

Muscles Promoting Facial Expressions



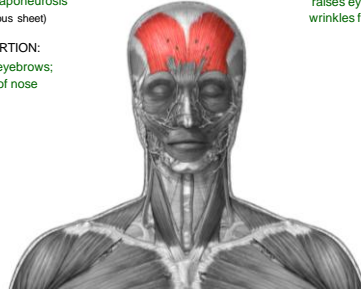
Muscles Promoting Facial Expressions

Frontalis (Epicranius)

ORIGIN:
epicranial aponeurosis
(tendinous sheet)

ACTION:
raises eyebrows;
wrinkles forehead

INSERTION:
skin of eyebrows;
root of nose



(Anterior view)

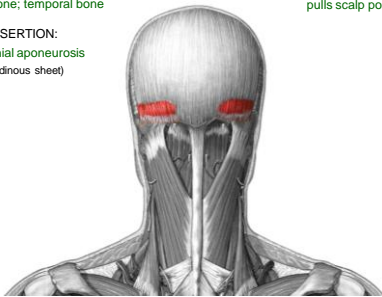
Muscles Promoting Facial Expressions

Occipitalis (Epicranius)

ORIGIN:
occipital bone; temporal bone

ACTION:
pulls scalp posteriorly

INSERTION:
epicranial aponeurosis
(tendinous sheet)



(Posterior view)

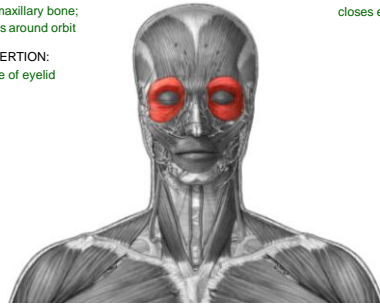
Muscles Promoting Facial Expressions

Orbicularis oculi

ORIGIN:
frontal / maxillary bone;
ligaments around orbit

ACTION:
closes eye

INSERTION:
tissue of eyelid



(Anterior view)

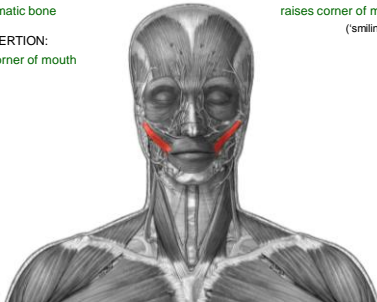
Muscles Promoting Facial Expressions

Zygomaticus (major / minor)

ORIGIN:
zygomatic bone

ACTION:
raises corner of mouth upwards
(smiling)

INSERTION:
skin at corner of mouth



(Anterior view)

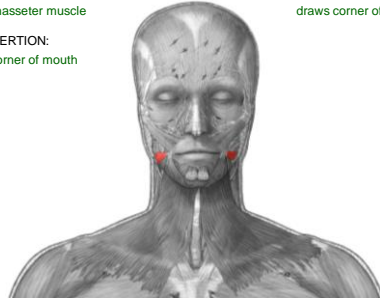
Muscles Promoting Facial Expressions

Risorius

ORIGIN:
fascia of masseter muscle

ACTION:
draws corner of lips laterally

INSERTION:
skin at corner of mouth



(Anterior view)

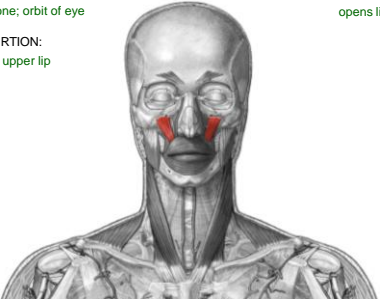
Muscles Promoting Facial Expressions

Levator labii superioris

ORIGIN:
zygomatic bone; orbit of eye

INSERTION:
skin of upper lip

ACTION:
opens lips



(Anterior view)

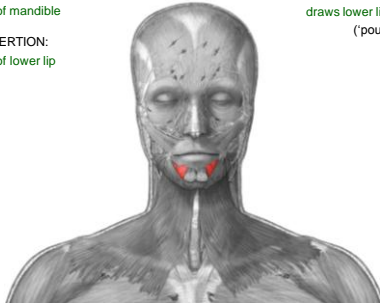
Muscles Promoting Facial Expressions

Depressor labii inferioris

ORIGIN:
body of mandible

INSERTION:
skin of lower lip

ACTION:
draws lower lip inferiorly ('pout')



(Anterior view)

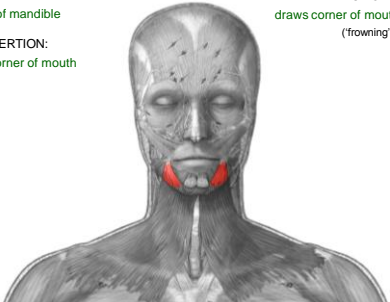
Muscles Promoting Facial Expressions

Depressor anguli oris

ORIGIN:
body of mandible

INSERTION:
skin at corner of mouth

ACTION:
draws corner of mouth downward ('frowning')



(Anterior view)

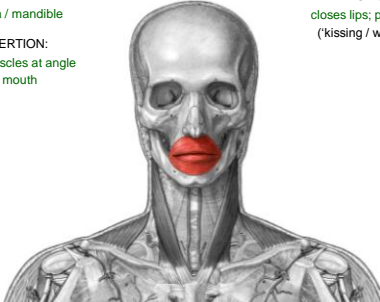
Muscles Promoting Facial Expressions

Orbicularis oris

ORIGIN:
maxilla / mandible

INSERTION:
skin / muscles at angle of mouth

ACTION:
closes lips; purses lips ('kissing / whistling')



(Anterior view)

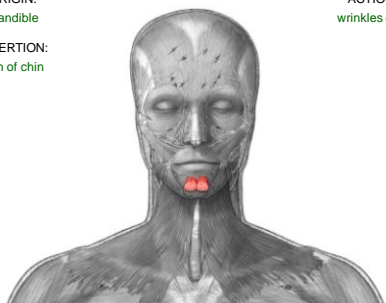
Muscles Promoting Facial Expressions

Mentalis

ORIGIN:
mandible

INSERTION:
skin of chin

ACTION:
wrinkles chin



(Anterior view)

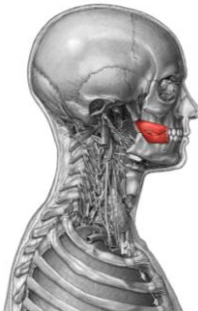
Muscles Promoting Facial Expressions

Buccinator

ORIGIN:
maxilla / mandible

INSERTION:
orbicularis oris muscle

ACTION:
compress cheeks ('sucking')



(Lateral view)

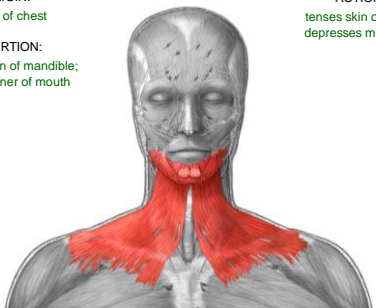
Muscles Promoting Facial Expressions

Platysma

ORIGIN:
fascia of chest

INSERTION:
lower margin of mandible;
skin at corner of mouth

ACTION:
tenses skin of neck;
depresses mandible



(Anterior view)

Muscles Promoting Mastication & Tongue Movement



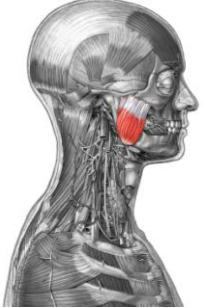
Muscles Promoting Mastication / Tongue Movement

Masseter

ORIGIN:
zygomatic arch / bone

INSERTION:
angle / ramus of mandible

ACTION:
elevates mandible



(Lateral view)


Muscles Promoting Mastication / Tongue Movement

Temporalis

ORIGIN:
temporal bone

INSERTION:
coronoid process
(mandible)

ACTION:
elevates mandible



(Lateral view)

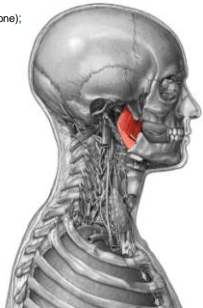
Muscles Promoting Mastication / Tongue Movement

Medial pterygoid

ORIGIN:
pterygoid process (sphenoid bone);
maxilla

INSERTION:
body of mandible

ACTION:
protrudes jaw; promotes
side-to-side chewing



(Lateral view)

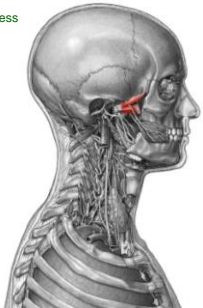
Muscles Promoting Mastication / Tongue Movement

Lateral pterygoid

ORIGIN:
greater wing / pterygoid process
(sphenoid bone)

INSERTION:
mandibular condyle
(mandible)

ACTION:
protrudes jaw; promotes
side-to-side chewing



(Lateral view)

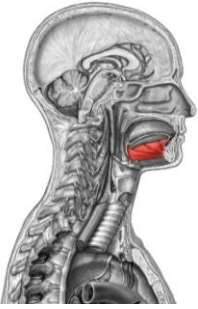
Muscles Promoting Mastication / Tongue Movement

Genioglossus

ORIGIN:
posterior body of mandible

INSERTION:
inferior aspect of tongue;
body of hyoid bone

ACTION:
protracts tongue
(‘sticking out’ tongue)



(Lateral view)

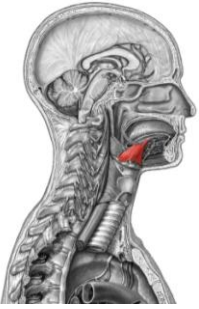
Muscles Promoting Mastication / Tongue Movement

Hyoglossus

ORIGIN:
body / greater horn of hyoid

INSERTION:
inferolateral tongue

ACTION:
depresses tongue



(Lateral view)

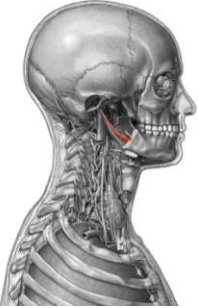
Muscles Promoting Mastication / Tongue Movement

Styloglossus

ORIGIN:
styloid process
(temporal bone)

INSERTION:
inferolateral tongue

ACTION:
retracts / elevates tongue



(Lateral view)

Muscles Promoting Head Movement



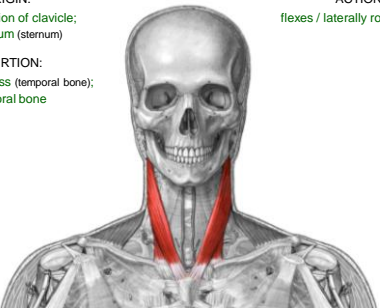
Muscles Promoting Head Movement

Sternocleidomastoid

ORIGIN:
medial portion of clavicle;
manubrium (sternum)

INSERTION:
mastoid process (temporal bone);
temporal bone

ACTION:
flexes / laterally rotates head



(Anterior view)

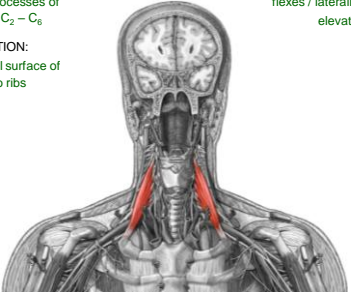
Muscles Promoting Head Movement

Scalenes

ORIGIN:
transverse processes of
vertebrae C₂ – C₆

INSERTION:
anterolateral surface of
first two ribs

ACTION:
flexes / laterally rotates neck;
elevates ribs



(Anterior view)

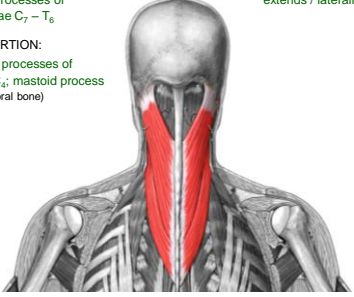
Muscles Promoting Head Movement

Splenius
(capitis/ cervicis)

ORIGIN:
spinous processes of
vertebrae C₇ – T₆

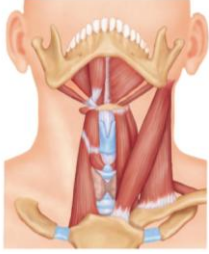
INSERTION:
Transverse processes of
vertebrae C₂ – C₄; mastoid process
(temporal bone)

ACTION:
extends / laterally rotates head



(Posterior view)

Muscles Promoting
Swallowing / Speaking



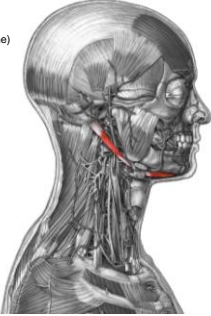
Muscles Promoting Swallowing / Speaking

Digastric

ORIGIN:
lower margin of mandible;
mastoid process (temporal bone)

INSERTION:
hyoid bone
(connective tissue loop)

ACTION:
elevates hyoid bone /
depresses mandible



(Lateral view)

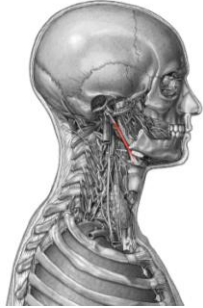
Muscles Promoting Swallowing / Speaking

Stylohyoid

ORIGIN:
styloid process
(temporal bone)

INSERTION:
hyoid bone

ACTION:
elevates / retracts
hyoid bone



(Lateral view)

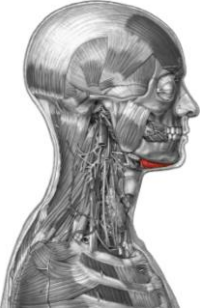
Muscles Promoting Swallowing / Speaking

Mylohyoid

ORIGIN:
medial inner surface
of mandible

INSERTION:
hyoid bone

ACTION:
elevates hyoid bone;
elevates floor of mouth



(Lateral view)

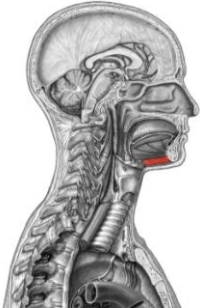
Muscles Promoting Swallowing / Speaking

Geniohyoid

ORIGIN:
medial inner surface
of mandible

INSERTION:
hyoid bone

ACTION:
elevates hyoid bone;
pulls hyoid bone anteriorly



(Lateral view)

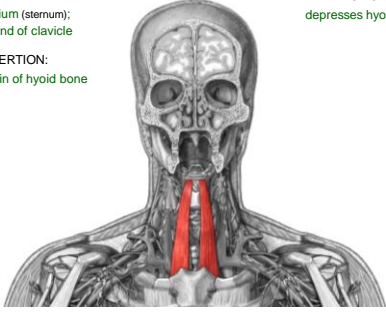
Muscles Promoting Swallowing / Speaking

Sternohyoid

ORIGIN:
manubrium (sternum);
medial end of clavicle

INSERTION:
lower margin of hyoid bone

ACTION:
depresses hyoid bone



(Anterior view)

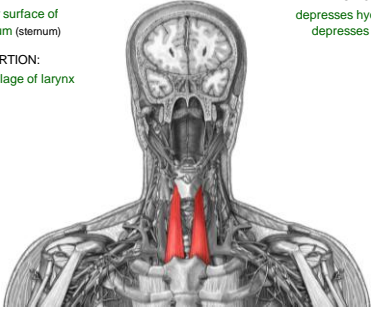
Muscles Promoting Swallowing / Speaking

Sternothyroid

ORIGIN:
posterior surface of
manubrium (sternum)

INSERTION:
thyroid cartilage of larynx

ACTION:
depresses hyoid bone;
depresses larynx



(Anterior view)

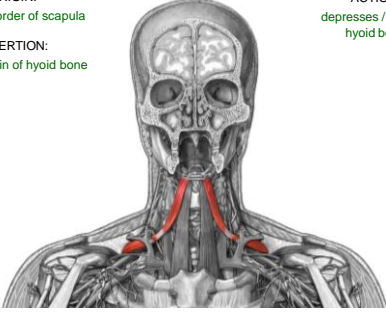
Muscles Promoting Swallowing / Speaking

Omohyoid

ORIGIN:
superior border of scapula

INSERTION:
lower margin of hyoid bone

ACTION:
depresses / retracts
hyoid bone



(Anterior view)

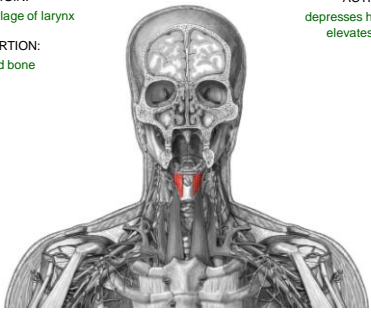
Muscles Promoting Swallowing / Speaking

Thyrohyoid

ORIGIN:
thyroid cartilage of larynx


INSERTION:
hyoid bone

ACTION:
depresses hyoid bone;
elevates larynx



(Anterior view)

Muscles Promoting Trunk Extension




Muscles Promoting Trunk Extension

Iliocostalis (Erector spinae)

ORIGIN:
Iliac crest (os coxae);
ribs 3 – 12

INSERTION:
angles of ribs;
transverse processes
of vertebrae C₄ – C₆

ACTION:
extends / laterally flexes
vertebral column



(Posterior view)


Muscles Promoting Trunk Extension

Longissimus
(Erector spinae)

ORIGIN:
transverse processes of vertebrae C₁ – L₅

INSERTION:
transverse processes of thoracic through cervical vertebrae; multiple ribs

ACTION:
extends / laterally flexes vertebral column



(Posterior view)


Muscles Promoting Trunk Extension

Spinalis
(Erector spinae)

ORIGIN:
spinous processes of upper lumbar and lower thoracic vertebrae

INSERTION:
spinous processes of upper thoracic and cervical vertebrae

ACTION:
extends vertebral column



(Posterior view)

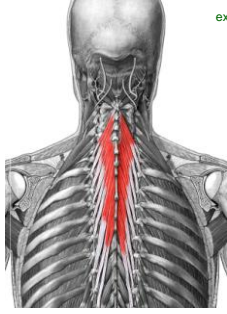
Muscles Promoting Trunk Extension

Semispinalis

ORIGIN:
transverse processes of vertebrae C₇ – T₁₂

INSERTION:
spinous processes of cervical and thoracic vertebrae

ACTION:
extends vertebral column



(Posterior view)

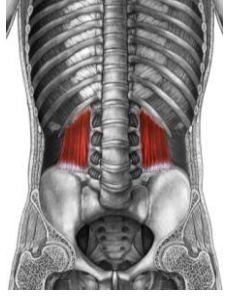
Muscles Promoting Trunk Extension

Quadratus lumborum

ORIGIN:
Iliac crest (os coxa)

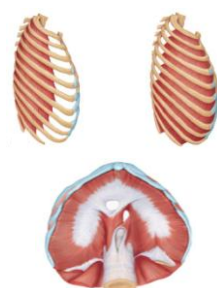
INSERTION:
transverse processes of vertebrae L₁ – L₄; lower margin of rib 12

ACTION:
laterally flexes vertebral column



(Anterior view)

Muscles Promoting Breathing




Muscles Promoting Breathing

External intercostals

ORIGIN:
inferior border of rib above

INSERTION:
superior border of rib below

ACTION:
elevates rib cage



(Anterior view)

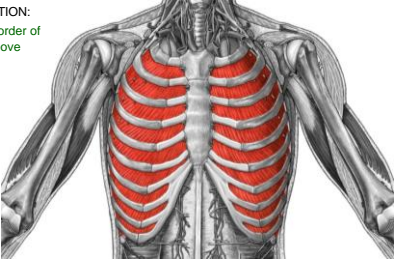
Muscles Promoting Breathing

Internal intercostals

ORIGIN:
superior border of rib below

INSERTION:
inferior border of rib above

ACTION:
depresses rib cage



(Anterior view)


Muscles Promoting Breathing

Diaphragm

ORIGIN:
inferior internal surface of rib cage / sternum; lumbar vertebrae


INSERTION:
central tendon of diaphragm

ACTION:
expands thoracic cavity



(Anterior view)

Muscles Promoting Movement / Compression of Abdominal Wall



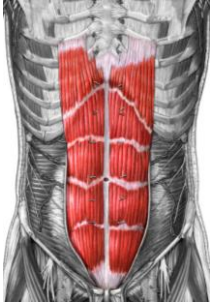
Muscles Promoting Movement / Compression of Abdominal Wall

Rectus abdominis

ORIGIN:
pubic crest (os coxa)

INSERTION:
xiphoid process (sternum); ribs 5 - 7

ACTION:
flexes / rotates lumbar region of vertebral column



(Anterior view)


Muscles Promoting Movement / Compression of Abdominal Wall

External oblique

ORIGIN:
outer surface of ribs 4 - 12

INSERTION:
linea alba (tendinous sheet)

ACTION:
flexes / rotates vertebral column; compresses abdominal wall



(Anterior view)

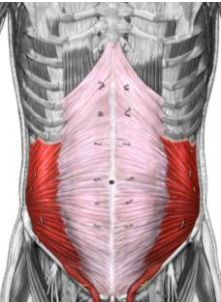
Muscles Promoting Movement / Compression of Abdominal Wall

Internal oblique

ORIGIN:
iliac crest (os coxa)

INSERTION:
linea alba; pubic crest (os coxa); ribs 9 - 12

ACTION:
flexes / rotates vertebral column; compresses abdominal wall



(Anterior view)

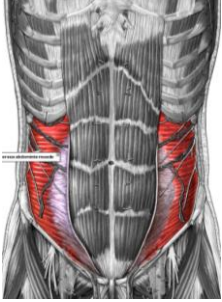
Muscles Promoting Movement / Compression of Abdominal Wall

Transversus abdominis

ORIGIN:
lumbar vertebrae;
ribs 7 – 12;
iliac crest (os coxa)


INSERTION:
linea alba;
pubic crest (os coxa)

ACTION:
compress abdominal wall



(Anterior view)

Muscles Promoting Pelvic Floor Support



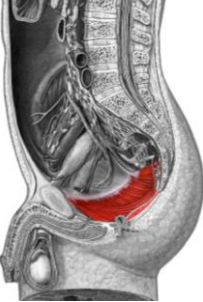
Muscles Promoting Pelvic Floor Support

Levator ani

ORIGIN:
inner pelvis from pubis
to ischial spine

INSERTION:
inner surface of coccyx

ACTION:
supports / maintains
position of pelvic viscera



(Medial view)


Muscles Promoting Pelvic Floor Support

Coccygeus

ORIGIN:
ischial spine (ischium)

INSERTION:
sacrum; coccyx

ACTION:
supports pelvic viscera



(Medial view)