

## Unit 7 Orthopedic Physiotherapy

### Task 1 Muscles typology

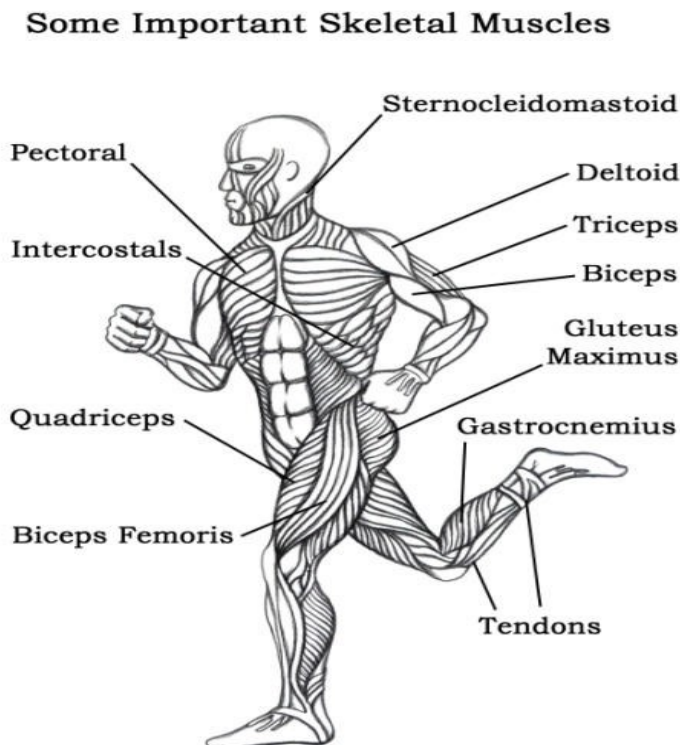
a) Ask about the missing information in the paragraph below:

You've got ..... muscles in your body, and they make up ..... of your bodyweight. These muscles can be divided into ..... . All of these muscles can stretch and contract, but they perform .....

b) Talk about the different types of the muscles in our body using the prompts below:

- attached to the skeleton
- voluntary control
- keep the body upright
- generate heat
- push food through the body
- work automatically
- squeeze blood out of the heart

c) Look at the diagram of the main muscles of the body. Do you know their function? Use vocabulary such as *rotate, raise, turn, extend, straighten*



(Source of picture: <https://www.youtube.com/watch?v=PBLUS34SBYQ>)

## Task 2 Listening - The benefits of good posture

(<https://www.youtube.com/watch?v=OyK0oE5rwFY>)

### Watch the video and answer the questions below:

- Why is good posture important?
- What does bad posture cause?
- What does good posture look like?
- What can we do to improve our posture?

### Now explain the meaning of the following expressions:

*slouch* – awkward position – wear and tear on ligaments – likelihood – exclusive cause - efficient - fatigue

## Task 3 Reading - Orthopedic physical therapy

Orthopedic physical therapy focuses on the problems of the muscular skeletal system (muscles, bones, ligaments or tendons). It deals with diagnosing, managing and treating injuries and problems and rehabilitating right after orthopedic operations, as well. Orthopedic therapy workers function *particularly* in treating post-operative joints, injuries *due to* sporting activities, arthritis and amputations.

Orthopedic physical therapy is very important for *restoring* the patients' activity, strength and motion right after injuries or surgery. You can find a number of things therapists can do in orthopedic physical therapy and there are lots of rehabilitation tools that they have on hand. Among these we should mention: stretching, strengthening, ice and heat therapy (hot and cold packs), electrical stimulation, ultrasound, etc.

Stretching is necessary if a patient has a stiff joint which can affect normal activities *severely*. Proper stretching exercise can assist to *preserve* such functions. To help a patient in improving the function of his/her muscles, increasing endurance and maintaining or improving the range of motions strengthening *workouts* are used.

The ice and heat therapy warm up and cool off muscles and *contribute to* the stimulation of blood circulation and assist to decrease swellings, as well. By using an ultrasound probe, deep tissues are stimulated and warmed while the *blood flow* will improve.

(adapted from <http://physical-therapy-treatment.com/orthopedic-physical-therapy.html>)

### Answer the questions:

Which problems does orthopedic physiotherapy focus on?

Which conditions is it required for?

What are the main orthopedic instruments?

When are stretching exercises necessary?

How is ice and heat therapy used?

### Replace the expressions in bold with synonyms.

**Task 4 Match groups of conditions with their headings below:**

**General Conditions**

**Shoulder Injuries**

**Elbow Injuries**

**Wrist Injuries**

**Neck and Low Back Injuries**

**Knee Injuries**

**Ankle Injuries**

**Foot/Toe Injuries**

Group 1

- Golfer's elbow (medial epicondylitis)
- Tennis elbow (lateral epicondylitis)
- Sprain/strain
- Fractures

Group 2

- Plantar fasciitis (heel pain)
- Tarsal tunnel syndrome
- Sprain/strain
- Fractures/stress fractures

Group 3

- *Osteoarthritis*: Degenerative joint disease (DJD); progressive destruction of articular cartilage and the formation of bone at the margin of the joint.
- *Osteoporosis*: A group of disorders, which have as their common denominator, a reduction of bone mass per unit of bone volume.
- *Fibromyalgia*: Chronic muscle pain syndrome with no known cause or cure, considered "inflammation of the soft tissue"; body and muscle aches often accompanied by overwhelming fatigue and pelvic pain; symptoms may wax and wane with no discernible cause

Group 4

- Rotator cuff tear (operative or non-operative)
- Dislocation
- Tendinitis
- Fracture

Group 5

- Sprain/strain
- Disc herniation
- Muscle spasm
- Posture
- Coccygodynia: refers to pain in and around the region of the coccyx or tailbone.

Group 6

- Achilles' tendonitis (Achilles' heel)
- Sprain/strain
- Fractures

### Group 7

- Patellofemoral syndrome
- ACL tear (operative or non-operative)
- Meniscus tear (operative or non-operative)
- Tendinitis
- Total knee replacement

### Group 8

- Carpal tunnel syndrome
- Sprain/strain (conservative or post-operative)
- Fractures

(<http://www.beyondbasicsphysicaltherapy.com/sports.shtml>)

**Choose one of the conditions, describe its causes and suggest suitable treatment. Discuss in pairs.**

### Task 5 Idioms

**Read the sentences below to find out the meaning of idiomatic phrases:**

- a) I had a good cry and *got it out of my system*.
- b) The woman *went under the knife* at the hospital last evening.
- c) My uncle *was the picture of health* when I last saw him.
- d) My mum has been *up and about* for a couple of days since she left the hospital.
- e) Our boss *got a taste of his own medicine* when people began to treat him badly like he treats others.
- f) Mrs. Robinson in room 203 has been *circling the drain* all week.
- g) Telling him about his girlfriend's wedding was like *twisting the knife in the wound*.