

# READ THIS BEFORE CONTINUING

*Welcome to an important moment  
in your recovery journey.*

Facing joint surgery is not only a physical matter. Often, uncertainty weighs the most: how the procedure will go, how long the pain will last, whether recovery will be complete, and whether you will return to moving as before.

When searching for information, it's easy to find a lot of material, but it is rarely organized in a clear and practical way. Some explanations are too technical, others superficial, and some even contradictory, creating more confusion than reassurance.

***This book was created to offer clarity.***

Inside, you will find a guided path, from preparation before surgery to the more advanced stages of recovery. Practical guidance, exercises, rehabilitation principles, and nutritional advice will help you understand what to do and how to do it in a simple way.

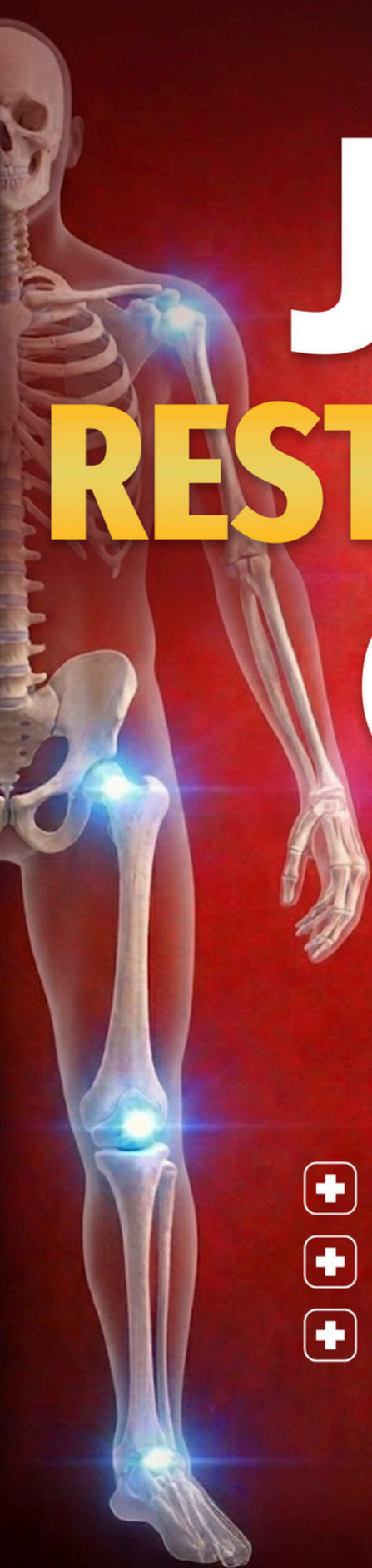
During your reading, you will also be able to access additional practical resources designed to help you better organize your recovery and simplify everyday decisions.

If you would like to explore specific topics further, such as exercises or nutrition, feel free to contact us and receive support:

***[info@infoeditorialbooks.com](mailto:info@infoeditorialbooks.com)***

Thank you for choosing to invest time in your recovery.

***Enjoy the book.***



# JOINT RESTORATION GUIDE

**From Surgery  
to Strength**

- + Pre & Post Surgery Exercise Program**
- + Recovery Journal**
- + Post-Operative Nutrition Plan**

MICHAEL R. THOMPSON

# **JOINT RESTORATION GUIDE**

Joint Replacement and Reconstruction:  
What to Expect Before Surgery,  
During Recovery and  
After Healing

***Michael R. Thompson***

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# Your Free Recovery Bonuses

*Practical resources to simplify your recovery, starting right away.*

## What you'll get:

- Step-by-step meal plan before and after surgery
- Guidance to reduce stress around what to eat
- A clear, ready-to-use grocery checklist
- Simple tips to support healing

Download your bonuses by  
clicking the blue button below



## Additional Guide (Not Always Available)

In some cases, in addition to the bonuses, you may also get access to a guide designed to help manage pain and inflammation over time, especially for those living with *osteoarthritis* or *rheumatoid arthritis*.

This guide, called ***Arthritis Relief Guide***, is reserved only for those who choose to go deeper.

***Click the blue button to unlock all available materials***

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## CHAPTER 1

# Major joint surgeries

When a joint wears down or tears beyond what rest and medication can fix, surgery becomes an option worth considering. The decision to operate is never simple. It requires understanding what the surgery actually does, what to realistically expect, and whether the benefits outweigh the risks and recovery burden for your particular situation.

This chapter walks through the major joint surgeries that adults over forty commonly face. The focus is on replacement and reconstruction procedures, the interventions that remove damaged tissue and either implant a prosthetic joint or rebuild the joint's structure. These are not minor procedures, but they are among the most studied and refined operations in medicine. Millions of Americans have had them.

The goal here is to give you enough clarity to ask smart questions, understand what your surgeon is proposing, and know what your life might look like six months and two years after surgery. This is not a substitute for a detailed conversation with your surgeon, but it is a foundation.

Joint surgery becomes relevant when pain, stiffness, or instability significantly limits what you can do. A person might struggle to walk a few blocks, climb stairs, or get in and out of a car. Another might have a shoulder that catches or gives way. The underlying causes vary.

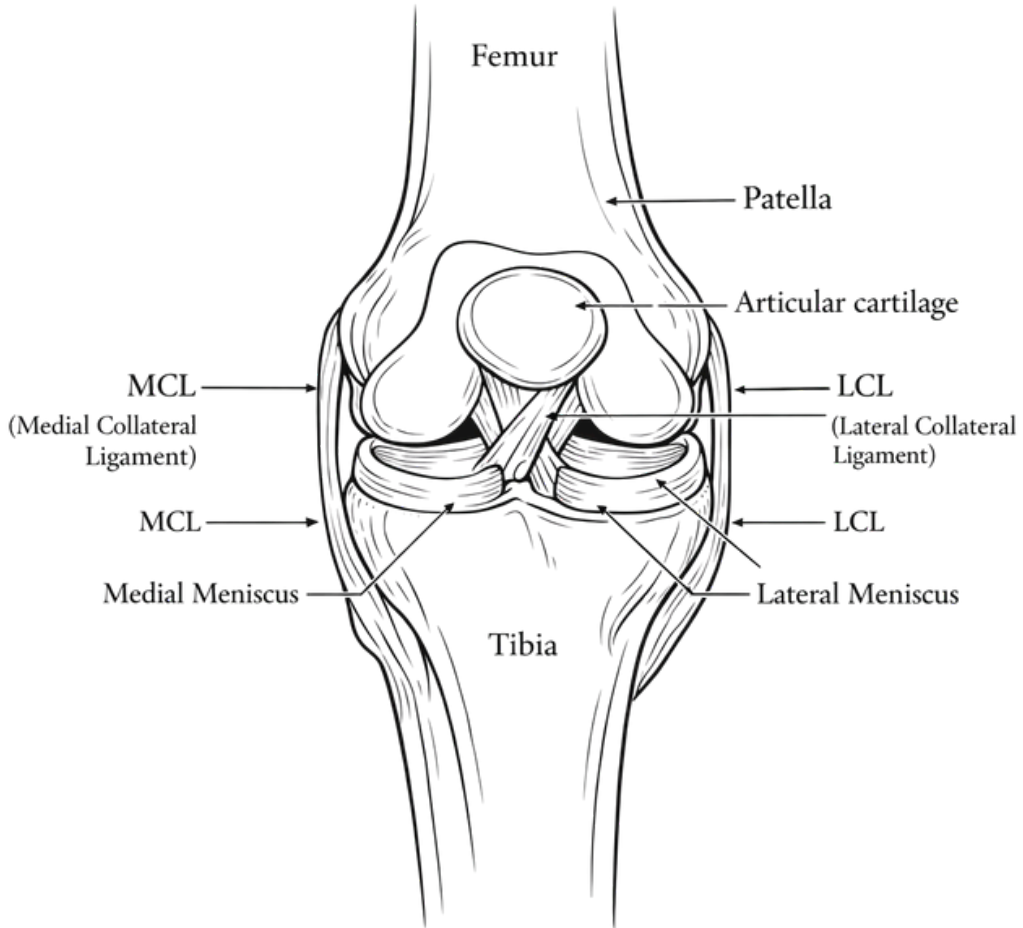
**Osteoarthritis**—the wear-and-tear kind—is the most common reason people over forty seek joint surgery. Rheumatoid arthritis, a disease where the immune system attacks joint tissue, drives surgery in some. So do old injuries that never healed properly, bone death from loss of blood supply, and rotator cuff damage that has cascaded into shoulder arthritis.

The decision to operate rests on a few basic questions. Is the pain or loss of function severe enough to justify surgery and recovery? Have nonoperative options—physical therapy, injections, medication, activity modification—been tried and fallen short? Is the patient healthy enough to tolerate surgery and engage in rehabilitation? Does the person understand what the surgery can and cannot do?

Candidates for joint surgery are generally people with significant symptoms that interfere with daily life or with activities that truly matter to them. Age alone, however, is not a limitation. A healthy seventy-five-year-old may be a better candidate than a fifty-year-old with several health problems. What really matters is overall health, bone quality, realistic expectations, and the willingness to commit to the recovery process.

The surgeries described in this chapter fall into two main categories. Replacement surgeries, or arthroplasties, remove the damaged joint surfaces and substitute them with artificial components made of metal, plastic, or ceramic. Reconstruction surgeries repair or rebuild the joint's supporting structures—tendons, ligaments, cartilage, or bone—without necessarily removing the entire joint. Both can relieve pain and restore function, but they work differently and suit different situations.

# Total Knee Arthroplasty



The knee is a hinge joint. It bends and straightens, but when the cartilage that covers the ends of the femur and tibia wears away, bone begins to rub against bone. The result is pain, swelling, stiffness, and over time difficulty walking, climbing stairs, or sitting comfortably.

**Total knee arthroplasty, or TKA**, addresses this by removing the damaged cartilage and bone from the ends of the thighbone and shinbone, and capping them with metal and plastic components. During the procedure, the surgeon accesses the knee joint through a small opening at the front of the knee. The damaged surfaces of the joint are carefully removed and replaced with components designed to restore the knee's natural movement. These components are securely fixed to the bone so the joint can move smoothly. Between the metal parts, a durable plastic insert acts like cartilage, allowing the surfaces to glide smoothly without friction.

Candidates for TKA (total knee arthroplasty) are often people with advanced osteoarthritis affecting the entire knee joint, or with rheumatoid arthritis that has severely damaged the knee. Symptoms that lead to surgery include pain while walking, especially on stairs or slopes, swelling that does not improve with rest, stiffness that limits daily activities, and sometimes a feeling that the knee is unstable.

The basic idea of the procedure is simple: remove the worn joint surfaces, implant artificial components, and restore the knee's ability to move without pain. The surgery usually takes one to two hours. Some people return home the same day, while others stay in the hospital overnight. Pain is managed with regional anesthesia and pain medications.

Walking often begins within a few hours after surgery, initially with the help of crutches or a walker. In general, people return to walking without support within two to four weeks. Driving and returning to desk work are usually possible after four to six weeks, while more physically demanding activities may require up to two or three months.

The main benefit is pain relief, with significant improvement reported in most cases. Mobility improves, climbing stairs becomes easier, and walking distances tend to increase. The knee usually feels more stable and swelling often decreases.

Complications are uncommon, but it is helpful to be aware of them. Infections and blood clots are rare, and the risk is reduced through preventive measures and early movement. In some cases, knee stiffness may occur, especially if physical therapy is not followed consistently. Nerve or blood vessel injuries are very rare, and over time the implant may wear down, although modern prostheses typically function well for many years.

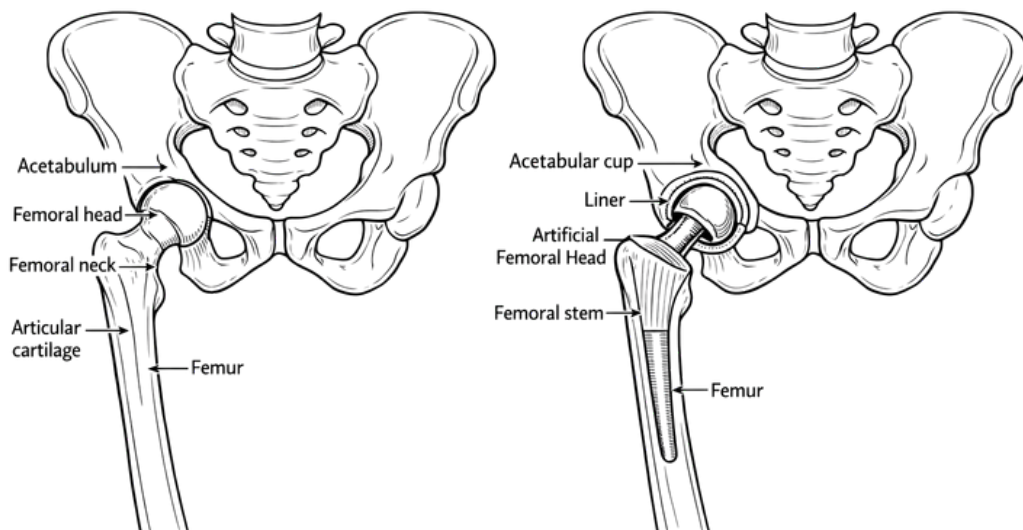
Implants typically last fifteen to twenty years or longer. Studies show that about 80–90% of knee replacements are still functioning well after fifteen years. Some may last less, while others can last thirty years or more. When an implant no longer functions properly, a revision surgery can be performed, meaning the worn prosthesis is replaced with a new one.

It is also worth mentioning partial knee replacement, or unicompartmental arthroplasty. If arthritis affects only one part of the knee — for example the inner side — a smaller implant can be used, preserving more of the natural joint. This option can be appealing for younger and more active people. Recovery is often faster, and the knee may feel more natural in movement. The downside is that arthritis may progress in other parts of the knee, which could make a total replacement necessary in the future. In addition, partial replacements tend to have higher revision rates than total replacements. The choice between partial and total replacement depends on the extent of arthritis, the alignment of the leg, and the person's age and activity level.

Another option for younger patients with arthritis in only one compartment and knee misalignment — where the knee angles inward or outward — is osteotomy.

In this procedure, the femur or tibia is cut and realigned to shift weight away from the damaged part of the joint. This preserves the natural joint and can delay or even avoid the need for a joint replacement. Recovery is longer, and the procedure is less common today than it once was, but for the right patient it can extend the life of the natural knee by many years.

## Total Hip Arthroplasty



The hip is a ball-and-socket joint: the ball is the head of the femur, while the socket is part of the pelvis. When the cartilage wears away, pain can radiate to the groin, buttock, or thigh. Walking becomes more difficult, and everyday actions such as getting in and out of a car, putting on shoes, or sleeping comfortably can become challenging.

Total hip arthroplasty (THA) replaces the damaged parts of the joint with artificial components. The surgeon accesses the hip from the front, side, or back, depending on the patient's anatomy and the technique used. The head of the femur is removed and replaced with a metal stem inserted into the thighbone, with a metal or ceramic ball attached to it. The socket is prepared and fitted with a metal cup. Inside the cup, a plastic, ceramic, or metal liner is placed to allow smooth joint movement.

People who may benefit from this procedure often have advanced osteoarthritis, rheumatoid arthritis, or avascular necrosis, a condition in which the bone loses its normal blood supply. Symptoms include groin or hip pain, difficulty walking, limping, and in some cases pain that can disturb sleep.

The procedure is most commonly performed in people between fifty and eighty years old, but it may also be recommended for younger individuals when symptoms are significant. Some conditions, such as active infections or serious health problems, may make surgery inadvisable.

The surgery usually takes one to two hours. In some cases, people return home the same day, while others stay in the hospital overnight. Pain is managed with a combination of regional anesthesia, which numbs the hip and leg, and pain medications.

Walking with crutches or a walker begins soon after surgery. Over the following weeks, people gradually return to walking without support. Driving is usually possible after four to six weeks, and desk work or light activities can often resume during the same period. More physically demanding activities may require two to three months.

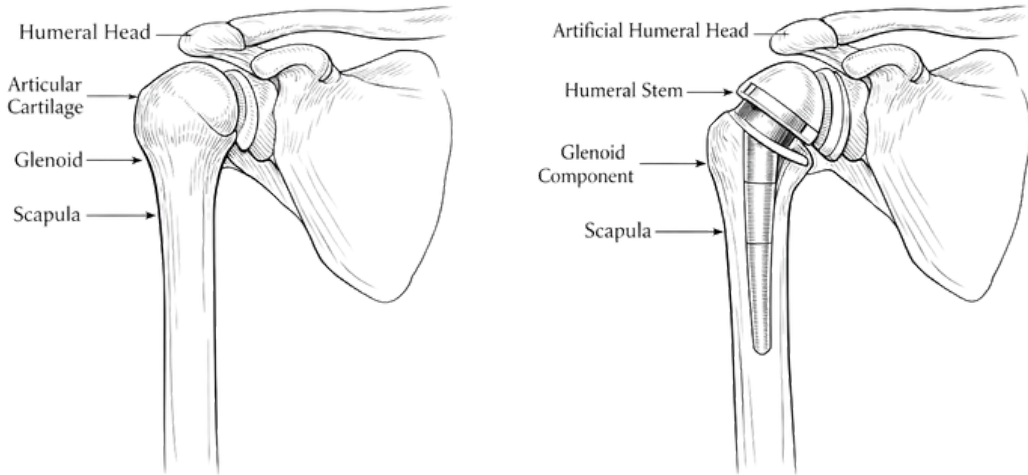
The benefits are similar to those of knee replacement: pain relief, improved mobility, and restored function. Walking becomes easier, distances increase, and everyday activities—such as getting in and out of a car, putting on shoes, or sleeping more comfortably—often become easier again. In most cases, people experience significant improvement.

Complications are uncommon, but it is helpful to be aware of them. Infections are rare, and blood clots may occur mainly during the first weeks, although the risk is reduced with preventive measures and early movement. In some cases, a dislocation may occur, meaning the ball comes out of the socket, especially during the first months. For this reason, certain movements are usually avoided in the early weeks. Nerve or blood vessel injuries are very rare. Occasionally, there may be a small difference in leg length, which can be corrected with a shoe lift if needed. Over time, the implant may wear down, although most modern prostheses function well for many years.

Implants often last fifteen to twenty years or longer. When a prosthesis wears out, it can be replaced with another operation called revision surgery, although this procedure is more complex than the first. Another option, in selected cases, is hip resurfacing. In this procedure, the head of the femur is not removed but covered with a metal cap that creates a new joint surface. This preserves more bone and may be appealing for younger, active individuals. Recovery is similar to that of a total hip replacement.

However, metal-on-metal joints have raised some concerns because small amounts of metal may enter the bloodstream. For this reason, the procedure is offered only to carefully selected patients. It is generally more suitable for younger men with strong bones and no kidney problems, while for women and older individuals it is usually not the preferred option.

# Total Shoulder Arthroplasty



The shoulder is the most mobile joint in the body, but for this reason it is also less stable than the hip or knee. Shoulder arthritis is less common, but when it occurs it can cause pain during movements such as reaching, lifting the arm, or sleeping on the affected side.

Shoulder replacement can be performed in two main forms, anatomic or reverse. In an anatomic shoulder replacement, the surgeon replaces the damaged head of the upper arm bone with a metal ball, while the shoulder socket is lined with a plastic or metal component. This option works well when the rotator cuff—the group of muscles and tendons that stabilizes the shoulder—is still intact.

In a reverse shoulder replacement, the position of the ball and socket is switched, with the ball attached to the socket side and the cup placed on the arm bone. This design allows the larger shoulder muscles to compensate for a severely damaged rotator cuff. In recent years this technique has become increasingly common, especially in patients with arthritis associated with rotator cuff injuries.

People who may benefit from this surgery often have advanced osteoarthritis, rheumatoid arthritis, or rotator cuff arthropathy, a form of arthritis linked to long-standing tendon damage in the shoulder. Common symptoms include pain during arm movements, stiffness, and sometimes weakness.

The procedure usually takes one to two hours, and in many cases patients can return home the same day. Pain is managed with regional anesthesia and pain medications.

Arm movement usually begins after a few days, although the arm is supported in a sling during the first weeks. Gradually, normal use of the arm returns for everyday activities. Light activities or desk work can often resume after four to six weeks, while more demanding activities generally require three to six months.

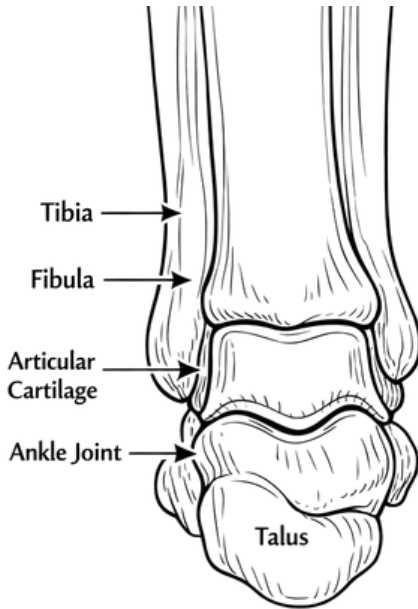
The main benefits are less pain and improved shoulder function. Many people regain the ability to lift the arm, reach for objects, and sleep more comfortably. Strength may also improve, particularly with reverse shoulder replacement.

Complications are uncommon but possible. Infections are rare. Stiffness can occur more often than with hip or knee surgery and may require additional physical therapy. Nerve injuries are rare. Over time the implant may wear or loosen, although most prostheses function well for many years. In some cases, a feeling of shoulder instability may occur.

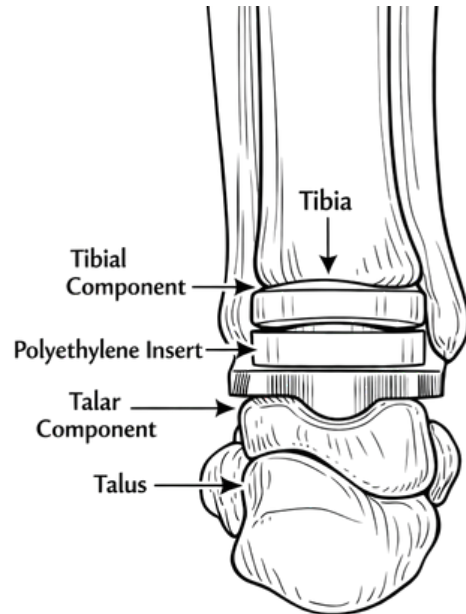
Implants often last fifteen to twenty years or longer, although long-term data for reverse shoulder replacement is still more limited because it is a relatively newer technique. When a prosthesis wears out or stops functioning properly, it can be replaced with another surgery.

A related procedure is rotator cuff repair. When the tendons are torn but the joint has not yet developed arthritis, the surgeon can reattach them to the bone to restore function. Recovery takes several months, and not all repairs heal completely. When possible, this procedure is often preferred over shoulder replacement because it preserves the natural joint.

# Ankle Arthroplasty



Normal Ankle Joint



Total Ankle Arthroplasty

Ankle arthritis is less common than arthritis of the knee or hip, but when it develops it can significantly limit mobility. Pain while walking, swelling, and stiffness can make everyday activities—such as walking longer distances or moving on uneven ground—more difficult.

Ankle arthroplasty, or total ankle replacement, is a newer procedure compared with hip and knee replacement. In recent years, improvements in surgical techniques and implant materials have made this option increasingly reliable.

During the procedure, the surgeon accesses the joint and removes the damaged surfaces of the tibia, fibula, and talus, the three bones that form the ankle joint. Metal and plastic components are then placed to recreate the joint's natural movement. The operation usually takes about one to two hours.

People who are evaluated for this surgery often have advanced osteoarthritis, frequently related to previous ankle fractures or long-standing joint instability. Common symptoms include pain while walking—especially on uneven surfaces—along with swelling and stiffness.

This procedure is most often performed in people between fifty and seventy years old. In younger patients, ankle fusion may be considered instead. This procedure eliminates pain but permanently stiffens the joint. Certain conditions, such as active infections or severe bone loss, may make ankle replacement less appropriate.

After surgery, the hospital stay is usually short, often limited to one night. Postoperative pain is managed with regional anesthesia and appropriate medications.

Weight-bearing on the foot is gradually reintroduced in the days following surgery. At first walking is limited, but movement steadily improves over time. More independent walking is often possible within four to six weeks. Light activities can usually resume after six to eight weeks, while more demanding activities may require several months.

The main goal of the procedure is pain relief and more comfortable walking. Many people report greater confidence when walking and an improved ability to move on uneven surfaces without feeling that the ankle might give way.

As with any surgery, complications are possible, although they are uncommon. These may include infection, blood clots, or stiffness in the joint. In rare cases, a nerve may become irritated or injured. Over time the implant can wear down or loosen, although long-term data are still evolving.

Ankle implants can often function well for ten to fifteen years or longer, although available data are not as extensive as for hip or knee replacements. When an implant no longer functions properly, revision surgery may be necessary, and this procedure is generally more complex than the initial operation.

An alternative to replacement is ankle fusion, which permanently joins the bones of the joint. This procedure eliminates pain but reduces ankle movement. The choice between replacement and fusion depends on several factors, including age, activity level, and patient preference.

## Other Frequent Surgeries

Knee osteotomy, mentioned earlier, deserves a bit more explanation. In this procedure, the femur or tibia is cut and realigned to shift weight away from the most damaged part of the knee. It is mainly recommended for younger, active individuals with arthritis limited to one area of the joint and with knee misalignment. Recovery takes several months. The procedure can delay the need for a knee replacement, although it usually does not eliminate it entirely. Today it is less common than it once was, but it remains a good option for selected patients.

ACL reconstruction and meniscus repair are not joint replacement procedures. The anterior cruciate ligament is one of the main stabilizers of the knee. When it tears, it can be reconstructed using a graft, often taken from the patellar tendon or the hamstring tendons. Some meniscus tears can also be repaired when the tear occurs in a well-vascularized area and the tissue quality is still good. Both procedures aim to improve knee stability and reduce the risk of further damage. Recovery is longer than for many other procedures, and rehabilitation after ACL reconstruction may take four to six months. These surgeries are more common in younger patients, but they can also be performed in adults when necessary.

Rotator cuff repair, mentioned earlier, involves reattaching torn tendons to the bone. It is performed when the rotator cuff is damaged but the shoulder joint has not yet developed advanced arthritis. The outcome depends on several factors, including the size of the tear, the quality of the tissue, and the person's age. Not all repairs heal completely, and in some cases the tear can recur. Recovery generally takes three to four months.

Foot or ankle fusion permanently stiffens the joint but eliminates pain. It is an alternative to ankle replacement, especially for younger and very active individuals. The trade-off is the loss of joint movement. Over time, however, most people adapt well to this change.

Hand and wrist procedures include thumb CMC arthroplasty, which is used to treat arthritis at the base of the thumb and improve the ability to grip objects. When wrist arthritis is present, fusion or joint replacement of the wrist may also be performed. These procedures are less common than hip, knee, or shoulder surgery, but they can significantly improve hand function and reduce pain.

## Anesthesia and Surgical Approach

The type of anesthesia used during joint surgery affects pain control and early mobility. Spinal anesthesia numbs the lower half of the body and is commonly used for knee, hip, and ankle procedures. General anesthesia puts the patient fully to sleep and is often used for shoulder surgery, and sometimes for hip or knee procedures. Regional nerve blocks, which involve injections near specific nerves, numb a targeted area and are often combined with spinal or general anesthesia to extend pain relief after surgery.

The choice of anesthesia depends on the procedure, the patient's health, and the preferences of the surgeon and anesthesiologist. Each option has advantages and possible drawbacks. Spinal anesthesia may allow faster recovery and earlier movement, though it can occasionally cause temporary headaches. General anesthesia provides greater control during surgery but may require slightly longer recovery. Regional nerve blocks offer excellent pain control and require experience to perform safely.

The surgical approach, meaning the path the surgeon uses to reach the joint, can vary. For the hip, the joint may be approached from the front, side, or back. The anterior approach preserves more muscle but requires specialized training. The posterior approach is more traditional and provides excellent visibility of the joint. The lateral approach is a middle option. All three can produce good results, especially when the surgeon is experienced with the technique.

For the knee, the incision is usually made along the front of the joint. Some techniques use smaller incisions and specialized instruments, often described as minimally invasive. These methods aim to reduce tissue trauma and support faster recovery, although outcomes are generally similar to traditional approaches when performed by experienced surgeons.

For the shoulder, the joint can be approached from the front or the side, depending on the procedure and the surgeon's technique.

Overall, the most important factor is the surgeon's experience with the chosen approach and careful surgical technique.

## **Setting and Logistics**

Joint replacement surgery is increasingly performed on an outpatient basis. In many cases, after hip, knee, or shoulder procedures, people can return home the same day when they are in good overall health. Same-day discharge usually requires good pain control, the ability to walk with assistive devices, no complications, and reliable support at home. Some individuals stay in the hospital overnight, especially if they are older, have multiple health conditions, or do not have assistance at home. This decision is usually evaluated before surgery.

During the first weeks at home, it is common to use a walker or crutches, usually for two to four weeks. Simple home adjustments, such as a raised toilet seat, a shower chair, or grab bars, can make daily activities safer and easier. It is often helpful to have someone at home during the first week to assist with cooking, cleaning, or personal care. Physical therapy typically begins within a few days after surgery and continues for six to twelve weeks.

Insurance and administrative considerations may also play a role. In many cases, prior authorization is required for scheduled procedures. Coverage conditions can vary depending on the facility and the professional chosen. Physical therapy coverage may also differ between plans. Some insurance policies limit the number of visits, while others offer greater flexibility. Understanding these details before surgery can help avoid surprises during recovery.

## **What Success Looks Like**

Success after joint surgery can mean different things to different people. In general, the main goal is pain reduction. A second goal is restored function, meaning the ability to perform everyday activities more easily, such as walking to do grocery shopping, getting out of bed, putting on shoes, doing light household tasks, or carrying a grocery bag. Activities that are typically allowed in the long term include walking, swimming, cycling, playing golf, and participating in recreational sports at a moderate level.

Activities that are generally discouraged include high-impact running, jumping, contact sports, and heavy lifting. The reason is that high-impact activities can accelerate implant wear. Implants are designed to last many years with normal use, but excessive stress can shorten their lifespan.

## CHAPTER 2

# When is it time for surgery?

The question is simple to ask, but often harder to answer. Is it really time for surgery? You might find yourself sitting in the doctor's office with a swollen knee that still feels stiff after a restless night, or with a shoulder that wakes you whenever you roll onto it in bed. Maybe it is your hip that makes stairs more difficult than they used to be, or that turns a short walk into something that requires more attention and patience. By this point you have likely already tried several options, such as medications, ice, injections, or a course of physical therapy. Some days feel manageable and the pain seems under control. Other days, even simple movements can become more challenging.

Imaging tests may show arthritis, a torn tendon, or joint wear that explains what you are feeling. At that stage the surgeon may begin to talk about repair or joint replacement. That is usually when the most common question appears. Is this really the right step now, or would it be better to wait? And perhaps most importantly, how do you know when the time is right?

This chapter is meant to help you think through that decision. The goal is not to tell you what to do, but to offer a clear and practical way to look at the situation with greater understanding. You have likely already read the earlier sections about shared decision-making and the main types of joint surgery. Here those ideas are applied directly to the most important question, whether and when surgery should be considered. If some of the concepts sound familiar, that is intentional. This chapter does not repeat technical surgical details or describe the procedures again. Instead, it focuses on how you and your surgeon evaluate the situation together, which factors matter most in the decision, and what to expect while you consider the next step.

This matters because joint surgery is rarely an immediate or automatic decision. If you think about an antibiotic for an infection, the path is usually clearer.

You take the medication, and in most cases the infection resolves. Joint surgery is different. The decision is built on a balance of probabilities, personal priorities, and timing. Two people with very similar X-rays may reach different decisions, and both can be reasonable.

Medical research can tell us what outcomes are most likely, how much pain might improve, how much function may return, and what risks exist. What medicine cannot determine with certainty is which choice best fits your life. Personal factors matter, including the activities you do every day, your responsibilities at work or at home, your comfort with risk, and how willing you are to commit to the recovery process after surgery. All of these elements, together with medical information, help guide a decision that is thoughtful and appropriate for your situation.

Start with your symptoms and how you function in daily life, not only with imaging results. X-rays and MRIs show the structure of the joint, but they do not tell the whole story. They cannot measure how much pain you feel or how easily you move. It is common to see signs of arthritis or tendon damage in people who remain active. In other situations, imaging may show only mild changes while symptoms feel much more significant.

The key question becomes simple, how much are your symptoms limiting the life you want to live. Consider whether pain prevents you from doing activities that matter to you and whether that limitation is strong enough to justify the time and recovery that surgery requires. The severity of symptoms includes both measurable and personal elements. You can look at how far you can walk, whether pain wakes you at night, or whether you have started avoiding activities you once enjoyed. At the same time, there is a personal side, how much discomfort you are willing to tolerate before considering surgery. Tracking symptoms for a few weeks can help clarify this. Note when pain appears, how it affects sleep or work, and whether it limits family or social activities.

Another key factor is the impact on daily life. The same level of pain can affect people differently depending on their responsibilities and routine. Someone with a physically demanding job may feel the effects much more than someone with a sedentary one. A helpful question is simple, if pain improved significantly, which activities would become easier again. If those activities are important in your life, surgery may become a reasonable option to discuss with your surgeon.

### **How-To**

*Follow this practical decision checklist before choosing joint surgery:*

- 1) Track symptoms for 2–6 weeks—pain at rest, with activity, sleep disruption, missed duties.*
- 2) Complete a meaningful conservative trial (structured PT, activity modification, injections, weight and comorbidity optimization) and document duration and response.*
- 3) Set 2–3 specific functional goals (e.g., sleep through the night, walk one mile, kneel 10 minutes).*
- 4) Optimize health risks (stop smoking, improve glucose control, lose modest weight) where feasible.*
- 5) Plan logistics: home help, transport, time off work.*
- 6) Ask the five key questions listed in the chapter and consider a second opinion if unclear.*

The response to non-surgical treatments is an important factor to consider before choosing surgery. It is helpful to have seriously tried the conservative options most appropriate for your condition, such as modifying daily activities, exercises to improve strength and mobility, ideally through guided physical therapy or a structured home program. In some situations, weight loss, better management of other health conditions, and targeted injections may also be useful. The key point is that the effort should be real and consistent. A single physical therapy session followed by an immediate return to usual habits is rarely enough. Likewise, a few weeks of irregular exercise is not the same as a consistent program carried out over several months. Keeping track of what you tried, for how long, and what results you noticed can help both you and your surgeon better understand the situation.

Timing also matters. In many degenerative joint conditions, there is a period when it can be helpful to prepare by strengthening muscles and organizing practical aspects of daily life.

Waiting too long, however, can make recovery more difficult. Over time, muscle strength may decline, mobility can decrease, and overall physical condition may worsen. For example, delaying a knee replacement until quadriceps strength is very poor can lead to a slower and less complete recovery.

On the other hand, rushing into surgery without seriously trying non-surgical options can lead to procedures that might not be necessary. It can be helpful to pause and consider what you might gain by waiting a little longer. That extra time may allow you to prepare better, try a more complete course of physical therapy, or in some cases avoid surgery altogether. At the same time, it is important to think about what might happen if you wait too long, such as increasing pain, reduced function, or fewer surgical options later.

Certain health conditions can also affect surgical safety and recovery. These include poorly controlled diabetes, active smoking, obesity that interferes with wound healing, unstable heart or lung disease, and untreated infections such as dental or skin infections. Improving these factors before an elective operation is not just a formality. It can lower the risk of complications and make rehabilitation easier. Even modest changes can make a real difference, such as stopping smoking several weeks before surgery, losing a small percentage of body weight, or improving blood sugar control.

It is also helpful to think about the practical aspects of daily life. Will someone be able to help you during the first days after surgery? Is your work flexible enough to allow time for recovery? Are you comfortable with the small possibility of a complication that may require additional treatment? Honest answers to these questions can help clarify whether this is the right time to proceed.

This is where shared decision-making becomes important. Both you and your surgeon should come to the conversation prepared with clear information. It can help to bring a brief symptom diary, a summary of the treatments you have already tried, and a few concrete goals about what you hope to return to doing in everyday life. Your surgeon, in turn, should explain the likely benefits and risks in clear language, taking into account your age, health conditions, and personal goals.

If you leave the visit feeling confused, or if the discussion focuses only on anatomy and not on what you hope to do afterward, it is reasonable to ask for clarification or seek a second opinion. Finding a surgeon who listens to your goals and explains realistic outcomes in terms you understand can make a significant difference when making this decision.

Before making a decision, it can be helpful to define a few clear and realistic goals. The more concrete they are, the easier it becomes to understand whether surgery will bring the improvement you are hoping for. For example, sleeping without pain, walking longer distances without stopping, or returning to activities that you enjoy. Goals like these help clarify what to expect and also allow the surgeon to better guide technical decisions.

If you decide to postpone surgery, that time can become an opportunity to prepare. Continuing with targeted exercises to maintain or improve strength and mobility can make recovery easier if surgery is eventually chosen. Even small, consistent improvements can make a meaningful difference.

The practical aspects of daily life can also influence the timing. Some people prefer to plan surgery during a quieter period, when recovery can be managed more comfortably or when help from family or friends is available. The goal is to balance good planning with avoiding excessive delays if symptoms continue to worsen.

Finally, it is normal to have questions or concerns. Speaking openly with your surgeon and asking how pain, recovery, and possible complications will be managed can help you feel more prepared. Understanding how the medical team approaches these situations often makes the decision clearer and more reassuring.

Finally, it is helpful to remember that medical decisions can change over time. If you choose to wait and symptoms worsen, you can revisit the decision with your doctor. If you move forward with surgery and the early recovery proves more challenging than expected, your surgeon and rehabilitation team can adjust the plan. The goal is not to find a perfect and final choice, but to make a thoughtful decision based on clear information and realistic expectations.

Before finishing a consultation, it can help to get clear answers to a few simple questions:

- What is the most likely outcome for pain and function?
- What are the most important risks, and how common are they in people with a situation similar to mine?
- What might change if I wait a few months before surgery?
- How can I prepare as well as possible, both in terms of health and practical arrangements at home?
- What practical results would indicate that the surgery has been successful?

Questions like these help turn the conversation into something more concrete and connected to your daily life, rather than staying at a general level.

The purpose of this chapter is to guide you toward a thoughtful and personal decision. In simple terms, pay attention to your symptoms, give non-surgical treatments a fair trial when appropriate, work on health factors you can improve, and set clear goals for what you hope to return to doing.

The next chapter will focus on preparing for the specialist consultation, including what to bring with you, which tests may be useful, and how to organize the next steps if surgery becomes the chosen path.

In short, be honest with yourself about how much pain is affecting your life. Use the time to prepare, improve what can be changed, and discuss realistic outcomes and risks with your surgeon. With these elements in place, the decision about whether and when to have joint surgery becomes less about a single moment and more about choosing the right timing for the life you want to live.

## CHAPTER 3

# Preparing the right way

As we have seen in the previous chapters, deciding to undergo joint surgery is not only the end of one journey but also the beginning of a new phase. The weeks before the operation are not simply a waiting period. They are a valuable time to prepare in the best possible way. The more carefully this phase is organized, the greater the chances of approaching surgery with confidence and supporting a smoother recovery. This chapter aims to turn that preparation period into a practical guide, moving from theory to action and organizing the most important steps, from physical preparation to practical arrangements and strategies to reduce risk.

It can be helpful to think of this period as four areas of preparation that move forward at the same time. The first involves your overall health and the medical checks needed before surgery. The second is the physical preparation of the body, which can help you arrive at the operation in better condition. The third concerns organizing your home and arranging daily support for the days after surgery. The fourth includes the practical and administrative aspects that often accompany a procedure.

In many cases, this preparation period lasts between four and eight weeks, although it can vary from person to person. Those in good health may move through it more quickly, while individuals living with heart conditions, poorly controlled diabetes, significant obesity, active infections, or complex medical treatments may need more time to prepare.

### **Optimizing Health Before Surgery**

One of the first steps is to schedule the preoperative visit with your primary care physician, ideally within thirty days of the surgery. This appointment is not just an administrative formality. It helps confirm that your main health conditions are well controlled and that your body is ready for the operation. During this visit, important parameters are usually checked, such as blood pressure, blood sugar levels, possible signs of anemia, kidney function, and cardiovascular risk.

To make the visit as useful as possible, it is helpful to bring an updated list of the medications you take, a record of any allergies, and the most recent blood test results if available. This information allows the doctor to evaluate your health more thoroughly.

If conditions such as heart disease, diabetes, sleep apnea, previous blood clots, or bleeding disorders are present, other specialists may also need to be involved. In these situations, it is useful to discuss this with your surgeon and schedule any recommended cardiology, endocrinology, pulmonology, or hematology consultations in advance so that any issues can be addressed before surgery.

## **Smoking and alcohol, addressing them early**

Smoking and alcohol use can also influence recovery after surgery. Nicotine, for example, can slow tissue healing and increase the risk of complications. For this reason, it is generally recommended to stop using all nicotine-containing products at least four to eight weeks before the operation.

If alcohol consumption is high, it is important to discuss it with your doctor. In some cases, it may need to be reduced gradually, since stopping abruptly can cause problems. When needed, support programs, medications, and structured guidance can help manage this change in a safer way.

## **Medications and supplements**

It is important that your surgeon or anesthesiologist review the full list of medications and supplements you take regularly. Do not stop prescription medications such as anticoagulants, antiplatelet drugs, insulin, or other treatments on your own. Always follow the written instructions provided by your medical team regarding which medications should be paused and when. In some situations, you may also be advised to stop certain supplements that can increase bleeding risk, such as fish oil, ginkgo, garlic, or high doses of turmeric.

## **Infection screening and vaccinations**

Before surgery, it is important to address any active infections, including dental, skin, urinary, or respiratory infections. If you have a dental cleaning or other dental treatment planned, try to schedule it well in advance so that it does not create last-minute problems before the operation.

It may also be useful to check with your doctor whether vaccinations such as influenza or COVID-19 are recommended, ideally at least two weeks before surgery. For certain vaccines, your medical team may advise on the most appropriate timing.

## **Preoperative tests and screening**

Complete any tests requested by your surgical team within the recommended time frame. These may include blood tests, an electrocardiogram, a chest X-ray, or other evaluations depending on your health history. Completing them in advance allows any abnormal findings to be addressed and helps avoid delays in the surgical schedule.

## **Physical preparation, focused and gradual work**

Physical preparation before surgery, often called prehabilitation, can support a smoother recovery. Rather than starting complex plans at the last minute, it is better to begin a few weeks earlier, ideally four to eight weeks before the operation, with a simple and consistent routine.

If possible, work with a physical therapist to develop an exercise program tailored to the joint involved. If that is not available, you can follow a home program provided by your surgeon or medical team. A practical target is about 20–30 minutes of exercise per day, four to six days per week, or two shorter sessions if that fits your schedule better.

Exercises should focus on the muscles that support the affected joint. For knee or hip surgery, strengthening the quadriceps, glutes, and hip muscles, along with balance work, can be helpful. For shoulder surgery, the focus is on the rotator cuff and the muscles that stabilize the shoulder blade. For ankle procedures, calf strength and balance are especially important.

Maintaining low-impact aerobic activity such as cycling, swimming, or using an elliptical machine for about 20–30 minutes, three to five times per week can improve overall endurance and help the body prepare for surgery.

Nutrition and body weight also matter. Even a modest weight loss of about 5–10 percent can reduce joint stress and support recovery. Adequate protein intake, good hydration, and a fiber-rich diet are helpful. If there are signs of malnutrition or unintentional weight loss, consulting a nutrition specialist before surgery may be beneficial.

## **Vitamin D and bone health**

Bone health also deserves attention before surgery. If there is a risk of vitamin D deficiency, it may be helpful to check your levels and correct them following your doctor's guidance. Continuing light resistance exercises, such as elastic bands or small weights, can help maintain muscle strength and build a better physical reserve before the operation.

## **Medications, anesthesia, and pain management**

Before surgery, it is important to discuss anesthesia options with the anesthesiologist. In many cases, regional nerve blocks may be used to help control pain in the first hours after surgery and may influence early mobility. Knowing what to expect in advance can make the immediate postoperative period easier to manage.

If you use opioid medications regularly, it is important to inform your surgeon. Long-term opioid use can make postoperative pain control more challenging and may require a more carefully planned approach. In these situations, the medical team may prepare a multimodal pain management strategy and plan for a gradual reduction if needed.

It is also helpful to have a simple written plan for medications after surgery. This plan may include pain medications, drugs to prevent nausea, stool softeners, and specific instructions for people who take insulin or medications for diabetes. Having a clear dosing schedule can be especially useful when you return home and may still feel tired or groggy after anesthesia.

## **Preventing blood clots and infections**

Ask your surgeon about the plan to prevent blood clots after surgery. Depending on the situation, this may involve aspirin, anticoagulant medications, or mechanical compression devices, sometimes used together. It is important to understand how long these measures will be needed, how to use them correctly, and which warning signs could indicate a problem.

If antiseptic showers or cleansing products are recommended in the days before surgery, follow the instructions carefully. It is generally best to avoid shaving the surgical area with a razor, as this may irritate the skin. If hair removal is necessary, an electric clipper is usually safer.

## **Preparing your home and support for recovery**

Preparing your home in advance can make the first days after surgery much easier. It can be helpful to obtain mobility aids such as a walker, crutches, or a cane before the operation. Small assistive tools for dressing, such as a long-handled shoehorn or a sock aid, can also make daily activities easier.

Before surgery, it can help to practice basic movements such as getting in and out of bed, standing up from a chair, using the bathroom, or getting into a car. Becoming familiar with these movements can make you feel more confident once you return home.

The home environment should also be arranged to support recovery. If possible, set up a comfortable recovery area on one level of the house. Keep walkways clear, secure loose rugs, organize electrical cords, and make sure lighting is adequate. A stable chair with armrests and simple bathroom supports such as grab bars or non-slip mats can reduce the risk of falls and make daily movements safer.

## **Household help**

It is helpful to identify a person who can assist you during the first 3–7 days after surgery, for example with transportation home, medications, meals, and basic daily tasks. If possible, arrange a backup in case that person is unavailable. If family or friends cannot help, consider looking into home care services. If you have pets or young children, plan their care in advance.

## **Supplies and meals**

Before surgery, it may be useful to prepare a small supply of simple, nutritious foods for one to two weeks, preferably high in protein and easy to prepare. Keep essential items within reach in your recovery area, such as ice packs, water, a phone charger, and other daily necessities.

## **Transportation, work, and practical arrangements**

Arrange transportation to and from the surgical facility and check whether there are specific rules about who can drive you home after anesthesia. Speak with your employer in advance to plan the time you may need away from work, taking into account the physical demands of your job. If you use health insurance, it can be helpful to verify any required authorizations and confirm coverage for medications you will need after surgery.

## **Documents and preparation**

Prepare a few important documents, including an updated medication list with doses, your allergy list, and emergency contact information. Keep these documents easily accessible and share them with the person who will be helping you.

If your hospital offers preoperative education sessions, attending one can help you better understand how pain, mobility, and early rehabilitation will be managed after surgery.

## **The night before surgery**

Follow the instructions you received carefully, including those related to fasting and hygiene. Bring the necessary identification and wear comfortable clothing. Remove jewelry and confirm your transportation to the facility. If you use a CPAP machine for sleep apnea, remember to bring it with you.

## **A final check**

Before surgery, it can be helpful to write down two or three main goals you hope to achieve and a few questions to discuss with your surgeon during the preoperative visit.

## **When to contact your surgeon**

If you develop fever, a persistent cough, breathing difficulties, skin infections, dental pain, urinary symptoms, or changes in your medications in the days before surgery, inform your surgeon as soon as possible. Prompt communication can help prevent delays or complications.

The weeks before surgery involve steady and practical preparation. Organizing support, preparing your home, and following medical guidance can help you approach surgery with greater confidence and support a smoother recovery.

# CHAPTER 4

## Preparing your Home and your Mind

The final two weeks before elective joint surgery are not idle time but concentrated preparation that clarifies logistics, reduces preventable risk, and preserves your energy for healing. This chapter translates general preoperative principles into **room-by-room actions, daily routines**, and simple mental habits so the acute postoperative period is less chaotic and safer.

Frame these days as investment time, the tasks you complete now pay off when pain, swelling, and dependence peak. The first ten to fourteen days after surgery are typically the most demanding — you'll rely on others, movement will be slower, and sleep will be fragmented. If you prepare thoughtfully, you avoid frantic searches for equipment, awkward lifting of laundry baskets, and improvised solutions for basic needs. Expect steady gains after two to six weeks and more substantial independence by eight to twelve weeks, though recovery timelines vary individually.

### Home safety and flow

Create a clear, well-lit path from your front door to your designated recovery area. Remove throw rugs, tuck cords out of the way, and keep the route at least **three feet wide**. Place a bench or chair inside the entrance so you can remove shoes without bending repeatedly. If steps are unavoidable, arrange assistance for the first days and consider temporary measures — a sturdy handrail or a short ramp — until you regain confidence.

Select one primary chair in your living area, firm, with armrests, and at a seat height that makes standing easier. If your usual chair is too low, use firm cushions or risers. Keep a small table within arm's reach for water, medications, phone, and remote controls. Secure cords and maintain unobstructed routes to the bathroom and kitchen. Install night-lights in hallways and at bedside to reduce hazardous nocturnal trips.

## **Bedroom and sleep setup**

Arrange the bedroom so getting in and out of bed requires minimal effort. Bed height should allow knees to be at or slightly below hip level when sitting at the edge. **Bed risers** are an inexpensive fix. Place essentials — phone, medications, a water bottle, and a reacher — within arm's reach. If the bathroom is distant or involves stairs, consider a bedside commode or urinal for the earliest nights. Gather pillows you may need for positioning: a pillow under the calf after knee surgery, or between the legs for a hip, following your surgeon's specific guidance.

## **Bathroom fall prevention**

Bathrooms are a frequent source of postoperative falls, treat them first. Install grab bars anchored into studs near the toilet and in the shower, avoid temporary suction devices as your primary support. Use non-slip mats and add a shower chair and a handheld showerhead so you can bathe seated without reaching. A raised toilet seat reduces the effort of sitting and standing. Store toiletries at waist height to eliminate frequent bending.

## **Kitchen and nutrition**

Organize the kitchen for minimal bending and reaching. Move frequently used items to counter level, stock easy, protein-rich meals, and prepare several frozen single-portion dishes in advance. Ready sources of protein — Greek yogurt, cottage cheese, pre-cooked lean meats, nuts, and protein shakes — support wound healing. Set up a beverage station at waist height so making tea or coffee doesn't require repeated stooping. Keep a non-slip mat by the sink and store a pitcher of water nearby to encourage hydration.

## **Stair management**

If your sleeping quarters are upstairs, accept that stairs will be limited initially. Secure railings on both sides and improve lighting, then limit stair trips to once or twice daily if possible. When feasible, create a main-floor recovery zone with a bed or comfortable recliner near a bathroom and kitchen access, many patients find sleeping downstairs the first week or two reduces risk and conserves energy.

## **Equipment and supplies**

Obtain and fit mobility aids before surgery: walker, crutches, or cane prescribed by your surgeon, and have a trained provider adjust them to

your height. Add practical aids: a reacher/grabber, long-handled shoehorn, sock aid, dressing stick, and a shower chair. Stock ice packs or reusable gel wraps, wedge pillows for elevation, waterproof dressings or adhesive covers for early showers if allowed, and compression stockings if prescribed. For wound care, have gauze, medical tape, mild soap, alcohol-free hand sanitizer, and any prescribed topical agents on hand. Create a medication organizer and set phone reminders, post a concise medication and allergy list on the refrigerator and carry a copy in your wallet.

## **Pain, swelling, and bowel planning**

The basic approach after surgery is simple: protect the joint, use ice, apply light compression, and keep the arm or leg elevated. Follow your doctor's instructions carefully about how much weight you can put on the joint and how you should move. Use ice for about twenty minutes at a time, several times a day during the first week. If recommended, use an elastic bandage and keep the limb raised above heart level when resting to help reduce swelling.

Take pain medications at the times prescribed, without waiting for the pain to become severe. Keeping pain under control from the start makes it easier to move and recover. Medications may include acetaminophen, an anti-inflammatory if approved by your doctor, and in some cases stronger pain medicines for a short period.

If these stronger medicines are used, it is helpful to prevent constipation from the beginning. This can include using a stool softener, drinking more water, eating foods rich in fiber, and taking short walks when possible. If your doctor recommends it, you may also keep a mild laxative available.

## **Daily tracking and routines**

Keeping a small daily journal can help you understand how recovery is progressing and communicate more clearly with your medical team. You can write down medication times, your pain level on a scale from zero to ten, how many times you used ice, how many minutes you walked or exercised, and whether symptoms such as numbness, fever, or increased fluid from the wound appeared. Recording these details helps you notice progress over time and can be useful during follow-up visits.

Organizing your day with a simple routine can also make recovery easier. You can alternate times for meals and medications, short walks, icing or resting with the leg elevated, prescribed exercises, and relaxation breaks. Adding something pleasant, such as a phone call with a friend, a favorite TV show, or a few pages of reading, can make the days feel lighter. A simple routine reduces stress and helps you see gradual improvement day by day.

## **Follow pre-surgery instructions carefully**

Follow the instructions you received before surgery carefully. These may include taking an antiseptic shower the night before, temporarily stopping certain medications, and following fasting guidelines. If you smoke, it is best to stop as early as possible, ideally several weeks before surgery, because nicotine can slow tissue healing. It is also helpful to reduce alcohol consumption and keep existing health conditions such as diabetes, high blood pressure, or sleep apnea well controlled by following your doctor's advice.

These simple steps can help reduce the risk of infection, support better wound healing, and make recovery smoother.

## **Recognizing warning signs**

Keep the most important warning signs and the phone number of your surgeon or medical team within easy reach. Some symptoms require contacting your doctor right away, such as fever above the level set by your team, sudden calf pain or swelling, chest pain or difficulty breathing, dressings that become quickly soaked, severe pain not controlled by medication, or sudden confusion. Informing your doctor promptly can help prevent more serious problems.

The goal of all this preparation is to make the period after surgery simpler and safer. When your home is organized, necessary items are ready, and you have a clear routine, you can focus more on healing. This allows your body and your medical team to work together toward a smoother and more comfortable recovery.

# CHAPTER 5

# Preoperative Evaluation

## Before you begin

Some ideas in this chapter may sound familiar because they were mentioned earlier in the book. This repetition is intentional.

When it comes to surgery and recovery, certain key points are worth hearing more than once. Seeing them in different contexts — decision, preparation, home organization, and medical evaluation — helps you understand them better and apply them at the right moment.

The goal is not to repeat information unnecessarily, but to reinforce the most important steps of the process so that when the time for surgery arrives, everything feels clearer and easier to remember.

At this stage of the journey, you enter a phase that may seem less important than the operation itself, but is actually essential. This is the time when doctors confirm that you are truly ready for surgery and when the surgical team learns more about your health and any potential risks.

The preoperative evaluation is not a single visit. It is a series of appointments, tests, and preparations that usually take place in the two to four weeks before surgery. The goal is to make sure the procedure can be done safely, identify any health issues that need attention, plan anesthesia and pain control, and clarify what to expect during recovery.

Timing also matters. Some visits and tests are scheduled in the weeks before surgery, while other preparations should begin earlier. If you smoke, this is the time to start quitting. If you need dental work, it is best to complete it at least two to four weeks before surgery to reduce the risk of infection. If you take blood thinners, your doctor will need to plan in advance how to pause them safely.

During this phase, the surgeon or a member of the team will review your imaging tests and explain how the operation will be performed. They will also discuss the limitations you may have during the first days after surgery and confirm the correct side of the body to operate on. At this visit, you will also be asked to sign the informed consent.

By the end of the visit, you should have a clear explanation of what will be done, why that specific procedure is recommended, and what to expect in the first weeks after surgery. This is also the right time to talk about your personal goals, such as returning to work, walking longer distances, or resuming important daily activities.

It is important to share any relevant information about your health, including allergies, complications from previous surgeries, implants already present in your body, or any family history of anesthesia problems.

## **Anesthesia and pain control**

The type of anesthesia used can influence the first hours after surgery and how pain is managed. During the visit with the anesthesiologist, they will review any past problems with anesthesia and discuss the medications and supplements you take.

The anesthesiologist will explain the available options, such as general anesthesia, spinal anesthesia, or regional nerve blocks. You will also receive instructions about fasting and which medications to take on the day of surgery. For many joint procedures, nerve blocks help control pain during the first hours after the operation and may reduce the need for stronger pain medications.

## **General health evaluation**

Your primary doctor and any relevant specialists will review your medical history and confirm that your health conditions are well controlled before surgery. If problems such as heart disease, lung disease, or diabetes are present, additional tests may be needed.

For example, a cardiologist may request an electrocardiogram or other tests, while a pulmonologist may help adjust treatments for breathing conditions. These evaluations help reduce risks and ensure the safest possible environment for surgery.

## **Physical preparation**

Your physical condition before surgery can influence recovery. A physical therapist may evaluate your starting mobility, such as how far you can walk, whether you use walking aids, and how easily you perform daily tasks.

During this stage, the therapist may help adjust any aids you will use after surgery, such as a cane or walker, and may suggest a short exercise program. Going into surgery with stronger muscles and better mobility often leads to a faster recovery.

## **Dental health**

Oral health is an important but sometimes overlooked factor. Dental infections or gum disease can increase the risk of implant infection even months after surgery.

If dental treatment is needed, it is best to complete it at least two to four weeks before surgery. After joint replacement, dentists usually recommend delaying non-urgent dental work for several months.

## **Tests before surgery**

Several routine tests are usually performed before surgery. Blood tests can detect anemia or kidney problems, while a urine test may check for infection. In some cases, a nasal swab is done to check for certain bacteria. If the test is positive, a short preventive treatment may be recommended to reduce the risk of infection.

An electrocardiogram is often performed in patients over fifty or when cardiac risk factors are present. Other tests are ordered only when necessary.

## **Medication management**

Managing medications is one of the most practical parts of preoperative preparation. It is helpful to bring a complete list of everything you take — prescription drugs, over-the-counter medications, vitamins, and supplements — to every appointment.

Some medications, such as blood thinners or anti-inflammatory drugs, may need to be stopped a few days before surgery. Diabetes and blood pressure medications may also require temporary adjustments. Some supplements, including fish oil or vitamin E, are often stopped one to two weeks before surgery because they may increase bleeding risk.

It is also important to limit alcohol and inform your doctor about any other substances you use so anesthesia can be planned safely.

## **Infection prevention**

Preventing infection is a simple but important step before surgery. Many hospitals recommend showering with an antiseptic soap the night before and the morning of the procedure. It is best to avoid shaving the surgical area within forty-eight hours before surgery, since small cuts in the skin can increase infection risk. Any rashes, wounds, or skin infections should be reported before the operation.

For people with diabetes, keeping blood sugar levels well controlled in the days before surgery is especially important.

## **Pain management plan**

Before surgery, it is helpful to discuss with the anesthesiologist how pain will be managed afterward. Often a combination of methods is used, including nerve blocks, acetaminophen, anti-inflammatory medications when appropriate, and stronger medications if needed.

You should also ask what level of pain is normal after surgery, when to take medications, and which side effects should prompt a call to your doctor.

## **Situations that may delay surgery**

In some cases, surgery may be postponed for safety reasons. This may happen if there is an active infection, poorly controlled blood sugar, chest pain, breathing problems, or open wounds near the surgical area.

Although a delay can be frustrating, these precautions help make surgery safer.

## **Why this phase matters**

The preoperative evaluation is not just a formality. It lays the foundation for a safer operation and a smoother recovery.

Come to your appointments with an updated medication list, answer your medical team's questions honestly, and follow the instructions you receive.

In this process, you are not a passive observer.

You are an active participant in preparing for a successful surgery and recovery.

# A Quick Pause

If this book is helping you feel more prepared and more at ease, you can do something simple that may help others as well.

## *Leave a short review on Amazon.*

It only takes 30 seconds.

You can write, for example:

- your experience or situation
- what is helping you the most
- which part you found most useful

If you'd like, you can also add a photo of your progress, such as a before-and-after.

It's completely optional, but it can make your experience even more helpful for others going through the same journey.



# CHAPTER 6

## The Day of Surgery

After weeks of preparation, the morning of surgery is the moment when everything becomes real. The plans you organized in the previous days now move into action. The day usually follows a clear sequence of steps and checks. Knowing in advance what will happen — before leaving home, in the pre-operative area, and shortly after the operation — can make the experience much easier to manage.

### Before Leaving Home

Follow carefully the fasting and medication instructions provided by your medical team. These are not simple suggestions but safety rules. If you are unsure about timing or which medications to take, clarify this with your surgeon's office the day before.

Bring with you:

- an updated list of medications
- a photo ID and insurance card
- any important medical documents
- your CPAP machine if you use one for sleep apnea

Leave valuables at home. Wear comfortable clothing, preferably with a front opening, and shoes that are easy to put on.

It is also important to plan the person who will accompany you. After surgery you will not be able to drive, so a responsible adult should bring you home and help during the first hours after the procedure

### Arrival at the Hospital and Pre-Operative Area

You will usually be asked to arrive 90–120 minutes before surgery. This time is needed for registration, identity checks, insurance verification, and review of the consent forms.

In the pre-operative area, a nurse will check your vital signs and may start an IV line. Allergies, medications, and previous anesthesia experiences will also be reviewed.

In some situations additional checks may be performed, such as:

- a pregnancy test
- a blood glucose check for people with diabetes

The anesthesiologist will meet with you to confirm the anesthesia and pain management plan. This is the right time to ask questions about nausea prevention, nerve blocks, or how you may feel when waking up.

If a nerve block is used, pain during the first hours may be greatly reduced, but the limb may feel temporarily numb or weak. Until the effect wears off, it is important to protect the limb and avoid putting weight on it.

Before entering the operating room, the team performs a final safety check called a time-out, confirming your name, the procedure, and the correct side of the body to be operated on. It may seem repetitive, but it is a critical safety step.

## **During Anesthesia and Surgery**

Your experience will depend on the type of anesthesia used.

With spinal anesthesia, you may feel brief pressure in the lower back followed by warmth or heaviness in the legs as sensation decreases. Sedation is often added, which makes the experience more relaxed and leaves little memory of the procedure.

With general anesthesia, you will breathe oxygen and gradually fall asleep. When you wake up, you may have a mild sore throat if a breathing tube was used.

A typical hip or knee joint replacement usually takes one to two hours. More complex procedures may take longer. When the surgery is finished, the surgeon or a member of the team will update the person who accompanied you.

## **Recovery in the Post-Anesthesia Care Unit (PACU)**

After surgery you will be taken to the post-anesthesia care unit (PACU), where you usually remain for one to three hours.

During this time nurses monitor:

- blood pressure and heart rate
- breathing and oxygen levels
- pain levels

Nausea or shivering may occur but are treated quickly with medication and supportive measures.

To reduce the risk of blood clots, compression devices are often placed on the legs, and staff will encourage gentle ankle movements as soon as possible.

If you received spinal anesthesia, staff will check the return of sensation and strength before helping you stand.

## **Bladder Function, Wound Care, and Early Movement**

Bladder function is monitored during the hours after surgery. Some patients leave the operating room with a temporary catheter, while others are observed to ensure they can urinate normally.

The surgical dressing is also checked regularly to make sure it remains dry. In many cases physical therapy begins very early, sometimes just a few hours after surgery. For lower-extremity procedures, early movement with an assistive device is encouraged to reduce stiffness and the risk of blood clots. For shoulder procedures, gentle protected movements may begin according to the surgeon's instructions.

## **When It Is Possible to Go Home**

Discharge occurs when several important criteria are met:

- stable vital signs
- pain and nausea controlled with oral medication
- ability to drink fluids
- ability to stand and walk a few steps with assistance
- a dry surgical dressing
- the presence of the person accompanying you home

If one of these criteria is not met, staying in the hospital overnight may be necessary.

Before leaving, you will review written instructions with the person accompanying you. These include medications, wound care, movement precautions, and follow-up appointments.

## **Looking Ahead**

The day of surgery is only the first step of recovery. In the hours and days that follow, the body begins the real healing process.

In the next chapter we will discuss what happens after returning home and how to manage the first two weeks of recovery, an important period for controlling pain, moving safely, and gradually returning to daily activities.

## CHAPTER 7

# The First two Weeks

The first two weeks after joint surgery are a period of rapid change. Inflammation usually reaches its peak, the effect of nerve blocks gradually fades, and recovery shifts from hospital monitoring to healing at home.

In this chapter we will look at what to expect during these first days and how to apply the key principles of recovery: protecting the joint, moving gently but regularly, using ice and elevation, and following your medication and clot-prevention plan. The goal is to maintain steady progress and avoid complications.

### **What Is Normal**

Swelling usually reaches its highest point between day three and day five, then slowly begins to decrease. Bruising may move downward due to gravity and change color as it heals.

Pain is often stronger during the first few days and then gradually improves, although it may vary during the day or after activity.

Interrupted sleep and difficulty finding a comfortable position are common in the early weeks.

These symptoms are part of the normal healing process. They become concerning if they suddenly worsen or change significantly, such as increasing redness, heavy bleeding, fever, shortness of breath, or sudden loss of movement.

### **Days 0–2: The First Actions**

During the hours after surgery, the medical team monitors bleeding, breathing, and circulation while nurses and therapists help you begin moving safely.

The first movements are mainly meant to stimulate circulation and restore normal movement patterns, not to cover long distances.

Once you return home, focus on the basics:

- take medications at the scheduled times
- begin stool softeners if prescribed

- stay well hydrated
- apply ice for about 15–20 minutes several times a day
- keep the limb elevated whenever possible

If you received a nerve block, the numbness may fade during these days, and pain may feel stronger as sensation returns.

If opioids were prescribed, they should be used only for short periods and exactly as directed by your doctor.

## **Days 3–7: Building a Routine**

This is often the week when symptoms feel most intense. Swelling and bruising may appear worse before they begin to improve. This is part of the body's normal inflammatory response.

Continue using ice, elevation, and compression if recommended.

Check the incision daily. Mild redness around the edges and slight warmth can be normal. However, spreading redness, foul-smelling drainage, or fever should prompt a call to your doctor.

Exercises should be frequent but gentle. Follow the program provided by your physical therapist, which may include simple movements such as:

- ankle pumps
- quadriceps contractions
- heel slides for the knee
- glute and hip exercises
- pendulum movements for the shoulder

These exercises are meant to restore movement, not to build strength. They should not cause severe pain.

If pain increases significantly, stop, apply ice, and rest.

Walking can also increase gradually. Many patients find it helpful to increase their steps by about 10–20% each day, always following the surgeon's instructions.

## **Days 8–14: Consolidating Progress**

By the second week, the most acute phase usually begins to settle. Swelling should start to decrease, and activity tolerance often improves.

Many people begin reducing opioid use during this period. It is best to taper gradually under medical guidance.

Joint movement also improves progressively. After knee surgery, for example, an early goal is to regain full extension and gradually reach 60–90 degrees of flexion.

Walking distances often increase to 500–1,000 steps per day, spread across several sessions.

## **Wound Care, Swelling, and Clot Prevention**

If you were given a waterproof dressing, brief showers may already be allowed. Otherwise, keep the wound dry until stitches or staples are removed, usually around day 10 to 14.

Do not soak the incision or apply creams unless approved by your medical team. Elevation remains one of the most effective ways to control swelling. Ice and compression can also help.

Follow your clot-prevention plan carefully. This may include prescribed medications, regular ankle movement, and short walks throughout the day.

Contact your doctor immediately if you notice:

- painful swelling in the calf
- chest pain
- sudden shortness of breath
- coughing up blood

## **Safety and Fall Prevention**

Falls are one of the most common risks after surgery.

Keep walkways clear and well lit. Wear shoes with good grip and watch out for rugs, cords, or pets.

Always use the assistive devices recommended by your therapist. When using stairs, follow the general rule: the stronger leg goes up first, the operated leg goes down first, unless your surgeon advises otherwise.

## **Nutrition, Digestion, and Mood**

Good nutrition supports healing. Try to maintain an adequate intake of protein and stay well hydrated.

Foods rich in fiber and light daily activity can help prevent constipation. Mood changes and sleep difficulties are also common during recovery. Short walks, natural daylight, and small achievable daily goals can help maintain motivation.

## **Looking Ahead**

The first two weeks set the tone for the months of recovery that follow. Following your medication plan, using ice and elevation, and maintaining gentle but regular movement help build steady progress.

Monitor your incision, pay attention to warning signs, and work with your medical team to safely reduce medications and gradually increase activity.

With patience and consistency, these early weeks become the foundation for a stable and lasting recovery.

## CHAPTER 8 Weeks 3-4

# Healing and Rehabilitation

After the first two weeks, the most intense phase of recovery begins to gradually stabilize. During weeks three and four, swelling and stiffness usually start to decrease, although they may still be present. Energy levels can vary throughout the day and progress may feel uneven. This is completely normal. Tissue healing and the body's adjustment take time, and it is common to experience better days followed by more difficult ones.

By the fourth week, however, many people begin to notice clearer improvements. Walking aids may feel less necessary, joint movement improves, and daily activities become easier. Many patients are also able to reduce or stop stronger pain medications if they have already begun tapering them gradually.

The main rule remains the same: move often, but don't overdo it. Increasing activity by about 10–20% each week is generally a safe pace. This might mean a few extra minutes of walking, an additional set of exercises, or slightly longer daily activities.

### **Managing swelling and recovery**

Ice can still be helpful, especially after exercises or longer walks. Applying it for about 15–20 minutes helps control swelling and discomfort.

When swelling increases, it can help to elevate the limb for 30–45 minutes and use light compression if recommended by your doctor.

Positioning during rest also remains important. A few simple adjustments can help, such as:

- placing a towel under the heel to encourage knee extension
- using a pillow between the knees after hip surgery
- supporting the shoulder in a slightly reclined position to reduce strain

## **Exercises and restoring movement**

### **Important note:**

For a clearer overview of exercises for the knee and hip, a later section of the book will be dedicated to specific exercise programs for different situations.

Exercises continue to play an important role in rehabilitation. After knee surgery, the main goal is to regain full extension and gradually improve flexion.

Simple exercises may include:

- heel slides
- quadriceps contractions
- straight leg raises
- small squats toward a chair
- low step exercises

These are usually performed in short sessions several times per day, with 10–15 repetitions per exercise. Pain should remain moderate. If it becomes intense, it is best to stop and rest.

After hip surgery, rehabilitation focuses mainly on improving walking and strengthening the hip muscles. Exercises such as sitting and standing from a chair, bridges, and controlled leg movements can help restore stability and reduce limping.

Shoulder surgery requires more gradual progress. At this stage, passive or assisted movements are preferred, such as pendulum exercises and gentle guided arm movements. The sling continues to protect the joint and should be used according to the surgeon's instructions.

## **Walking and daily activity**

Walking remains one of the most effective tools for recovery. During week three, many patients reach 10–20 minutes of walking per day, divided into several sessions. By week four, the total time may increase to 20–30 minutes.

The key is consistency without pushing too hard. If swelling or pain increases after activity and does not improve by the next day, it is better to temporarily reduce activity levels.

Stairs can be approached cautiously when it is safe to do so, always using a handrail. Simple balance exercises with support may also begin during this stage.

## **Returning to daily activities**

By the fourth week, many people are able to perform certain activities more independently, such as showering with safety supports, preparing simple meals, or going out for short errands with assistance.

It is still important to avoid heavy lifting and sudden movements. For example, lifting more than 5–7 kg (10–15 lbs) is usually not recommended without medical approval, and twisting on the operated leg should be avoided.

Taking short breaks to stand and walk every one to two hours can help circulation and reduce stiffness.

## **Work and driving**

Returning to work depends on the type of job. Desk work or remote tasks may sometimes resume between weeks three and four, especially if stronger daytime pain medications are no longer needed.

Driving requires normal reaction time and the ability to brake quickly. After surgery on the right leg, returning to driving may take longer. It is always best to confirm timing with your surgeon.

## **Wound care and medications**

The surgical incision should continue healing steadily. It is helpful to check it daily to ensure there is no spreading redness, drainage, or unusual odor.

Follow your doctor's instructions regarding dressings, showering, and the use of any creams or lotions.

If you have been prescribed medications to prevent blood clots, it is important to complete them for the full recommended duration.

## **Warning signs**

Contact your doctor if you notice symptoms such as:

- fever above 38°C (100.4°F)
- redness or drainage from the incision
- calf pain or swelling
- chest pain or difficulty breathing
- sudden loss of movement or strength
- pain not controlled by medication

## **Looking ahead**

Recovery during weeks three and four represents a transition phase. The early crisis period has passed, and the focus shifts more toward rehabilitation.

Continuing regular activity, targeted exercises, good sleep, and proper nutrition helps prepare the body for the next stage of recovery, which will involve further strengthening and gradually more demanding activities.

# CHAPTER 9 Weeks 5-12

Between the fifth and twelfth week after joint surgery, recovery enters a new phase. In the previous weeks, the main goal was to protect the joint and allow the tissues to begin healing. Now the focus gradually shifts toward rebuilding strength, endurance, and safer function in daily life.

During this period, many people begin to feel more stable in their movements. Walking aids are often reduced step by step, for example moving from a walker to a cane and, in some cases, to walking without support. Joint movement continues to improve, although daily exercises may still be needed.

The general rule remains the same as in the previous weeks: move regularly, but increase activity gradually. An increase of about 10–20% in activity each week is usually a safe pace. Small, steady gains work better than doing too much too soon, which can lead to swelling or pain.

## **Walking and Aerobic Activity**

Walking remains the simplest and most effective aerobic activity during this phase. Short, regular walks are generally better than long, occasional ones.

A typical progression may be:

- about 15–20 minutes of walking per day around week six
- 20–30 minutes per day by week eight
- about 30 minutes on most days by week ten

The pace should remain moderate. It is best to avoid uneven ground or steep hills until strength and balance have improved.

If swelling or pain appears after activity and lasts beyond the following day, it may help to temporarily reduce the intensity and discuss it with your physical therapist.

## **Managing Swelling and Recovery**

Even at this stage, swelling or soreness may still occur, especially at the end of the day or after longer activities. When this happens, it can help to elevate the limb for a short period and use light compression if recommended by your doctor.

Ice may still be useful, especially after exercises or longer walks.

Applying it for about 15–20 minutes can help reduce swelling and discomfort. Sudden, sharp pain, swelling with redness or fever, or calf pain should be evaluated by a doctor.

## **Nutrition and Recovery**

Good nutrition continues to play an important role in recovery. Adequate protein intake supports muscle repair, while proper hydration helps circulation and tissue healing.

If stronger pain medications are still being used, it is helpful to reduce them gradually according to medical advice. During this phase, it is also wise to limit alcohol and maintain a balanced diet.

## **Weeks 7–8: Greater Independence**

Between weeks seven and eight, many people notice more obvious improvement. Pain often decreases and movements begin to feel more natural. Some patients are able to climb stairs again using alternating steps and remain standing for longer periods.

During this phase, some lighter types of work, especially desk work or remote work, may gradually resume if pain is well controlled and sitting, walking, and standing are manageable.

Heavier manual work usually requires more time and should only be resumed with the surgeon's approval.

## **Weeks 9–10: More Strength and Endurance**

Between weeks nine and ten, supervised physical therapy often begins to decrease, while independence with home exercises grows.

Exercises may become slightly more demanding, including deeper squats for the knee, balance work for the hip, and more progressive resistance exercises for the shoulder.

At this stage, it is helpful to manage energy well during the day. Alternating periods of activity with moments of rest can help avoid overdoing it and then feeling worse afterward.

## **Physical Activity and Movement**

After about ten weeks, many people tolerate activities such as a stationary bike or elliptical trainer with moderate resistance. Swimming may be introduced once the wound is fully healed and the surgeon approves it.

High-impact activities, such as running or more intense sports, should be reintroduced cautiously and only with medical guidance.

As strength improves, it becomes possible to begin practicing activities useful for everyday life, such as standing longer, carrying small loads, or repeating movements needed for work or household tasks.

## **Weeks 11–12: A New Balance**

Weeks eleven and twelve often represent an important milestone in recovery. Pain is usually minimal, swelling is greatly reduced, and movement is close to normal.

Muscle strength, however, may still be lower than on the non-operated side, so it remains important to avoid excessive loads.

During this period, many patients gradually move from frequent physical therapy sessions to a home maintenance program, continuing with strength, mobility, and aerobic exercises.

## **Maintaining Progress**

One of the main challenges at this stage is staying consistent with exercise. Without the structure of physical therapy sessions, it can be easy to reduce activity.

Creating a simple routine can help, for example:

- mobility exercises in the morning
- strengthening exercises during the day
- a walk or light cycling in the evening

Setting small, realistic weekly goals can help maintain motivation and make progress easier to track.

## **Looking Ahead**

By the twelfth week, you should have a fairly clear sense of how recovery is progressing. Movement should be significantly improved, pain reduced, and walking more natural.

Continuing with gradual progress, maintaining an active lifestyle, and contacting your medical team if unusual symptoms appear will help consolidate the results and support continued recovery over time.

## CHAPTER 10

# One Year and Beyond

Reaching one year after joint replacement is an important milestone, but it is better seen as a stage in the journey rather than the final destination. By this time most healing has occurred, rehabilitation has already produced its main results, and your expectations about pain, strength, and movement are becoming clearer.

This stage is less about recovery and more about maintaining the progress you have achieved.

For many people, daily life feels significantly easier than it did before surgery. Walking may be smoother, stairs easier to climb, and simple movements such as sitting, standing, or getting in and out of a car more comfortable. Age, general health, and commitment to rehabilitation can influence the final outcome, but the most important sign at this stage is stable improvement rather than gradual decline.

Some minor symptoms can still appear from time to time. Mild swelling after heavier activity is common and usually improves with rest. Stiffness may occur after sitting for long periods but often resolves once you begin moving again. Baseline pain should generally remain low and appear mainly after unusual effort.

### **Changes to watch over time**

The concerns at this stage are different from those in the early weeks after surgery. Immediate warning signs such as fever, rapidly worsening pain, severe calf pain, or drainage from the wound still require urgent medical attention.

More commonly, however, problems develop gradually. Changes worth discussing with your doctor include:

- new clicking or unusual noises in the joint
- a feeling that the joint is unstable
- a slow but persistent increase in pain
- swelling that does not improve with rest
- gradual loss of function, such as increasing limp or shorter walking distance

Addressing these changes early helps protect joint function and preserve treatment options.

## How long joint replacements last

Joint implants are designed to be durable, but they are not permanent. Studies show that many hip and knee replacements function well for fifteen to twenty years, and sometimes longer. Data for shoulder and ankle replacements are similar, although less extensive.

Longevity depends on several factors, including:

- age at the time of surgery
- activity level
- body weight
- bone quality
- overall health and infections

These factors are not reasons for worry but aspects that can often be managed. Understanding them helps set realistic expectations and maintain appropriate follow-up over time.

In some cases, a revision surgery may eventually be needed. This should not be seen as a failure, but rather as a form of long-term maintenance for certain implants. Revision procedures can be more complex and recovery may take longer, which is why protecting bone health and reducing preventable risks remains important throughout the years.

## Follow-up visits

Periodic checkups help identify small changes before they become serious problems. Many surgeons recommend follow-up visits every two or three years, or sooner if new symptoms appear.

During these visits, the doctor may review X-rays, evaluate joint function, and discuss your daily activities. These appointments allow potential issues to be addressed calmly and early, rather than during an urgent situation.

If returning to the original surgeon is not possible, checkups can be performed by your primary doctor or a local orthopedic specialist, with imaging shared with the surgical team when needed.

## Protecting your joint replacement

Maintaining the results of surgery requires a combination of healthy habits and sensible activity choices.

Keeping a healthy body weight reduces long-term stress on the joint. Continuing a basic strengthening program helps support the muscles

that stabilize the joint, such as the quadriceps and hip muscles after lower-limb replacements or the rotator cuff and shoulder stabilizers after shoulder surgery.

Low-impact activities such as walking, cycling, swimming, or elliptical training are excellent options for maintaining cardiovascular health without placing excessive stress on the implant. High-impact or repetitive activities should be approached with caution and discussed with your medical team.

Bone health also plays an important role. Adequate calcium and vitamin D, regular weight-bearing exercise, and appropriate medical treatment when needed help maintain bone strength and support the implant over time.

Preventing infections is another important part of long-term joint protection. Infections in other parts of the body — such as dental, urinary, or skin infections — should be treated promptly. Informing your healthcare providers about your joint replacement before certain procedures can help reduce potential risks.

## **Looking ahead**

One year after surgery marks the beginning of a new phase. The intense recovery period is behind you, and the focus shifts toward maintaining the progress you have made.

Reaching this point is already a significant achievement. You went through surgery, rehabilitation, and the most challenging moments of recovery. Now the goal is simply to keep moving forward — maintaining strength, staying active, and listening to your body.

Small habits make a meaningful difference: regular movement, caring for your joint, and making simple daily choices that help preserve the quality of life you worked hard to regain.

And while most patients continue to do well for many years, it is also important to understand one of the rare but serious complications that can affect joint replacements over time.

In the next chapter, we will discuss prosthetic joint infection — what it is, how it can occur, and the early signs that should never be ignored. Understanding this condition is an important step in protecting the long-term success of your joint replacement.

## CHAPTER 11

# Prosthetic Joint Infection

A **prosthetic joint infection** is one of the most serious complications that can occur after joint replacement. At the same time, when it is recognized early and treated promptly, it can often be managed successfully. For this reason, understanding the possible warning signs and knowing when to contact your medical team can make an important difference.

Unlike natural tissues, a prosthetic implant provides a surface where bacteria can attach more easily and form what doctors call a *biofilm*. This is a protective layer created by communities of bacteria that allows them to survive more easily and makes antibiotics less effective. Because of this, infections involving a joint implant often require more complex treatment than ordinary soft-tissue infections.

Doctors usually classify these infections according to when they appear and how deeply they involve the joint. Some infections affect only the skin and superficial tissues around the surgical incision. These are generally easier to treat and usually do not threaten the implant itself. In other cases, however, the infection reaches the joint space or the surface of the prosthesis and requires a more aggressive approach.

The timing of the infection also plays an important role. *Acute infections*, which develop in the first weeks after surgery, are often related to contamination during or shortly after the operation. **Delayed infections** may appear months later and are sometimes caused by slower-growing bacteria. In other situations, bacteria from another part of the body can travel through the bloodstream and reach the implant, causing what is known as a hematogenous infection.

Certain conditions may increase the risk of infection. These include previous joint infections, revision surgery, poorly controlled diabetes, smoking, obesity, a weakened immune system, or problems with the skin around the surgical area. When one or more of these factors are present, it becomes even more important to pay attention to changes around the joint and maintain open communication with your medical team.

Often the earliest signs are subtle and may not be immediately obvious. For example, recovery that had seemed to be progressing well may suddenly slow down or worsen. Swelling that does not improve with rest, redness spreading beyond the surgical scar, persistent drainage from the wound, or fever associated with joint pain should not be ignored. A wound that appears to reopen, a sudden decrease in movement, or a new feeling of instability in the joint can also indicate a problem. In situations like these, contacting your surgeon the same day is usually the safest choice.

Confirming an infection requires a careful diagnostic process. Doctors typically begin with a clinical examination and blood tests that measure inflammation, such as **ESR** and **CRP**. Another important step is joint aspiration, a procedure in which a small sample of fluid is taken from the joint with a needle. This fluid is analyzed to evaluate the presence of white blood cells and sent to the laboratory to identify possible bacteria. Because some organisms grow slowly, final culture results may take several days or even a few weeks.

Imaging tests can also help in the evaluation. X-rays allow doctors to check the position and stability of the implant, while ultrasound may be useful in guiding the aspiration of joint fluid. In certain situations CT scans or MRI may also be used, although metal implants can sometimes make these images more difficult to interpret.

Treatment decisions depend mainly on how long the infection has been present and how much the bacterial biofilm has developed. When the infection is identified early, doctors may attempt to preserve the implant using a procedure known as **DAIR** (*debridement, antibiotics, and implant retention*). During this operation the surgeon carefully cleans the joint, replaces removable components when possible, and combines surgery with targeted antibiotic therapy. When treated promptly, this strategy can offer good chances of success.

When the infection has been present for a longer period of time, however, removing the prosthesis often becomes necessary. One common approach is the two-stage revision, in which the infected implant is removed and temporarily replaced with an antibiotic spacer. After several weeks of antibiotic treatment, a new prosthesis can be implanted once the infection appears to be under control. In certain favorable situations, surgeons may perform a one-stage revision,

removing and replacing the implant during the same operation after a thorough surgical cleaning of the joint.

For patients who cannot safely undergo major surgery, long-term antibiotic therapy may sometimes be used to control symptoms. This treatment does not completely eliminate the infection, but it may help keep it stable and requires careful monitoring.

Managing a prosthetic joint infection can affect several aspects of daily life. Some patients may need intravenous antibiotics through a **PICC** line, frequent blood tests, or temporary limitations in mobility. As with many powerful medications, antibiotics can also cause side effects such as gastrointestinal discomfort, allergic reactions, or, more rarely, more serious complications. For this reason, it is important to remain in close contact with your medical team and report any new symptoms promptly.

Preventing infections in other parts of the body also becomes particularly important. Dental, urinary, or skin infections should be treated quickly, since bacteria from these areas can sometimes travel through the bloodstream and reach the prosthetic joint. In certain situations, doctors may also recommend preventive antibiotics before specific procedures, depending on the individual level of risk.

Beyond the medical aspects, the emotional impact of this complication should not be underestimated. Facing additional treatment after a major operation can feel frustrating and discouraging. Keeping a simple symptom diary, carrying a card with information about your implant, and maintaining open communication with your surgical team can help you feel more prepared and supported.

Prosthetic joint infections remain relatively rare events. When they do occur, however, modern treatment strategies allow many patients to recover and regain good joint function.

Understanding this complication is not meant to create anxiety, but rather to increase awareness. Recognizing early changes and acting quickly helps protect the long-term success of the operation and the quality of life you worked so hard to regain.

## CHAPTER 12

# Nutrition for Healing

Before going into the details, it is helpful to know that in the following pages you will also find a short, more practical section dedicated to nutrition during recovery. There we will look in simple terms at the nutrients that most support healing, along with an example of how daily meals can be organized in the weeks after surgery. The goal is not to follow a perfect diet, but to make **simple choices that help your body recover better**.

Preparing for joint replacement surgery also means taking care of your nutrition. Food provides the body with the energy and nutrients needed to repair tissues, fight infections, and maintain muscle mass. Even small improvements in eating habits can help reduce complications and support a smoother recovery.

In the months before and after surgery, **protein becomes especially important**. About two to six weeks before the operation, it is helpful to consume around **1.0–1.2 grams of protein per kilogram of ideal body weight per day**. In some situations, such as when muscle mass has been lost or physical weakness is present, intake may increase to about 1.5 grams per kilogram.

A practical goal can be about **25–30 grams of protein at each main meal** and **10–20 grams in snacks**. Simple foods such as chicken, eggs, Greek yogurt, fish, or legumes can help reach these amounts without difficulty. During the first weeks after surgery, appetite may decrease just when the body needs more energy to heal. In these situations, smaller and more frequent meals, or protein-rich smoothies, are often easier than trying to eat large meals.

Some vitamins and minerals also play an important role in healing. **Vitamin C** supports collagen formation and wound repair. Zinc helps the immune system function properly, while iron helps prevent anemia, which can slow recovery. If fatigue becomes significant or persistent, it may be helpful to check hemoglobin and ferritin levels.

**Vitamin D** is also important for bones and muscles. Checking levels and taking supplements only if recommended by your doctor can be helpful.

Calcium should mainly come from food sources such as milk, yogurt, and leafy green vegetables. When eating iron-rich foods, combining them with vitamin C can improve absorption, while tea, coffee, or calcium-rich foods are best consumed a few hours apart.

Hydration is equally important. Drinking fluids throughout the day helps the body function properly and supports muscle recovery. In general, about eight to ten glasses of fluids per day is a good starting point unless your doctor advises otherwise.

If weight loss is recommended before surgery, it should be done gradually, about half a kilogram per week, while maintaining adequate protein intake and some strength activity to avoid losing muscle mass. After surgery it often helps to keep meals simple and regular. Prioritizing protein through foods that are easy to eat, such as yogurt, scrambled eggs, cottage cheese, or smoothies with fruit and vegetables, can help meet nutritional needs even when appetite is low. If nausea appears, starting with **small and light meals** is often more comfortable.

Constipation is a fairly common issue after surgery, especially when pain medications are used. Increasing fiber intake, drinking more fluids, and resuming walking as soon as possible can help restore normal bowel function.

Nutrition can also support rehabilitation. After a physiotherapy session, a small combination of **carbohydrates and protein** can help restore energy and support muscle repair.

Some medical conditions require additional attention. People with diabetes should work with their endocrinologist to keep blood glucose levels well controlled before and after surgery. Those with kidney disease should discuss appropriate protein intake with their nephrologist. If medications such as warfarin are used, it is important to keep vitamin K intake stable and speak with a doctor before taking supplements or herbal products, since some may increase bleeding risk.

In general, nutrition should remain *simple and consistent*. Prioritizing protein, maintaining good hydration, and checking with your doctor for possible deficiencies in vitamin D, iron, or vitamin C can support recovery. Limiting alcohol and avoiding excess in the weeks before surgery is another helpful step.

Keeping practical and nutritious foods at home can make eating easier when mobility is limited. Frozen or canned vegetables and fruit, eggs, tuna, yogurt, oats, brown rice, rotisserie chicken, and dried legumes are simple options that require little preparation. Preparing meals in advance, freezing portions, and asking for help with grocery shopping during the first weeks can make recovery much easier.

Finally, it is important to pay attention to certain **warning signs** that may require medical advice. Very low appetite lasting more than a week, weight loss greater than five percent in a month, slow wound healing, or unstable blood sugar levels should be evaluated by a doctor.

Nutrition alone will not eliminate pain or guarantee a perfect recovery. However, it can **reduce infection risk, preserve muscle mass, and help you return more quickly to independence.**

## CHAPTER 13

# Emotional Recovery After Surgery

During recovery it can be easy to focus only on the difficulties of the moment: the pain, the fatigue, the movements that still don't work the way you would like. But recovery rarely happens in a straight line. There are days when everything seems to improve and others when it feels like you are taking a step back...

For this reason, it can be helpful to pause from time to time and observe the journey from a broader perspective. When you look back after a few weeks, you often realize how many small changes have taken place. A movement that used to be difficult and now feels more natural, a few extra steps, less pain during the day. These are improvements that sometimes go unnoticed if we do not take the time to recognize them.

Throughout the book you will also find a space designed specifically for this: the Recovery Journal. It is not a task to complete or an exercise to do perfectly. It is simply a tool to help you pause, reflect, and become more aware of what is changing both inside and outside of you during recovery.

Writing even a few words can make a big difference, it can help you recognize progress, better understand the more difficult moments, and remember why you chose to begin this journey. Sometimes putting a thought, a feeling, or a small improvement down on paper makes it easier to see recovery more clearly.

This part of the book includes moments for reflection, a review of the first month of recovery, and a space to look ahead and define the next steps. You do not need to write much, even a few lines can become a valuable reminder of the path you are taking.

Recovery is not only a physical process, but also a mental shift. It means learning to be patient, to listen to your body, and to accept that progress happens little by little.

Every small step matters, and every day of recovery is a step forward compared to where you were before surgery. Pausing to observe this journey can help you maintain motivation and remind you that you are moving in the right direction.

Over time, these small observations become a record of your journey. A concrete reminder of how far you have come, even during moments when it felt like nothing was changing.

## CHAPTER 14

# Returning to Normal Life

In the later stage of recovery, the focus shifts from rehabilitation rules to the practical choices of daily life. This is the moment when you begin to understand which activities truly matter to you, how much load the joint can tolerate, and how to find a balance between safety and freedom of movement.

Recovery rarely follows a perfectly straight line. For some people it progresses smoothly, while for others it may include periods of slower progress. Age, the type of surgery, overall health, and commitment to early rehabilitation can influence the pace of recovery. Someone who was active before surgery may recover more quickly, while someone starting from a more fragile physical condition may need more time. Both paths are valid as long as progress is steady and aligned with personal goals.

Each step forward should be based on signals from the body and, when possible, discussed with your surgeon or physical therapist. Positive signs include pain that can be managed without strong medication, minimal swelling, a fully healed incision, and good strength in the operated limb. The ability to move without compensation or forced movements also indicates that recovery is moving in the right direction.

Not all activities require the same level of effort. Walking or cycling is generally less demanding than running, kneeling, or lifting heavy objects. When thinking about returning to a hobby or a work activity, it can be helpful to break it down into the main movements involved. Identify which parts may place more stress on the joint, practice them first during physical therapy or in a controlled setting, and then increase the effort gradually. Changing only one variable at a time, such as duration or intensity, helps you better understand how the body responds over the following days.

At the same time, it is important to recognize warning signs that require caution. If swelling, warmth, or redness increases and does not improve with rest and ice within a few days, or if fever appears or the incision shows unusual changes, it is advisable to contact your doctor.

Persistent strong pain, calf pain, sudden shortness of breath, or new weakness also require medical evaluation.

Many signs of improvement are simple but meaningful, such as being able to walk a few more minutes, needing fewer medications, or climbing stairs more easily. These are often indicators that recovery is progressing well. Alternating periods of activity with moments of rest allows the body to consolidate improvements and reduces the risk of overload.

It can also be helpful to observe simple details during the day, such as minutes of walking, pain levels before and after activity, or the exercises completed. Practicing new movements in physical therapy before introducing them into daily life can increase confidence and help you better understand your limits.

The goal is not to return immediately to the most demanding activities you performed before surgery, but to build an active and sustainable life over time. With gradual progress, realistic goals, and open communication with your healthcare team, independence usually returns step by step.

Over time, many activities that once felt difficult become part of everyday life again. Not always in exactly the same way as before, but often with a new awareness of your body and its limits. It is this balance between movement, caution, and confidence that helps restore a stable and lasting sense of normal life.

From the next section of the book, the focus becomes even more practical. You will find a guided exercise program, “**Pre & Post Surgery Exercise Program**” designed to help prepare the body before surgery and support recovery in the weeks that follow. The exercises are presented in a simple and progressive way so they can be adapted to the different stages of the healing process.

# Exercise Program

## Before and After Surgery

Surgery repairs or replaces a joint, but recovery also depends on how the body prepares beforehand and how the period after the operation is managed. Moving in a controlled way before and after surgery can help maintain strength, improve joint stability, and make recovery more gradual.

This exercise program is designed to support you during both phases.

### Program Structure

The program is divided into two parts:

#### *Part A – Four Weeks Before Surgery*

This phase helps maintain as much strength, mobility, and joint control as possible before surgery.

#### *Part B – Four Weeks After Surgery*

This phase introduces progressive movements to help the joint regain stability, strength, and function.

The exercises in this guide focus on knee and hip rehabilitation.

If you need exercises for other joints, or if you would like to explore additional exercises, you can contact me using the email address provided **on the last page of the book.**

Use only the section related to your stage of recovery and your type of procedure.

## How to Use This Program

Each exercise includes:

- When to start
- The purpose of the exercise
- The starting position
- Step-by-step instructions
- Recommended repetitions
- How to progress gradually
- Common mistakes
- Signs to stop

Work calmly and consistently.

Most sessions require about **20–30 minutes per day**, which can be divided into shorter sessions if needed.

## When to Stop and Contact Your Doctor

Stop exercising and contact your surgeon or healthcare provider if you experience:

- rapidly increasing swelling
- fever
- wound drainage
- calf pain or shortness of breath
- new neurological symptoms
- sudden joint instability

This program supports recovery but **does not replace medical advice**. Always follow the instructions provided by your surgeon or physical therapist.

# EXERCISE 1 – Knee (Pre-Surgery)

## Quad Sets

### When to Start

About 4 weeks before surgery.

### Goal

Activate the quadriceps muscle and maintain full knee extension before surgery.

### Starting Position

Lie on your back on a firm surface.

Keep the surgical leg **fully extended**.

Place a small rolled towel under the heel to encourage complete knee extension.

The opposite leg may remain bent for comfort.

### Execution

1. Tighten the muscle at the front of your thigh.
2. Press the back of your knee gently toward the floor or bed.
3. Hold the contraction for about 5 seconds.
4. Completely relax the muscle.
5. Repeat the movement.

The movement is small. The goal is **to activate the muscle**, not to lift the leg.

### Repetitions

10 repetitions per set

3–4 sets per day

### Progression

Start by holding the contraction for about 5 seconds.

When the exercise becomes easier and you can clearly activate the muscle, gradually increase the hold to 8–10 seconds.

External weights or resistance are not necessary for this exercise.

## **Common Mistakes**

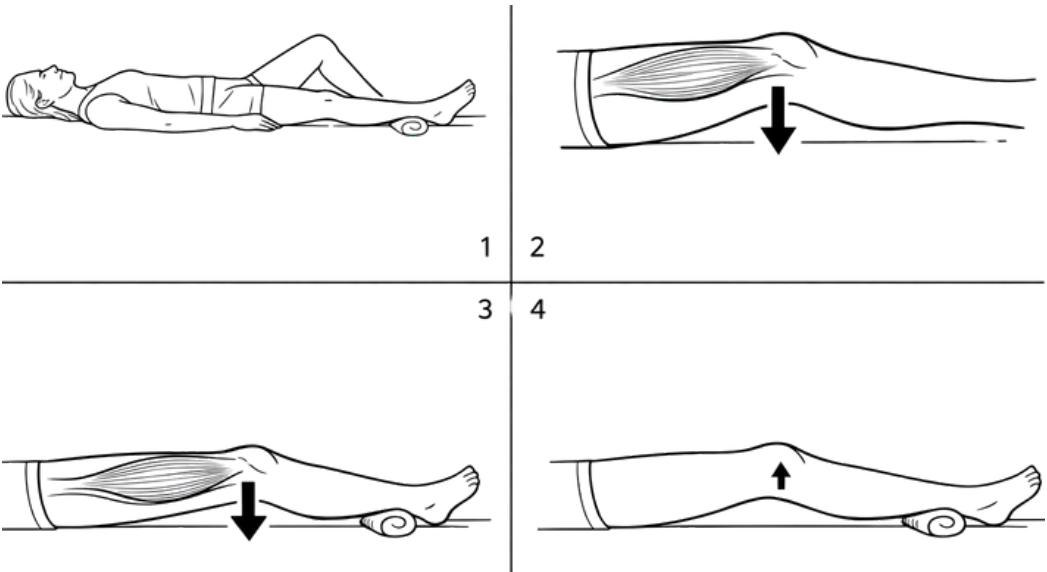
- Lifting the entire leg instead of contracting only the thigh
- Allowing the knee to remain slightly bent
- Contracting the hips or glutes instead of the quadriceps
- Holding your breath during the contraction

## **When to Stop**

Stop the exercise if you experience:

- sharp knee pain
- noticeable increase in swelling
- difficulty keeping the knee fully extended

Mild muscle fatigue is normal. Joint pain is not.



# EXERCISE 2 - knee (Pre-Surgery)

## Straight Leg Raise

### When to Start

About **4 weeks before surgery**, once you can perform Quad Sets while keeping the knee fully straight.

### Goal

Strengthen the quadriceps while keeping the knee straight and improve control of the leg during lifting.

### Starting Position

Lie on your back on a firm surface.

Bend the non-surgical leg with the foot flat on the floor.

Keep the surgical leg fully straight.

Tighten the quadriceps before starting the movement.

### Execution

1. Tighten the thigh muscle (as in a *Quad Set*).
2. Keep the knee completely straight.
3. Slowly lift the leg about 12–16 inches (**30–40 cm**) off the floor.
4. Hold the position for **2–3 seconds**.
5. Lower the leg slowly and with control.
6. Fully relax before the next repetition.

The knee should remain straight throughout the entire movement.

### Repetitions

10 repetitions per set / 3–4 sets per day

### Progression

Start by holding the leg up for **2–3 seconds**.

When the movement becomes easier and you can keep the knee fully straight, gradually increase the hold to **5–8 seconds**.

Adding ankle weights is not necessary at this stage.

## **Common Mistakes**

- Letting the knee bend during the lift
- Lifting the leg too quickly
- Excessively arching the lower back
- Lowering the leg without control

## **When to Stop**

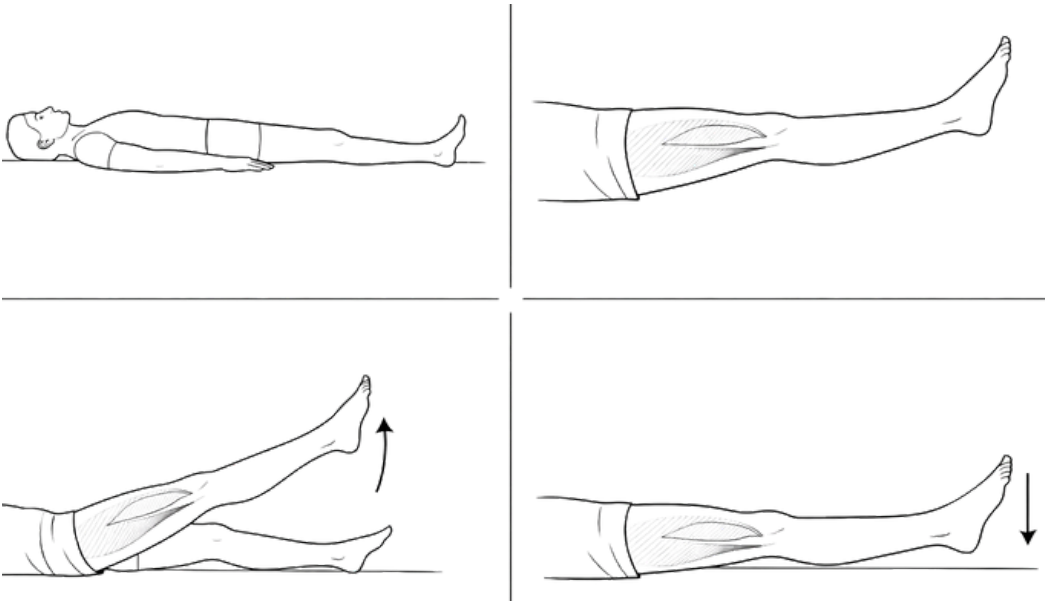
Stop the exercise if you notice:

- difficulty keeping the knee completely straight
- sharp pain in the front of the knee
- noticeable increase in swelling afterward

Mild muscle fatigue is normal. Joint pain is not.

## **Estimated Time**

About ***3–5 minutes per session.***



# EXERCISE 3 – Knee (Pre-Surgery)

## Heel Slides

### When to Start

About **4 weeks before surgery**.

### Goal

Improve knee bending (flexion) and reduce joint stiffness through controlled movement.

### Starting Position

Lie on your back on a firm surface.

Keep both legs extended.

Place a towel or cloth under the heel of the surgical leg to help it slide.

### Execution

1. Slowly slide your heel toward your buttocks.
2. Allow the knee to bend as far as comfortable without forcing it.
3. Hold the end position for **2–3 seconds**.
4. Slowly slide the heel forward until the leg is straight again.
5. Repeat the movement in a slow and controlled rhythm.

The movement should create a *gentle stretch*, but not sharp pain.

### Repetitions

10-15 repetitions per set

3–4 sets per day

### Progression

Start by bending the knee only to a level of mild tension.

Over time, gradually increase how far you bend the knee while keeping the movement smooth and controlled.

The goal is to improve **mobility**, not to force the joint.

## Common Mistakes

- Forcing the knee to bend aggressively
- Lifting the heel instead of sliding it
- Holding your breath during the movement
- Moving the leg too quickly

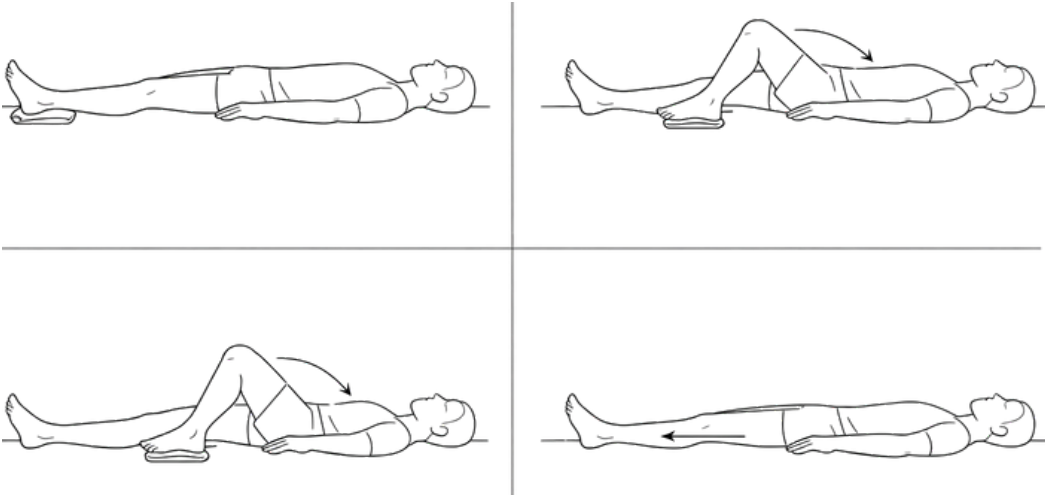
## When to Stop

Stop the exercise if you notice:

- sharp pain or a catching sensation in the knee
- sudden increase in swelling
- pain that lasts more than 24 hours after the exercise

## Easier Version

If the movement feels difficult, you can use **a larger towel or a strap** around your foot to help gently pull the heel toward you.



# EXERCISE 4 – Knee (Pre-Surgery)

## Sit-to-Stand

### When to Start

About **4 weeks before surgery**, once you can perform *Quad Sets* and the *Straight Leg Raise*.

### Goal

Strengthen the quadriceps and gluteal muscles and improve control when moving from sitting to standing.

### Starting Position

Sit on a stable chair, preferably with armrests.  
Keep your feet flat on the floor, about hip-width apart.  
Your knees should be aligned with your feet.  
Keep your back straight and your upper body relaxed.  
If needed, start with a slightly **higher chair**.

### Execution

1. Lean your trunk slightly forward from the hips.
2. Push evenly through both feet.
3. Slowly stand up until you are fully upright.
4. Fully straighten your hips and knees.
5. Slowly sit back down with control.
6. Take about **3–4 seconds** to return to the seated position.

The lowering phase is just as important as standing up.  
Avoid dropping into the chair.

### Repetitions

8–12 repetitions per set  
3–4 sets per day

### Progression

At first, you may use the armrests of the chair for support.  
Over time, try to **reduce the use of your arms** and push more through your legs.  
Focus on slow and controlled movement during both standing and sitting.

## Common Mistakes

- Letting the knees collapse inward
- Shifting weight only to the non-surgical leg
- Using momentum instead of muscle control
- Dropping into the chair

## When to Stop

Stop the exercise if you notice:

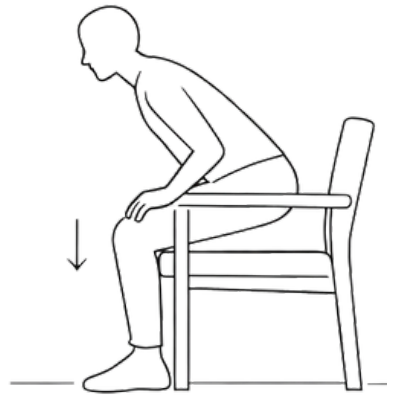
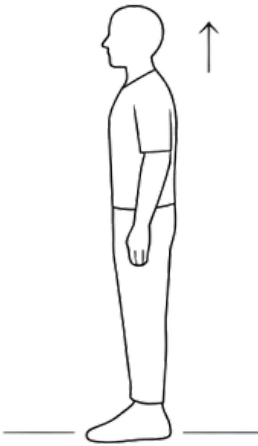
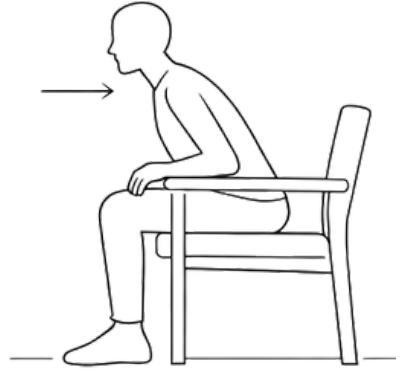
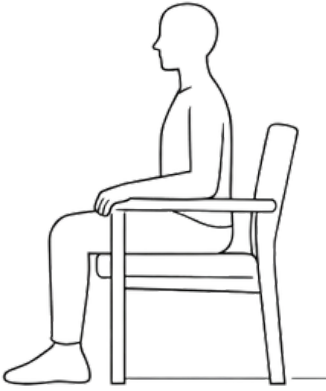
- sharp knee pain
- a feeling of instability or giving way
- noticeable increase in swelling afterward

## Easier Version

If the exercise feels difficult, use a **higher chair** or push through the armrests to help stand up.

## Estimated Time

About **4–6 minutes per session**.



# EXERCISE 5 – Knee (Pre-Surgery)

## Single-Leg Stance

### When to Start

About **4 weeks before surgery**, once you can perform the *Sit-to-Stand* with good control and without instability.

### Goal

Improve balance, knee control, and leg stability during weight-bearing.

### Starting Position

Stand near a stable support, such as a table or chair.

Keep your feet about hip-width apart.

Distribute your weight evenly on both legs.

Maintain an upright posture with relaxed shoulders.

### Execution

1. Slowly shift your weight onto the surgical leg.
2. Slightly lift the opposite foot off the floor.
3. Keep your trunk upright without leaning sideways.
4. Keep the knee slightly bent, without locking it completely.
5. Hold the position while breathing normally.
6. Slowly place the opposite foot back on the floor and repeat.

Focus on ***balance control***, not on duration.

### Repetitions

5–8 holds per set

3–4 sets per day

Hold each position for **10–20 seconds**.

### Progression

Start by maintaining balance for about **10 seconds**.

As the exercise becomes easier, gradually increase the hold to **20–30 seconds**.

Over time, try to ***reduce the use of your hands*** on the support, keeping them there only for safety.

## **Common Mistakes**

- Locking the knee completely
- Leaning the trunk toward the standing leg
- Holding your breath
- Gripping the floor excessively with the toes

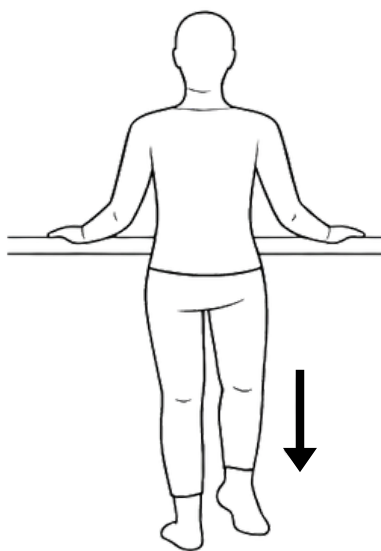
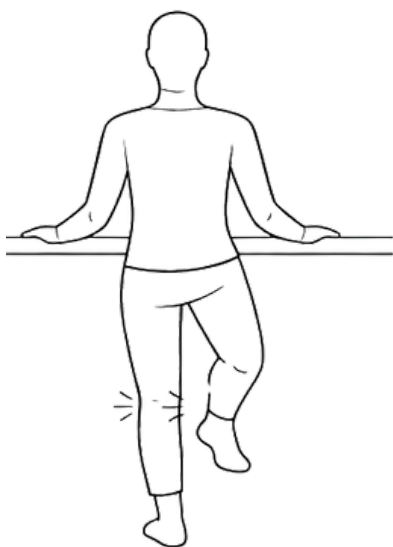
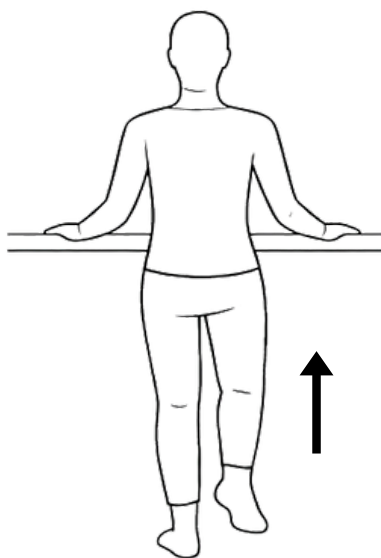
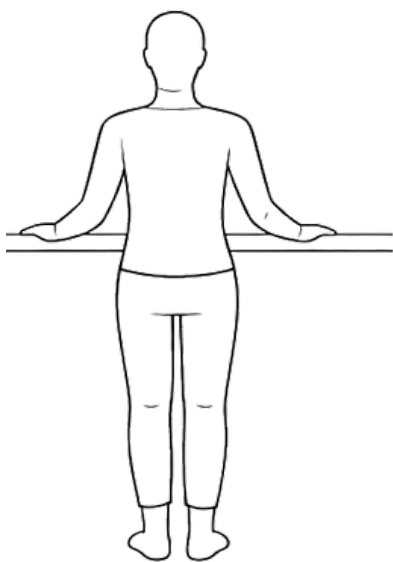
## **When to Stop**

Stop the exercise if you notice:

- sudden instability
- sharp knee pain
- noticeable increase in swelling afterward

## **Estimated Time**

About **3–4 minutes per session**.



# EXERCISE 6 – Knee (Pre-Surgery)

## Step-Ups

### When to Start

About **4 weeks before surgery**, once you can perform **Sit-to-Stand** and **Single-Leg Stance** with good control and without significant pain.

### Goal

Strengthen the quadriceps and gluteal muscles during weight-bearing and improve knee control while stepping up and down.

### Starting Position

Stand in front of a low, stable step (about 2–4 inches / 5–10 cm high).

Keep your feet about hip-width apart.

Maintain an upright posture and look forward.

If needed, lightly place one hand on a stable support (such as a railing or table).

### Execution

1. Place the surgical foot fully on the step.
2. Slowly shift your weight onto that leg.
3. Push through the heel and straighten the knee to step up.
4. Bring the other foot up onto the step.
5. Step down slowly, leading with the non-surgical leg.
6. Lower the surgical leg back to the floor slowly (3–4 seconds).

The lowering phase is very important.

Control the movement and avoid stepping down too quickly.

### Repetitions

8–10 repetitions per set

3–4 sets per day

### Progression

At first, you may lightly use your hands on a support to help maintain balance.

Over time, try to reduce hand support and improve control during the lowering phase.

Focus on slow and controlled movements.

There is no need to increase the step height during this phase.

## Common Mistakes

- Pushing too much with the non-surgical leg
- Letting the knee collapse inward
- Stepping down too quickly
- Leaning the trunk excessively forward

## When to Stop

Stop the exercise if you notice:

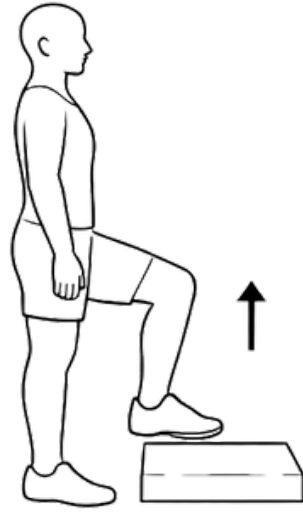
- sharp knee pain
- a feeling that the knee may give way
- noticeable increase in swelling afterward

## Easier Version

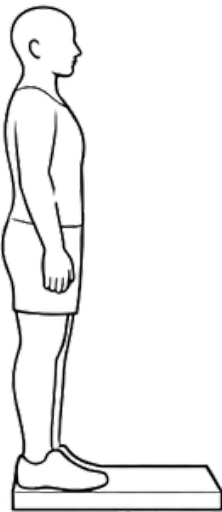
If the exercise feels difficult, use **a lower step** or lightly support yourself with your hands on a stable surface.



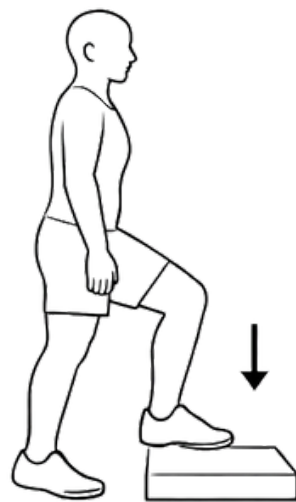
Starting Position



Step Up



Top Position



Controlled Descent

# POST-SURGERY EXERCISES KNEE

The exercises in the previous section were designed to prepare your body before surgery.

From this point forward, the focus shifts to **recovery after the operation**.

In the first weeks after surgery, the main goals are to restore gentle movement, reactivate the muscles around the joint, and gradually rebuild strength and stability.

Progress should always be **slow and controlled**. Follow the instructions carefully and respect the limits of your body.

If your surgeon or physical therapist provides specific guidelines that differ from this program, **always follow their recommendations first**.

The exercises in the following pages will guide you step by step through the **early phase of recovery after surgery**.

# EXERCISE 1 – Knee (Post-Surgery)

## Ankle Pumps

### When to Start

On the day of surgery or the **first day after the operation**, unless your surgeon gives different instructions.

### Goal

Improve circulation in the operated leg and help reduce swelling without placing stress on the knee.

### Starting Position

Lie on your back or sit with the leg well supported.

If recommended by your doctor, keep the leg slightly elevated.

The knee should remain relaxed and in a comfortable position.

### Execution

1. Slowly pull your toes toward you.
2. Pause briefly.
3. Point your toes away from you.
4. Move the ankle through the full comfortable range of motion.
5. Continue with a slow and steady rhythm.

The knee should remain relaxed during the entire exercise.

### Repetitions

20–30 movements per set

Repeat every hour while awake during the first days after surgery.

### Progression

Continue performing the exercise frequently during the first days.

Over time, you can reduce the frequency to **3–4 times per day**, while maintaining slow and full ankle movements.

No weights or resistance are required.

## **Common Mistakes**

- Moving the ankle too quickly
- Performing small movements without using the full ankle range
- Contracting the thigh unnecessarily
- Lifting the entire leg instead of moving only the ankle

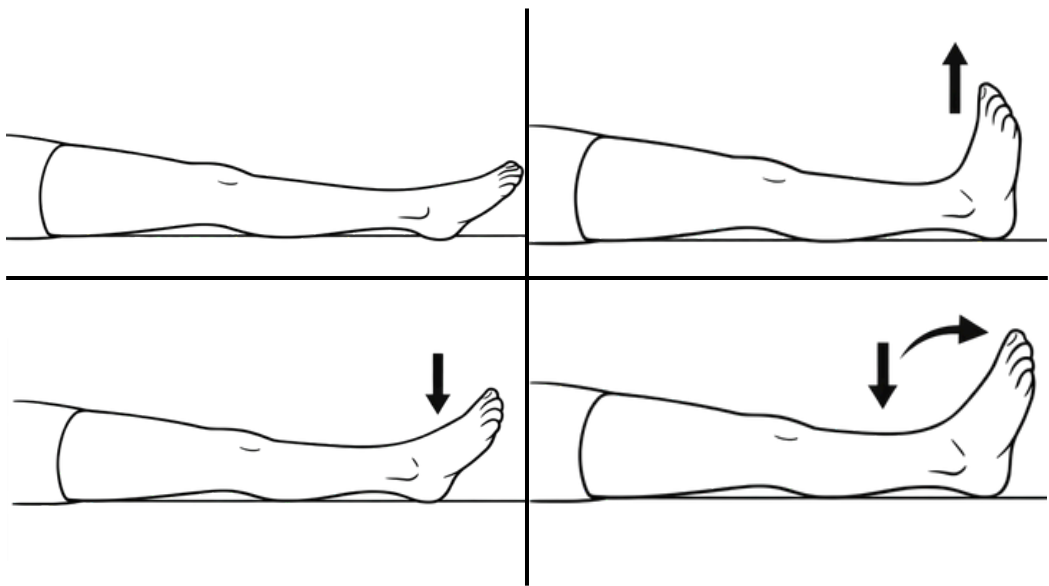
## **When to Stop**

Stop the exercise and contact your doctor if you notice:

- sudden calf pain
- increased swelling in the calf
- warmth or redness in the calf area
- shortness of breath

## **Estimated Time**

About ***1–2 minutes per set.***



# EXERCISE 2 – Knee (Post-Surgery)

## Quad Sets

### When to Start

Within **24–48 hours after surgery**, unless your surgeon gives different instructions.

### Goal

Reactivate the quadriceps muscle and maintain full knee extension during the early phase of recovery.

### Starting Position

Lie on your back on a firm surface.

Keep the surgical leg extended.

Place a small rolled towel under the heel to encourage knee extension.

The opposite leg may remain bent for comfort.

### Execution

1. Gently tighten the muscle at the front of your thigh.
2. Press the back of your knee toward the bed or floor.
3. Try to see or feel the muscle above the kneecap contracting.
4. Hold the contraction for **about 5 seconds**.
5. Fully relax the muscle.
6. Repeat the movement.

The movement is small. The goal is to activate the muscle, not to lift the leg.

### Repetitions

10 repetitions per set

3–4 sets per day during the first week after surgery

### Progression

Start by holding the contraction for about 5 seconds.

As the exercise becomes easier, gradually increase the hold to **8–10 seconds**.

Focus on the quality of the contraction and on keeping the knee fully extended.

No weights are necessary during this phase.

## Common Mistakes

- Lifting the entire leg instead of contracting only the thigh
- Allowing the knee to remain slightly bent
- Contracting the hip instead of the quadriceps
- Holding your breath during the contraction
- Forcing the knee into a painful position

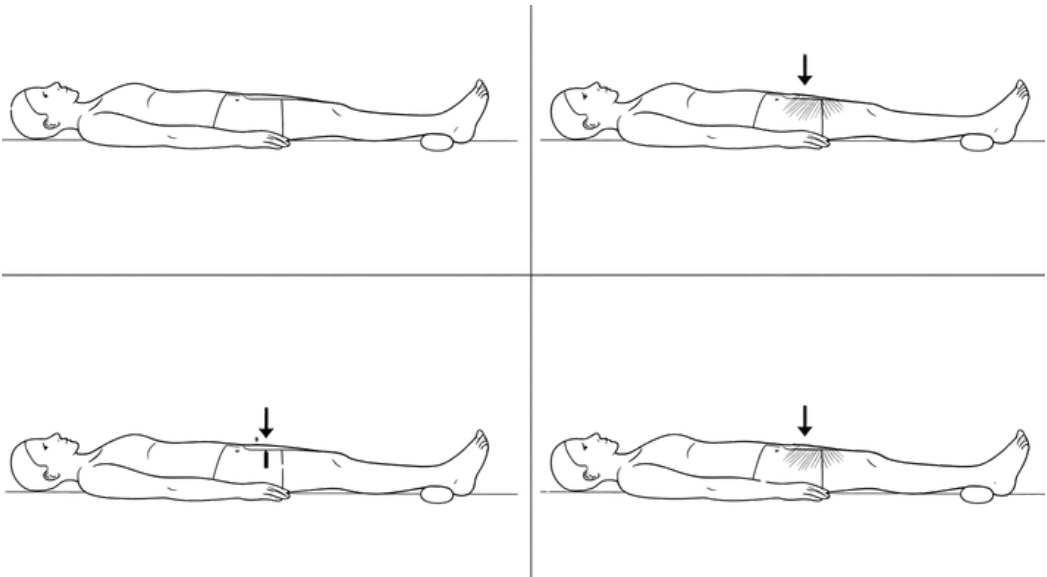
## When to Stop

Stop the exercise if you notice:

- sharp knee pain
- noticeable increase in swelling
- difficulty keeping the knee fully extended
- sudden increase in warmth or redness in the joint

## Easier Version

If the exercise feels difficult, you can start by simply ***tightening the thigh muscle for a few seconds*** without pressing the knee strongly downward.



# EXERCISE 3 – Knee (Post-Surgery)

## Assisted Heel Slides

### When to Start

About **2–4 days after surgery**, or when your surgeon allows the first gentle knee bending movements.

### Goal

Gradually restore knee bending and reduce joint stiffness during the early phase of recovery.

### Starting Position

Lie on your back on a firm surface.

Place a small towel or cloth under the heel of the surgical leg to help it slide.

The opposite leg may remain bent for comfort.

Keep your pelvis relaxed.

If necessary, you may use a strap or towel around your foot to help bend the leg.

### Execution

1. Slowly slide your heel toward your body.
2. Allow the knee to bend gradually.
3. If needed, gently assist the movement with your hands or a strap.
4. Stop when you feel **moderate tension**, not sharp pain.
5. Hold the position for **2–3 seconds**.
6. Slowly slide the heel forward until the leg is straight again.

The movement should create a **stretching sensation**, not a forced movement.

### Repetitions

10–15 repetitions per set

3–4 sets per day during the first weeks after surgery

## **Progression**

At first, move the knee only within a comfortable range.

As the days pass, gradually try to increase how much the knee bends while keeping the movement slow and controlled.

Always keep the movement smooth and avoid forcing the knee.

## **Common Mistakes**

- Forcing the knee to bend into pain
- Lifting the heel instead of sliding it
- Rotating the leg outward during the movement
- Moving the leg too quickly

## **When to Stop**

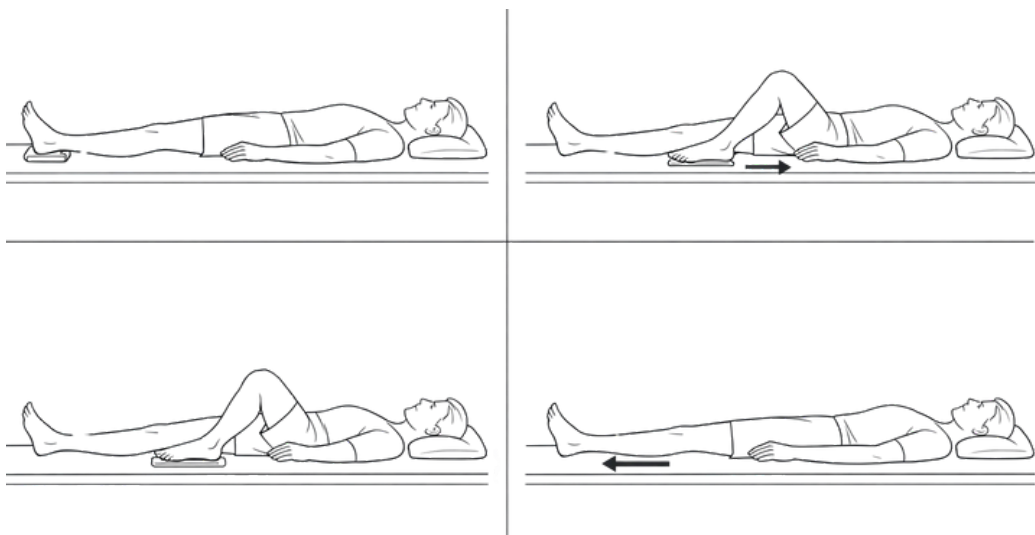
Stop the exercise if you notice:

- sharp pain or a catching sensation in the knee
- rapid increase in swelling
- pain lasting more than 24 hours after the exercise
- a feeling of knee instability

A mild stretching sensation is normal. Sharp joint pain is not.

## **Estimated Time**

About **3–5 minutes per session**.



# EXERCISE 4 – Knee (Post-Surgery)

## Short Arc Quad

### When to Start

During the *first week after surgery*, once you are able to activate the quadriceps with *Quad Sets*.

### Goal

Strengthen the quadriceps and improve control of knee extension without fully loading the leg.

### Starting Position

Lie on your back on a firm surface.

Place a rolled towel or small cushion *under the knee of the surgical leg*.

The knee should remain slightly bent over the support.

The heel rests on the bed or floor.

The opposite leg may remain bent for comfort.

### Execution

1. Tighten the muscle at the front of your thigh.
2. Slowly lift the heel by straightening the knee.
3. Extend the knee as much as possible without forcing pain.
4. Hold the position for **3–5 seconds**.
5. Slowly lower the heel with control.

The movement occurs only at the knee.

Avoid lifting the entire leg.

### Repetitions

10–12 repetitions per set

3 sets per day during the first weeks after surgery

## Progression

Start by holding the position for **about 3 seconds**.

As the exercise becomes easier, gradually increase the hold to **5–8 seconds**.

Focus on slow and controlled movements.

No ankle weights are necessary during this phase.

## Common Mistakes

- Lifting the entire leg instead of moving only the knee
- Using the hip muscles instead of the quadriceps
- Forcing knee extension and causing pain
- Moving the leg too quickly
- Letting the heel drop without control

## When to Stop

Stop the exercise if you notice:

- sharp pain in the front of the knee
- noticeable increase in swelling afterward
- difficulty fully straightening the knee
- a feeling of instability

## Easier Version

If the exercise feels difficult, start by **lifting the heel only a few centimeters** and holding the position for **2–3 seconds**.

**1. Starting Position**



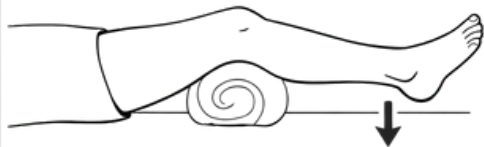
**2. Extension Phase**



**3. Full Extension Hold**



**4. Controlled Lowering**



# EXERCISE 5 – Knee (Post-Surgery)

## Supported Weight Shift

### When to Start

About **2 weeks after surgery**, once you are able to perform **Short Arc Quad** and control the quadriceps without increased swelling.

### Goal

Gradually reintroduce weight bearing on the surgical leg and improve balance while standing.

### Starting Position

Stand near a stable support, such as a table, railing, or walker.

Keep your feet about hip-width apart.

Both feet should be fully flat on the floor.

Lightly place your fingertips on the support to maintain balance.

Maintain an upright posture.

### Execution

1. Slowly shift your body weight toward the surgical leg.
2. Allow the knee to accept the load without locking it completely.
3. Keep the pelvis stable and avoid leaning your trunk.
4. Hold the position for **5–10 seconds**.
5. Slowly shift your weight back to the center.
6. Repeat the movement with control.

The movement should be slow and controlled.

Avoid sudden weight shifts.

### Repetitions

8–10 weight shifts per set

3 sets per day

## Progression

Start by holding the weight on the surgical leg for **about 5 seconds**. As the exercise becomes easier, gradually increase the hold to **8–10 seconds**.

Over time, try to reduce the use of your hands on the support while maintaining good balance.

## Common Mistakes

- Leaning the trunk toward the surgical leg
- Locking the knee completely
- Shifting the weight too quickly
- Gripping the support too tightly
- Letting the knee collapse inward

## When to Stop

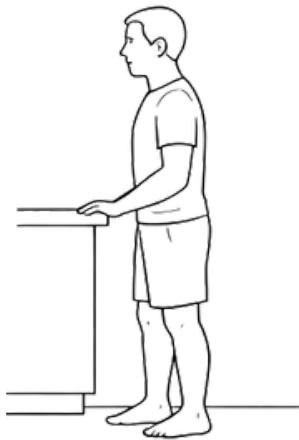
Stop the exercise if you notice:

- sudden instability
- sharp knee pain
- noticeable increase in swelling afterward
- persistent pain beyond normal muscle fatigue

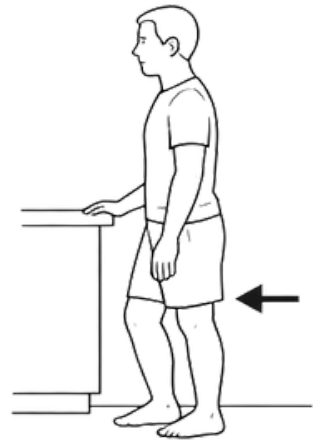
Mild muscle fatigue is normal. Instability is not.

## Estimated Time

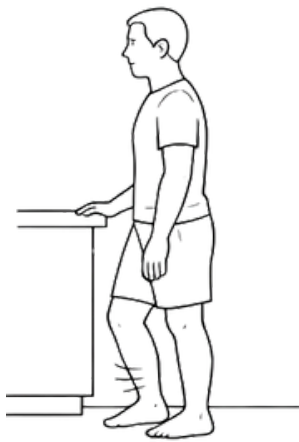
About **3–4 minutes per session**.



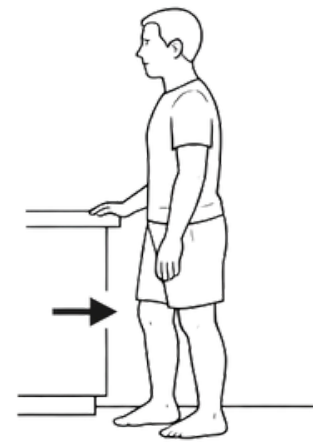
Starting Position



Weight Shift Phase



Hold Position



Return to Center

# EXERCISE 6 – Knee (Post-Surgery)

## Low Step Practice

### When to Start

About **3–4 weeks after surgery**, once you can perform the **Supported Weight Shift** with good control and without increased swelling.

### Goal

Prepare the surgical leg for stair climbing and improve knee control during weight-bearing.

### Starting Position

Stand in front of a low, stable step (about **2–4 inches / 5–10 cm** high).

Keep your feet about hip-width apart.

Lightly place your fingertips on a stable support (such as a railing or table).

Maintain an upright posture and look forward.

### Execution

1. Place the surgical foot fully on the step.
2. Slowly shift your weight onto that leg.
3. Push through the heel and straighten the knee to step up.
4. Bring the other foot up onto the step.
5. Step down slowly, leading with the non-surgical leg.
6. Lower the surgical leg back to the floor **slowly** (3–4 seconds).

The lowering phase is very important.

Control the movement and avoid stepping down too quickly.

### Repetitions

8–10 repetitions per set

2–3 sets per day

## Progression

At first, use your hands on the support to maintain balance. Over time, gradually **reduce hand support** while maintaining control of the movement.

Focus especially on the slow and controlled lowering phase.

There is no need to increase the step height during the first month after surgery.

## Common Mistakes

- Pushing too much with the non-surgical leg
- Letting the knee collapse inward
- Leaning the trunk excessively forward
- Stepping down too quickly
- Using momentum instead of controlled movement

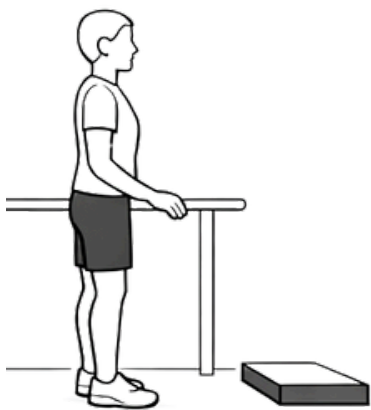
## When to Stop

Stop the exercise if you notice:

- sharp knee pain
- a feeling that the leg may give way
- noticeable increase in swelling afterward
- persistent pain beyond normal muscle fatigue

## Easier Version

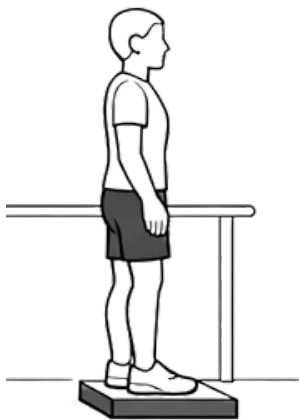
If the exercise feels difficult, use **an even lower step** or perform the movement while keeping both hands on the support.



Starting Position



Step Up Phase



Top Position



Controlled Step Down

# END OF THE KNEE EXERCISES

If you've made it this far, congratulations.

Even small improvements are important steps toward restoring mobility and joint function.

Recovery is not always linear: some days you'll feel better, while others may bring stiffness or fatigue. This is normal. Keep moving carefully, listen to your body, and progress gradually.

If this program is helping you, you can do something simple that may help others as well.

## ***Leave a short review on Amazon.***

It only takes 30 seconds.

You can share, for example:

- what is helping you the most
- which exercise you found most useful
- your experience so far



## ***Next Section – Hip Exercises***

In the following pages, you will find exercises designed to support recovery after hip surgery.

The goal is to:

- reactivate the muscles
- improve movement control
- restore strength and stability

Perform the exercises calmly and always follow the guidance of your surgeon or physical therapist.

Now let's begin with the hip recovery exercises.

# EXERCISE 1 – Hip (Pre-Surgery)

## Gluteal Set

### When to Start

Begin about **4 weeks before surgery**, or when hip pain allows gentle muscle activation without causing sharp discomfort.

### Goal

Reactivate the gluteal muscles and improve hip stability before surgery.

### Starting Position

Lie on your back on a firm surface.

To perform the exercise correctly:

- the legs remain extended and relaxed
- the feet are about hip-width apart
- the pelvis stays in a neutral position without arching the lower back
- the arms can rest comfortably at your sides

The exercise should be performed **without lifting the legs or the pelvis**.

### Execution

1. Slowly tighten the gluteal muscles.
2. Imagine squeezing the glutes together without moving your legs.
3. Keep the pelvis still and do not lift your hips.
4. Continue breathing normally.
5. Hold the contraction for **about 5 seconds**.
6. Fully relax before the next repetition.

The movement should be **very subtle**.

### Repetitions

Perform **10 repetitions per set**.

The exercise can be performed **3–4 times** per day, keeping the movement slow and controlled.

## Progression

At first, hold the contraction for about **5 seconds**.

As the gluteal activation becomes easier, gradually increase the hold to **8–10 seconds**.

At this stage, the quality of the contraction is more important than the strength of the effort.

No weights or additional resistance are necessary.

## Common Mistakes

During the exercise, try to avoid these common errors:

- arching the lower back
- pushing through the feet to lift the pelvis
- activating the hamstrings instead of the gluteal muscles
- holding your breath
- creating tension in the shoulders or neck

## When to Stop

Stop the exercise if you notice:

- sharp pain in the hip or groin
- increased discomfort in the joint
- pain radiating down the leg
- worsening symptoms lasting more than 24 hours

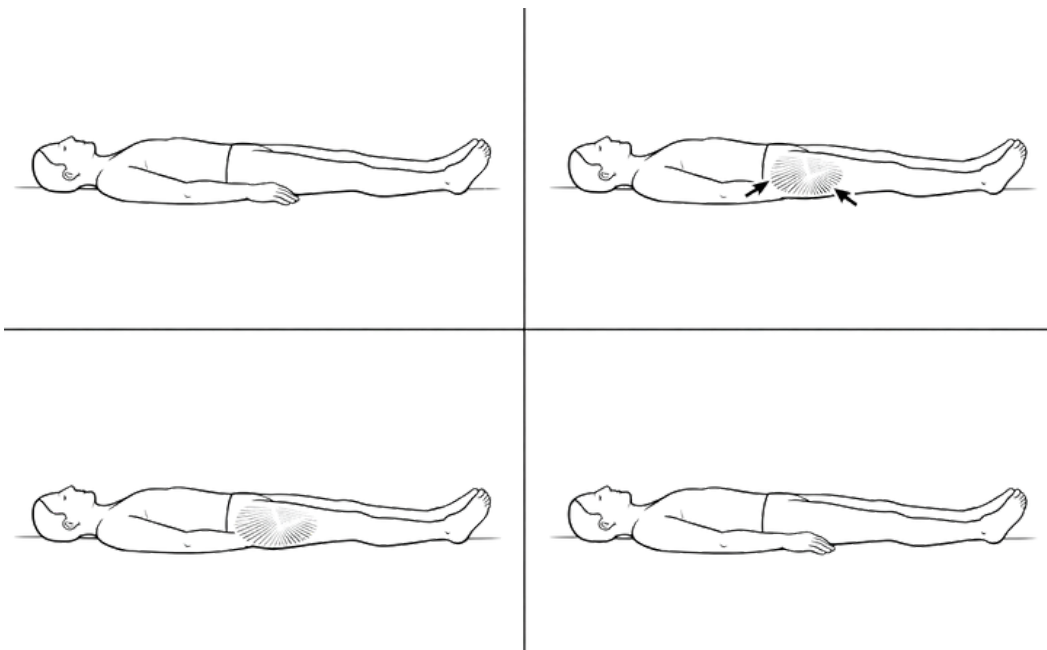
## Estimated Time

About **2–3 minutes per session**.

### Note:

This exercise may seem very simple, but it is essential for properly reactivating the hip muscles before surgery.

Good gluteal activation helps improve pelvic stability and prepares the joint for the postoperative recovery process.



# EXERCISE 2 – Hip (Pre-Surgery)

## Supine Hip Abduction

### When to Start

About **4 weeks before surgery**, once you are able to activate the gluteal muscles with the Gluteal Set without sharp hip pain.

### Goal

Strengthen the muscles on the side of the hip and improve pelvic stability during movement.

### Starting Position

Lie on your back on a firm surface.

Both legs remain extended.

To prepare the correct position:

- place a small towel under the heel of the working leg to help it slide
- keep your toes pointing toward the ceiling
- the pelvis should remain stable and relaxed

Avoid rotating the foot outward.

### Execution

1. Slowly slide the working leg outward to the side.
2. Keep the knee straight but not rigid.
3. Keep your toes pointing toward the ceiling.
4. Move the leg only within a comfortable range.
5. Pause briefly at the end of the movement.
6. Slowly slide the leg back to the starting position with control.

The movement should be **slow and controlled**.

The pelvis should remain stable without tilting.

### Repetitions

Perform **10–12 repetitions per set**.

The exercise can be performed **3 times per day**, maintaining controlled movement.

## Progression

At first, move the leg only within a small range of motion.

As the days pass, you can gradually increase how far the leg moves outward if the movement remains comfortable.

Focus especially on:

- control of the movement
- pelvic stability
- slow return to the starting position

No resistance bands or weights are required at this stage.

## Common Mistakes

During the exercise, try to avoid:

- rotating the foot outward
- tilting the pelvis
- moving the leg too quickly
- bending the knee
- moving into groin pain

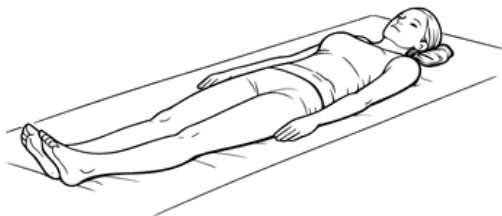
## When to Stop

Stop the exercise if you notice:

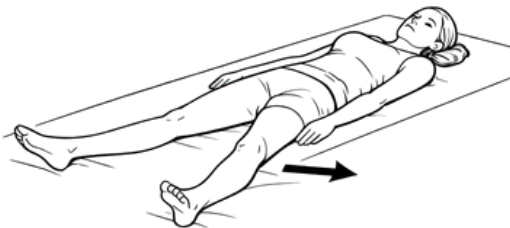
- sharp pain in the front of the hip
- a catching or clicking sensation in the groin
- increased joint discomfort lasting more than 24 hours
- pain radiating down the leg

## Estimated Time

About **3 minutes per session**.



1. Starting Position



2. Outward Slide



3. Outer Position Hold



4. Controlled Return

# EXERCISE 3 – Hip (Pre-Surgery)

## Low Bridge

### When to Start

About **4 weeks before surgery**, once you can perform the **Gluteal Set** and *Supine Hip Abduction* with good control and without sharp hip pain.

### Goal

Strengthen the gluteal muscles, improve hip extension, and increase stability between the pelvis and lower back.

### Starting Position

Lie on your back on a firm surface.

To assume the correct position:

- bend both knees to about **60–70°**
- keep your feet flat on the floor at hip-width apart
- allow your arms to rest relaxed at your sides
- keep the pelvis in a neutral position without arching the lower back

The heels should remain fully in contact with the floor.

### Execution

1. Gently tighten the gluteal muscles.
2. Push through your heels.
3. Slowly lift your hips off the floor.
4. Raise only until your trunk and thighs form a straight line.
5. Hold the position briefly while keeping the pelvis stable.
6. Slowly lower your hips back to the starting position.

The movement should come from the hips, not from the lower back. Avoid lifting too high or pushing excessively.

### Repetitions

Perform **8–12 repetitions per set**.

You can perform **3 sets per day**, always keeping the movement slow and controlled.

## Progression

At first, lift the pelvis only a few centimeters.

As the exercise becomes easier, you may:

- hold the position for 3–5 seconds
- focus more on the slow lowering phase
- concentrate on the contraction of the gluteal muscles

It is not necessary to add weights or perform single-leg variations during this phase.

## Common Mistakes

During the exercise, try to avoid:

- excessive arching of the lower back
- pushing through the toes instead of the heels
- lifting the hips too high
- letting the knees collapse inward
- performing the movement too quickly

## When to Stop

Stop the exercise if you notice:

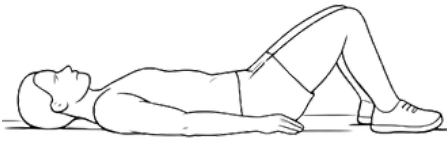
- sharp pain in the front of the hip
- increased groin pain
- lower back pain during or after the exercise
- worsening symptoms lasting more than 24 hours

## Estimated Time

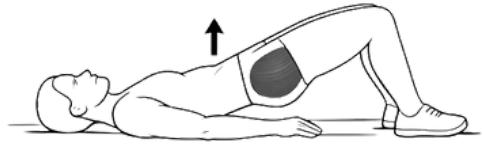
About **3–4 minutes per session**.

### **Note:**

*This exercise is important because it helps reactivate **hip extension** without overloading the joint. Good control of the gluteal muscles and pelvis supports many everyday activities such as **standing up, walking, and climbing stairs**.*



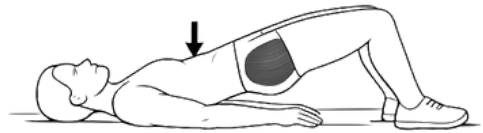
Starting Position



Lift Phase



Top Position



Controlled Lowering

# EXERCISE 4 – Hip (Pre-Surgery)

## Standing Hip Abduction

### When to Start

About **4 weeks before surgery**, once you can perform the supine exercises with good pelvic control and without sharp hip pain.

### Goal

Strengthen the muscles on the side of the hip and improve pelvic stability while standing.

### Starting Position

Stand near a stable support, such as a table, railing, or sturdy chair. To assume the correct position:

- keep your feet about hip-width apart
- lightly place your fingertips on the support to maintain balance
- keep your back straight and your trunk upright
- distribute your weight evenly on both legs

Avoid leaning the trunk sideways.

### Execution

1. Shift your weight slightly onto the non-surgical leg.
2. Slowly lift the working leg out to the side.
3. Keep the knee straight but relaxed.
4. Keep the toes pointing forward.
5. Lift the leg only a few centimeters.
6. Slowly return the leg to the starting position.

The trunk should remain stable throughout the movement. Avoid swinging the leg.

### Repetitions

Perform **8–12 repetitions per set**.

You can perform **3 sets per day**, keeping the movement slow and controlled.

## Progression

Over time, you can improve the exercise by focusing on:

- greater pelvic stability
- a slower return of the leg to the starting position
- gradually reducing the support from your hands

There is no need to use ankle weights or resistance bands at this stage.

## Common Mistakes

During the exercise, avoid:

- leaning the trunk toward the standing leg
- rotating the foot outward
- swinging the leg quickly
- lifting the leg too high
- locking the knee of the standing leg

## When to Stop

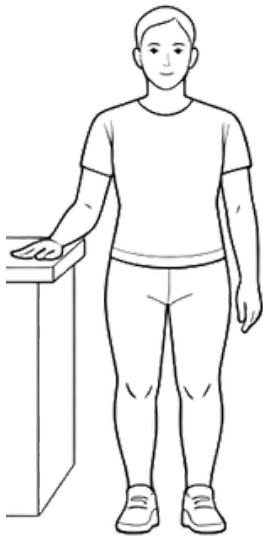
Stop the exercise if you notice:

- sharp pain in the hip or groin
- sudden instability
- increased joint irritation in the hours after exercise
- pain radiating down the leg

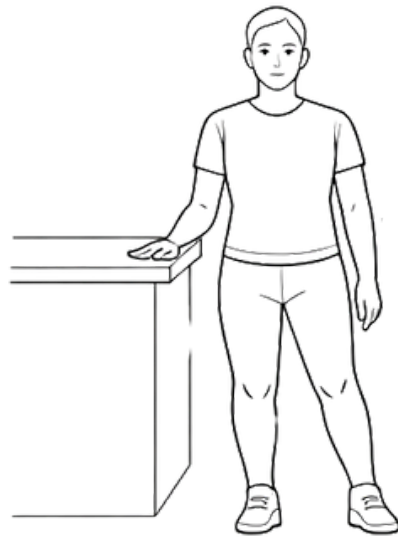
A mild muscular activation on the side of the hip is normal.

## Estimated Time

About **3–4 minutes per session**.



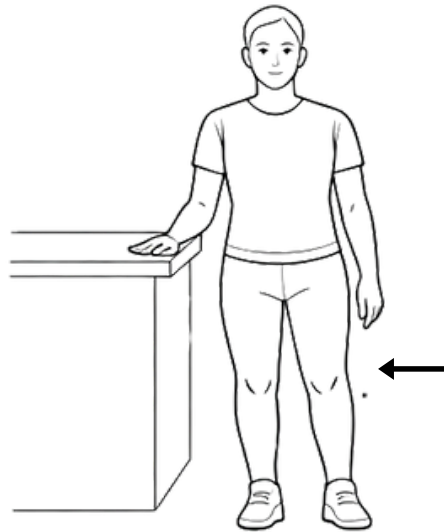
**Starting Position**



**Weight Shift**



**Controlled Abduction**



**Controlled Return**

# EXERCISE 5 – Hip (Pre-Surgery)

## Supported Weight Shift

### When to Start

About 4 weeks before surgery, once you are able to perform Standing Hip Abduction with good pelvic control and without sharp hip pain.

### Goal

Gradually train the hip to support body weight and improve stability while standing.

### Starting Position

Stand near a stable support, such as a table, railing, or sturdy chair.

To prepare the correct position:

- keep your feet about hip-width apart
- both feet should be fully flat on the floor
- lightly place your fingertips on the support for balance
- keep your back straight and your trunk upright

At the beginning, your weight should be *evenly distributed on both legs*.

### Execution

1. Slowly shift your body weight toward the surgical leg.
2. Allow the hip to gradually accept the load.
3. Keep the pelvis stable without leaning the trunk.
4. Hold the position for about 5 seconds.
5. Slowly return your weight to the center.

The movement should be ***slow and controlled***.

Avoid sudden weight shifts.

### Repetitions

Perform **8–10** weight shifts per set.

You can perform **3 sets per day**, maintaining good posture and control.

## Progression

Over time, you can improve the exercise by focusing on:

- longer hold duration (***up to 8–10 seconds***)
- better pelvic stability
- gradually reducing hand support on the stable surface

The goal is to distribute body weight ***more naturally between both legs.***

## Common Mistakes

During the exercise, avoid:

- leaning the trunk toward the standing leg
- locking the knee completely
- shifting weight too quickly
- gripping the support too tightly
- letting the pelvis drop on the opposite side

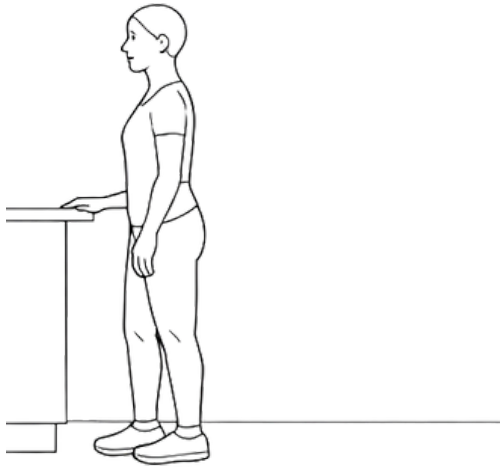
## When to Stop

Stop the exercise if you notice:

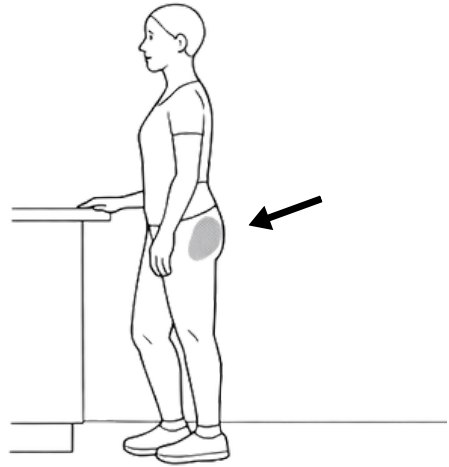
- sudden instability
- sharp pain in the hip or groin
- increased joint discomfort in the hours after exercise
- symptoms that worsen beyond normal muscular fatigue

## Estimated Time

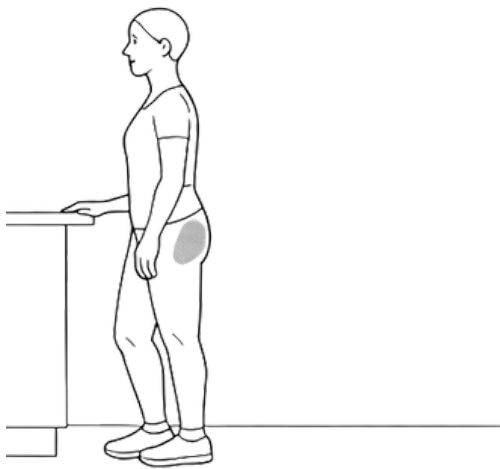
About 3 *minutes per session.*



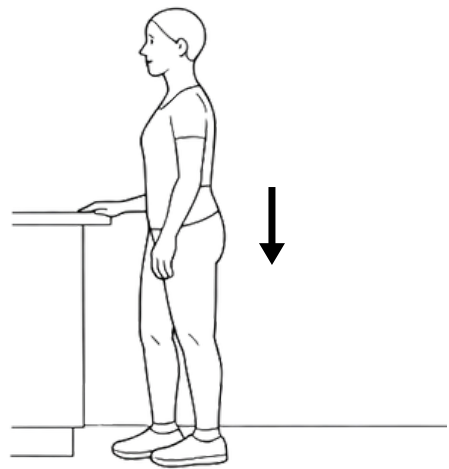
Starting Position



Weight Shift Phase



Hold Position



Return to Center

# EXERCISE 6 – Hip (Pre-Surgery)

## Controlled Sit-to-Stand

### When to Start

About **4 weeks before surgery**, once you can perform the Supported Weight Shift with good pelvic control and without sharp hip pain.

### Goal

Strengthen the muscles that extend the hip and improve control during the transition from sitting to standing.

This movement is very important because it is used every day when **getting up from a chair, bed, or toilet**.

### Starting Position

Sit on a stable chair. If needed, you may use a chair with armrests. For a correct position:

- both feet are fully flat on the floor
- the distance between the feet is about hip-width
- the knees remain aligned with the feet
- keep the trunk upright

At the beginning, your weight should be **evenly distributed on both feet**.

If the exercise feels difficult, you may start with a *slightly higher chair*.

### Execution

1. Lean your trunk slightly forward from the hips.
2. Push evenly through both feet.
3. Stand up slowly without using momentum.
4. Fully straighten the hips and knees until standing.
5. Sit back down slowly onto the chair.
6. Take about 3–4 seconds for the lowering phase.

The lowering phase is *as important as the standing phase*. Avoid dropping down onto the chair

## Repetitions

Perform *8–10 repetitions per set*.

You can perform *2–3 sets per day*, keeping the movement slow and controlled.

## Progression

Over time, you can make the exercise more effective by focusing on:

- reducing the use of the arms on the armrests
- maintaining equal weight distribution on both legs
- improving control during the descent toward the chair

The goal is to stand up and sit down in a stable and symmetrical way

## Common Mistakes

During the exercise, avoid:

- shifting weight only onto the non-surgical leg
- using excessive trunk momentum
- allowing the knees to collapse inward
- sitting down too quickly
- aggressively locking the knees when standing

## When to Stop

Stop the exercise if you notice:

- sharp pain in the hip or groin
- sudden instability
- increased joint discomfort in the hours after exercise
- persistent pain beyond normal muscular fatigue

A mild sensation of muscular fatigue is normal.

*If you feel strong joint pain, stop the exercise.*

## Estimated Time

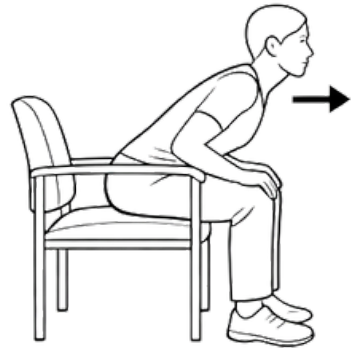
About *4–5 minutes per session*.

### **Note:**

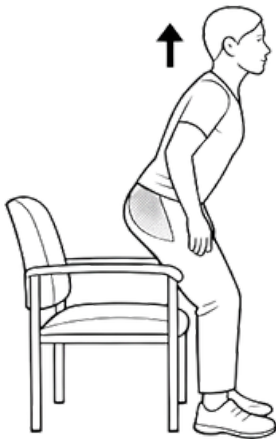
*This exercise is one of the most useful in everyday life. Improving control when moving from sitting to standing helps restore independence in daily activities after surgery.*



Starting Position



Forward Lean



Rise Phase



Controlled Lowering

# POST-SURGERY EXERCISES HIP

The exercises in the previous section were designed to ***prepare your body before surgery.***

From this point forward, the focus shifts to ***recovery after hip surgery.***

During the first weeks after the procedure, the main goals are to gradually restore movement, reactivate the muscles around the joint, and rebuild ***strength and stability.***

Progress should always be gradual and controlled. Follow the instructions carefully and respect the limits of your body.

If your ***surgeon or physical therapist*** provides specific instructions that differ from this program, always follow their recommendations first.

The exercises in the following pages will guide you ***step by step through the early phase of recovery after hip surgery.***

# EXERCISE 1 – Hip (Post-Surgery)

## Ankle Pumps

### When to Start

On the day of surgery or the first day after the operation, unless your surgeon or medical team advises otherwise.

### Goal

This exercise aims to:

- improve circulation in the operated leg
- reduce the risk of blood clot formation
- help control swelling during the first days after surgery

This is a circulation exercise, not a strengthening exercise.

### Starting Position

Lie on your back in bed.

To maintain a safe position:

- the surgical leg remains in a neutral position
- avoid crossing your legs
- keep the hip in a comfortable position recommended by your surgeon
- keep the foot relaxed before starting

### Execution

1. Slowly pull your toes toward you.
2. Pause briefly at the top of the movement.
3. Point your toes away from you.
4. Move the ankle through the full comfortable range of motion.
5. Continue with a slow, steady rhythm.

The movement should be continuous and controlled.

The hip and knee remain relaxed during the exercise.

## Repetitions

Perform **20–30 movements per set**.

During the first days after surgery, you can repeat the exercise every hour while you are awake.

## Progression

During the first days, the main goal is to perform the movement frequently throughout the day.

As you begin to move more, you can reduce the frequency to 3–4 sessions per day, while maintaining full ankle movement.

No weights or resistance bands are required.

## Common Mistakes

During the exercise, avoid:

- moving the ankle too quickly
- performing small movements without using the full range
- unnecessarily contracting the thigh
- lifting the entire leg instead of moving only the ankle
- crossing the legs in bed

## When to Stop

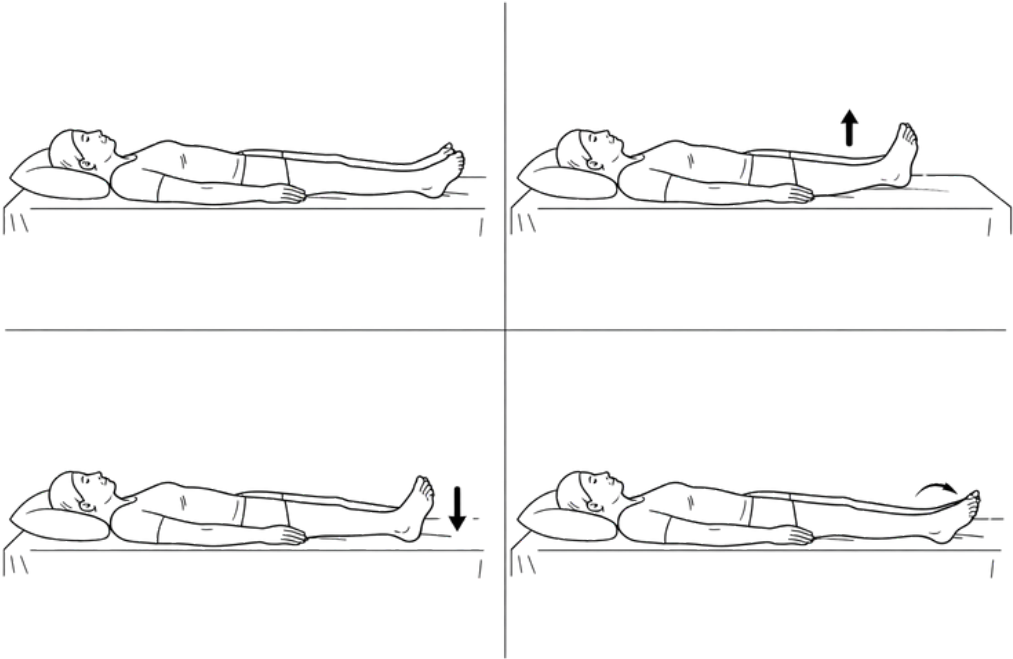
Stop the exercise and inform medical staff if you notice:

- sudden calf pain
- increased swelling in the calf
- warmth or redness in the calf area
- shortness of breath

A mild feeling of fatigue in the lower leg is normal.

## Estimated Time

About *1–2 minutes per set*.



# EXERCISE 2 – Hip (Post-Surgery)

## Isometric Gluteal Contraction

### When to Start

From the *first day after surgery*, unless otherwise instructed by your surgeon or medical team.

### Goal

Reactivate the gluteal muscles during the early phase after surgery and improve hip stability without moving the joint.

This exercise helps counteract the temporary loss of muscle strength that may occur after the operation.

### Starting Position

Lie on your back in bed.

To maintain a safe position:

- the legs remain extended and relaxed
- the hip stays in a neutral position
- avoid crossing your legs
- the arms can rest comfortably at your sides
- keep the pelvis stable without arching the lower back

### Execution

1. Gently tighten the gluteal muscles.
2. Imagine squeezing the glutes together.
3. Hold the contraction for about 5 seconds.
4. Continue breathing normally.
5. Fully relax the muscles.
6. Repeat the movement.

The movement should be very gentle.

Do not lift your hips off the bed, this is not a bridge exercise.

## Repetitions

Perform 10 repetitions per set.

You can perform 3–4 sets per day during the first week after surgery.

## Progression

At first, hold the contraction for about 5 seconds.

As the exercise becomes easier, you can gradually increase the hold to about 8 seconds.

Focus especially on:

- even activation of both gluteal muscles
- keeping the pelvis stable
- relaxed breathing during the contraction

## Common Mistakes

During the exercise, avoid:

- lifting the hips off the bed
- arching the lower back
- contracting only one side of the glutes
- holding your breath
- squeezing too hard and causing discomfort

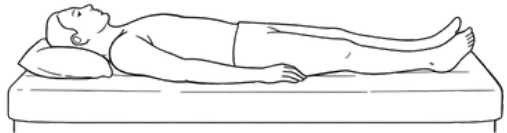
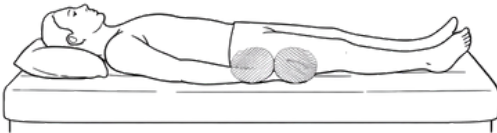
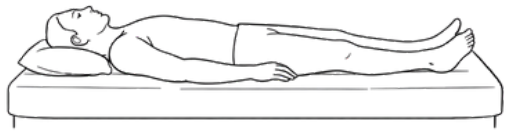
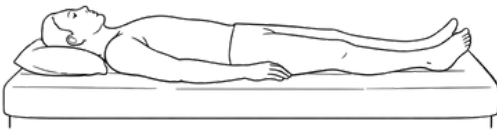
## When to Stop

Stop the exercise if you notice:

- sharp pain in the hip or groin
- increased joint discomfort
- lower back pain during the contraction
- increased swelling in the hours after the exercise

## Estimated Time

About **2–3 minutes per session.**



# EXERCISE 3 – Hip (Post-Surgery)

## Quadriceps Set

### When to Start

From the *first day after surgery*, unless otherwise instructed by your surgeon or medical team.

### Goal

Reactivate the quadriceps muscle and improve knee control during the early stages of mobilization after surgery.

Even though the surgery involves the hip, knee control is essential for standing up, maintaining balance, and beginning to walk safely.

### Starting Position

Lie on your back in bed.

To maintain the correct position:

- the surgical leg remains comfortably extended
- you may place a small rolled towel under the heel
- the hip remains in a neutral position
- avoid crossing your legs
- the opposite leg may remain bent for comfort

The pelvis should remain stable without arching the lower back.

### Execution

1. Gently tighten the muscle at the front of your thigh.
2. Press the back of your knee downward toward the bed.
3. Try to feel the muscle above the kneecap activating.
4. Hold the contraction for about 5 seconds.
5. Fully relax the muscle.
6. Repeat the movement.

The movement is small and controlled.

Do not lift the leg off the bed and do not force the knee into a painful position.

## Repetitions

Perform 10 repetitions per set.

You can perform 3–4 sets per day during the first week after surgery.

## Progression

At first, hold the contraction for about 5 seconds.

As muscle control improves, you can gradually increase the hold to 8–10 seconds.

*Focus on:*

- full knee extension
- a clean quadriceps contraction
- maintaining a stable pelvis

No weights or resistance bands are necessary during the first weeks.

## Common Mistakes

During the exercise, avoid:

- lifting the entire leg off the bed
- leaving the knee slightly bent
- excessively contracting the hip flexors
- holding your breath
- forcing the knee into a painful position

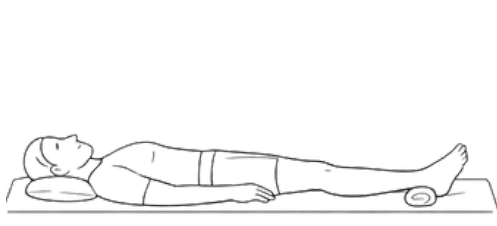
## When to Stop

Stop the exercise if you notice:

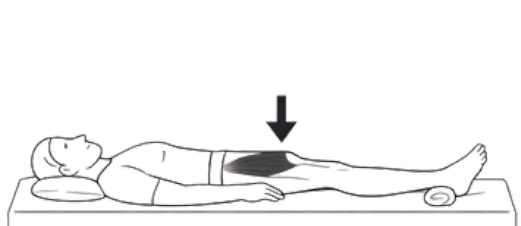
- sharp pain in the front of the knee
- increased swelling in the hours after exercise
- difficulty fully straightening the knee
- groin discomfort during the contraction

## Estimated Time

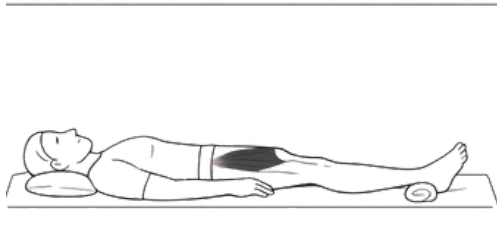
About **2–3 minutes per session**.



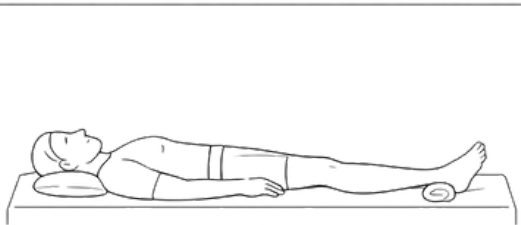
Starting Position



Activation Phase



Hold Phase



Relax Phase

# EXERCISE 4 – Hip (Post-Surgery)

## Assisted Heel Slides

### When to Start

Approximately **2–4 days after surgery**, or when your surgeon allows the first gentle hip flexion movements.

### Goal

Gradually restore hip flexion within safe limits and reduce joint stiffness during the early stages of recovery.

This exercise helps maintain joint mobility without overloading the new hip replacement.

### Starting Position

Lie on your back on a firm surface or in bed.

To prepare the correct position:

- place a small towel or cloth under the heel of the surgical leg to help the heel slide
- the opposite leg may remain bent for comfort
- keep the pelvis relaxed in a neutral position

Avoid rotating the hip inward and do not allow the leg to cross the body's midline.

### Execution

1. Slowly slide your heel toward your body.
2. Allow the hip and knee to bend together.
3. Move only within a comfortable range.
4. Hold the position for 2–3 seconds.
5. Slowly slide the heel forward again until the leg is straight.

The movement should be ***slow and controlled***.

Avoid sudden or forced movements.

## Repetitions

Perform 10–15 repetitions per set.

You can perform 3 sets per day during the first weeks after surgery. Short and frequent sessions are preferable to a single long session.

## Progression

At first, bend the leg only within a small range of motion.

As the days pass, you may gradually increase hip flexion while always respecting the limits indicated by your surgeon.

Remember that in the early phase **hip flexion should not exceed 90°**, unless otherwise instructed by your doctor.

Do not use weights or resistance during this phase.

## Common Mistakes

During the exercise avoid:

- forcing hip flexion beyond 90°
- lifting the heel instead of sliding it
- bringing the knee inward across the midline  
internally rotating the hip
- moving the leg too quickly

## When to Stop

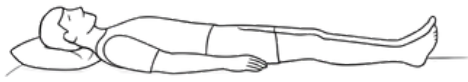
Stop the exercise if you notice:

- sharp groin pain
- a catching sensation in the joint
- rapid increase in swelling
- pain lasting more than 24 hours
- a feeling of instability

A mild stretching sensation is normal.

## Estimated Time

About 3–4 minutes per session.



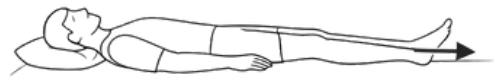
Starting Position



Sliding Phase



End Range Hold



Return Phase

# EXERCISE 5 – Hip (Post-Surgery)

## Supine Hip Abduction

### When to Start

Begin *during the second week after surgery*, once you are able to activate the gluteal muscles and perform gentle hip flexion without increased swelling or groin pain.

### Goal

Restore strength in the lateral hip muscles and improve pelvic stability during movement.

This exercise also helps prevent the operated leg from moving too close to the midline, maintaining safe hip alignment after surgery.

### Starting Position

Lie on your back on a firm surface.

To prepare the correct position:

- both legs remain extended
- keep your toes pointing toward the ceiling
- the pelvis remains stable in a neutral position
- if necessary, place a small towel under the heel of the surgical leg to help it slide

Avoid rotating the hip inward or outward.

### Execution

1. Slowly slide the surgical leg out to the side.
2. Keep the knee straight but relaxed.
3. Move the leg only within a comfortable range.
4. Keep the toes pointing upward during the movement.
5. Hold the outer position for **2–3 seconds**.
6. Slowly return the leg to the starting position.

The pelvis should remain stable throughout the exercise.

Avoid rotating the trunk or lifting the hip.

## Repetitions

Perform 10–12 repetitions per set.

You can perform 2–3 sets per day during the second and third week after surgery.

Focus more on movement control than on the distance the leg moves.

## Progression

At first, move the leg only within a moderate and pain-free range.

Over time you can:

- increase the hold time to **3–5 seconds**
- improve pelvic stability during the movement
- slightly increase the outward movement if comfortable

Resistance bands or additional weights are not necessary during the first postoperative month.

## Common Mistakes

During the exercise avoid:

- rotating the leg outward during the movement
- tilting or rotating the pelvis
- lifting the leg instead of sliding it
- moving the leg too quickly
- allowing the leg to cross the body's midline

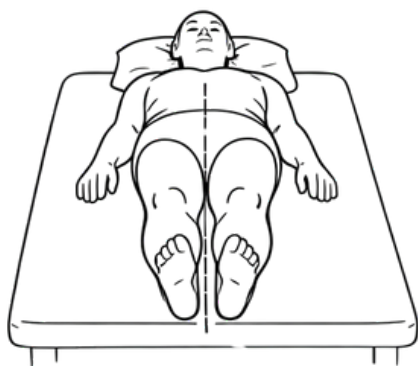
## When to Stop

Stop the exercise if you notice:

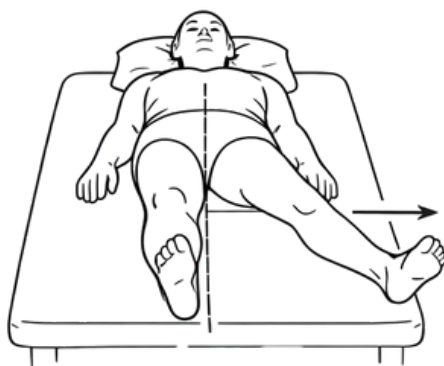
- sharp pain on the side of the hip
- groin discomfort
- increased swelling in the hours after the exercise
- a feeling of instability

## Estimated Time

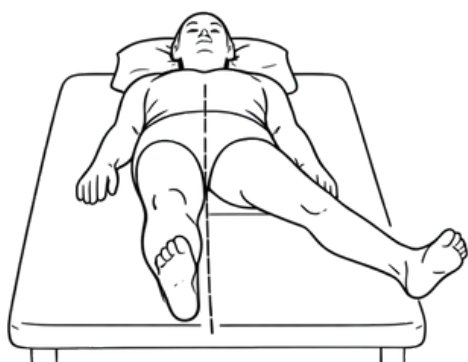
About **3 minutes per session**.



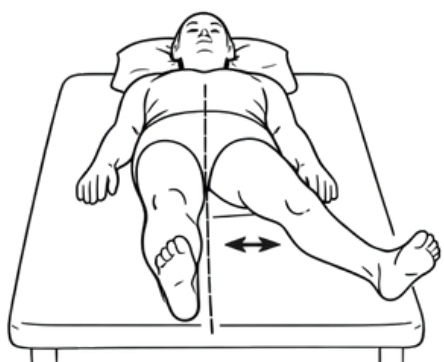
Starting Position



Abduction Phase



End Range Hold



Controlled Return

# EXERCISE 6 – Hip (Post-Surgery)

## Supported Weight Shift

### When to Start

Begin *between the second and third week after surgery*, once you are able to perform Supine Hip Abduction and maintain a standing position with good balance without increased swelling or a feeling of instability.

### Goal

Gradually reintroduce weight bearing on the operated hip and improve stability while standing.

This exercise also helps redistribute body weight more symmetrically between both legs, preparing you for a more natural walking pattern.

### Starting Position

Stand near a stable support such as a table, railing, or walker.

To assume the correct position:

- keep your feet hip-width apart
- both feet should remain fully flat on the floor
- lightly rest your fingertips on the support for balance
- keep your back straight and your spine in a neutral position
- keep the pelvis level

At the beginning, body weight should be evenly distributed on both legs.

### Execution

1. Slowly shift your body weight toward the operated leg.
2. Allow the hip to gradually accept the load without fully locking the knee.
  1. Keep the pelvis stable and avoid leaning the trunk.
  2. Hold the position for 5–10 seconds.
  3. Slowly return your weight to the center.

The movement should be slow, smooth, and controlled. Avoid sudden or abrupt weight shifts.

## Repetitions

Perform 8–10 weight shifts per set.

You can perform 2–3 sets per day.

Postural control and alignment are more important than the depth of the shift.

## Progression

At first, hold the weight shift for about 5 seconds.

Over time you can:

- increase the hold to 8–10 seconds
- gradually reduce hand support
- improve pelvic stability while loading the leg

Do not completely remove support until your balance has improved.

## Common Mistakes

During the exercise avoid:

- leaning the trunk toward the operated leg
- fully locking the knee
- shifting weight too quickly
- gripping the support too tightly with your hands
- allowing the pelvis to drop on the opposite side

## When to Stop

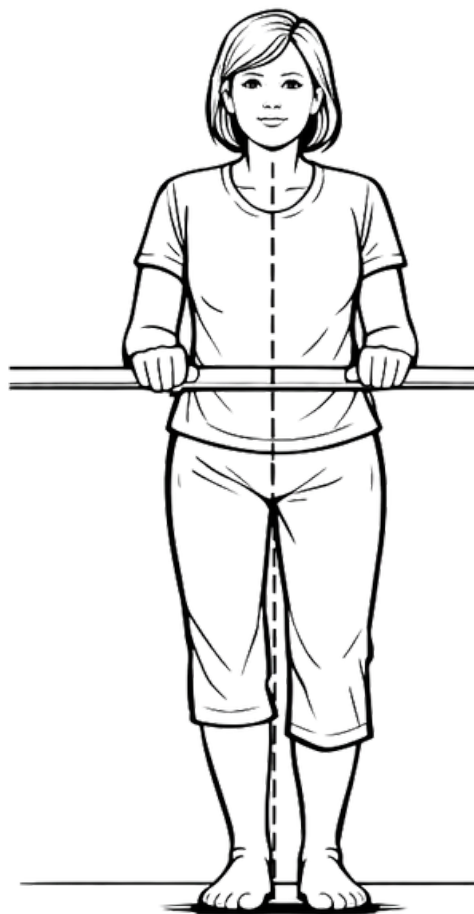
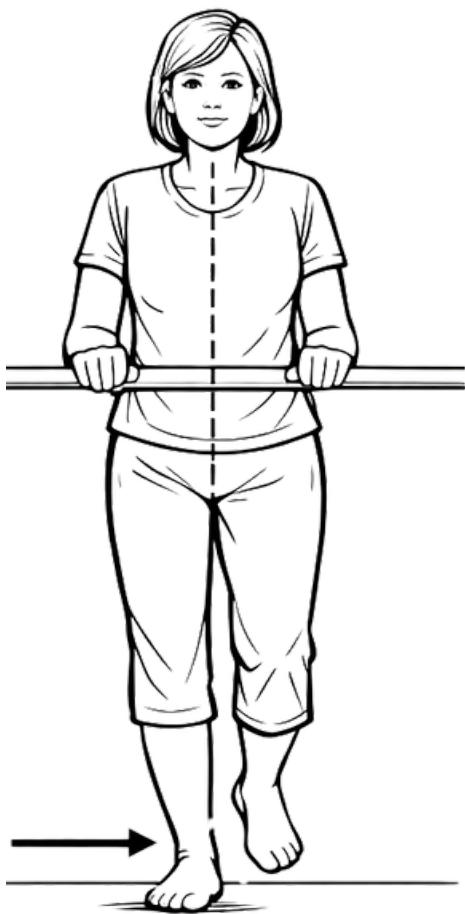
Stop the exercise if you experience:

- sudden instability
- sharp groin or lateral hip pain
- noticeable swelling increase in the hours after exercise
- persistent discomfort beyond normal muscle fatigue

A mild muscular activation is normal. Instability or sharp joint pain is not

## Estimated Time

About **3–4 minutes per session.**



# Recovery Journal

***Recovery after joint surgery rarely follows a perfectly straight line.***

Pain may vary from morning to evening, swelling can increase slightly after activity and settle again with rest, and energy levels may feel stable one day and lower the next. These variations are not necessarily signs of a problem; they are part of the normal healing process.

However, when progress feels unclear, even small and expected fluctuations can create unnecessary concern. Monitoring recovery in a structured way helps reduce this uncertainty. By writing down your pain levels, mobility, sleep quality, and the rehabilitation work you complete each day, it becomes easier to observe progress over time rather than focusing on single difficult days.

This section is not intended to replace medical follow-up, nor is it a detailed clinical record. It is a practical tool designed to encourage greater awareness and consistency throughout your recovery journey. You do not need to record every detail—just a few minutes each day are enough.

You may not notice improvement every day, and recovery does not progress at the same pace for everyone. What truly matters is the overall direction over the course of weeks, not the fluctuations of a single day. When progress is observed calmly and objectively, confidence in the process increases, and that confidence helps maintain consistency in rehabilitation.

Even small steps, repeated consistently day after day, can lead to meaningful progress over time.

# How to Use the Recovery Journal

In the following pages, you will find a **Recovery Journal** designed to help you observe and monitor your recovery day by day.

Each page contains three daily entries to complete. You can take a few minutes each day to record simple but useful information about your recovery process.

For each day, you can note:

- **Date and post-operative week**
- **How you feel today (good, neutral, or difficult)**
- **Pain level in the morning and evening**
- **Swelling**
- **Mobility**
- **Whether you completed your rehabilitation exercises**
- **Hours of sleep and sleep quality**

At the bottom of each entry, you will also find two short reflection sections:

- **3 things you are grateful for today**
- **3 positive things that happened during the day**

This part is optional, but it can help maintain a positive perspective throughout the recovery process.

You can also use the **Notes** section to write any personal observations, such as sensations during exercises, changes in mobility, or simply thoughts about your day.

If you wish, it can also be helpful to keep a *small personal notebook alongside this journal* where you can write longer reflections or additional details about your recovery. Sometimes the space in the daily entry may not be enough, and spending a few extra minutes writing can help you approach this 30-day recovery journey with greater awareness.

You do not need to fill everything out perfectly. Even a few notes each day are enough to help you **observe progress over time and stay more aware of your recovery**.

At the end of the 30-day journal, you will also find two additional sections designed to help you reflect on your recovery and plan the next phase.

*The **Reflection & Awareness – One Month Review** page invites you to pause and look back at your first month of recovery. It provides space to reflect on what improved, what was challenging, and what helped you stay consistent during difficult days.*

*The **Commitment & Forward Focus** page helps you look ahead. Here you can write down your goals for the next 30 days, identify habits you want to continue or improve, and reinforce your commitment to the recovery process.*

*These pages are not tests or evaluations. They are simply tools to help you become more aware of your progress and to maintain motivation as your recovery continues.*

**DAY 1:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 2:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 3:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 4:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 5:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 6:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 7:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 8:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 9:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 10:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 11:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 12:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 13:**      Date \_\_\_\_\_      Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**       **Neutral**       **Difficult**

**Pain (0–10):**    Morning \_\_\_\_\_      Evening \_\_\_\_\_

**Swelling:**       None       Mild       Moderate       Increased today

**Mobility:**       Improved       Same       More stiff

**Rehab activity completed:**     Yes     Partially     No

**Sleep:**          Hours \_\_\_\_\_      Quality  Poor     Fair     Good

**3 Things I Am Grateful For**      **3 Positive Things That Happened Today**

1 \_\_\_\_\_      1 \_\_\_\_\_

2 \_\_\_\_\_      2 \_\_\_\_\_

3 \_\_\_\_\_      3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 14:**      Date \_\_\_\_\_      Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**       **Neutral**       **Difficult**

**Pain (0–10):**    Morning \_\_\_\_\_      Evening \_\_\_\_\_

**Swelling:**       None       Mild       Moderate       Increased today

**Mobility:**       Improved       Same       More stiff

**Rehab activity completed:**     Yes     Partially     No

**Sleep:**          Hours \_\_\_\_\_      Quality  Poor     Fair     Good

**3 Things I Am Grateful For**      **3 Positive Things That Happened Today**

1 \_\_\_\_\_      1 \_\_\_\_\_

2 \_\_\_\_\_      2 \_\_\_\_\_

3 \_\_\_\_\_      3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 15:**      Date \_\_\_\_\_      Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**       **Neutral**       **Difficult**

**Pain (0–10):**    Morning \_\_\_\_\_      Evening \_\_\_\_\_

**Swelling:**       None       Mild       Moderate       Increased today

**Mobility:**       Improved       Same       More stiff

**Rehab activity completed:**     Yes     Partially     No

**Sleep:**          Hours \_\_\_\_\_      Quality  Poor     Fair     Good

**3 Things I Am Grateful For**      **3 Positive Things That Happened Today**

1 \_\_\_\_\_      1 \_\_\_\_\_

2 \_\_\_\_\_      2 \_\_\_\_\_

3 \_\_\_\_\_      3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 16:**      Date \_\_\_\_\_      Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**       **Neutral**       **Difficult**

**Pain (0–10):**    Morning \_\_\_\_\_      Evening \_\_\_\_\_

**Swelling:**       None       Mild       Moderate       Increased today

**Mobility:**       Improved       Same       More stiff

**Rehab activity completed:**     Yes     Partially     No

**Sleep:**          Hours \_\_\_\_\_      Quality  Poor     Fair     Good

**3 Things I Am Grateful For**      **3 Positive Things That Happened Today**

1 \_\_\_\_\_      1 \_\_\_\_\_

2 \_\_\_\_\_      2 \_\_\_\_\_

3 \_\_\_\_\_      3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 17:**      Date \_\_\_\_\_      Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**       **Neutral**       **Difficult**

**Pain (0–10):**    Morning \_\_\_\_\_      Evening \_\_\_\_\_

**Swelling:**       None       Mild       Moderate       Increased today

**Mobility:**       Improved       Same       More stiff

**Rehab activity completed:**     Yes     Partially     No

**Sleep:**          Hours \_\_\_\_\_      Quality  Poor     Fair     Good

**3 Things I Am Grateful For**      **3 Positive Things That Happened Today**

1 \_\_\_\_\_      1 \_\_\_\_\_

2 \_\_\_\_\_      2 \_\_\_\_\_

3 \_\_\_\_\_      3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 18:**      Date \_\_\_\_\_      Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**       **Neutral**       **Difficult**

**Pain (0–10):**    Morning \_\_\_\_\_      Evening \_\_\_\_\_

**Swelling:**       None       Mild       Moderate       Increased today

**Mobility:**       Improved       Same       More stiff

**Rehab activity completed:**     Yes     Partially     No

**Sleep:**          Hours \_\_\_\_\_      Quality  Poor     Fair     Good

**3 Things I Am Grateful For**      **3 Positive Things That Happened Today**

1 \_\_\_\_\_      1 \_\_\_\_\_

2 \_\_\_\_\_      2 \_\_\_\_\_

3 \_\_\_\_\_      3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 19:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 20:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 21:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 22:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 23:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 24:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 25:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 26:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 27:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 28:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 29:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

**DAY 30:** Date \_\_\_\_\_ Post-Op Week \_\_\_\_\_

**How do you feel today?**  😊 **Good**  **Neutral**  **Difficult**

**Pain (0–10):** Morning \_\_\_\_\_ Evening \_\_\_\_\_

**Swelling:**  None  Mild  Moderate  Increased today

**Mobility:**  Improved  Same  More stiff

**Rehab activity completed:**  Yes  Partially  No

**Sleep:** Hours \_\_\_\_\_ Quality  Poor  Fair  Good

**3 Things I Am Grateful For** **3 Positive Things That Happened Today**

1 \_\_\_\_\_ 1 \_\_\_\_\_

2 \_\_\_\_\_ 2 \_\_\_\_\_

3 \_\_\_\_\_ 3 \_\_\_\_\_

**Note:** \_\_\_\_\_

# Reflection & Awareness

## One Month Review

You have completed **30 days of recovery**.

Recovery is not always linear, some days felt strong, others more difficult. What matters most is the consistency you showed.

Take a moment to reflect on this first month.

**What improved the most this month?**

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**What was the hardest moment?**

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**What helped you push through difficult days?**

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**What habits made a difference?**

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**One thing I am proud of:**

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Small actions repeated over time create progress.

You showed up. *That matters.*

# COMMITMENT & FORWARD FOCUS

*Recovery does not end here.*

The first month builds the foundation. The next phase builds strength, confidence, and long-term stability.

Take a moment to write your commitment for the next phase.

**My goal for the next 30 days:**

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**One behavior I will continue consistently:**

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**One behavior I will improve:**

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**When motivation drops, I will remind myself that:**

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*My body is healing.  
My effort matters.  
Consistency creates results.*

***Keep going..***

# Before Moving Into Nutrition

So far, you've seen how preparation, surgery, and rehabilitation influence recovery.

But healing does not depend on movement alone.

Nutrition also plays a key role: it can support tissue repair, reduce inflammation, and help you maintain energy during recovery.

If this guide is helping you, you can do something simple that may help others as well.

***Leave a short review on Amazon.***

It only takes 30 seconds.

You can share, for example:

- what has been most helpful to you so far
- what you've understood better thanks to this guide
- your experience throughout the recovery process



If you'd like to explore certain topics further, such as exercises or nutrition, feel free to reach out and receive support:

***Email:***

***info@infoeditorialbooks.com***

# NUTRITION & HEALING FOUNDATIONS

Surgery does not simply repair a joint. It initiates a complex biological process that requires energy, structural building materials, and precise metabolic coordination.

From the moment the procedure ends, the body begins rebuilding tissue, regulating inflammation, restoring circulation, and reorganizing muscle function. For this reason, nutrition during recovery plays an important role in supporting healing.

Healing tissues require amino acids to rebuild muscles and connective structures, sufficient energy to prevent muscle loss, and micronutrients that support immune function and collagen production.

When food intake is too restrictive or deficient in protein, the body may be forced to direct its resources toward essential survival functions rather than tissue repair.

Even though physical activity may be temporarily reduced, the body still uses energy to sustain the healing process. Tissue remodeling, inflammation regulation, and immune activity all require fuel. Eating too little during this phase may contribute to fatigue, slower strength recovery, and delayed tissue repair.

Particular attention should be given to protein intake, because muscle mass naturally declines after surgery due to reduced activity and temporary unloading of the joint.

Preserving muscle mass helps to:

- maintain joint stability
- support functional recovery
- reduce weakness during the later phases of rehabilitation

Adequate nutritional support, together with rehabilitation exercises, creates the most favorable biological conditions for effective healing.

Proper hydration is also important. Drinking enough fluids supports circulation, helps deliver nutrients to healing tissues, and contributes to swelling regulation. Even mild dehydration can negatively influence recovery by reducing circulatory efficiency and tissue oxygenation.

The overall goal is simple: **stability and consistency** — providing the body with what it needs to heal as effectively as possible.

# KEY NUTRIENTS FOR RECOVERY

During the first month after surgery, the body manages several processes at the same time: tissue repair, inflammation regulation, and muscle reactivation.

For this reason, certain nutrients deserve particular attention.

## Protein and Muscle Preservation

After surgery, the temporary reduction in movement and joint loading can accelerate muscle mass loss. Without an adequate protein intake, this loss may become more significant and slow the recovery process. Proteins provide the amino acids necessary for:

- collagen formation
- connective tissue repair
- maintenance of muscle mass

During recovery, a protein intake of approximately **1.6–2.0 grams per kilogram of body weight per day** may be helpful, unless otherwise advised by a healthcare professional.

Distributing protein intake across meals throughout the day helps the body use it more efficiently and supports ongoing tissue synthesis.

Protein-rich food sources include:

- eggs
- Greek yogurt and high-protein dairy products
- fish and poultry
- lean meats
- legumes
- tofu

## Vitamin D and Calcium

After surgeries involving weight-bearing joints such as the hip or knee, bone remodeling continues in the weeks following the procedure.

Vitamin D helps the body absorb calcium and supports musculoskeletal health, while calcium contributes to bone structure and integrity.

Common dietary sources include:

- fatty fish
- fortified dairy products
- egg yolks
- leafy green vegetables

Sunlight exposure can also support natural vitamin D production. Any supplementation should only be considered under medical supervision, especially in cases of confirmed deficiency.

## **Hydration and Circulatory Support**

Proper fluid balance supports several essential recovery processes, including:

- nutrient delivery to healing tissues
- removal of metabolic waste products
- regulation of postoperative swelling

Even moderate dehydration can reduce circulatory efficiency and slow recovery.

Unless otherwise advised by a healthcare provider, maintaining consistent hydration throughout the day helps support physiological stability during healing.

During the early recovery phase, the goal is not nutritional perfection or extensive supplementation. The objective is simply to provide the body with the resources it needs to rebuild tissue and maintain internal stability.

# INFLAMMATION BALANCE & RECOVERY SUPPORT

Inflammation is a natural part of the healing process. It allows the body to remove damaged tissue and initiate repair mechanisms.

During recovery, the goal is not to eliminate inflammation completely, but to prevent it from becoming excessive or prolonged, as this could interfere with tissue repair and rehabilitation progress.

Food choices can influence the body's inflammatory balance. Nutrient-dense, minimally processed foods provide antioxidants, fiber, and essential fats that help support these processes.

Foods that may support inflammatory balance include:

- omega-3 rich fish such as salmon, sardines, and mackerel
- extra virgin olive oil
- nuts and seeds
- avocado
- colorful fruits and vegetables rich in antioxidants

Spices such as **turmeric and ginger** contain natural compounds that may help support this balance when included in a varied diet. Their role is supportive and should not replace medical guidance.

At the same time, certain dietary patterns may increase the body's inflammatory load. Frequent consumption of:

- ultra-processed foods
- refined sugars
- excessive alcohol
- highly refined carbohydrates

may negatively affect metabolism and energy balance during recovery.

Severe calorie restriction, prolonged fasting, or aggressive weight-loss attempts during the first month after surgery may also interfere with healing because they limit the resources needed for tissue repair.

Balanced meals, regular eating patterns, and adequate protein intake help maintain energy availability without creating unnecessary metabolic stress.

# SIMPLE NUTRITION STRUCTURE DURING RECOVERY

Organizing meals in a simple and regular way can help support recovery without creating unnecessary complications or restrictions.

The goal is not to follow a rigid diet, but to establish a daily rhythm that supports tissue repair, provides energy for rehabilitation, and maintains metabolic stability.

A practical structure may include **three main meals and one or two small snacks**, depending on appetite and individual needs.

Spacing meals throughout the day helps maintain a steady supply of amino acids for muscle repair and prevents large fluctuations in energy levels.

## Breakfast

It is helpful to begin the day with a good source of protein, combined with fiber and healthy fats.

Examples may include:

- eggs with vegetables cooked in olive oil
- Greek yogurt with nuts and berries
- a protein smoothie with fruit and seeds

The goal is to provide the body with an adequate protein intake from the start of the day.

## Midday Meal

A balanced meal should include protein, complex carbohydrates, and vegetables.

For example:

- chicken, fish, tofu, or legumes
- rice, quinoa, or whole grains
- a portion of vegetables

A moderate amount of carbohydrates helps support the energy levels needed for rehabilitation.

## **Snack (if needed)**

A protein-rich snack can help maintain consistent nutrient intake between meals.

Simple examples include:

- yogurt
- cottage cheese
- nuts
- boiled eggs

During recovery, appetite may fluctuate; some flexibility is normal as long as overall intake remains adequate.

## **Evening Meal**

Dinner can prioritize protein and vegetables, with a moderate amount of carbohydrates depending on activity level.

Fish, lean meats, or plant-based proteins combined with vegetables and healthy fats create a simple structure that supports recovery.

## **Hydration Throughout the Day**

Rather than drinking large amounts of fluids at once, it is preferable to distribute fluid intake across the day. Water remains the primary source of hydration.

This structure is flexible and can be adjusted based on personal medical history, dietary preferences, and guidance from your physician or nutrition professional.

## **Clinical Note**

Before making significant dietary changes, consult your surgeon or healthcare provider, especially if you have diabetes, kidney disease, cardiovascular conditions, or other medical concerns that require individualized nutritional planning.

# Recovery Meal Structure Guide

After surgery, nutrition should support recovery by providing energy, protein, and nutrients that help the body heal.

Use the table below as a simple and flexible guide, adjusting portion sizes based on your appetite and your doctor's recommendations.

<b>Meal</b>	<b>Protein Source</b>	<b>Carbohydrate Source</b>	<b>Healthy Fats</b>	<b>Vegetables / Fiber</b>
<b>Breakfast</b>	Eggs, Greek yogurt, Cottage cheese, Protein smoothie	Oats, Whole grain toast, Fruit	Nuts, Seeds, Olive oil	Berries, Spinach, Mixed vegetables
<b>Snack</b>	Yogurt, Cottage cheese, Nuts, Boiled eggs	Fruit (optional)	Nuts or seeds	—
<b>Lunch</b>	Chicken, Fish, Tofu, Legumes	Rice, Quinoa, Sweet potatoes, Whole grains	Olive oil, Avocado	Leafy greens, Mixed vegetables
<b>Snack</b>	Protein yogurt, Milk, Nuts, Protein shake	—	Small portion nuts (if needed)	—
<b>Dinner</b>	Fish, Lean meat, Tofu, Legumes	Moderate portion rice or potatoes	Olive oil	Steamed or roasted vegetables

# About the Author

**Michael R. Thompson** has spent more than twenty years studying and supporting people who are preparing for joint surgery, with particular attention to the preparation before the operation and the recovery in the weeks that follow.

Throughout his experience, he has worked closely with patients and rehabilitation professionals, observing which habits and strategies truly help make recovery easier and which ones can slow it down.

Over time, he noticed a common situation: many people approach surgery with unclear information, limited practical preparation, and many unanswered questions. Often the home is not organized in advance, rehabilitation is underestimated, and nutrition does not receive the attention it deserves. From these observations came the idea of creating a practical approach to help people face surgery with greater calm and organization.

The principle behind his work is simple: good preparation can make recovery smoother and easier to manage. Progress does not depend only on exercises, but also on mindset, home organization, proper nutrition, and gradual rehabilitation.

This book is based on years of experience and the observation of many recovery journeys.

If you have already read this guide, you have likely gained greater clarity and a better idea of what to do before and after surgery. If you are just beginning, you will find a simple tool designed to help you feel more prepared and more at ease throughout the process.

When you know what to expect and have a clear plan, recovery no longer feels uncertain, but becomes a path you can approach with greater confidence and peace of mind.

**Michael R. Thompson**

# Before You Close This Book...

If this guide has helped you better understand what to expect, feel more prepared, or approach your recovery with greater peace of mind, you can take one final simple step to continue your journey.

## Your Free Recovery Bonuses

Practical resources to simplify your recovery, starting right away.

What you'll get:

- Step-by-step meal plan before and after surgery
- Guidance to reduce stress around what to eat
- A clear, ready-to-use grocery checklist
- Simple tips to support healing

**Download your bonuses by  
clicking the blue button below**



## Additional Guide (Not Always Available)

In some cases, in addition to the bonuses, you may also get access to a guide designed to help manage pain and inflammation over time, especially for those living with *osteoarthritis* or *rheumatoid arthritis*.

This guide, called **Arthritis Relief Guide**, is reserved only for those who choose to go deeper.

***Click the blue button to unlock all available materials***

## ***Thank you for completing this journey***

If you've made it this far, it means you're taking your recovery seriously. Those who choose to go deeper are often the ones who achieve better results over time.

### ***Go beyond the initial recovery***

Beyond the bonuses, you can access more in-depth content to support you in the next stages.

A guide focused on managing pain, inflammation, and mobility over time.

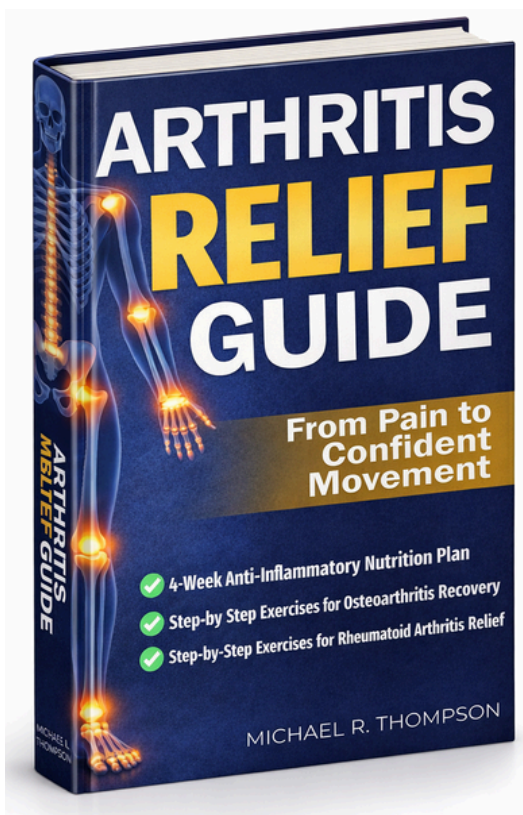
## ***Arthritis Relief Guide***

A practical guide designed for those living with:

- ***osteoarthritis***
- ***rheumatoid arthritis***
- ***recurring joint stiffness and pain***

Inside, you'll find guidance on nutrition, movement, and habits to help you improve over time.

This guide is shared only in some cases and may not always be available.



**Access all available  
materials now**

