You, empowered. You, unstoppable.

# **Exactly.**



**C** exactech



#### **HOW DOES**

### Your Shoulder Work?

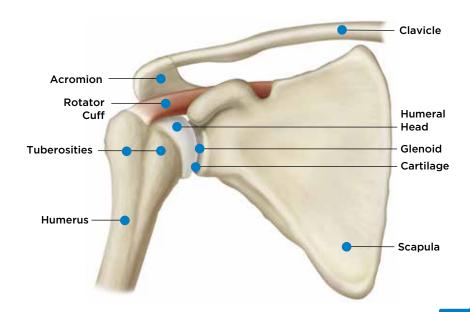
The shoulder joint is comprised of three main bones: the collarbone (clavicle), the shoulder blade (scapula) and the upper arm bone (humerus). The glenoid (part of the scapula) and humeral head (part of the humerus) are normally the parts of the shoulder that have to be replaced because they rub together when you move your arm. In a healthy shoulder, these portions of bone are covered with cartilage, which allows for painless motion—lifting, pushing and pulling. But arthritis can damage this protective cartilage, which makes these motions painful.

Arthritis is one of the most common conditions that causes wear and tear to your joint cartilage and develops after years of constant motion and pressure on the joints. If non-surgical treatment options such as medication, physical therapy or lifestyle changes fail to provide relief, your surgeon may recommend shoulder replacement surgery.

#### THE SHOULDER IS

# The Most Mobile Joint in the Body.

The shoulder joint is similar to a ball-and-socket joint, but more closely resembles a golf ball on a tee. The rotator cuff provides the stability - keeping the golf ball on the tee.



#### WHAT IS

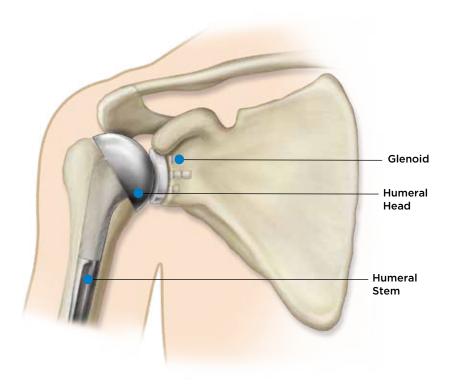
# **Total Shoulder Replacement?**

#### **Primary Shoulder Replacement**

Shoulder replacement surgery replaces the damaged part of your shoulder to recreate the natural contours of the bones in a healthy shoulder.

Sometimes, only the ball is replaced (hemiarthroplasty), while other times, both the ball and socket are replaced (total shoulder arthroplasty). The ball is metal and the socket is plastic.

During surgery, an incision is made in the front of the shoulder. Once your surgeon exposes your shoulder joint, the surgeon will remove the damaged bone and cartilage. The head of the humerus is then removed and a metal stem is placed into the humeral canal. This provides a stabilizing anchor for the head.





**Pre-op Primary** 



**Post-op Primary** 

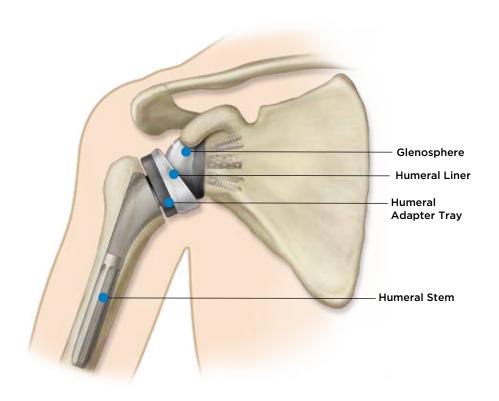


#### **Reverse Shoulder Replacement**

If you have a massive, irreparable rotator cuff tear and arthritis, your surgeon may opt to perform a reverse shoulder replacement.

The rotator cuff is a group of muscles and tendons that surround the shoulder in order to keep the humerus centered while performing shoulder-related tasks such as lifting the arm. When the rotator cuff tears, the muscles lose their ability to keep the humerus centered on the glenoid, causing your humerus to move upward and out of the socket. This instability, combined with arthritis or a previous shoulder injury, can cause severe pain and loss of function.

In this procedure, the anatomy of the shoulder is reversed by attaching a metal ball (glenosphere) to the glenoid and the plastic socket (humeral liner) to the upper humerus. A reverse shoulder replacement empowers your deltoid to become the main functioning muscle in the absence of a healthy rotator cuff.









Post-op Reverse

#### WHAT IS

# **Shoulder Resurfacing?**

Shoulder resurfacing is an alternative to total shoulder replacement often performed on younger, very active patients or patients whose arthritis is confined to the humeral head (ball).

Rather than replacing both the humeral stem and head, only the humeral head is replaced. This gives a new surface to the ball of the joint while allowing much of the natural humeral bone to remain intact. A surgeon may choose to add a high-quality plastic glenoid component to the new humeral head in order to replicate a patient's cartilage.

#### Potential resurfacing benefits:

- Restoration of natural anatomy
- Bone preservation (when compared to total shoulder arthroplasty)
- Compatible with a soft tissue preserving technique<sup>1</sup>
- Simplified removal if revision surgery is needed<sup>2</sup>



**Pre-op Primary** 



**Post-op Primary** 





The primary goal of the Equinoxe® Shoulder System is to help you enjoy your daily activities with reduced pain and increased mobility.

#### THE EXACTECH

## **Shoulder System**

It is widely recognized that quality design and materials contribute to longevity and function when it comes to total joint implants.

The Equinoxe Shoulder System has demonstrated excellent biomechanics and outcomes in its 20 years of use, as proven by more than 300 peer-reviewed clinical studies.

The platform system allows conversion of a primary or fracture shoulder replacement to a reverse without the need to remove the already well-fixed stem. The high-quality implants are designed to:

- Help match each individual patient's bone structure
- Preserve a patient's natural anatomy
- Work in a variety of procedures
- Address unique clinical challenges

#### WHY EXACTECH IMPLANTS

### Are Right for You.

Your surgeon will consider a wide variety of variables when selecting the shoulder implant that's right for you. Your age, height, weight, lifestyle and your general health are among the most important factors. The Equinoxe Shoulder System is designed to accommodate these and other variations in anatomy to provide you with the best possible outcome.

This information is for educational purposes only and is not intended to replace the expert guidance of your orthopaedic surgeon. Please direct any questions or concerns you may have to your orthopaedic surgeon.



References: 1. **Morishige, M. et al.** Subscapularis-sparing Deltopectoral Approach to the Shoulder. *Tech Should Surg.* 2010;11: 19-24. 2. **Sanchez-Sotelo** J. Total Shoulder Arthroplasty. *Open Orthop J.* 2011; 5: 106-114. 3. Data on file at Exactech.

