of the walker or crutches you will progress to a cane that you can purchase at any pharmacy or medical supply store (use in the hand opposite the side of the surgery). When you are getting around without a limp, the cane can be discontinued, initially for short walks around the house and progressing to longer distances as tolerated.

A home nurse and Physical Therapist will see you 3 times weekly initially. The home nurse will monitor your incision and will generally remove your sutures or staples 10-14 days after the surgery. The home physical therapist will monitor your exercises. If all is going well you may not need the services of either one for more than 1-2 weeks.

You may take your first shower when the incision is completely dry, typically by 3-5 days after surgery. Remove the bandage prior to the shower and simply let soapy water run over the incision – do not scrub the incision. Pat the incision dry with a clean towel. DO NOT APPLY OINTMENT OR OIL OF ANY KIND. A light dressing may be reapplied but is not necessary as long as the incision remains dry and is kept clean.
Dislocation Precautions
Since use of the “Capsular Noose” technique for repair of the tough capsular tissue around the new hip (developed by Dr. Swanson in 2002), dislocation of the artificial hip is extremely rare. However, during the first 6 weeks while soft tissues are healing, you should be careful to avoid extreme positions, especially turning the knee inward when your hip is flexed (such as while sitting down). Always remember to roll your hip and knee outward, not inward, as a general rule (i.e. keep your knees apart while sitting or bending at the waist). As long as you can see the inside part of your knee on the operated side, dislocation is extremely unlikely, even while sitting or bending.

The Physical Therapist will teach you stretching exercises to help cross your ankle over the opposite knee (“Figure-4 Position”) for handling shoes, socks, clipping toenails, etc. Always keep the knee rotated outward when you bend the hip past 90 degrees (such as reaching for something on the floor when sitting in a chair).

As a general rule, once soft tissues have healed, it is safe to flex the hip past a 90-degree angle if you have rotated the knee outward enough that you can see the inside part of the knee—keep this rule in mind at all times; it will eventually become automatic when you sit, bend over, squat, or flex your hip. Additionally, you will be given specific exercises by a Physical Therapist to help strengthen and stretch the muscles around the joint. Do these exercises regularly, at least 3 times daily, during the first 6 weeks after surgery. Stretching exercises are also important, particularly rotating the knee outward. You will be taught to sit in a chair with your feet together and press the knees outward while bending forward a bit. You will also begin to slide the operated ankle up the opposite leg with the knee rotated outward to eventually enable a “Figure-4” position to allow easy access to your feet. Remember, as long as the knee is rotated outward, it is unlikely that the hip will ever dislocate.

Blood Clot Prevention
Prevention of blood clots in the legs—called deep venous thrombosis (DVT)—begins with movement of the legs. The more you move your legs, particularly pumping your ankles up and down, the less likely you are to develop a clot in your leg. Pump your ankles up and down 10 times every 15 minutes for the first 6 weeks after surgery.

Elastic compression stockings (TED’s is a common brand name) are also used to prevent blood clots in the legs. You should wear the stockings as much as possible for 6 weeks post-operatively in order to keep blood from pooling in the veins in your legs during periods of inactivity. These stockings
A Guide To Your New Total Hip

also help prevent swelling in your legs. The type of stocking issued at the hospital has a hole at the toe, to allow staff to check the circulation of the foot. You may buy additional compression stockings at a medical supply store. You may prefer to buy the closed-toe type, which many patients find more comfortable. Your leg must be measured for correct fit. After hospital discharge, TED’s can be removed a few hours at a time for comfort, but you should try to wear them as much as reasonably possible for 6 weeks. TEDs are tight-fitting, and you may need assistance getting them on and off.

You will also be given a blood thinner to prevent blood clots. The most common are Xarelto, aspirin, Coumadin, or an injectable medication such as Lovenox or Arixtra. If told to use aspirin, take an adult aspirin twice daily for 6 weeks. If started on Coumadin, you will need to have your blood level checked frequently and monitored by your medical doctor or your Home Health Care agency. Coumadin and the injectable blood thinners are usually continued for 3-6 weeks.

**Weight Bearing Restrictions**
Most routine total hip replacement patients are allowed immediate full weight bearing as tolerated on the new hip without restriction. You will begin taking a few steps the day of, or the morning after, surgery with a walker or crutches and the help of a hospital Physical Therapist. You will soon find yourself able to do one or two laps around the nurses’ station once or twice daily and will work on ascending and descending stairs if necessary. The hospital Physical Therapist will continue working with your walking until you are released from the hospital.

Once home, you should continue walking and performing the exercises learned in the hospital, initially under the supervision of the home Physical Therapist. In general, weight bearing “as tolerated” means putting your full weight on the extremity, with or without the use of walking aids (walker, crutches, or a cane). Walk as much as reasonably comfortable, but don’t overdo it; your body requires time to heal, and you may ultimately slow your recovery if you try to do too much too soon. You will use a walker or crutches initially, then advance to a cane, and finally no support at all when able to walk without a limp. (If you are allowed to bear only a portion of your weight on the hip initially, you can walk over a bathroom scale to see how many pounds you are actually placing on the hip.) The hospital discharge planner will normally order a walker or crutches for you prior to discharge from the hospital. Most insurance companies will pay for your walker or crutches. However, you may want to check with your insurance company prior to your surgery to confirm this. Otherwise, you will have to make arrangements to buy or borrow walking aids for use after discharge.
A Guide To Your New Total Hip

Many people attach carrying bags or baskets to their walker to make carrying things with them easier.

**Elevated Toilet Seat**
You may need an elevated toilet seat if you have problems rising from a standard toilet seat. This item is typically issued at the hospital and paid for by your insurance. You may want to check with your insurance regarding their policy before your surgery. Some people replace their old low toilets with permanent higher toilets.

**Reachers**
You will be given a reacher prior to discharge from the hospital. A reacher is a long stick with a mechanical grabber on the end. It will aid you in picking up items off the floor and getting dressed. The Occupational Therapist in the hospital will teach you how to use your reacher before discharge. There are two types of reachers: one type has a claw extension at the end, and the other has two suction cups on each pincher. Both types are useful for different things. See if the Physical Therapist or Occupational Therapist at the hospital will let you play with the assortment of reachers to decide which one works for you. If you get home and find you need a second one or another type, you can purchase one from a medical supply house. They are an inexpensive, handy piece of equipment.

**Pain Control**
To help ease post-operative pain, most people prefer to use the painkillers they have become accustomed to using prior to surgery. Using a painkiller with which you are familiar helps you avoid unpleasant side effects and dosing unfamiliarity. Ice packs are helpful for swelling around the incision that may cause local discomfort. Alternating heat and ice can eventually be helpful for muscle soreness. Massage should be avoided early on, but once the incision is healed (usually after 4 weeks), gentle massage can help keep the tissues soft and supple. Some believe that massage with Vitamin E oil or lotion will help the incision to heal with less scarring. Rest and relaxation techniques are helpful to release muscle tension.

**Seating**
Use a comfortable chair post-operatively. Typically, a chair with a higher seat cushion and armrests facilitates getting up from the chair. A height-adjustable office chair can work well; but if it has castors, brace it against something before sitting down, to make sure it will not roll out from underneath you. A resin porch chair used with a seat cushion is an inexpensive solution.
A Guide To Your New Total Hip

Stairs
Your ability to use stairs after surgery will depend on Dr. Swanson's post-operative precautions for you and your own strength. During the early weeks, you may need to lie down and rest several times a day; so, try to have your rest area on the same floor as a bathroom and the kitchen. Some people with two-story homes choose to move their bed downstairs, or to rent a hospital bed and place it downstairs until they feel stronger. Others use an upholstered recliner in which to rest, during the day. If you choose that option, practice before surgery, to be sure you can easily get up out of the chair. Still other patients have found that they can manage stairs several times a day, as long as most of their day is spent on one level.

HOME PREPARATION

Bathroom
Consider installing grab bars in your bathroom, especially on the walls of the tub or shower stall. Make sure you know how to find wall studs for secure installation. Prior to surgery, make sure that a walker will fit through your bathroom door. Take rugs out of the bathroom so you don’t have to worry about tripping on them. If you have glass shower doors on your tub you may want to take them off to accommodate a shower seat. There are two types of shower seats. A tub transfer bench straddles the wall of the tub, and the other type sits inside a shower stall. (A resin porch chair can be used, with a rubber mat underneath to prevent slipping.) With the type that straddles the tub, you may have to have someone help you lift your operated leg up and over the side of the tub, until you get stronger and can do this yourself. Shower seats are typically supplied by the hospital prior to discharge and paid for by your insurance. You may want to check with your insurance company prior to surgery so you aren’t without this essential piece of equipment when you leave the hospital.

You may want to have a hand held showerhead, for easy showering while seated. These fit over the faucet in the tub and have a long hose that leads to a small showerhead. You may want to use liquid soap, or put your soap into a nylon stocking and tie it to a faucet handle. You will want to avoid the danger of trying to bend over in a slippery shower to retrieve a dropped bar of soap. Don’t forget about having a good supply of wash clothes in the bathroom for sponge baths when no one is available to help you shower. You will be able to wash your hair in the kitchen sink alone. Women can tape a razor to a long handled wooden spoon to shave their legs while seated on the shower seat.
A Guide To Your New Total Hip

Bed
Check the height on your bed as well. The old types can be quite low. Keep your knees apart when getting in and out of bed. If you have problems because your bed is too low, hospital beds can be rented quite inexpensively. Some people put their bed up on blocks. Soft side waterbeds that are on a frame will usually be the appropriate height. Standard waterbeds may be too low and too difficult to get in and out of. Test yourself getting in and out of your bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. If you need to do a big “heave-ho” to get out of the bed prior to the surgery. Some people buy egg crate foam to put on top of the mattress for extra comfort. You will want to have your non-operated leg on the outside of the bed as it will be easier to get in and out of bed (i.e. use right side of bed if left hip replaced).

Cupboards
You won't be able to reach very low or very high items. Organize one easy-to-reach shelf in your kitchen with the pots you use the most, several dishes and storage containers. Stock up on frozen food and other favorite easy-to-eat food before you leave for the hospital.

Drawers and Closet
Put together a wardrobe of loose, casual clothing that is appropriate for the season and place it in the front of the closet. Rearrange your drawers so that the clothes you will use most often are in the top drawer.

SELF PREPARATION

Dental Appointments
You should do any pending dental work well in advance of surgery. Dental work, even teeth cleaning, can be a potential risk of infection of the hip afterwards. The American Dental Association and the American Academy of Orthopedic Surgeons recommends dentists use antibiotics prophylactically for two years following hip replacement surgery to prevent oral bacteria from entering the blood stream and coating the hip implant. After two years, the implant is surrounded by new bone or fibrous tissue, and the risk of infection is reduced. Patients with diabetes, inflammatory arthritis, taking steroid or immunosuppressant medication, or anyone else prone to infection should plan on using prophylactic antibiotics before dental work for the rest of their lives. Check with Dr. Swanson if you are unsure. Additionally, antibiotics should be taken prior to any manipulation or surgery on your genito-urinary tract or gastro-intestinal tract, and any infection anywhere in your body should be treated promptly with antibiotics (see Appendix D).
Exercise
Exercise is typically very painful for patients preparing for THA surgery. However, stationary cycling, swimming, or gentle exercises can be beneficial in hastening post-operative recovery. Some exercises to try include:

1) Glut squeezes - Lying on back, isolate and squeeze butt muscles.

2) Heel slides - Lying on back, bend the knee and slide the foot towards body and back down again.

3) Side leg slide - Lying on back with legs together, move one leg out to the side and back or spread both legs out and in (similar to making snow angels).

Standing hip exercises are usually difficult for hip patients to do, as most cannot tolerate weight bearing on the affected leg. However, standing on the good hip and lifting the arthritic leg to the side (abduction) is a good exercise to strengthen the “abductor muscles,” the muscles that allow one to walk without a limp. Riding a stationary bike may also be beneficial and easily tolerated by patients with hip arthritis.

Access to a pool can give you a pleasant, aerobic workout without causing too much discomfort to your hip. In addition, you should practice the exercises you will be doing after surgery. Please see exercise information, below, under “Post-Operative Care.”

Grooming
Plan ahead for your last haircut and/or color, as you will have a long period when it may be difficult to get out and get a trim. Likewise, have your legs waxed or shave before surgery if you follow those grooming habits. After surgery, you can tape a razor to a long handled wooden spoon for shaving without breaking precautions. You may not be able to reach your feet for quite a while after surgery. You may want to have a pedicure prior to surgery.

Sleeping
It is very important to sleep well before the surgery. Many people find that the anxiety about their upcoming surgery and increased pain caused by ceasing anti-inflammatories prior to surgery keeps them awake. If you have trouble sleeping you may want to take a sleeping aid like Tylenol PM or Benadryl (diphenhydramine). Tylenol can help with pain control in lieu of NSAID’s. Check with Dr. Swanson or his staff before adding any medications.
A Guide To Your New Total Hip

**Finances**
Take care of all of your finances and paperwork before surgery. You may want to pay all your bills ahead of your surgery. If you don't have the money to send them, put dates on the outside of your envelopes that indicate when they can be mailed. Energy and attention span may be low, and you may not feel like getting back to business for some time. Buy some thank-you cards in advance so that you have them at hand. It's a good idea to have some cash available. That way if you need to ask a neighbor or friend to pick something up for you, you can pay them back right away.

**Dealing with Fear and Anxiety**
It is perfectly normal and appropriate to feel fear and anxiety prior to surgery. Avoid caffeine and stimulants. Make sure you sleep each night prior to surgery even if it requires taking sleeping aids. It is not helpful to lie awake and worry, exhausting your body and mind. Again, check with Dr. Swanson's office prior to adding any medications.

**Clothing**
You will want to avoid clothing that is tight or rubs on the incision and requires extensive bending and pulling to put on or take off. The incision site may be sore at first, so some people buy boxers or very loose underwear that won't irritate the incision. Loose clothes or dresses are easy to put on and essential if you experience post-operative swelling. You can use your reacher to help pull on your clothing, but don't set yourself up for a daily struggle by wearing tight clothing.

You will need to have a pair of comfortable shoes with non-slip soles to wear post-operatively. They should adjust to accommodate any swelling in your foot. You will not be able to tie your shoes and you will tire of needing someone to help you. Regular tennis shoes can be fitted with curly elastic laces to become slip on shoes. Long handled pliers can be used to pull Velcro straps closed, and long handled shoehorns can be useful. Make sure you try the shoes out before you get to the hospital. They need to feel secure, as you will be taking your first steps post-operatively in them. Do not wear heels, slippery soles or loose sandals.

**WHAT TO TAKE TO THE HOSPITAL**

Don't over pack for the hospital. Hospitals request that you don't bring valuables with you, although out-of-town patients may be allowed to deposit items in a safe. You won't be in any condition to watch over your valuables, nor will you be able to carry them along if you need to leave the room. Give your overnight bag to a friend or family member who can carry it to your hospital room after surgery. Popular items to bring to the hospital include:
A Guide To Your New Total Hip

- Phone number of insurance and doctor
- Cell phone or phone card for long distance calls
- Daily medications, vitamins or laxatives, which have been approved by Dr. Swanson (Let the nursing staff know if you are taking any medications in addition to what they are giving you.)
- Basic grooming supplies - brush, comb, toothpaste, toothbrush, robe
- Lip balm for dry lips
- A pillow from home
- Ear plugs and a sleep mask
- Very light reading material
- Comfort Bath wash cloths and No Rinse Shampoo (No water needed)
- Personal music with headset
- Fanny pack to hold essentials and strap to the hospital bed
- Mints and gum
- Insurance card or number
- Socks - grip soles are nice
- Stable shoes for PT and going home
- Loose comfortable clothing for PT and to wear home

POST-OPERATIVE CARE

You may be tired post-operatively and benefit from someone staying with you during the first few days to cook, bring you things, help with TED’S compression stockings, help you shower and shampoo your hair, do laundry, etc. After the first week post-operatively, you may only need someone to come for a short period twice a day, to do little things like help with pets and bring in the mail. Churches and charitable organizations often have volunteers willing to assist people after surgery.

A cleaning person is helpful during the early weeks. The sheets will need to be changed frequently and you will definitely not be capable of cleaning the house. A lawn service may also be helpful as you won’t be able to complete regular yard responsibilities. Make a list ahead of time of all the places that deliver meals and possibly groceries. Some stores will take call-in grocery orders, which they will gather for someone to pick up. This greatly reduces the time required of the person doing your shopping.

Most people clearly state that they preferred to be alone in the early period post-operatively. This often seems unbelievable to loving family and friends who want to dote, and neighbors who feel you crave company. This is not a time to err on the side of being polite. If it is difficult for you to assert yourself with visitors, make a pact with a family member. Employ them to usher people out at your signal, or have them help you excuse yourself to go rest. You may be exhausted post-operatively, and sitting for long periods of
A Guide To Your New Total Hip

time may be painful and unadvisable. Ask your comrade to encourage guests to return in several weeks when you will be feeling much stronger, able to sit for longer periods and ready for some diversion from the monotony.

Most insurance companies will allow you to have in home health care. These nurses and nurse’s aids can assist you with showering and incision care if desired. Taking your first shower can be intimidating. Dr. Swanson routinely discharges patients with home health care nursing and physical therapy.

You will sleep better at night if you haven't spent the whole day in bed. Be sure to have a change of scenery. Get up and move about regularly, reserve bed for naps and times you just cannot get comfortable anywhere else. Get some fresh air on an appropriate chair outdoors if the season allows. You may find you sleep better if you aren't sharing a bed with someone in the early post-operative days. Fear of protecting your leg from someone moving in the night may keep you awake. The person sharing your bed will probably sleep better if they aren’t on guard for your well-being and listening to you rustling about trying to get comfortable. They will also be able to help a lot more if they aren’t worn out themselves from lack of sleep.

PET CARE

Most pet owners report that their pets were a great source of comfort and companionship post-operatively. However, you will want to make arrangements for someone to feed them or purchase a feeder that makes the food continuously available, as you won’t be able to reach bowls on the floor. Likewise, you won’t be able to take them for walks for quite some time. It is helpful to get your pets accustomed to crutches and walkers before surgery. You will not want them bustling around threatening to knock you over in their enthusiasm to see you again upon your return from the hospital. For your first post-operative meeting with your pets you may want to be seated securely in a stable chair with a pillow between your legs to avoid being jostled. It will not be appropriate for your pets to sleep with you post-operatively. You may want to be sure to shut your door at night to keep them out or rent a hospital bed that is higher. Teach them that this bed is off limits. To ensure they are not going to knock you over going down the stairs, stop at the top of the stairs and let them proceed down ahead of you.
RESUMING NORMAL, DAILY ACTIVITIES

Most patients resume normal, active lifestyles after total hip replacement. In fact, activity levels often improve due to absence of the arthritic hip pain and stiffness. Most activities are acceptable after total hip replacement surgery, and can generally be resumed at or before 4-6 weeks after surgery. Start slowly, and then progress as your body and common sense allow. Walking, swimming, cycling, cross-country skiing, golf, doubles tennis, rollerblading, gardening, and dancing are examples of activities that are well tolerated by the artificial hip joint. Working out in a gym is also recommended as long as specific exercises are avoided and certain exercises are done in moderation. (See Appendix B: Post-Op Exercises)

Showering: as soon as the wound has no more drainage (generally 3-5 days after surgery). Let soapy water run over the wound, and blot dry with a towel. DO NOT USE OINTMENTS OR OILS OF ANY KIND UNTIL THE WOUND IS COMPLETELY HEALED (GENERALLY 4 WEEKS OR SO).

Tub bath or Jacuzzi: At 4 weeks if wound is completely dry and healed with absolutely no scab or opening. (Be careful getting in and out of the tub so as not to violate the dislocation precaution.)

Leaving the House: It is perfectly acceptable to leave your house for short walks, or to go on short outings (dinner, visiting neighbors) as soon as you feel comfortable. Remember, your comfort should dictate your activity level. If your hip swells and is painful during or after a particular activity, you have probably overdone it. Be patient; you will be comfortable doing more and more each week.

Driving: Left hip—approximately 2 weeks; right hip—approximately 4 weeks. Be sure that you feel comfortable driving so that you are safe. Of course, if you are taking pain medication you should not be driving. Go out with a friend or spouse the first time, and drive only short distances initially. If you both agree that you are safe, you may continue driving. Be sure to observe the dislocation precautions when getting in and out of the car, and avoid very low car seats initially.

Putting shoe and sock on without assistive device—as soon as your hip mobility allows (in the “figure-4” position or with knee rolled outward.)

Traveling: You can begin taking short trips, either by car or airplane, as early as 2 weeks post-operatively, although waiting 4-6 weeks will be more comfortable for you. Move your ankles up and down frequently, and get up
to walk around every hour or so to prevent blood clots. You may want to book a seat in bulkhead so that you have more leg room.

**Security:** Most total hip replacements will set off the metal detectors at airports, courthouses, etc. Although we used to give everyone ID cards to show the security personnel that you have had a hip replacement, it now makes little difference whether you carry a card or not. Simply inform the security people that you have an artificial hip joint, and let them scan you with the metal detector. That is all that is usually required to pass the security checkpoint. However, you may want to allow yourself an additional 5-10 minutes travel time for this screening.

**Sexual relations:** In general, common sense should be utilized when resuming sexual relations. Some form of sexual intimacy can be resumed as early as a week or two after surgery. However, your comfort and safety are of highest importance. Do not do anything that causes discomfort to the hip or that puts the hip in a position where it could dislocate. At 4-6 weeks post-op, a normal sexual life may be resumed, always keeping the dislocation precaution in mind (i.e. avoid acrobatics, etc.).

**Returning to work:** Most patients return to work 2-6 weeks after surgery depending on the type of work. Patients with sedentary (sitting) jobs can often return to work at least part-time within 1-2 weeks. Those who stand but are not doing manual labor can generally return within 3-4 weeks. Manual laborers should wait 5-6 weeks to return to work. Remember, these are generalizations, so you may be able to return sooner than these guidelines, or you may take slightly longer. Listen to your body when deciding at what point to return to work. You may be required to make some modification to your job description if your job requires repeated heavy lifting throughout the day. Dr. Swanson’s staff will assist you with the paperwork to supply to your employer outlining the appropriate return to work date and any required job modifications.

**Activities that should be avoided** after total hip replacement fall into two categories:

1) those that put excessive stress and wear on the hip, and
2) those that present a significant risk of dislocation.

Activities that cause excessive wear and tear on the hip joint include “impact loading” activities such as jogging, singles tennis, racquetball, basketball, and any activity that involves running, jumping, or repetitive heavy lifting. These activities wear out the hip joint either because of excessive repetitive motion or high "impact loading" (the hard, jolting stress to the hip joint such
as occurs with jumping or running). Think of your new hip joint as a new tire on your car: if you continuously drive too fast, marathon distances, or over rough terrain and bumps, the tire will wear out more quickly than if you drive it sensibly on smooth highways.

Activities that present a significant risk of dislocation include activities where a fall is likely, such as skiing, skating, and horseback riding or activities that require extremes of position, particularly hyper-flexion combined with internal rotation, such as with rock climbing. Another consideration in resuming various activities is your level of experience. If one is an accomplished skier, for example, skiing the green or smooth blue runs may be safe. Likewise, if one is an accomplished horseback rider, riding on safe terrain on a well-trained horse may also be safe. One should use common sense when deciding whether an activity has a significant risk for a fall and possible dislocation. (See Appendix C).

**POST-OPERATIVE APPOINTMENT**

At 4-6 weeks you will have an appointment to see Dr. Swanson or one of his assistants in his office. By that time most patients are getting around independently without any significant discomfort, and almost all are off pain pills. Several things usually happen after the 4-6 week visit:

- You can quit wearing your elastic stockings
- You can discontinue the aspirin and iron pills (unless taking them for other reasons)
- You can discontinue any other blood thinners you may have been put on after surgery unless instructed otherwise by your primary care doctor.
- The primary dislocation precaution (keep your hip rolled slightly outward when bending at the waist or flexing the hip) will be reviewed with you. You should remember this simple precaution for the rest of your life.
- You may begin riding a stationary bike to build muscle strength and loosen up the hip so you can easily put on your shoes and socks, clip your toenails, etc.

After this first post-op visit, Dr. Swanson or one of his staff will see you 3-6 months later depending on how you are doing. If you are doing well, you may not need to return for any further follow-up appointments unless you are having problems. **Because of the number of patients Dr. Swanson cares for, you may not see him at every post-operative visit, particularly if you are doing well.** If you are having any problems, you will see Dr. Swanson; but more often, when things are progressing
A Guide To Your New Total Hip

smoothly, you may see one of Dr. Swanson’s assistants for some of your follow-up visits. Dr. Swanson apologizes for not being able to see you for every post-operative visit; however, this policy minimizes patient wait times while allowing Dr. Swanson to give his attention to patients with serious problems.

Note: Sometimes, due to patient add-ons or other unforeseen events, Dr. Swanson may be running behind schedule. Bring reading material or another diversion to your appointment in case there is a wait. If you are doing well and you are there for a routine post-operative check, you may be seen by one of Dr. Swanson’s assistants; this will allow for a much shorter wait in many cases. However, Dr. Swanson will always see you at your request, although the wait may be a bit longer; and he will always see you if you are having any significant problem with the hip.

ADDITIONAL READING ON WWW.MINITOTALHIP.COM


Discussion Board http://disc.yourwebapps.com/_indices/216603.html

Replacement Bearing Surfaces http://www.minitotalhip.com/hip-information/alternative-bearing-surfaces/


Back to Sports http://www.minitotalhip.com/hip-information/back-to-sports/


Visit the Swanson Orthopedics channel on YouTube to view recovery videos, patient testimonials and live surgery videos.

Visit Todd Swanson Orthopedics on Facebook
A Guide To Your New Total Hip

APPENDIX A: RISKS OF SURGERY

No surgery is without risks. Luckily, complications from total hip replacement are uncommon. Additionally, choosing a surgeon with significant experience in total hip replacement reduces the risk of complications. In short, >95% of patients undergoing total hip replacement obtain a good result with absolutely no problems or complication. Although there is no way that all of the possible complications can be listed here, the most common and/or worrisome complications are as follows:

**Infection:** This occurs in less than 1% of cases. At its worst, it can require removal of the hip prosthesis, implantation of a temporary “spacer,” 6 weeks of intravenous antibiotics, then re-implantation of a new prosthesis 3-6 weeks later. Patients at slightly higher risk of infection include diabetics, obese patients, those with certain types of arthritis including rheumatoid arthritis, patients on steroids, and patients who have had prior surgery or infection in the hip. Special precautions are taken in all total hip patients to minimize the risk of infection.

**Dislocation:** Since use of the “Capsular Noose” technique, dislocation of the artificial hip is unlikely. However, if dislocation were to occur it is most likely during the first 6 weeks after surgery, and you will be taught specific precautions to follow during this period. After 6 weeks, the risk of dislocation goes down significantly. If you have sudden onset of pain in the hip or are unable to bear any weight on the leg you may have dislocated your hip. Call 911 to be brought to the emergency room for an x-ray. Usually, the hip can be put back in place by traction on the leg after an intravenous sedative in the emergency room or anesthetic in the operating room. If your hip dislocates more than 2-3 times, it may require surgery to stabilize the hip.

**Leg Length Discrepancy:** Much care and pre-operative planning goes into ensuring that your post-operative leg lengths are equal. Leg lengths can be adjusted to within ¼ inch in most cases. Most patients will not notice a discrepancy of ¼ inch or less, and it is rare that you would need to use a shoe lift for such a small leg length discrepancy. However, on a rare occasion, and for various reasons, the post-operative leg lengths may be > 1/4 inch different. Usually this is either the result of a fixed obliquity of the pelvis or the need to lengthen the leg with certain anatomy types to tighten the muscles and reduce the risk of a dislocation. We will do everything possible to ensure that your final leg lengths are equal; however, if we have to choose between a leg length discrepancy vs. a dislocating hip, we will usually choose to lengthen the leg a bit in order to minimize the risk of dislocation. Again, this occurs extremely rarely.
A Guide To Your New Total Hip

**Wound Healing Problems:** A few patients, particularly diabetics, patients with circulatory problems, and the obese, may have problems with prolonged wound drainage or healing. Often these problems require no further surgery and heal spontaneously. However, it is occasionally necessary to return to the operating room to clean and close the portion of the wound that is not healing. **Call Dr. Swanson immediately if your wound drains any longer than 4-5 days after surgery.**

**Blood Clots:** Although small, insignificant clots may occur in the veins of the legs, very rarely a severe clot can travel to your lungs and cause serious problems. You will be treated with special preventative measures to avoid this complication. Please let us know if you have a history of previous blood clots in the legs or lungs. **If you develop swelling which does not go down with elevation, call Dr. Swanson’s office immediately.**

**Nerve Injury:** The most common nerve injury after total hip replacement is peroneal nerve palsy or “foot drop.” This unavoidable complication occurs in approximately 1% of cases and consists of inability to raise (dorsiflex) the foot along with numbness on the top of the foot. Although the condition may be permanent, most patients recover partially or completely. If the nerve does not recover fully, you may need to use a light, plastic ankle brace in your shoe permanently to support your foot. The second most common injury is to the femoral nerve, which controls your quadriceps muscle. Usually, this nerve recovers fully, although it may take several months. Studies have shown that nerve injuries often continue to recover for up to 2 years.

**Injury to blood vessels:** Because large blood vessels are located in close proximity to the surgery, there is always a risk of damage to these vessels. However, every precaution will be taken to avoid this complication.

**Fracture:** It is remotely possible to fracture the femur or hip socket with total hip replacement, particularly if you have soft bone. While most fractures will heal with a period of immobilization, others require further surgery to fix the fracture occurs, it may require more extensive surgery to repair the fracture and a period of non-weight-bearing after surgery (often 6 weeks or so).

**Loosening/Wear:** No artificial joint replacement will last forever. Although we expect your total hip replacement to last 10-20 years, this varies depending on body weight, activity level, implant type, and surgical technique. If your hip replacement fails, it can usually be revised to a new hip replacement.
**A Guide To Your New Total Hip**

**Anesthetic and Medical Complications:** It is impossible to list all of the potential, but unlikely, complications of any surgery. The anesthesiologist will go over many of these with you. Bear in mind that, although the list of possible complications is extremely long, the likelihood of any of these events occurring is also extremely small. In short, more than 95% of patients undergoing total hip replacement obtain a good result with absolutely no problems or complication.

**Death:** The most severe complication of any surgical procedure is death. However, the risk of dying during a surgical procedure is extremely remote unless you have very severe medical problems such as end-stage heart or lung problems. If this is the case, we or your medical doctors will discuss the risks with you to allow you to make an informed decision about surgery.
You can begin the figure-4 exercise several days after surgery. Start by placing the ankle of the operated leg on the opposite ankle. Slowly slide your ankle up the leg, only go as far as you can comfortably go to feel a stretch. Hold this position as long as you can to stretch out your operated leg. You may want to start by wrapping a towel around your ankle and pulling the ankle slowly up the opposite leg. Eventually, you will be able to get your ankle onto your knee. From this position, you will be able to put on your shoes and do maintenance on your feet. You can also stretch your operated leg by placing your feet together, pressing your knees apart and leaning slightly forward with a straight back.
POST-OP EXERCISES
Several days after your surgery you can begin strengthening your leg muscles with several simple exercises. Stand with one hand resting on a chair, counter or dresser for support. Lift your operated leg to the front, side and back and hold in that position for approximately 15 seconds. When lifting to the front, be sure to include both a straight and bent leg. This exercise will aid in improving strength while climbing stairs. You will want to repeat these exercises while standing on your operated leg and lifting and holding your un-operated leg in all positions. You will probably find this to be much harder since a great deal of muscle strength is required to stabilize the standing leg. Be patient with yourself and start out gently. Do these exercises several times a day.
After your six-week post-operative check up, you can begin riding a stationary bike. To begin, position the seat so your leg is fully extended in the downward cycle. As you get stronger and more flexible, begin to gradually lower the seat until the highpoint of the knee is level with the hip. As with all hip flexion activities, try to keep the knees slightly apart during stationary biking.
### APPENDIX C: SPORTS RECOMMENDATIONS

<table>
<thead>
<tr>
<th>RECOMMENDED / ALLOWED SPORTS</th>
<th>NOT RECOMMENDED</th>
<th>NO CONCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>high-impact aerobics</td>
<td>fencing</td>
<td></td>
</tr>
<tr>
<td>baseball /softball</td>
<td>snowboarding</td>
<td></td>
</tr>
<tr>
<td>football</td>
<td></td>
<td></td>
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<tr>
<td>gymnastics</td>
<td></td>
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<tr>
<td>handball</td>
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<tr>
<td>hockey</td>
<td></td>
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<tr>
<td>jogging</td>
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<tr>
<td>lacrosse</td>
<td></td>
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<tr>
<td>racquetball</td>
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<tr>
<td>squash</td>
<td></td>
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</tr>
<tr>
<td>soccer</td>
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<tr>
<td>singles tennis</td>
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</tr>
<tr>
<td>volleyball</td>
<td></td>
<td></td>
</tr>
<tr>
<td>snow boarding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>martial arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>golf</td>
<td></td>
<td></td>
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<tr>
<td>ballroom dancing</td>
<td></td>
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<tr>
<td>jazz dancing</td>
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<tr>
<td>square dancing</td>
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<tr>
<td>swimming</td>
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<tr>
<td>walking</td>
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<tr>
<td>speed walking</td>
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<tr>
<td>hiking</td>
<td></td>
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<tr>
<td>treadmill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>low-impact aerobics</td>
<td></td>
<td></td>
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<tr>
<td>stair climber</td>
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<tr>
<td>elliptical machine</td>
<td></td>
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<tr>
<td>stationary skiing</td>
<td></td>
<td></td>
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<tr>
<td>weight machines</td>
<td></td>
<td></td>
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<tr>
<td>pilates</td>
<td></td>
<td></td>
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<tr>
<td>road cycling</td>
<td></td>
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<tr>
<td>stationary bicycle</td>
<td></td>
<td></td>
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<tr>
<td>doubles tennis</td>
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<tr>
<td>bowling</td>
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<tr>
<td>canoeing</td>
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<tr>
<td>rowing</td>
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<tr>
<td>horseshoes</td>
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<tr>
<td>shooting</td>
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<td></td>
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<tr>
<td>croquet</td>
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<tr>
<td>horseback riding (*)</td>
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<tr>
<td>downhill skiing (*)</td>
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<tr>
<td>cross-country skiing</td>
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<tr>
<td>ice skating (*)</td>
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<tr>
<td>roller skating (*)</td>
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<td></td>
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<tr>
<td>rock climbing (*)</td>
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<td></td>
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<tr>
<td>weight lifting (*)</td>
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</tbody>
</table>

*RECOMMENDED ONLY FOR EXPERIENCED PATIENTS*

*The recommendation was reached among the members of The Hip Society as to the following sports and activities:*
For the first two years after joint replacement, all patients are required to take antibiotics for all dental procedures including:

- All dental extractions
- All periodontal procedures
- Dental implant placement and reimplantation of teeth that were knocked out
- Some root canal work
- Initial placement of orthodontic bands (not brackets)
- Certain specialized local anesthetic injections
- Regular dental cleanings (if bleeding is anticipated)

You should have preventive antibiotics before all dental procedures for the rest of your life if:

- You’ve had previous infections in your artificial joint.
- You have an inflammatory type of arthritis (i.e. rheumatoid arthritis, lupus), Type I diabetes, or hemophilia.
- You have a suppressed immune system (i.e. HIV) or are malnourished.
- History of prior or present malignancy.

**If you have NONE of the above risk factors, you will need prophylactic antibiotics prior to any dental procedure ONLY for the first 2 years after your joint replacement**

The bacteria commonly found in the mouth may travel through the bloodstream and settle in your artificial joint. This increases your risk of contracting an infection. Ask your dentist about preventive antibiotics for all dental procedures with a high risk of bleeding or producing high levels of bacteria in your blood. Your dentist and your orthopedic surgeon, working together, will develop an appropriate course of treatment for you.

**One of these preventive antibiotics should be prescribed to you:**
If you are not allergic to penicillin: 2 grams of Amoxicillin, Cephalexin, or Cephradine (orally) OR 2 grams of Ampicillin OR 1 gram of Cefazolin (intramuscularly or intravenously) one hour before the procedure. If you are allergic to penicillin: 600 mg of clindamycin (orally or intravenously) 1 hour prior to the dental procedure.
# A Guide To Your New Total Hip

## APPENDIX E: BLOOD THINNERS

### Supplements—Stop these 14 days prior to surgery

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Supplement</th>
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<th>Supplement</th>
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<tbody>
<tr>
<td>ALOE VERA</td>
<td>BILBERRY</td>
<td>CAYENNE</td>
<td>DANSHEN</td>
</tr>
<tr>
<td>DONG QUAI</td>
<td>ECHINACEA</td>
<td>EPHEDRA (MA HUANG)</td>
<td>FEWERFEW</td>
</tr>
<tr>
<td>FISH OIL</td>
<td>GARLIC</td>
<td>GINGER</td>
<td>GINKO BILOBA</td>
</tr>
<tr>
<td>GOLDENSEAL</td>
<td>HAWTHORNE</td>
<td>LICORICE ROOT</td>
<td>MELATONIN</td>
</tr>
<tr>
<td>OMEGA 3 FATTY ACIDS</td>
<td>RED CLOVER</td>
<td>SENNA</td>
<td>ST. JOHN’S WORT</td>
</tr>
<tr>
<td>VALERIAN</td>
<td>VITAMIN E</td>
<td>VITAMIN K</td>
<td>YOHIMBE</td>
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</table>

### Anti-inflammatories—Stop these 10 days prior to surgery

<table>
<thead>
<tr>
<th>Inflammtory</th>
<th>Inflammtory</th>
<th>Inflammtory</th>
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<tbody>
<tr>
<td>IBUPROFEN</td>
<td>BRAND NAMES—</td>
<td>MOTRIN, TABPROFEN</td>
<td>ADVIL</td>
</tr>
<tr>
<td>NAPROXEN</td>
<td>BRAND NAMES—</td>
<td>ALEVE, NAPROSYN,</td>
<td>NAPRLAN, TREVIMET</td>
</tr>
<tr>
<td>COMBUNOX</td>
<td>BRAND NAME—</td>
<td>VICOPROFEN</td>
<td></td>
</tr>
<tr>
<td>ASPIRIN</td>
<td>BRAND NAMES—</td>
<td>BUFFERIN, BAYER (81 mg aspirin allowed)</td>
<td></td>
</tr>
<tr>
<td>INDOMETHACIN</td>
<td>BRAND NAMES—</td>
<td>INDOCIN, INDO-LEMMON, INDOMETHAGAN</td>
<td></td>
</tr>
<tr>
<td>DICLOFENAC</td>
<td>BRAND NAME—</td>
<td>CATAFLAM, VOLTAREN</td>
<td></td>
</tr>
<tr>
<td>ARTHROTEC</td>
<td>(MISOPROSTOL WITH DICLOFENAC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MELOXICAM</td>
<td>BRAND NAME—</td>
<td>MOBIC</td>
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</table>

### Prescription Blood Thinners—Stop these as instructed by prescribing physician

<table>
<thead>
<tr>
<th>Blood Thinner</th>
<th>Blood Thinner</th>
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<tbody>
<tr>
<td>WARFARIN—GENERIC</td>
<td>BRAND NAMES—</td>
<td>COUMADIN, JANTOVEN</td>
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<tr>
<td>CLOPIDOGREL—GENERIC</td>
<td>BRAND NAME—</td>
<td>PLAVIX</td>
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<tr>
<td>DABIGATRAN—GENERIC</td>
<td>BRAND NAME—</td>
<td>PRADAXA</td>
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<tr>
<td>PRASUGREL—GENERIC</td>
<td>BRAND NAME—</td>
<td>EFFIENT</td>
<td></td>
</tr>
<tr>
<td>DIPYRIDAMOLE—GENERIC</td>
<td>BRAND NAME—</td>
<td>PERSANTINE</td>
<td></td>
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</table>
MORE INFORMATION ABOUT YOUR SURGEON
DR. TODD V. SWANSON

Dr. Swanson is one of the country’s leading Total Joint Replacement surgeons. Since 1997 he has performed over 3,000 minimally invasive total hip procedures. He has been instrumental in teaching this new technique to other surgeons, and reports his own research demonstrating the procedure’s benefits to surgeons around the world.

Dr. Swanson graduated Summa Cum Laude from Augustana College in Sioux Falls, South Dakota, and attended Washington University School of Medicine, in St. Louis, Missouri. He completed his orthopedic training at the University of California, Davis, in Sacramento and specialized in total joint replacements of the hip, knee, and shoulder during a fellowship at the Metropolitan/Mount Sinai Medical Center in Minneapolis, Minnesota.

Since finishing his fellowship, Dr. Swanson has practiced with Desert Orthopaedic Center in Las Vegas, Nevada. Board certified and a Fellow of the American Academy of Orthopedic Surgeons, Dr. Swanson focuses his practice on arthritic conditions of the hip and knee. Dr. Swanson serves as a consultant for orthopedic implant companies, has designed several joint replacement prostheses, holds several patents relating to joint replacement, and directs the Desert Orthopaedic Research Foundation, a not-for-profit research organization working to benefit patients with orthopedic problems (see last page of handout). Several research studies and orthopedic implant design innovations have been developed through the work of Dr. Swanson and his research. Additionally, he directs the Desert Orthopaedic Adult Reconstructive Fellowship program, a post residency training program that prepares orthopedic surgery graduates for a career in total joint replacement surgery.

Complete Curriculum Vitae:

Recent Publications and Presentation
http://www.minitotalknee.com/knee-information/publications-and-presentations/
Dr. Swanson and his partners founded the Desert Orthopaedic Research Foundation (DORF) in the early 1990’s to help fund research projects undertaken by the group. Since then, Dr. Swanson has assumed responsibility for DORF and oversees most of the research conducted by DORF.

DORF has been instrumental in several research projects which have benefited patients over the years. Dr. Swanson’s work on the Mini-incision Total Hip procedure was initially funded by DORF in 1997, and since then Dr. Swanson has performed more than 3,000 of these procedures, published the favorable results of his first 1,000 cases (Swanson, J Arthroplasty, 2005), and continues to teach the procedure to other surgeons around the world and refine the procedure with the development of new instruments and surgical modifications.

Similarly, the Mini-incision Total Knee and Unicompartmental Knee procedures were developed in part through DORF. Additional projects are underway, including new techniques to reduce complications of total hip and knee replacements and methods to speed recovery after these procedures.

However, these research projects cannot be done without funding for equipment and personnel. Much of the past research by DORF has been funded by Dr. Swanson personally. Today, further funding is needed to complete several projects, some which are already underway, including:

1. Validation of the reduced dislocation rate using the “Capsular Noose” technique developed for Mini-incision Total Hip Replacements. (Dislocations are rare with this technique)
2. Development of better instrumentation to balance knee ligaments after Mini-incision Total Knee Replacement (in order to reduce long-term pain and sensations of knee instability).
3. Development of better methods of measurement and instrumentation to ensure accurate equalization of leg lengths after Mini-incision Total Hip Replacement.
4. Determination of the accuracy of digital radiographs vs. standard radiographs for pre-operative planning for total hip replacement.
There is still much work to be done to improve upon procedures that have already seen significant improvements over the past 10 years. However, they can only be done with funding for equipment, supplies, and staff. This is where we need your help. If you have benefited from any of these procedures, or if you know someone who has, please consider giving so that we can continue improving the quality of life for those with hip or knee arthritis.

**Functions of DORF:**

**Research**

**Development of new procedures or surgical techniques**
It takes time, effort, and resources to take an idea from a mere concept to something that can actually be used in surgery. DORF has facilitated development of many concepts into reality.

**Evaluate results of new and established procedures or devices**
New devices and surgical techniques developed through DORF, as well as devices and techniques developed by independent researchers, need to be tested and validated to determine if they are truly effective or superior to other devices and techniques. Some researcher or company “CLAIMS” are marketed as “FACT” to the general public. DORF has evaluated many of these claims to determine whether they are accurate or not, in addition to critically evaluating the results of procedures and devices developed through DORF.

**Determine causes of favorable or poor results**
Certain procedures succeed or fail because of unknown influences by the surgeon, hospital, patient, and environment. In many cases, we don’t know why certain procedures work better than others. Usually those factors that influence results of procedures can be determined through research studies. This information, applied in the operating room, ensures the best surgical results possible.
A Guide To Your New Total Hip

**Design**

**Implants**
Although actual design of implants and instruments is not a function of DORF, development and testing of concepts which may be applicable to the design of these devices is carried out by DORF. Research to determine which factors contribute to the success (or failure) of various orthopedic devices and implants allow modifications to be made in order to improve upon the success of those devices.

**Instruments**
The success of a surgical procedure often largely lies in the efficacy of the instruments used to perform the procedure. DORF has helped improve upon and develop novel instrumentation for joint replacement procedures since its inception.

**Surgical techniques**
DORF has been instrumental in seeing several surgical procedures developed, tested, and brought into mainstream orthopedics. Among them, the minimally invasive total hip replacement procedure, minimally invasive total knee replacement, and the capsular noose procedure to prevent dislocation after total hip replacement.

**Education**

**Surgeon Instruction**
After development of a surgical technique, it can only benefit patients on a larger scale if it is taught to other surgeons. DORF has helped spread knowledge gained through the foundation and disseminate it to other surgeons throughout the world.

**Public/Patients**
Information must also be disseminated to patients in order to help them make informed decisions. This is done through educational websites such as www.SwansonHipandKnee.com, www.minitotalhip.com and www.minitotalknee.com.

**Publications, Technique Manuals, and Book Chapters**
Once information has been gained through research, it can be disseminated and memorialized in publications in professional journals, technique manuals, and book chapters. Several have been published over the years through the assistance of DORF.
A Guide To Your New Total Hip

Some of these functions may seem more important to you than others. You may have even benefited yourself through past projects funded by DORF. All aspects are important to continue to improve upon the care we are able to offer our patients. Most orthopedic surgeons do not participate in research because of the huge time and financial commitment. For years, Dr. Swanson has largely funded these research projects personally, but it is now time to take these projects to the next level.

In order to do this, we need your help. Any donation you can make to DORF will be put to good use to continue the high quality of research and development that it has pursued over the past 15 years. And every dollar donated is tax-deductible to you as a charitable donation through its 501(c)3 status. Please give what you can so that DORF can continue to help people like yourself. Whether it’s $25.00 or $2,500.00, every dollar helps.

DORF Structure:

DORF Structure
Desert Orthopaedic Research Foundation is a tax exempt 501(c)3 organization under the Internal Revenue Code. It is organized purely for the purpose of pursuing orthopedic research carried on in the public interest, and none of its funds inure to any private shareholder or individual. It does not participate in any political or legislative activities.

Donations to DORF are tax deductible to you as a charitable deduction on Schedule A of Form 1040 of your personal tax return.

How to Contribute

If you believe as we do that this is a worthy cause, or if you have benefited yourself from any of DORF’s prior research, please make a contribution today. DORF and future patients like yourself will benefit from any contribution, whether it be $25.00, $250.00, or $2,500.00. Please send check or money order to:

DORF
2800 E. Desert Inn Rd., #100
Las Vegas, NV  89121
Or give online at http://www.firstgiving.com/DORF