



THE MOVEMENT MUSCLE MANUAL



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INTRODUCTION



- In this manual, we categorize muscles by the movement(s) they facilitate. This allows us to clearly see which muscles assist and oppose each other.
- Rather than concentrating on an endless list of origins and insertions (explained in the next slide), we simply consider which joint(s) the muscles cross, and how this relates to movement and training.
- This style of functional anatomy allows us to maximise performance and manage injuries – when we know how a muscle works, we know how to work it.
- Many muscles will feature on multiple slides. This is because muscles usually perform multiple actions.





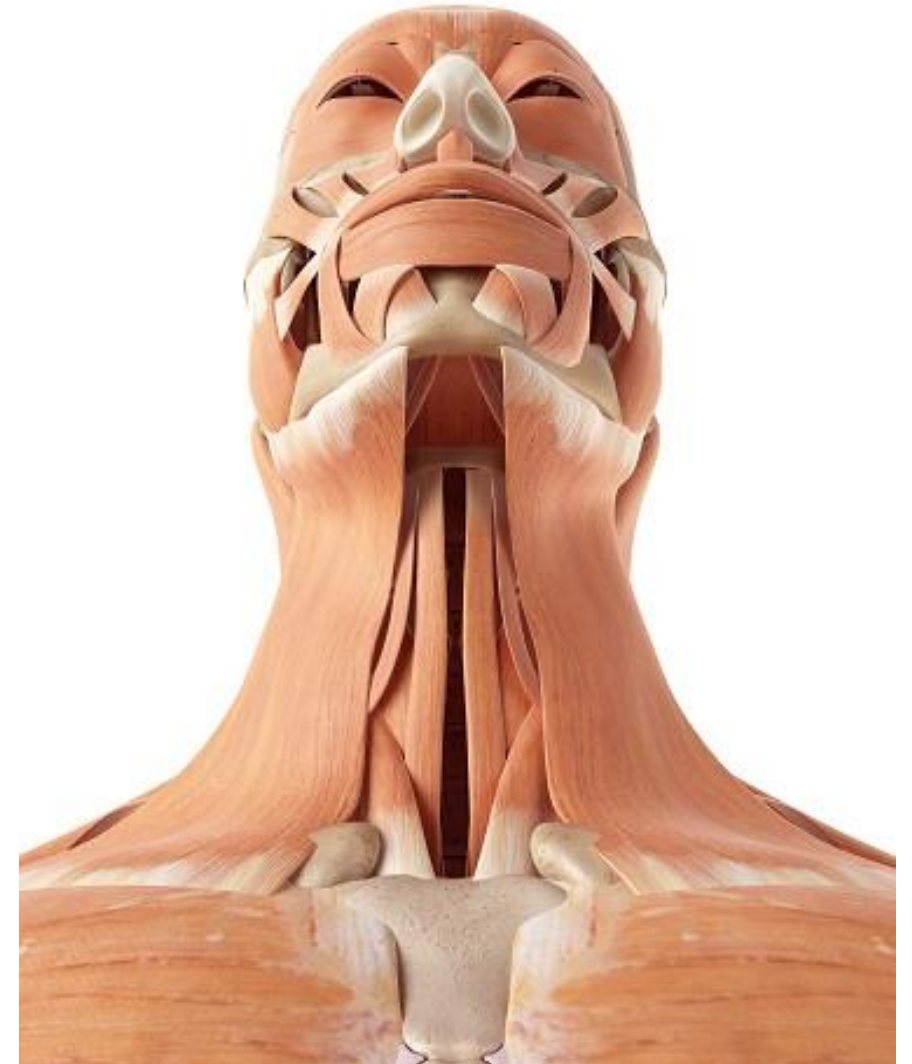
TECHNICAL TERMINOLOGY

- **Origin:** The origin is attached to a fixed bone that usually doesn't move during contraction. It is often described as the proximal attachment, meaning it is closer to the centre or midline of the body – muscles may have more than one origin, for example the triceps have 3 and the biceps have 2.
- **Insertion:** The insertion is the attachment to a bone that usually moves during contraction. It is often described as the distal attachment, meaning further from the centre or midline of the body.
- **Prime Movers / Agonists:** These are the primary muscles that perform the desired action. For example the biceps during a biceps curl.
- **Antagonists:** These are the muscles that oppose the agonist. For example, the triceps during a biceps curl.
- **Synergists:** These are the muscles that assist the agonist. For example, the brachioradialis.
- **Fixators:** These are the muscles that stabilize the body during the movement. For example, the deltoid during a biceps curl.



THE NECK

- This section is made up of the muscles that move the neck.
- The neck consists of 7 cervical vertebrae. The 1st is the atlas and the 2nd is the axis.
- The neck is capable of flexion, lateral flexion, extension and rotation.
- The muscles at the front flex the neck while the muscle at the back extend the neck.
- The muscles on each side of the neck allow the neck to laterally flex, laterally extend and rotate when working unilaterally.



BECOME THE EXPERT

FLEXORS OF THE NECK

BRINGING YOUR CHIN TOWARDS YOUR CHEST

STERNOCLEIDOMASTOID



SCALENES



LONGUS COLLI



BECOME THE EXPERT

EXTENSORS OF THE NECK

LOOKING UP TOWARDS THE CEILING

UPPER TRAPEZIUS



SPLenius CAPITIS



SPLenius CERVICIS





THE UPPER EXTREMITIES

- This section is made up of the muscles that move the upper extremities (arms).
- These muscles surround and cross the shoulder girdle (scapula and clavicle), shoulder joint (scapula and humerus), elbow joint (humerus, radius and ulna), and the wrist joint (radius and carpals).
- **Shoulder Actions:** Elevation / Depression / Protraction / Retraction / Upward Rotation / Downward Rotation / Internal Rotation / External Rotation / Flexion / Extension / Abduction / Adduction / Circumduction.
- **Elbow Actions:** Flexion / Extension (Pronation and Supination occur at the radioulnar joint).
- **Wrist Actions:** Flexion / Extension / Abduction / Adduction / Circumduction.



BECOME THE EXPERT

ELEVATORS OF THE SCAPULA

BRING YOUR SHOULDER BLADES UPWARDS – SHRUG YOUR SHOULDERS

UPPER TRAPEZIUS



LEVATOR SCAPULA



BECOME THE EXPERT

DEPRESSORS OF THE SCAPULA

BRING YOUR SHOULDER BLADES DOWN – HANDS IN POCKETS

LOWER TRAPEZIUS



PECTORALIS MINOR



BECOME THE EXPERT

PROTRACTORS OF THE SCAPULA

BRING YOUR SHOULDERS FORWARDS – REACHING FOR A DOOR HANDLE

PECTORALIS MINOR



SERRATUS ANTERIOR



BECOME THE EXPERT

RETRACTORS OF THE SCAPULA

BRING YOUR SHOULDERS BACK – PROUD CHEST

MIDDLE TRAPEZIUS



RHOMBOIDS



BECOME THE EXPERT

UPWARD ROTATORS OF THE SCAPULA

ROTATE YOUR SHOULDERS BLADES UP AND TOWARDS EACH OTHER (SUPERIOR ANGLE)

UPPER & MIDDLE
TRAPEZIUS



SERRATUS ANTERIOR



BECOME THE EXPERT

DOWNWARD ROTATORS OF THE SCAPULA

ROTATE YOUR SHOULDER BLADES DOWN AND TOWARDS EACH OTHER (INFERIOR ANGLE)

LEVATOR SCAPULA



RHOMBOIDS



PECTORALIS MINOR



BECOME THE EXPERT

INTERNAL ROTATORS OF THE HUMERUS

PART 1: ROTATE YOUR SHOULDER SO YOUR PALMS ARE FACING TO THE REAR

ANTERIOR DELTOID



PECTORALIS MAJOR



SUBSCAPULARIS



BECOME THE EXPERT

INTERNAL ROTATORS OF THE HUMERUS

PART 2: ROTATE YOUR SHOULDERS SO YOUR PALMS ARE FACING TO THE REAR

TERES MAJOR



LATISSIMUS DORSI



BECOME THE EXPERT

EXTERNAL ROTATORS OF THE HUMERUS

ROTATE YOUR ARMS SO YOUR PALMS ARE FACING FORWARD (ALSO KNOWN AS LATERAL ROTATION)

INFRASPINATUS



TERES MINOR



POSTERIOR DELTOID



BECOME THE EXPERT

FLEXORS OF THE HUMERUS

PART 1: RAISING YOUR ARM(S) TO THE FRONT

ANTERIOR DELTOID



PECTORALIS MAJOR
(CLAVICULAR HEAD)



BECOME THE EXPERT

FLEXORS OF THE HUMERUS

PART 2: RAISING YOUR ARM(S) TO THE FRONT

CORACOBRACHIALIS



BICEPS BRACHII
(SHORT HEAD)



BECOME THE EXPERT

EXTENSORS OF THE HUMERUS

PART 1: BRINGING YOUR ARM(S) BACK TOWARDS YOUR BODY FROM THE FRONT

LATISSIMUS DORSI



POSTERIOR DELTOID



BECOME THE EXPERT

EXTENSORS OF THE HUMERUS

PART 2: BRINGING YOUR ARM(S) BACK TOWARDS YOUR BODY FROM THE FRONT

TERES MAJOR



INFRASPINATUS



BECOME THE EXPERT

EXTENSORS OF THE HUMERUS

PART 3: BRINGING YOUR ARM(S) BACK TOWARDS YOUR BODY FROM THE FRONT

**TRICEPS BRACHII
(LONG HEAD)**



**PECTORALIS MAJOR
(STERNAL HEAD)**



BECOME THE EXPERT

ABDUCTORS OF THE HUMERUS

RAISING YOUR ARM(S) OUT TO THE SIDE

SUPRASPINATUS



MIDDLE DELTOID



BECOME THE EXPERT

ADDUCTORS OF THE HUMERUS

PART 1: BRINGING YOUR ARM(S) BACK TO THE BODY FROM THE SIDE

PECTORALIS MAJOR



CORACOBRACHIALIS



LATISSIMUS DORSI



BECOME THE EXPERT

ADDUCTORS OF THE HUMERUS

PART 2: BRINGING YOUR ARM(S) BACK TO THE BODY FROM THE SIDE

TERES MAJOR



SUBSCAPULARIS



BECOME THE EXPERT

HORIZONTAL FLEXORS OF THE HUMERUS

BRINGING YOUR ARMS TOGETHER WITH YOUR SHOULDERS FLEXED

ANTERIOR DELTOID



PECTORALIS MAJOR



BECOME THE EXPERT

HORIZONTAL EXTENSORS OF THE HUMERUS

BRINGING YOUR ARMS OUT TO YOUR SIDES WITH YOUR SHOULDERS FLEXED

POSTERIOR DELTOID



TERES MINOR



INFRASPINATUS



BECOME THE EXPERT

FLEXORS OF THE ELBOW

PART 1: BENDING YOUR ELBOW

BICEPS BRACHII



BRACHIALIS



BECOME THE EXPERT

FLEXORS OF THE ELBOW

PART 2: BENDING YOUR ELBOW

BRACHIORADIALIS



PRONATOR TERES



BECOME THE EXPERT

EXTENSORS OF THE ELBOW

STRAIGHTENING YOUR ELBOW

TRICEPS BRACHII



ANCONEUS



BECOME THE EXPERT

SUPINATORS OF THE FOREARM

WITH YOU ELBOW BENT AT 90 DEGREES, TURN YOUR PALM TOWARDS THE CEILING

BICEPS BRACHII



SUPINATOR



BECOME THE EXPERT

PRONATORS OF THE FOREARM

WITH YOUR ELBOW BENT AT 90 DEGREES, TURN YOUR PALM TOWARDS THE FLOOR

PRONATOR TERES



PRONATOR QUADRATUS



BECOME THE EXPERT

FLEXORS OF THE WRIST

BENDING YOUR WRIST SO YOUR PALM IS BROUGHT TOWARDS YOUR FOREARM

FLEXOR CARPI RADIALIS



FLEXOR CARPI ULNARIS



PALMARIS LONGUS



BECOME THE EXPERT

EXTENSORS OF THE WRIST

BENDING YOUR WRIST SO THE BACK OF YOUR HAND IS BROUGHT TOWARDS YOUR FOREARM

EXTENSOR CARPI
RADIALIS LONGUS



PRONATOR QUADRATUS



EXTENSOR CARPI
ULNARIS



BECOME THE EXPERT

ABDUCTORS OF THE WRIST

BENDING YOUR WRIST SO YOUR THUMB IS BROUGHT TOWARDS YOUR FOREARM

FLEXOR CARPI RADIALIS



**EXTENSOR CARPI
RADIALIS LONGUS**



BECOME THE EXPERT

ADDUCTORS OF THE WRIST

BENDING YOUR WRIST SO YOUR LITTLE FINGER IS BROUGHT TOWARDS YOUR FOREARM

**EXTENSOR CARPI
ULNARIS**



FLEXOR CARPI ULNARIS





THE TORSO AKA TRUNK

- This section is made up of the muscles that move the spine – many of the muscles attach to the pelvis and therefore, impact on hip movement.
- The spine is made up of 5 regions (4 curves): Cervical (7 vertebrae) / Thoracic (12 vertebrae) / lumbar (5 vertebrae) / Sacrum (5 vertebrae – fused) / Coccyx (4 vertebrae – fused).
- **Actions:** Flexion / Extension / Lateral Flexion / Lateral Extension / Rotation / Circumduction.



BECOME THE EXPERT

FLEXORS OF THE TORSO

PART 1: BENDING FORWARD

RECTUS ABDOMINIS



EXTERNAL OBLIQUES



BECOME THE EXPERT

FLEXORS OF THE TORSO

PART 2: BENDING FORWARD

INTERNAL OBLIQUES



TRANSVERSE ABDOMINIS



BECOME THE EXPERT

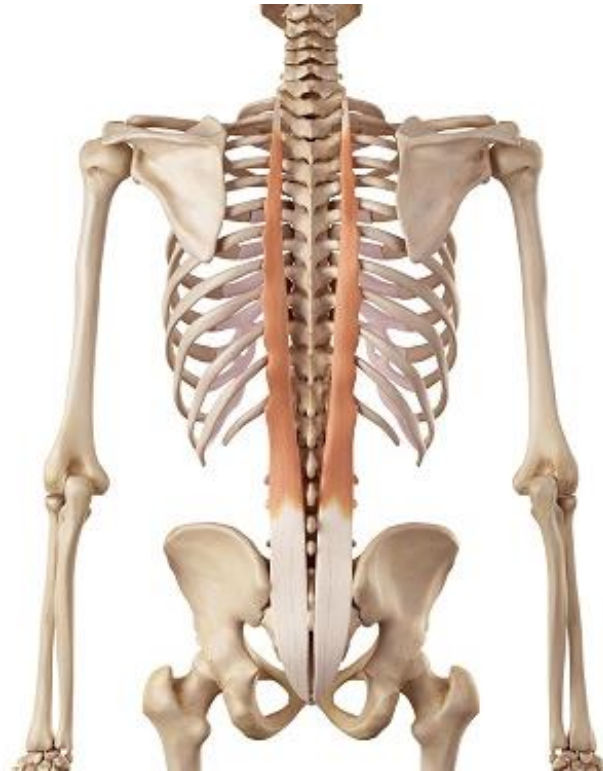
EXTENSORS OF THE TORSO

PART 1: STANDING UP STRAIGHT

ILIOCOSTALIS



LONGISSIMUS



SPINALIS



BECOME THE EXPERT

EXTENSORS OF THE TORSO

PART 2: STANDING UP STRAIGHT

SEMISPINALIS



QUADRATUS LUMBORUM



BECOME THE EXPERT

LATERAL FLEXORS/EXTENSORS OF THE TORSO

SIDE BENDING AND STRAIGHTENING OF THE SPINE

QUADRATUS LUMBORUM



EXTERNAL OBLIQUES



INTERNAL OBLIQUES



BECOME THE EXPERT

ROTATORS OF THE TORSO

PART 1: TWISTING THE SPINE

EXTERNAL OBLIQUES



INTERNAL OBLIQUES



BECOME THE EXPERT

ROTATORS OF THE TORSO

PART 2: TWISTING THE SPINE

MULTIFIDUS



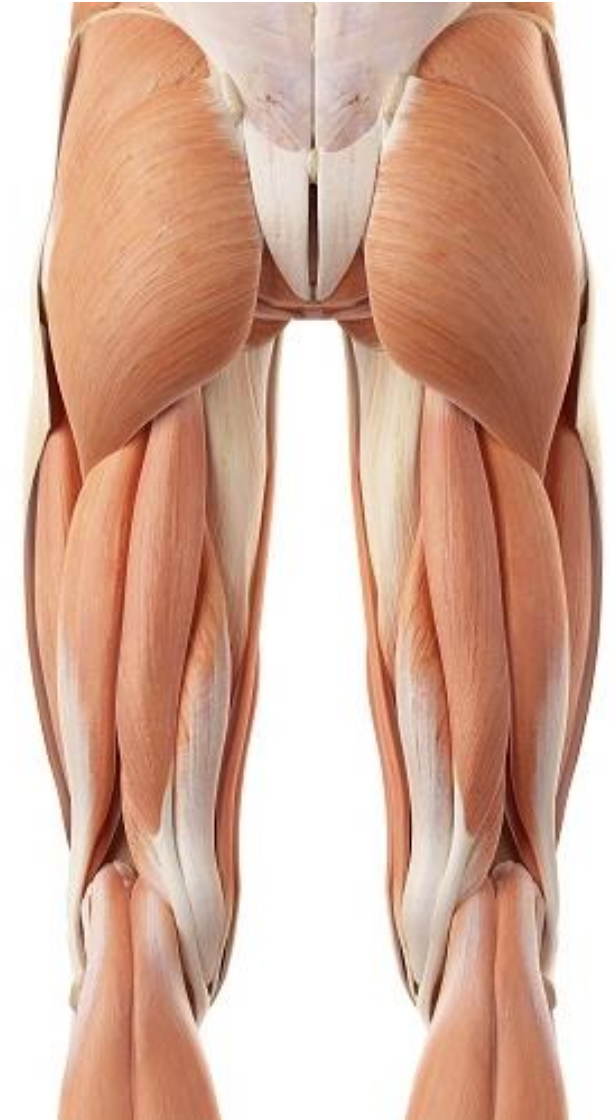
ROTATORES





THE LOWER EXTREMITIES

- This section is made up of the muscles that move the lower extremities (legs).
- These muscles surround and cross the hip joints (pelvis and femur), knee joints (femur and tibia) and the ankle joints (tibia, fibula and talus).
- **Hip Actions:** Internal Rotation / External Rotation / Flexion / Extension / Abduction / Adduction / Circumduction.
- **Knee Actions:** Flexion / Extension / Internal Rotation / External Rotation.
- **Ankle Actions:** Plantarflexion / Dorsiflexion / Inversion / Eversion / Circumduction.



BECOME THE EXPERT

INTERNAL ROTATORS OF THE HIP

PART 1: WITH A STRAIGHT LEG, TURN YOUR TOES INWARDS (ALSO KNOWN AS MEDIAL ROTATION)

GLUTEUS MINIMUS



GLUTEUS MEDIUS

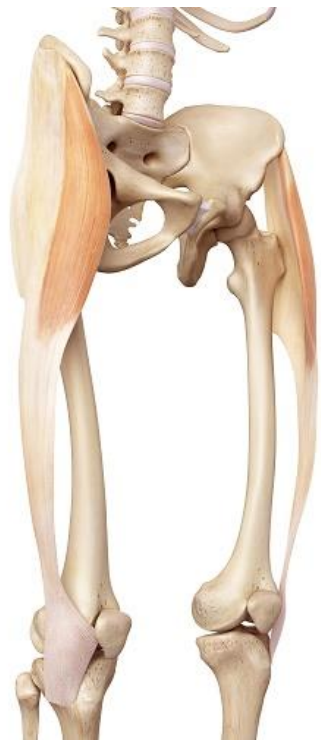


BECOME THE EXPERT

INTERNAL ROTATORS OF THE HIP

PART 2: WITH A STRAIGHT LEG, TURN YOUR TOES INWARDS (ALSO KNOWN AS MEDIAL ROTATION)

TENSOR FASCIA LATAE



ADDUCTOR MAGNUS



BECOME THE EXPERT

EXTERNAL ROTATORS OF THE HIP

PART 1: WITH A STRAIGHT LEG, TURN YOUR TOES OUTWARDS (ALSO KNOWN AS LATERAL ROTATION)

PIRIFORMIS

GEMELLUS SUPERIOR

GEMELLUS INFERIOR



BECOME THE EXPERT

EXTERNAL ROTATORS OF THE HIP

PART 2: WITH A STRAIGHT LEG, TURN YOUR TOES OUTWARDS (ALSO KNOWN AS LATERAL ROTATION)

OBTURATOR INTERNUS



OBTURATOR EXTERNUS



QUADRATUS FEMORIS



BECOME THE EXPERT

EXTERNAL ROTATORS OF THE HIP

PART 3: WITH A STRAIGHT LEG, TURN YOUR TOES OUTWARDS (ALSO KNOWN AS LATERAL ROTATION)

GLUTEUS MAXIMUS



SARTORIUS



BECOME THE EXPERT

FLEXORS OF THE HIP

PART 1: BENDING THE HIPS (RAISING YOUR KNEE)

PSOAS MAJOR



ILIACUS



PECTINEUS



BECOME THE EXPERT

FLEXORS OF THE HIP

PART 2: BENDING THE HIPS (RAISING YOUR KNEE)

TENSOR FASCIA LATAE



ADDUCTOR BREVIS



ADDUCTOR LONGUS



BECOME THE EXPERT

FLEXORS OF THE HIP

PART 3: BENDING THE HIPS (RAISING YOUR KNEE)

ADDUCTOR MAGNUS



RECTUS FEMORIS



SARTORIUS

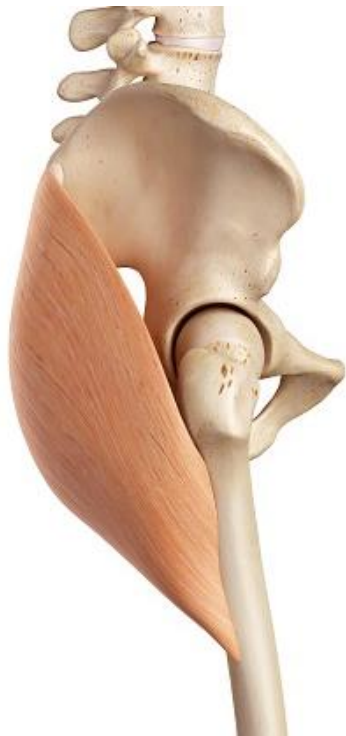


BECOME THE EXPERT

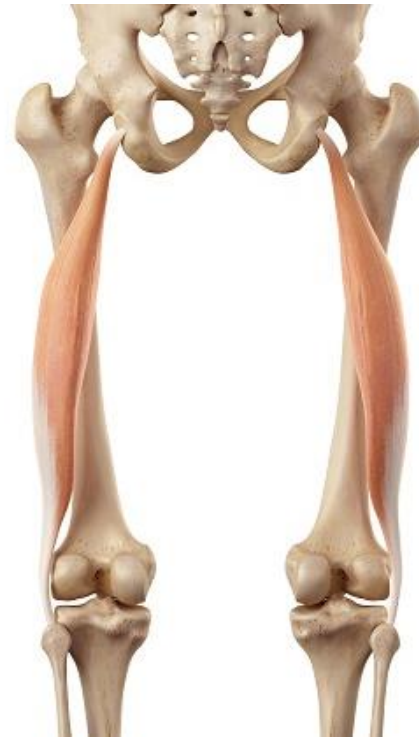
EXTENSORS OF THE HIP

PART 1: STRAIGHTENING THE HIPS

GLUTEUS MAXIMUS



BICEPS FEMORIS
(LONG HEAD)



SEMITENDINOSUS



BECOME THE EXPERT

EXTENSORS OF THE HIP

PART 2: STRAIGHTENING THE HIPS

SEMIMEMBRANOSUS



ADDUCTOR MAGNUS



BECOME THE EXPERT

ABDUCTORS OF THE HIP

PART 1: MOVING YOUR LEG OUT TO THE SIDE

GLUTEUS MINIMUS



GLUTEUS MEDIUS



BECOME THE EXPERT

ABDUCTORS OF THE HIP

PART 2: MOVING YOUR LEG OUT TO THE SIDE

TENSOR FASCIA LATAE



SARTORIUS



BECOME THE EXPERT

ADDUCTORS OF THE HIP

PART 1: BRINGING YOUR LEG BACK TOWARDS YOUR BODY FROM THE SIDE

ADDUCTOR MAGNUS



ADDUCTOR LONGUS



ADDUCTOR BREVIS



BECOME THE EXPERT

ADDUCTORS OF THE HIP

PART 2: BRINGING YOUR LEG BACK TOWARDS YOUR BODY FROM THE SIDE

GRACILIS



PECTINEUS

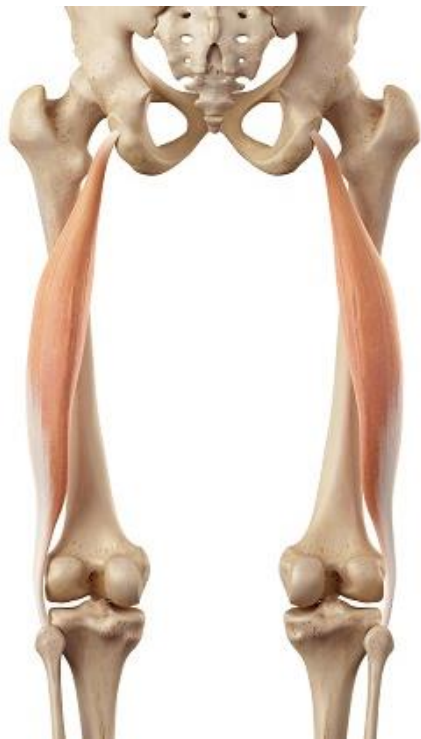


BECOME THE EXPERT

FLEXORS OF THE KNEE

PART 1: BENDING YOUR KNEE

BICEPS FEMORIS



SEMITENDINOSUS



SEMIMEMBRANOSUS



BECOME THE EXPERT

FLEXORS OF THE KNEE

PART 2: BENDING YOUR KNEE

SARTORIUS



GRACILIS



BECOME THE EXPERT

FLEXORS OF THE KNEE

PART 3: BENDING YOUR KNEE

GASTROCNEMIUS



POPLITEUS

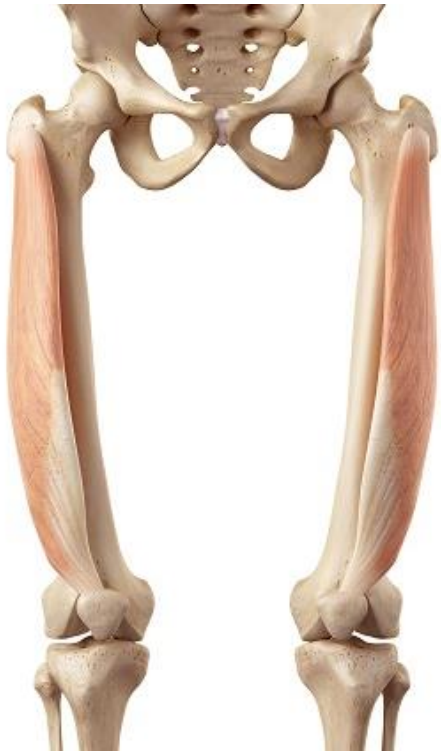


BECOME THE EXPERT

EXTENSORS OF THE KNEE

PART 1: STRAIGHTENING YOUR KNEE

VASTUS LATERALIS



VASTUS INTERMEDIUS



VASTUS MEDIALIS



BECOME THE EXPERT

EXTENSORS OF THE KNEE

PART 2: STRAIGHTENING YOUR KNEE

RECTUS FEMORIS



TENSOR FASCIA LATAE



BECOME THE EXPERT

INTERNAL ROTATORS OF THE KNEE

PART 1: WITH A BENT KNEE, TURN YOUR TOES INWARDS

SEMITENDINOSUS



SEMIMEMBRANOSUS



POPLITEUS



BECOME THE EXPERT

INTERNAL ROTATORS OF THE KNEE

PART 2: WITH A BENT KNEE, TURN YOUR TOES INWARDS

GRACILIS



SARTORIUS

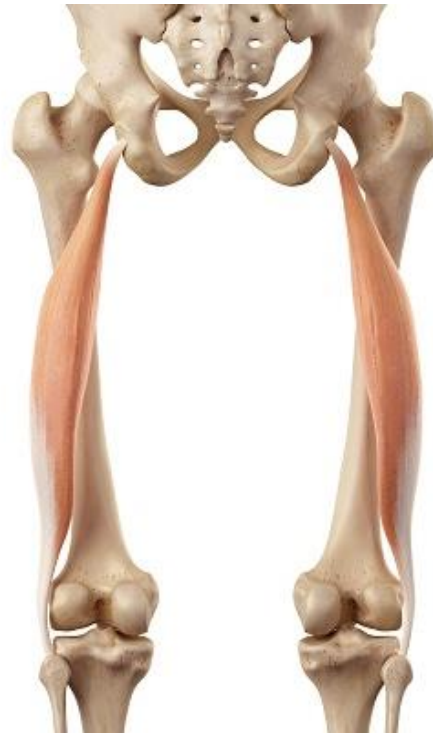


BECOME THE EXPERT

EXTERNAL ROTATOR OF THE KNEE

WITH A BENT KNEE, TURN YOUR TOES OUTWARDS

BICEPS FEMORIS



BECOME THE EXPERT

DORSIFLEXORS OF THE ANKLE

PART 1: BRINGING YOUR TOES TOWARDS YOUR SHIN(S)

TIBIALIS ANTERIOR



**EXTENSOR DIGITORUM
LONGUS**



BECOME THE EXPERT

DORSIFLEXORS OF THE ANKLE

PART 2: BRINGING YOUR TOES TOWARDS YOUR SHIN(S)

PERONEUS TERTIUS



EXTENSOR HALLUCIS LONGUS



BECOME THE EXPERT

PLANTARFLEXORS OF THE ANKLE

PART 1: BRINGING TOES TOWARDS THE FLOOR / COMING UP ONTO YOUR TOES

GASTROCNEMIUS



SOLEUS



PLANTARIS



BECOME THE EXPERT

PLANTARFLEXORS OF THE ANKLE

PART 2: BRINGING TOES TOWARDS THE FLOOR / COMING UP ONTO YOUR TOES

PERONEUS LONGUS



PERONEUS BREVIS



TIBIALIS POSTERIOR



BECOME THE EXPERT

PLANTARFLEXORS OF THE ANKLE

PART 3: BRINGING TOES TOWARDS THE FLOOR / COMING UP ONTO YOUR TOES

**FLEXOR HALLUCIS
LONGUS**



**FLEXOR DIGITORUM
LONGUS**



BECOME THE EXPERT

INVERTORS OF THE ANKLE

COME ONTO THE OUTER SIDE OF THE FOOT – SOLE TURNED INWARDS

TIBIALIS ANTERIOR



TIBIALIS POSTERIOR



BECOME THE EXPERT

EVERTORS OF THE ANKLE

COME ONTO THE INNER SIDE OF THE FOOT – SOLE TURNED OUTWARDS

PERONEUS LONGUS



PERONEUS BREVIS



PERONEUS TERTIUS





MUSCLES & MOVEMENT

If you enjoyed this Muscle Manual, consider enrolling on our Full Muscles & Movement Course.

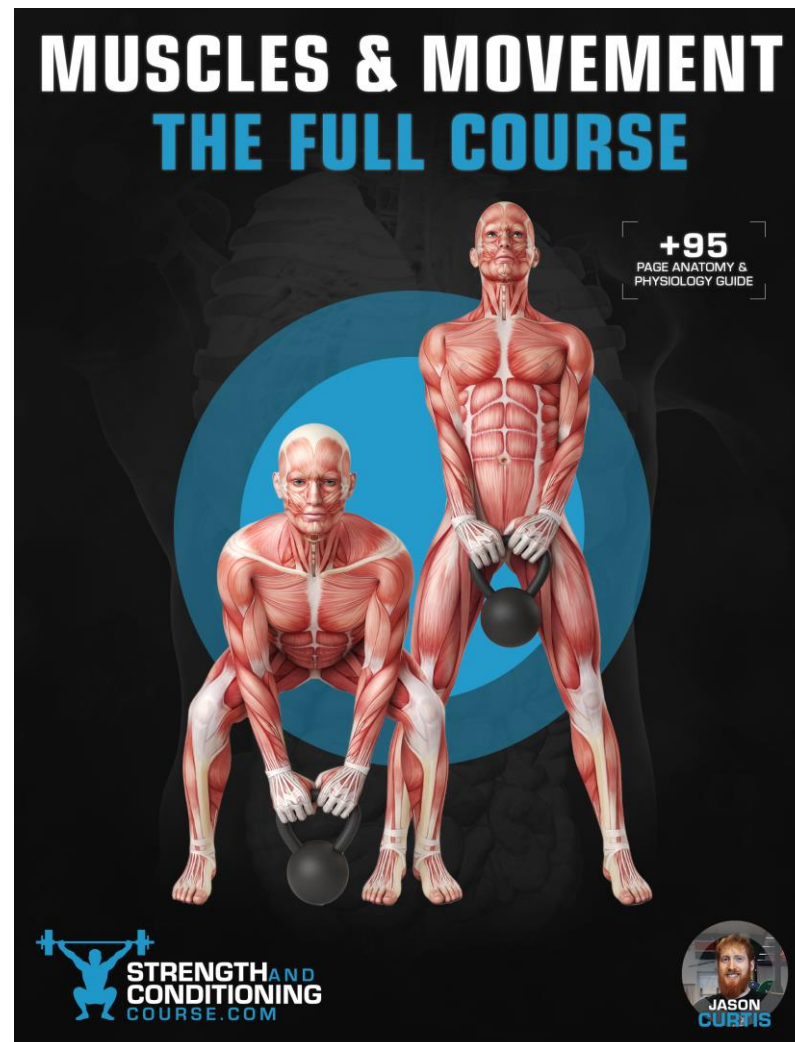
In this course, Coach Curtis discusses the intricacies of each slide from this muscle manual and has included hours of video footage demonstrating how to target each area.

Included in this course is an awesome piece of bonus content, our 95-Page Anatomy & Physiology Guide which is packed with useful infographics.

This course is a must for anyone who wants to gain a mastery of movement!

Use the link below to get 80% off the course:

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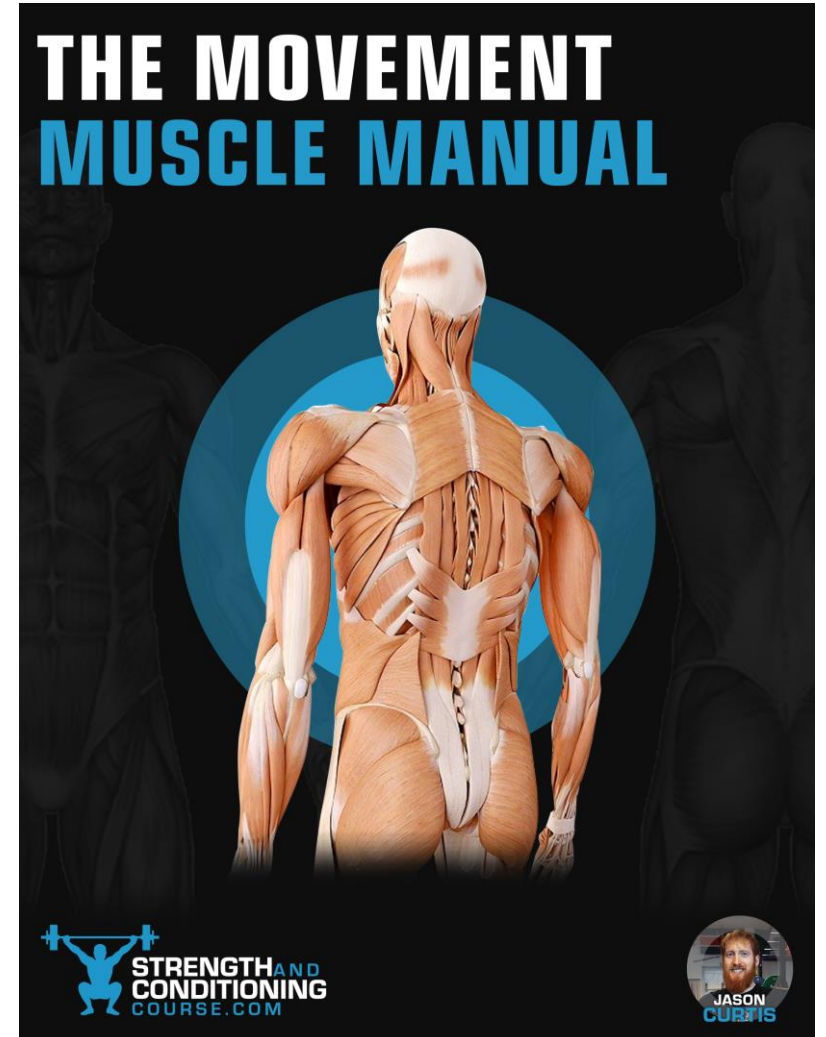
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Coach Curtis



HOPE YOU ENJOYED
OUR CONTENT



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CONDITIONING**
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