PURPOSE

To better prepare you and your family for your upcoming total joint surgery through education on both the pre-operative and post-operative course of treatment.

CAMPBELL CLINIC MISSION STATEMENT

To provide unsurpassed patient care while being recognized as a leader in teaching and research in the profession of orthopaedic surgery. As one of the world's premier practicing and teaching orthopaedic centers, we dedicate ourselves completely to the advancement of orthopaedic techniques in order to better serve our patients.

DISCLAIMER

 This is to be used as a resource and a guide for patients. Always follow specific instructions from your treating surgeon.

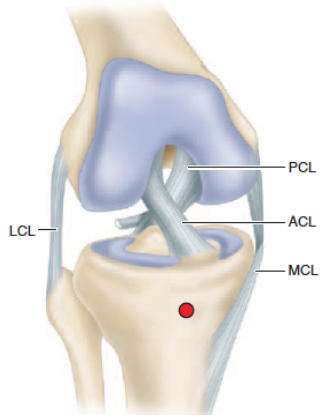
TABLE OF CONTENTS

ANATOMY OF THE KNEE

- Largest joint in the body

Components of the Healthy Knee

- Femur (thigh bone)
- Tibia (shin bone)
- Patella (knee cap)
- Articular cartilage (cushion)
    - Healthy cartilage allows smooth, pain-free movements, such as knee flexion and extension.
- Ligaments (ACL, PCL, MCL, LCL)



- Movements
    - Surfaces of the femur and tibia are smooth (covered with cartilage) to allow them to roll, rotate, and glide over each other.
    - Healthy cartilage allows smooth, pain-free movements, such as knee flexion and extension.

The Problem Knee

- Bone surfaces become rough.
- Cartilage wears away.
- When the surfaces are worn and become rough, the movements of the bones are no longer smooth and cause pain, inflammation, and stiffness.

Common Causes of Knee Pain

Arthritis: Most common cause of disability/dysfunction

1. Osteoarthritis (OA)

- Usually occurs in people older than 50 years of age.
- Often, there is a family history of arthritis.
- Cartilage that cushions the bones softens and wears away. This results in "bone-on-bone."
- PAINFUL

2. Rheumatoid arthritis (RA)

- Autoimmune disease
- Synovial membrane becomes inflamed and thick and produces too much synovial fluid. The end result is damage to the articular cartilage.
- Pain and stiffness

3. Traumatic arthritis

- Due to a serious knee injury that may damage cartilage.
- Knee fracture
- Severe ligament tears

Other Indications for a Total Knee Replacement

- Osteonecrosis (bone death)
- Tumor
- Failed non-operative treatment
- Other surgical procedures[1]

Do you have?

- Severe pain that limits your daily activities
  - Walking, standing, stairs, sit to stand, etc.
- Constant pain and stiffness, even at rest
- Swelling
- Knee deformity
- Pain unresolved or not improved with conservative treatment

If so...

- You are a candidate for a total joint replacement surgery
- Total knee arthroplasty (TKA)
- Partial knee replacement

Who is NOT a candidate?

- Morbid obesity
- Current infection
- Non-functional extensor mechanism (insufficient stability to support replacement/straighten the knee)
- Previous arthrodesis (knee fusion)
- Uncontrolled peripheral vascular disease
- Skin problems (open sores/wound, infection, etc.)
- Neuropathic joint
- Other contraindications noted by your MD

TOTAL KNEE REPLACEMENT

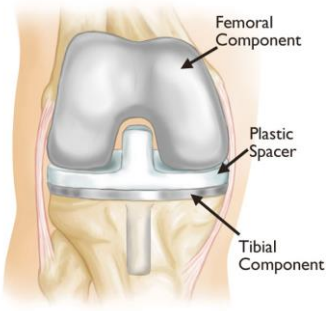
- One of the most successful orthopaedic surgeries performed.
- Diseased part or parts of the knee joint are removed and replaced with artificial parts.
- Complications occur in less than *2%* of the patients.
- Performed in US since 1960s.
- According to the American Academy of Orthopedic Surgeons (AAOS), knee replacement is on the rise, with more than 581,000 performed each year.
- Surgery provides a substantial improvement in pain, functional status, and overall quality of life in 90% of patients.

Goals of TKA

1. Pain relief
2. Improved knee range of motion (ROM)
3. Improved knee strength
4. Standing and walking that are not limited by your knee
5. Improved appearance of a deformed joint
6. Improved function

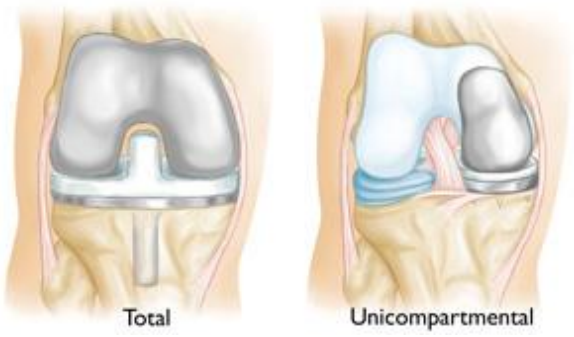
Components of a New Knee

- Femoral component
- Polyethylene plastic surface
- Stemmed tibial plate
- Knee cap (plastic[2])



PARTIAL KNEE REPLACEMENT

- For patients with limited knee arthritis
- Replaces the medial side (inside) of the knee to decrease pain and prevent total knee replacement.
- 75% less bone and cartilage are removed.
- Less painful
- More rapid recovery
- More natural range of motion
- Your surgeon will decide if you are a candidate.



Orthopaedic Evaluation

1. Detailed **medical history**

2. **Full evaluation** from your general practitioner and any other specialist key to your overall health

3**. Physical examination**

- Knee mobility
- Strength
- Alignment
- Leg length

4. **X-rays** or other tests may be required by MD

- MRI
- Bone density
- Bone scan
- Blood tests

- Your surgeon will choose the implants and surgical procedure *BEST* suited to your condition. He/she will review all components, benefits, and risks for your condition.

Risks/Complications of TKA

- ***Reminder:*** ALL surgical procedures have risks.
- If complications occur, MOST are successfully treated. Complications may prolong or limit full recovery.
- Serious complications occur in less than *2%* of patients.
- Chronic illness may increase the risk of complications.

*** This is not a complete list of complications and risks. Please take notes and discuss with your family, friends, primary physician, and most important, your orthopaedic surgeon.

Risks

- Pain
- Blood clots (DVT)
- Fracture
- Anesthesia reaction
- Infection
- Loosening of the joint
- Heart attack
- Stroke (CVA)
- Death
- Urinary tract infection
- Leg length discrepancy (LLD)
- Limited range of motion
- Paralysis or damage to nerves or blood vessels in and around the knee

Pain

- *Temporary* pain after surgery is common.
- Some patients receive a spinal block (single injection).
- Pain management (medications and other treatments)
    - Keeps you more comfortable at home
    - Improves early mobility
    - Allows you to begin physical therapy more quickly and improves progress
- Take medications as directed (discuss with your MD).
- Get on a schedule to take pain medications with a meal 30 minutes to one hour before PT.
- May also use **ice** and elevation for 10 to 15 minutes to prevent swelling and decrease pain
    - ***Remember****:* swelling and bruising on the leg and numbness around the incision are all to be expected
- Pain usually decreases over the first few weeks after surgery and gradually disappears after a few months

Blood Clot (Deep Vein Thrombosis or DVT)

- Most common complication after knee replacement surgery
- Occurs in the leg veins
- Can dislodge and cause a blocked artery in the lungs called a pulmonary embolism (PE)

Anesthesia Reaction

- *It is important to tell both the surgeon and the anesthesiologist if you have ever had a reaction to anesthesia or pain medication in the past or any other known allergies to decrease your risk of reaction*.
- Newer and safer drugs, along with advances in monitoring equipment, makes anesthesia safer than ever before.
- 1 in 3,000 people have a reaction.
- Risks are related to your general medical condition and function of your heart, lungs, and kidneys.
- You are *required* to have medical clearance from a primary care physician before surgery.

Infection

- Most feared complication with any surgery
- Ratio is 1:250 to 1:500 (CDC)
- May occur in the wound or deep around the new joint
- Antibiotics are given before and after surgery to reduce the risk of infection.
- ***Most common cause:***
    - Bacteria that enters the bloodstream during dental procedures, urinary tract infection, or skin infections
    - The bacteria can lodge around the implant, leading to infection.
- **Minor infections:**
    - Treated with antibiotics or local wound care.
- **Major (deep) infections**
    - Rarely occur
    - May require more surgery or removal of the artificial joint

Loosening of the New Joint

- Loosening of the new joint within the bone is rare.
- May cause increased pain

- **Causes of loosening**
  - Pivoting sports (singles racquetball/tennis)
  - Running
  - Being overweight
  - Heavy labor
  - Fracture
  - Wearing away of the bone around the prosthesis (osteolysis).

- **Prevention of loosening**
  - Follow set instructions prescribed by your MD/PT.
  - Prevent falls
  - Manage a healthy weight prescribed by MD/PT.
  - Follow American Academy of Orthopaedic Surgery (AAOS) guidelines for safe exercises/recreational activities found on page 40.

Leg Length Discrepancy (LLD)

- Do **NOT** worry about this
- Surgeon will take this into account
    - *Remember:* the arthritis before surgery made the surgical leg shorter and the surgery is restoring a more normal joint height.
- May occur or seem worse after surgery
    - Cannot truly assess until full strength and mobility have been restored.
- May require a shoe lift after surgery.
    - Sometimes required to make the knee stable.

Revision Surgery

- *TKA is a successful surgery, especially for pain relief and return to function, BUT the wear and tear over time may cause changes that require further surgery, such as a revision.*
- Most artificial joints last 15 to 20 years.
- Because more people are having joint replacements at a younger age, revision surgery is becoming more common.

- **Surgeons consider revision if**:
    - Medication and lifestyle changes do not relieve pain and disability.
    - X-rays show bone loss, wearing of the artificial joint surfaces, or prosthesis loosening.

- **Other reasons for a revision**
    - Fracture or dislocation of artificial parts or infection

Pre-operative Check-list

☐ **Complete physical examination by a primary care physician**

☐ **Tests prior to surgery**

- Blood and urine
- Electrocardiogram (EKG)
- Chest x-ray

☐ **Preparing skin/leg**

- No infections or irritation
- No chronic swelling

☐ **Medications**

- Take a list of your current medications, vitamins, and supplements to MD appointment to be advised if you need to discontinue any of them before surgery.

☐ **Dental evaluation**

- Incidence of infection is low, but bacteria can enter blood stream and cause infection; therefore, it is recommended that significant dental disease be treated and dental work be completed before surgery.

☐ **Follow MD specific pre-operative guidelines**

- Appropriate body mass index (BMI)
- Controlled diabetes
- Smoking cessation

☐ **Complete Campbell Clinic pre-hab program**

What do I take to the hospital?

- ☐ Insurance cards, proper identification, and other pertinent paperwork
- ☐ Walker or other assistive device fitted by your PT

  Write your name on each item.
- ☐ Pants/pajama pants/shorts that are easy to put on.
- ☐ Rubber-soled shoes with a back (NO slide-on slippers).
- ☐ A list of all medications.
- ☐ Personal hygiene items (underwear, toothbrush, brush, etc.)
- ☐ If applicable, glasses, hearing aid, CPAP.
- ☐ Cell phone, charger, change for vending machine for those assisting you.
- ☐ Any other item noted on your surgical paperwork from MD.
- ☐ Do not take any valuables (e.g., jewelry, cash, etc.)
- ☐ Do NOT take any of your own medication unless directed by your MD.

Notes:_____

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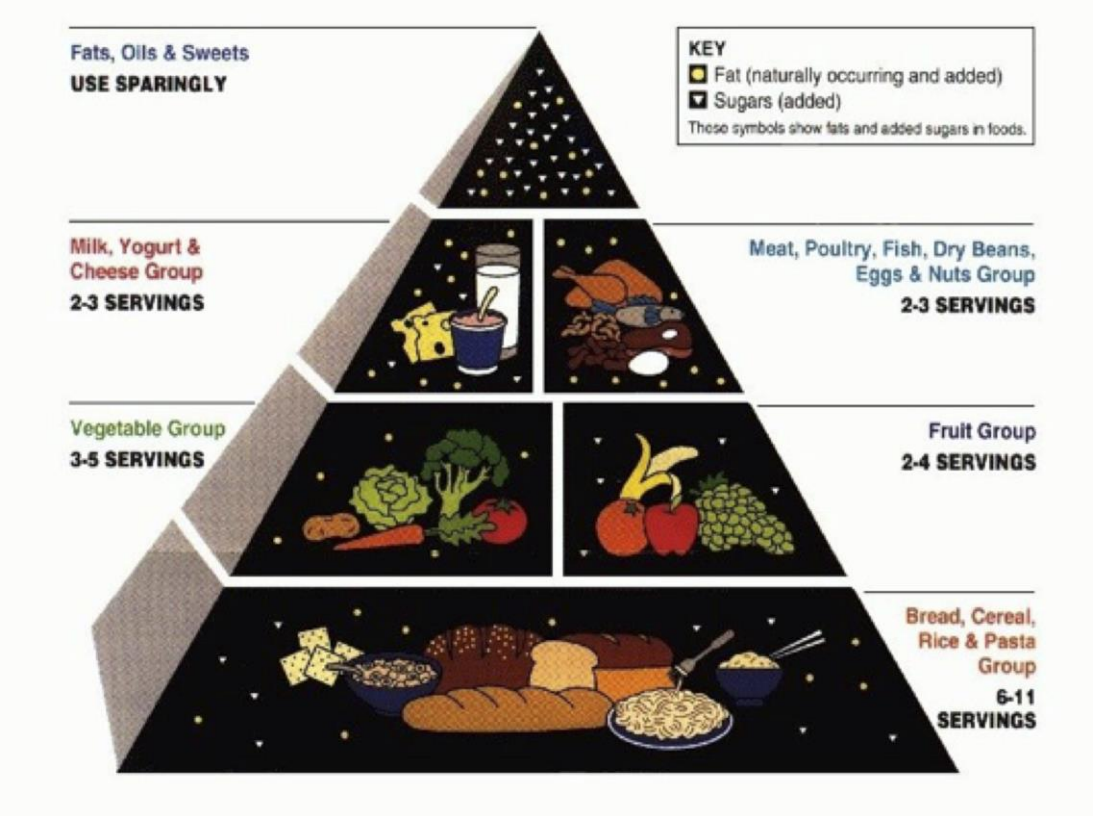
Pre-operative Social Planning

- **If you live alone, make arrangements prior to surgery.**
- You must make advance arrangements to have someone assist you.
- You will need a driver for 2 to 6 weeks depending, on the operative leg and your functional status.
- After surgery, we **do NOT** recommend a stay in an extended-care facility.
  - Only under certain circumstances will the MD prescribe home health (HH), skilled nursing (SNF) or inpatient rehabilitation.

- ***Reminder**:* Each patient is different. Discuss individual needs with MD and PT.
- You will be able to walk with a walker soon after surgery, but you may need assistance for several weeks with tasks such as driving, shopping, cooking, bathing, laundry, etc.

- **Nutritional Considerations**
    - You will not always feel hungry, but we recommend eating frequent small meals following the American Heart Association guidelines (see reference).
    - Try to eat a balanced diet that includes iron rich foods and plenty of fluids
        - If you have a medical condition that requires a special diet, follow your MD's guidelines.
    - To prevent upset stomach, try adding a carbohydrate (toast, crackers, bagel, etc.) when taking pain medication.



Pre-operative Home Planning

Suggested Home Modifications

We suggest you make modifications before surgery to ease navigation of your home after surgery.

- Move loose rugs, cords, or furniture to allow you to move freely and safely through the home with a walker.
- Temporary living space or a bedroom on the first floor is recommended by some physicians.
- Add handrails to stairs and in shower if needed for safety.
- Add night lights for safety, especially in the bathroom.
- Place phone next to bed and chair.
- Add non-skid mats in the bathroom (tub/shower/floor).
- Use a stable chair with arms and firm seat cushion to allow ease in sit to stand transition.

- *Optional* items to discuss with PT
    - Toilet chair/riser.
    - Shower/tub chair.
    - More often used with the hip, sometimes necessary after TKA: reacher, sock aid, long-handle sponge, elastic shoelaces, and long-handle shoehorn.

The night before surgery, follow all guidelines provided by your MD.

THE OPERATION

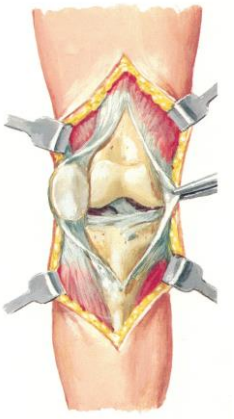
- **Remember**: any total joint surgery is considered MAJOR surgery.
- **Our goal** is to ensure that you are well informed and well prepared.
    - If you have any questions, please ask MD or PT.
- The procedure takes approximately 1.5-3 hours.

Before surgery

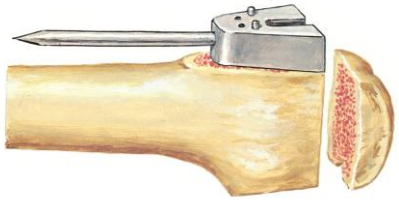
- You will be admitted to the hospital or, if you are a candidate, you will have surgery at the Campbell Clinic Outpatient Surgery Center.
- Surgery preparations
    - Number of measurements are taken
    - Surgery leg is identified.
    - Meeting with anesthesiologist

THE PROCEDURE

- An incision is made on the front of the knee, and the soft tissues and muscles are retracted to expose the joint.



- Damaged bone and cartilage are removed and prepared for new components. Tibial and femoral components are inserted.



- Plastic plate is fitted over tibial component. Knee cap may be resurfaced with plastic polyethylene or replaced with disc shaped component.[4]

- Surgeon ensures good range of motion and stability (goal: 0º extension, ≥ 120º flexion).

- Incision is closed with MD-preferred method. Options for surgical closure include staples, stitches, steri-strips, skin glue, and/or a waperproof surgical bandage.

- Taken to recovery

RECOVERY

- Will stay in recovery 1-2 hours for monitoring.
- You will wake up with compression boots to increase blood flow and minimize swelling.
- Optional: knee immobilizer
- Surgeon preference: drain to remove blood/fluid.
- A physical therapist will assist you in walking with the assistive device either in recovery or once you get to your room.
- You will be discharged the SAME day of surgery *or*, if the MD finds it necessary, you will stay ONE night in the hospital.

POSTOPERATIVE REHABILITATION

- Begin as soon as you awake from surgery - **ankle pumps.**
- To avoid lung congestion, you should breathe deeply and cough frequently to clear your lungs.
- Your exercises will be based on your individual needs and will be provided by your PT.
- **Please refer to the handouts for your prescribed exercises.**

**** Early range of motion is the key to your rehab success****

Campbell Clinic PHYSICAL THERAPY

Total Knee After Surgery Exercises

Early Post-operative Exercises

Total Knee Replacement

- These exercises will improve your range of motion, aid in preventing blood clots, and restore early mobility in preparation for physical therapy.

- Our goal is to speed your post-operative recovery.

- Only perform the checked exercises provided by your physical therapist (PT).

- Remember to change positions frequently. Refer to pre-hab book for safe sitting, sleeping, transitioning, etc. Use the appropriate assistive device to prevent falls.

- Pain, swelling, bruising and soreness in your leg are expected after surgery. Remember pain is temporary, range of motion is forever.

- Work hard day one to bend and straighten the knee.

**please follow MD and PT specific guidelines. Not every patient performs all exercises noted on this handout. PT will highlight specific exercises during prehab and post-operatively*

Ankle Pumps

Repeat: 10 times

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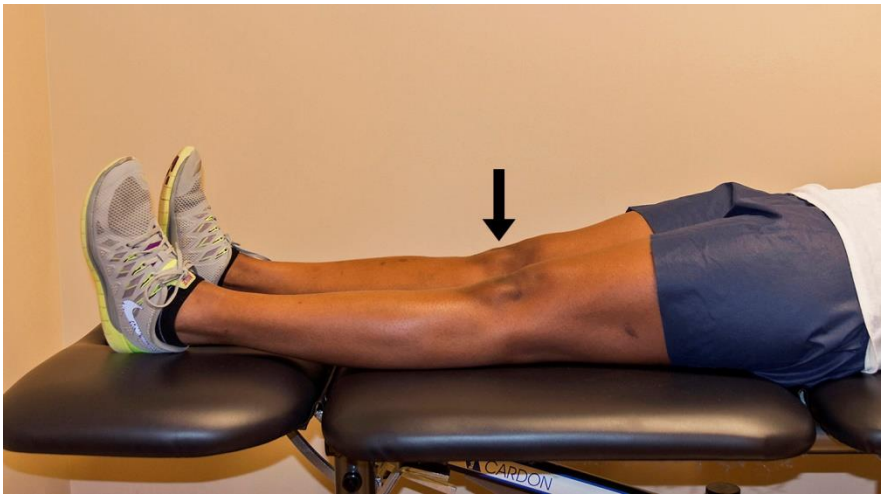
Perform throughout the day to increase circulation and prevent blood clots.

1. Lie flat on your back with legs straight and toes pointed towards the ceiling.
2. Move feet up and down, as if you are pushing a gas pedal.

Quad Sets



Hold: 5 seconds

Repeat: 10 times

Sets per session: 3

Sessions per day: 2-3

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1. Lie flat on your back with legs straight and toes pointed towards the ceiling.
2. Push your knees down, tightening thighs.

Knee Flexion

Option 1: Towel heel slides

Repeat: 10 times

Sets per session: 2-3

Sessions per day: 3-4

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*helpful hint: the more you bend early on, the better!

1. Sit with your legs straight. Back supported if needed. Loop a towel or a belt around the involved foot.
2. Use your arms to assist in bending the knee until a stretch is felt. Hold this stretch and then continue to bend further.
3. Return to start and repeat.

Option 2: Active Assistive Knee Flexion

Hold: 10-15 seconds

Repeat: 10 times

Sets per session: 2-3

Sessions per day: 3-4

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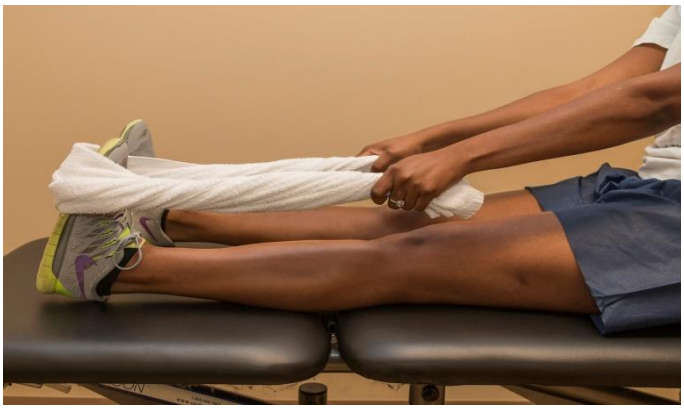
1. Sit in a chair or off the edge of the bed with both knees bent.
2. Use uninvolved leg to assist with bending the involved leg.

Dorsiflexion Towel Stretch



Hold: 20-30 seconds

Repeat: 3 times

Sets per session: 2-3

Sessions per day: 3

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1. Sit with your legs straight. Back supported if necessary.

2. Loop a towel or a belt around the involved foot.

3. Gently pull on the towel until a stretch is felt in the calf. Remember to keep heel in contact with the surface.

Knee Extension Stretch

Hold: 10-15 minutes

Repeat: 1

Sessions per day: 3-4

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*this may cause discomfort, but continue to stretch

1. Lying on your back or sitting with legs straight. Place a towel roll under involved ankle.

2. Try to straighten your knee. Allow knee to relax down to the surface.

(Another option would be to prop leg up on a footstool, kitchen chair, etc.)

Straight Leg Raise

Repeat: 10 times

Sets per session: 2-3

Sessions per day: 1-2

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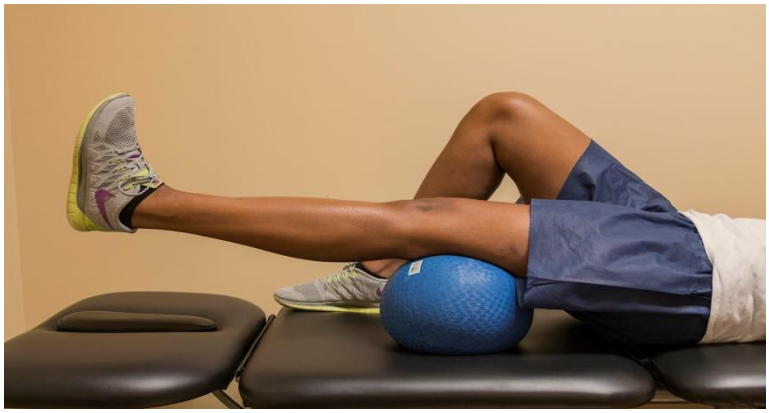
1. Lying flat on your back with involved leg straight and opposite leg bent.
2. Tighten thigh muscles and lift straight leg four inches and lower slowly.

   *you may not be able to lift your leg early on, but please try a few times each day to regain the muscle contraction as soon as possible.

Short Arc Quad (Terminal Knee Extension)



Repeat: 10 times

Sets per session: 2-3

Sessions per day: 1

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1. Lie flat on your back with your uninvolved leg bent.

2. Take a ball or pillow and place it under the knee of the involved leg.

3. Let the leg relax over the ball or pillow.

4. Slowly straighten the knee by tightening the muscles on the top of the thigh, while keeping the back of the knee on the ball or pillow.

Knee Extension (Long Arc Quad)

Repeat: 10 times

Sets per session: 2-3

Sessions per day: 1

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1. Sit on the edge of a bed, mat, or chair.
2. Slowly straighten the knee then lower slowly.

Heel Raises

Repeat: 10 times

Sets per session: 2-3

Sessions per day: 1

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1. Hold onto a stable object (kitchen counter or walker). Point your toes forward.
2. Rise up on the balls of your feet and back down to the ground.

Ice

Time: 10-15 minutes

Sessions per day: at least 3x per day early on

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1. **Elevate leg lengthwise on pillows.**
2. **Place Ice pack around entire knee, keeping knee straight.**
   - **Place pillowcase between ice and skin**
3. **Do NOT ice longer than 15 minutes.**

Sleeping Positions

Preferred Position: Use a pillow lengthwise to keep surgical knee straight. Do not allow knee to bend over pillows.

If you prefer to sleep on your side, please keep surgical knee as straight as possible. You may place a pillow between the knees.

Optional Post-Operative Care

Immobilizer

- *MD specific. Not every patient will have one. If you have an immobilizer:*
  - Use it until you regain sensation from the epidural/spinal block or can complete a straight leg raise.
  - Use it while walking for stability and to keep leg straight while sleeping.
  - Continue to use it until PT or MD releases you from immobilizer.
  - Remove the immobilizer when sitting to bend your knee at least 3 or 4 times a day.

Constant Passive Motion Machine (CPM)

- *MD specific*
- Used for revision surgery or for patients with arthrofibrosis.
  - If you have a CPM, use it for a few hours, come out of the machine and stretch, move around/rest, and then use CPM again. Do not complete the recommended 6 hours per day in same sitting - break it up into 1-2 hour sessions.
  - Make sure motion is coming from the knee and do not substitute hip motion.
  - Try to increase range of motion each use.
  - Do not sleep while using the machine.

Signs of DVT (blood clot)

- Calf or thigh tenderness/soreness
- Redness, swelling and increased warmth around the lower leg that does not decrease with rest and elevation

Signs of Pulmonary Embolism (PE)

- Difficulty breathing/shortness of breath
- Coughing with pain in the chest

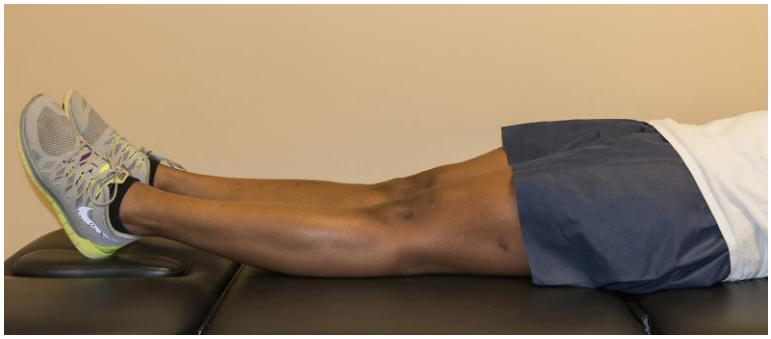
HOW DO I PREVENT A BLOOD CLOT

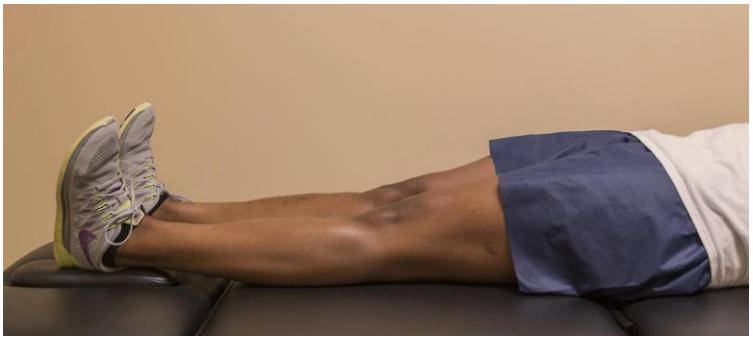
1. Perform ankle pumps and other leg exercises that increase blood flow. Pump your ankles up and down, as if you are pushing a gas pedal. Complete 20-30 repetitions and repeat every 15-30 minutes throughout the day, especially while immobilized.

2. Periodic elevation of the legs.

3. Medication to thin blood (anti-coagulants) as prescribed by your MD.
   Aspirin, Heparin or Lovenox shots are most commonly used.

4. Compression boots (plastic boots that inflate with air to compress leg muscles).
   You will wake up in the recovery room with these on your feet and will use them until you are walking





SIGNS OF INFECTION

- Fever over 101º Fahrenheit (measured with a thermometer)
- Severe joint pain or increased joint pain
- Increased drainage
- Incision draining for more than 7 days
- Increased redness
- Odor
- Increased warmth around incision

Many of these symptoms are common with normal recovery, but you should notify MD if you experience any of them.

INFECTION PREVENTION

- Please refer to discharge instructions on your specific surgical dressing.
- Keep incision clean and dry.
- If you have a waterproof dressing, you may shower and pat dry.
- If you do NOT have a waterproof dressing, you may remove the bandage to shower per MD orders. Usually, you can shower within 48 hours. After shower, ensure incision is dry (pat dry with a clean towel) and replace light gauze dressing.
- If excessive drainage is soaking through gauze type dressing, notify MD assistant and change surgical dressing.

ACTIVITIES OF DAILY LIVING (ADLs)

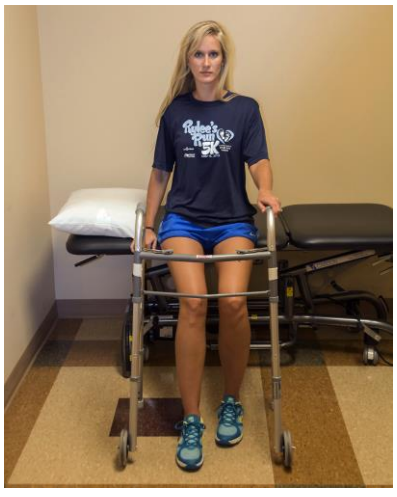
After pre-hab, practice all ADLs in your own environment before surgery

How do I get out of bed?

- NEVER try to get out of bed the first time without assistance from the hospital staff.
- Always wear non-skid socks or a pair of rubber-soled shoes with a back.
- ***Remember*:** Your leg will feel heavy and difficult to lift and may be bruised and swollen.
- If you need a stool to get out of bed, please let your PT know.

1. Scoot to the edge of the bed.
2. Use your arms to push up into a sitting position.

3. Use the uninvolved leg and arms to bring your surgical leg off the side of the bed.
4. Place the involved leg slightly in front of the uninvolved leg.



5. Push up from the bed with your arms. DO NOT pull on the walker.
6. Stand for 30 to 60 seconds to get your balance.
7. You are now ready to walk.

How do I get into bed?

1. Get close to the head of the bed.
2. Back up until you feel the bed against the back of your legs.
3. Place the involved leg slightly in front of the uninvolved leg.
4. Reach down for the bed with your arms and lower yourself slowly to the edge.
5. Turn your body with the help of your arms supporting the involved leg until you are straight in the bed.

    You may use your uninvolved leg to assist the involved leg into bed.

How do I get into a chair or onto the toilet?

1. Back up until you feel the chair or toilet against your legs.
2. Slide your involved leg forward and reach back with your opposite hand and then your other hand to slowly lower yourself to the chair/toilet.
    - Use the arms on the chair to assist.
    - Use safety bars in the bathroom, if you have them.

How do I get off of the chair or toilet?

1. Slide to the edge until both feet are on the floor.
2. Slide the involved leg forward.
3. Push yourself up with your arms and uninvolved leg. (Allow surgical leg to assist as much as possible.)
    - Reminder: One arm can be on the chair/toilet and one on the walker OR place both arms on the chair/toilet to push and then reach one hand at time to the walker.
    - DO NOT pull up on the walker. It can roll out from under you.





How do I walk with a walker?

1. Standing in the walker, roll the walker forward.
2. Step with the involved leg first.
3. Then step with the uninvolved leg.
4. Stay close to the walker, stand up straight and walk as normal as possible.
    - Do NOT step past the front of the walker.

The walker is the most stable base and decreases the risk of falls. Your PT will get you off the walker as soon as you have sufficient strength and balance.

Quick PT summary: roll walker → surgery leg → uninvolved leg, trying to walk heel-to-toe.

How do I negotiate a curb or a single step with a walker?

(Have someone assist you, if needed)

Down

1. Roll walker close to the curb.

2. Place walker down first.

3. Step down with the involved leg.

4. Follow with the uninvolved leg.

Up

***Option 1*:**

1. Back up until you feel the curb on the back of your heels.

2. With your hands on the walker, step up with the uninvolved leg.

3. Follow with the involved leg.

4. Slowly bring the walker up.

5. Take a few small steps backwards.
6. When you begin to walk, turn towards your uninvolved side to avoid twisting.

Up

Option 2:

- Acceptable only if you feel safe.
- Do not let the walker roll out from under you.
- Have someone assist you.

1. Face the curb.
2. Roll the walker up until it hits the curb.
3. Place the walker onto the curb.
4. With your arms pushing down into the walker, place your uninvolved leg onto the curb.
5. Bring the involved leg up.

Quick PT summary: Take your time. “Step up with your good leg ➔ down with your bad leg.”

How do I negotiate stairs?

Sideways: handrail on involved side

- Requires assistant to carry walker

Up

1. Turn sideways and face the handrail. Hold handrail with both hands.
2. Push through the handrail, taking weight off your surgery leg. Step up with uninvolved leg.
3. Follow with the involved leg. Take your time.
4. Have assistant carry the walker to the top of the stairs and open it for you.

Down

1. Turn sideways and face the handrail. Place both hands on the handrail.
2. Step down with the involved leg.
3. Push through the handrail to take weight off the involved leg before stepping down with the uninvolved leg.
4. Have assistant carry the walker and unfold it at the bottom of the stairs.

Rolling walker and handrail

- It is best to have someone standing by for assistance and safety.

Up

1. Fold the walker
2. Hold onto the handrail with the walker in the opposite hand.
3. Step up with your uninvolved leg while pushing through the walker and pulling up with the handrail.

4. Bring the walker and involved leg up at the same time.

Down

1. Hold onto the handrail with one hand and hold walker in the other hand.
2. Place walker down first.
3. Follow with involved leg, then uninvolved leg.
4. Someone may assist you in stabilizing the walker as you descend the stairs.

Rolling walker without handrail

- Not preferred, but sometimes there is no choice.
- **MUST** have an assistant for safety.
- Please notify your PT if you have no handrail, and he or she will train you on the safest way for your home.

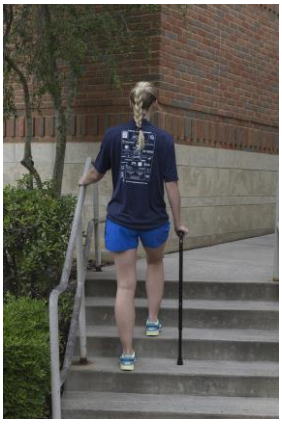
How do I negotiate stairs with a cane?

- When advised by PT.
- Use handrail, if available.

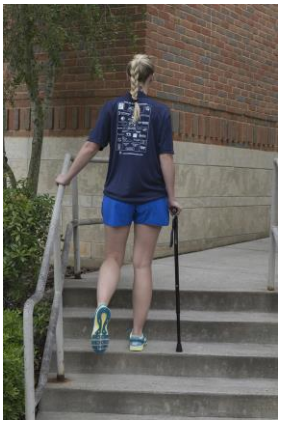
Up

1. Place cane in hand opposite of surgery leg.

2. Advance uninvolved leg first.



3. Follow with involved leg and cane together.



Down

1. Cane goes down first.
2. Advance involved leg down.
3. Follow with uninvolved leg

<u>How do I get into a walk-in shower or step-over tub?</u>

- You will not be able to soak in a bathtub until your MD allows.

In/Out

1. Walk up to the shower with the walker.
2. Turn sideways and hold onto the wall, bar, or walker.
3. Sidestep uninvolved leg into the shower.
4. Use hands if needed to lift involved leg into the shower.
    - *Helpful hint:* If balance is unstable, have a chair outside the bathtub to assist with transfers.

What if I have a bath chair?

(Optional)

- Recommended if you are unstable on your feet.
- Ask PT based on your bathroom layout, tub style, and type of bath chair.

How do I get dressed?

Pants

On

1. Seated on the edge of the bed or in a chair, place the involved leg into pant leg first, then you may lean forward to help pull up your pants.
2. Use of a reacher is optional; discuss this with your PT.

Off

1. Remove the uninvolved leg first.
2. You may bend forward to reach pants from the floor.

Shoes/Socks

1. Sit on the edge of the bed or chair.
2. Bend forward to reach your foot.
3. *Helpful hint:* You may place your foot up on a small stool in front of you or have someone assist you until you regain flexibility.
4. Sock aid is optional; discuss with your PT

How do I get in and out of the car?

- *Push the seat all the way back and recline, if possible.*

In

1. With your walker in front of you, back up to the car until you feel the car seat on the back of your legs.

2. Reach back with one hand at a time for the car seat and slowly lower yourself to a sitting position.

3. Place your legs into the car one at a time.
    - *Remember:* you may have to use your hands or uninvolved leg to lift involved leg into the car.

Out

1. Lift your legs out one at a time so you are facing out of the car.

2. Scoot to the edge of the seat until your feet are flat on the pavement with the involved leg slightly in front.

3. Driver or assistant will place your walker in front of you.

4. Push yourself up with your arms onto the uninvolved leg and place your hands on the walker one at a time. (Allow surgical leg to assist as much as possible.)



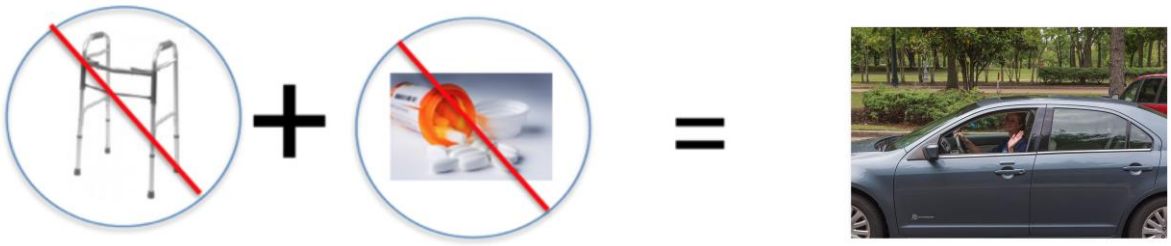
Other helpful hints

- Avoid carrying objects.
    - Attach a bag/basket to walker or wear a fanny pack/cross-body purse.
    - Slide objects along the counter in the kitchen or bathroom.
- Wear rubber-soled shoes with a back to prevent slipping; elastic shoelaces or Velcro® closings may be helpful
- It is ok to perform a small squat to retrieve object from the floor. (use of a reacher is optional)

When can I drive?

- When cleared by your MD.
- When your knee bends sufficiently and your reaction time has returned to normal.
- No pain medications and no walker.
- Ranges between 2-6 weeks.
- Dependent on the knee replaced. Patients with left knee replacements tend to drive sooner than those with right knee replacements.
- In the early weeks, please do not deprive yourself of pain medication just so you can drive.
- Pain control is important to exercising efficiently in physical therapy.

Rule: no walker and no pain medication



When can I return to normal ADLs?

- Patient-dependent, but it can take up to 3-6 months to return to all ADLs.

To enhance recovery time:

- Know what to expect before and after surgery.
- Work hard as soon as you wake up from surgery.
- Work hard at home and with physical therapy.

PHYSICAL THERAPY

How long will I need physical therapy?

- Typically, 4-8 weeks, 2-3 times a week, as prescribed by MD/PT or until all goals are met and you have returned to a safe level of independent function.
- When discharged from formal physical therapy, continue your home program so that you can resume all normal activities by 3-6 months after surgery.

- **Progress depends on**
    1. Patient's age
    2. Motivation
    3. Fitness level before surgery
    4. Pain level
    5. Compliance with home program

PROLONGING THE LIFE OF YOUR KNEE

Exercise after Recovery

- To prevent wear and tear on the prosthesis, follow the recommendations from the American Academy of Orthopaedic Surgeons (AAOS).
- Avoid high impact sports like running and jumping and certain activities for the rest of your life to prolong the life of your knee.

Recommended low-impact activities

- Recreational walking
- Swimming
- Elliptical
- Cycling
- Dancing
- Rowing
- Golf, typically can start putting and chipping at 6 weeks
- Return to gym and lighter weights as prescribed by PT

Activities to avoid

- **Avoid falls. High-impact sports, such as running and jumping.**
- Exercise with extremes of motion (e.g., yoga)
- Vigorous walking or hiking
- Water or snow skiing
- Repetitive lifting over 50 pounds or as noted by MD
- Repetitive aerobic stair-climbing (step aerobics or running stairs)
- Singles tennis

- Continue finalized PT home exercise program to maintain range of motion, strength, and balance to prevent falls. Please see surgeon periodically for follow-up examination and x-ray.

- Notify your dentist that you have a total knee replacement. You may be asked to take an antibiotic before dental procedures.

REMINDER TO PATIENTS

Total joint replacement is a major surgery. You may go home the same day or may stay only one night in the hospital, but you must respect the healing process. Soft-tissue healing occurs in the first 6 weeks after surgery. Bone healing takes longer and depends on multiple factors. Therefore, it is important to follow the recommendations of your surgeon and physical therapist. Focus on early range of motion for bending and straightening your knee. Remember, pain is temporary and range of motion is forever!

TAKE ACTION NOW

After completing the Campbell Clinic pre-hab program, you will schedule your postoperative Physical Therapy evaluation for **2** or **3** days after surgery.

MD _____ **MD assistant**_____

Date of surgery_____

Location _____ **Arrival time** _____

PT evaluation location _____ **Time** _____

Questions/Notes:

_____

_____

_____

Medication list

_____

_____

_____

To-do list

_____

_____

_____

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