

Muscles that act on the axial skeleton

Axial muscles

- of the neck, spine
- thoracic & abdominal walls
- diaphragm, pelvic floor*

Sternocleidomastoid

- O - sternum & clavicle
- I - mastoid process
- A - rotates head, flex neck (?)

Erector spinae - extends spine & neck

Abdominal Wall / Abdominal cavity

1. External obliques
2. Internal obliques
3. Transverse abdominis
4. Rectus abdominis
 - O - pubic symphysis
 - I - costal cartilage & xiphoid process
 - A - depress ribs, flexes vertebral column
5. Pelvic diaphragm – supports pelvic contents

Thoracic wall / Thoracic cavity

1. External intercostals - elevate ribs
2. Internal Intercostals - depress ribs
3. Transverse thoracis - depress ribs
4. Diaphragm - expands thorax & compresses abdomen

MUSCLES OF THE HEAD

Muscles of Mastication

Temporalis

- O - sphenoid, frontal, temporal, parietal bones
- I - coronoid process of mandible
- A - elevates and retracts mandible

Masseter

- O - zygomatic arch
- I - lateral surface of mandibular ramus/angle
- A - elevates and protracts mandible

Pterygoid(s)

- O - pterygoid plates of sphenoid bone
- I - medial surface of mandibular ramus/angle/condyle
- A - elevates/protracts/translates the mandible

Hyoid musculature

Suprahyoid(s)

O - hyoid bone

I - mandible, tongue, floor of brain case

A - elevate hyoid, depress mandible

Infrahyoid(s)

O - sternum, clavicle, larynx (voice- box)

I - hyoid

A - depress hyoid

Muscles of facial expression

Epicranius

= **Occipitalis** + galea aponeurotica + **Frontalis**)

= moves scalp, raises eyebrows, and wrinkles forehead

Corrugator supercilii - wrinkles brow

Nasalis - wrinkles bridge of nose

Orbicularis oculi - closes eye

Orbicularis oris - closes/protrudes lips

Buccinator - compresses cheeks

Levator labii superioris - elevates upper lip

Depressor labii inferioris - depresses lower lip

Zygomaticus - elevates corner of mouth

Depressor anguli oris - depresses corner of mouth

Platysma - compresses neck, depresses mandible