

TOTAL KNEE REPLACEMENT

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You, empowered.  
You, unstoppable.

**Exactly.**



exactech

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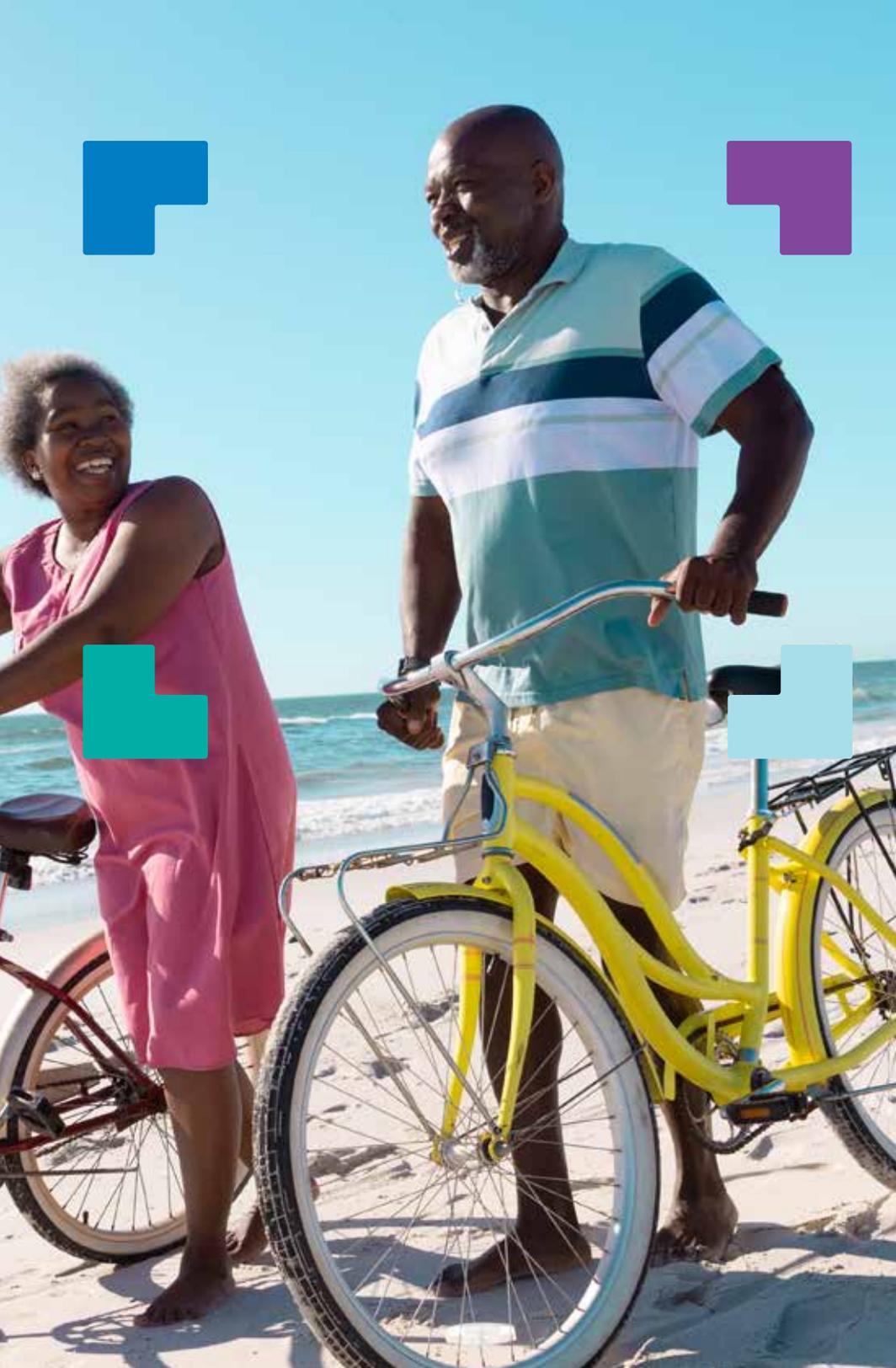
## UNDERSTANDING

# Total Knee Replacement.

Knee pain can significantly impact your daily activities. Having a total knee replacement is one solution that your physician may discuss with you to help get you back to a normal, active life. Although the reasons to have a total knee replacement vary from person to person, the goal is the same – to get you back to what you love!

Total knee replacement, also called total knee arthroplasty (TKA), is a very common surgical procedure. Today, more than half a million knee replacement procedures are performed every year in the United States alone.<sup>1</sup>

Exactech's knee system has a unique story that began more than 40 years ago at the Hospital for Special Surgery in New York, one of the world's leading orthopaedic research and treatment institutions. Founded on a rich design history and proven by scientific and clinical data, Exactech's lineage of knee systems builds on excellent long-term results, helping hundreds of thousands of patients around the world regain their mobility.<sup>2-3</sup>





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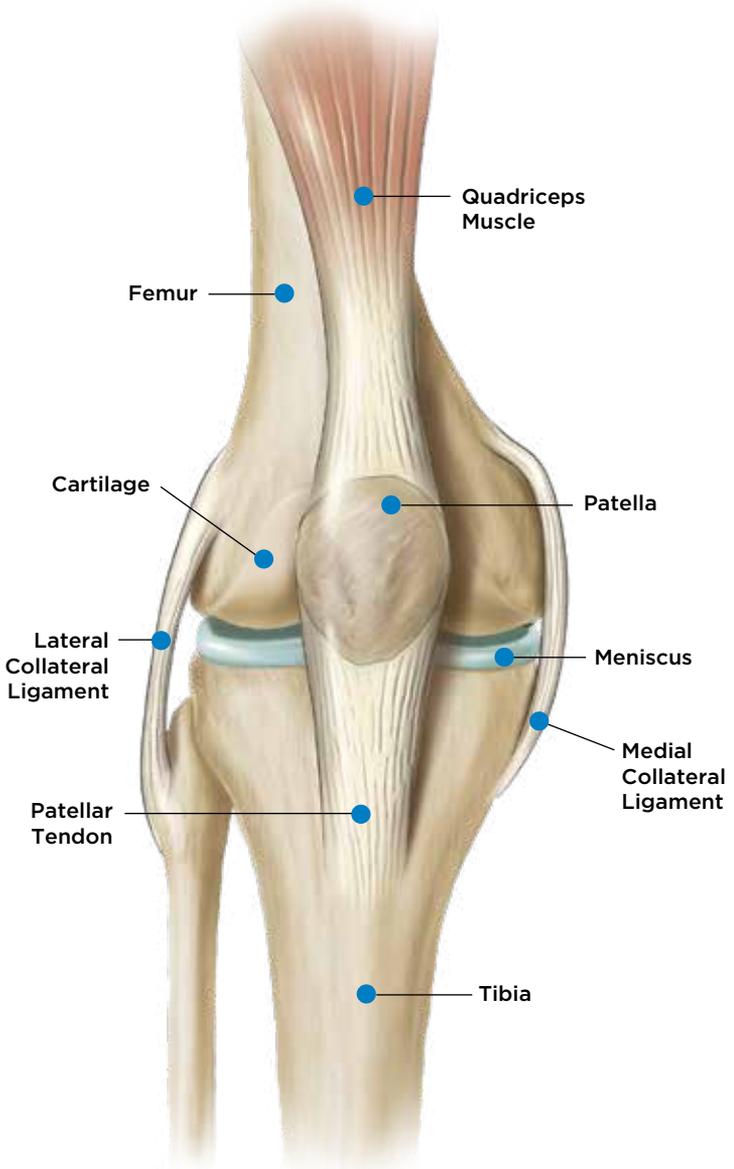
WHAT IS

## Total Knee Replacement?

**Total knee replacement is often the recommended surgical operation for patients experiencing pain from arthritis in the knee joint.**

Over time, different forms of arthritis can lead to cartilage wear or degeneration within the knee. People with severe degenerative joint disease may experience pain and be unable to do normal activities that involve bending at the knee, such as walking or climbing stairs. The knee may swell or give way because the joint is not stable. Your doctor may determine that a total knee replacement procedure is the best treatment option for you.

In this procedure, your surgeon will remove the damaged portion of the femur (or thigh bone), the tibia (or shin bone), and the patella (or knee cap), replacing them with metal and/or plastic components that will replicate the knee's natural movement and function.





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PROVEN DESIGN,

## Proven Materials

At Exactech, we take pride in providing you with a total knee replacement that has been built on a history of clinically-proven and well-performing implants over time.<sup>3</sup> As Exactech continues to expand its portfolio, the fundamental design goals and quality of materials used in our products remains consistent.<sup>4</sup>

It is widely recognized that quality design and materials contribute to longevity and function when it comes to total joint implants. The patented design features and proprietary materials contribute to the Exactech knee system's overall longevity and excellent clinical performance.<sup>2-3</sup>

### **Some of the unique features of Exactech's system include:**

- Wide range of implant types and sizes
- Net Compression Molded polyethylene inserts used to replicate your cartilage, which are proven to have one of the best resistance to overall wear rates<sup>6</sup>
- Curve-shaped design of components help distribute weight and pressure evenly to minimize the potential for long-term wear<sup>5</sup>
- Anatomically-designed implant intended to reduce strain on surrounding ligaments, while providing natural patella tracking during range of motion
- Implant design helps preserve natural bone<sup>4</sup>
- Streamlined instrumentation provides options for your surgeon to use alternative surgical approaches that best meet your individual needs.

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## DIFFERENCE

# Through Design

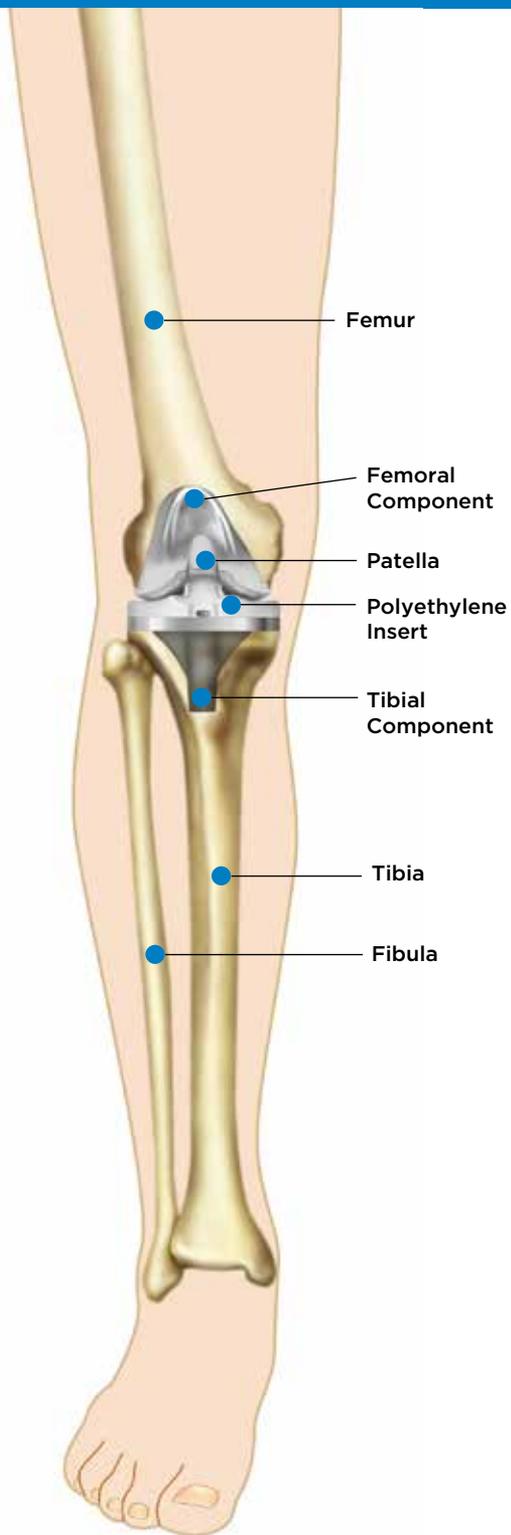
Just like your natural knee, the components of a knee implant are subject to wear caused by bending, straightening and supporting weight. The shape of knee implant components—particularly the parts that slide against each other—is very important to ensure the least possible amount of wear.<sup>6</sup>

One part of a knee system that is subject to wear is the place where the femoral and tibial components meet – the polyethylene (or plastic) tibial insert. When weight is placed unevenly, as often happens with normal activities of daily living, a high level of pressure may be exerted on the edge of the joint. This can lead to pain and discomfort.

The unique shape of the Exactech knees' femoral and tibial components are designed to distribute weight and pressure evenly across the area where the components meet, even when weight is concentrated on one side of the knee.<sup>8</sup>

Another key factor in the way a knee implant performs is the way the knee cap (patella) moves when you bend your knee. From the earliest knee designs, surgeons have struggled to recreate the correct patella tracking and limb alignment to ensure you have a comfortable, natural feel and function.

Exactech knee systems feature a wide femoral groove that allows the kneecap to track naturally (to either the inside or the outside) during normal bending and straightening of the leg. This patented tracking feature is designed to reduce potential pain or stress on the surrounding ligaments and muscles.

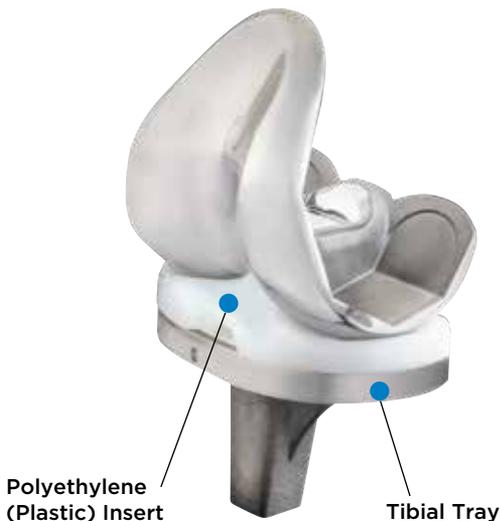


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## Molded for You

Critical to the knee replacement implant is the polyethylene, or plastic, insert that fits into the tibial tray. The purpose of this insert is to allow the femoral component to slide easily while bending the leg. Variations in the way the plastic is made, packaged and sterilized can have a significant impact on the long-term viability of the plastic itself.

Exactech uses a clinically documented and successful net compression molded manufacturing process to ensure that you receive the highest quality plastic insert during your total knee replacement. It is documented that Exactech's manufacturing process provides plastic inserts with some of the best resistance to overall wear rates.<sup>6-7</sup>





**Whether it's dancing, golfing or relaxing on the beach, the Exactech Knee is here to help you get back to what you love with a goal of reduced pain and increased mobility.**

#### References

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6. **Furman, B.D., Bhattacharyya, S., Li, S.** A Comparison of Degradation of UHMWPE for Shelf Aged and Implanted UHMWPE Components. *Trans. 27th Ann. Meeting Soc. Biomaterials,* 459, 2001.
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8. **Cottrell JM, Townsend E, Lipman J, Sculco TP, Wright TM.** Bearing surface design changes affect contact patterns in total knee arthroplasty. *Clin Orthop Relat Res.* 2007 November; 464:127-31.

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WHY THE EXACTECH KNEE

## May Be Right for You.

Your surgeon will consider a number of variables when selecting the knee implant that's right for you. Your age, height, weight, lifestyle and your general health are among the most important factors.

Sure, there are plenty of choices out there and new knee systems are being introduced every day. But there's nothing like the confidence that comes from the test of time. With Exactech's knee systems, you have the best of both worlds—a proven design foundation, enhanced by today's most modern surgical technologies.



For more information, visit

**ExactlyForYou.com**

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