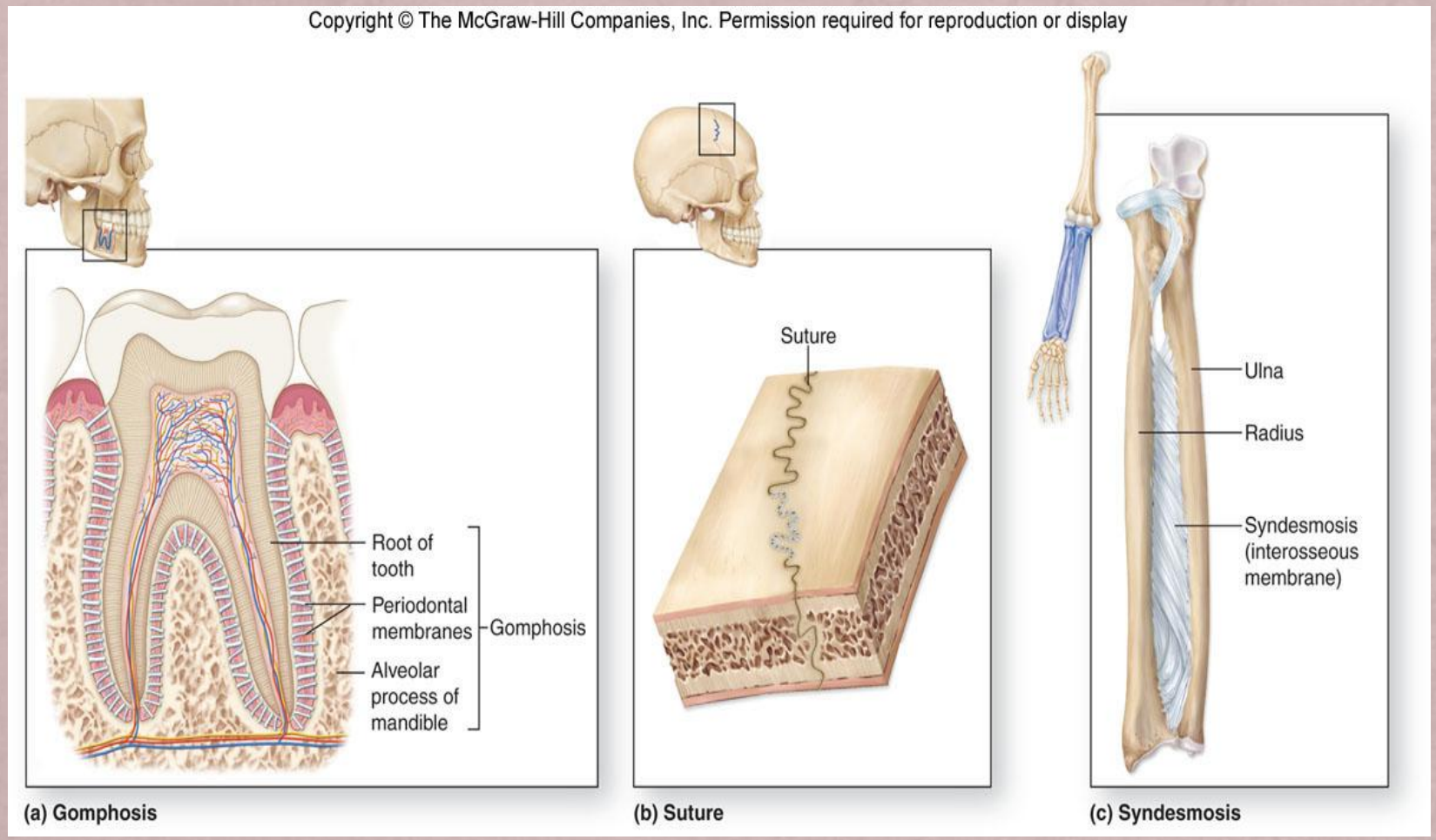
第九章　關節

分類	種類	例子	移動
纖維性	1.釘狀關節 2.縫合 3.韌帶聯合(骨間膜)	1.齒 2.人字縫(連接頂骨與枕骨)槽窩/牙根 3.橈尺骨、脛腓骨的骨間模	X
軟骨性	1.軟骨聯合(透明) 2.聯合(纖維)	1.骨骺板、肋軟骨關節(第一肋) 2.恥骨聯合、椎間盤關節	X
滑液性	1.平面(滑動)關節 2.屈戌關節 3.樞軸關節(=車軸=樞紐關節) 4.髁狀關節 5.鞍狀關節 6.球窩關節(=杵臼關節)	1.腕骨間關節(三角.鉤狀骨)、跗骨間關節 2.肘關節 3.寰樞關節(寰椎C1與樞椎C2) 4.掌指關節(2-5指) 5.腕骨(大多角骨.第一掌骨) 6.盂肱關節、髖關	V

纖維關節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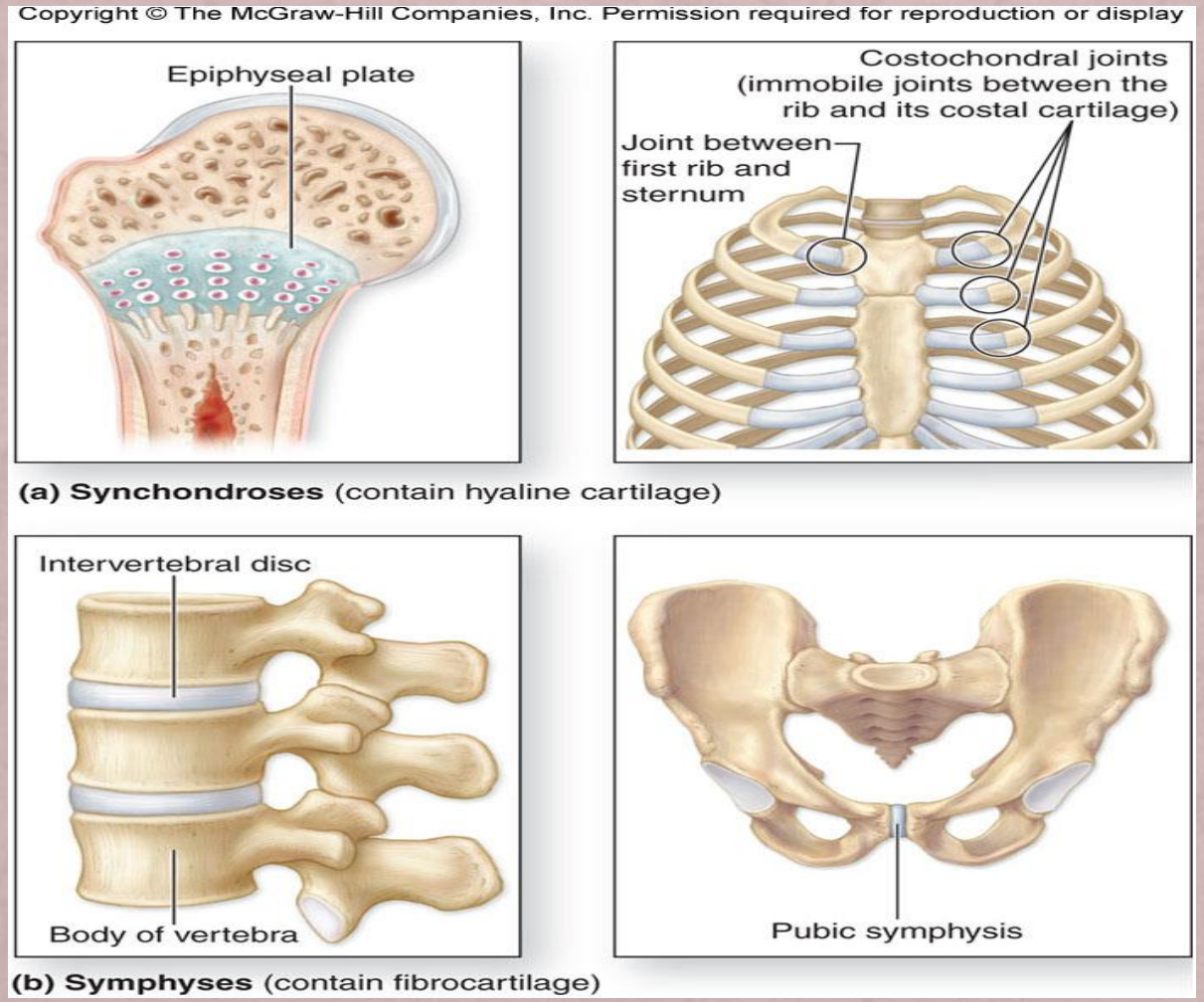
Root of tooth
Periodontal membranes
Alveolar process of mandible
Gomphosis
(a) Gomphosis
Suture
(b) Suture
Ulna
Radius
Syndesmosis (interosseous membrane)
(c) Syndesmosis

軟骨關節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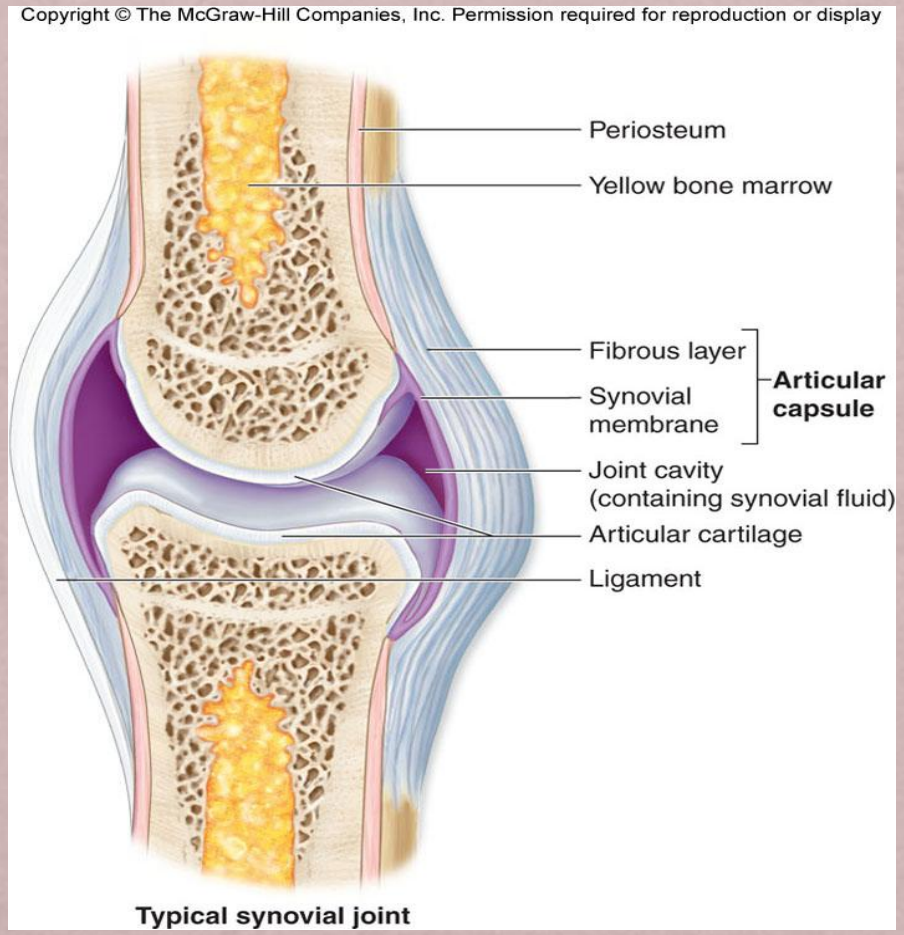
Epiphyseal plate
Costochondral joints
(immobile joints between the
rib and its costal cartilage)
Joint between
first rib and
sternum
(a) Synchondroses (contain hyaline cartilage)
Intervertebral disc
Body of vertebra
Pubic symphysis
(b) Symphyses (contain fibrocartilage)

滑液關節

滑液關節皆是可自由活動的。

關節囊：包含纖維層+滑液膜，

兩者內部包裹著關節腔(含滑液)



滑液關節

Plane joints平面

Hinge joints屈戌

Pivot joints樞紐

Condylar joints髁

Saddle joints鞍狀

Ball-and-socket joints球窩

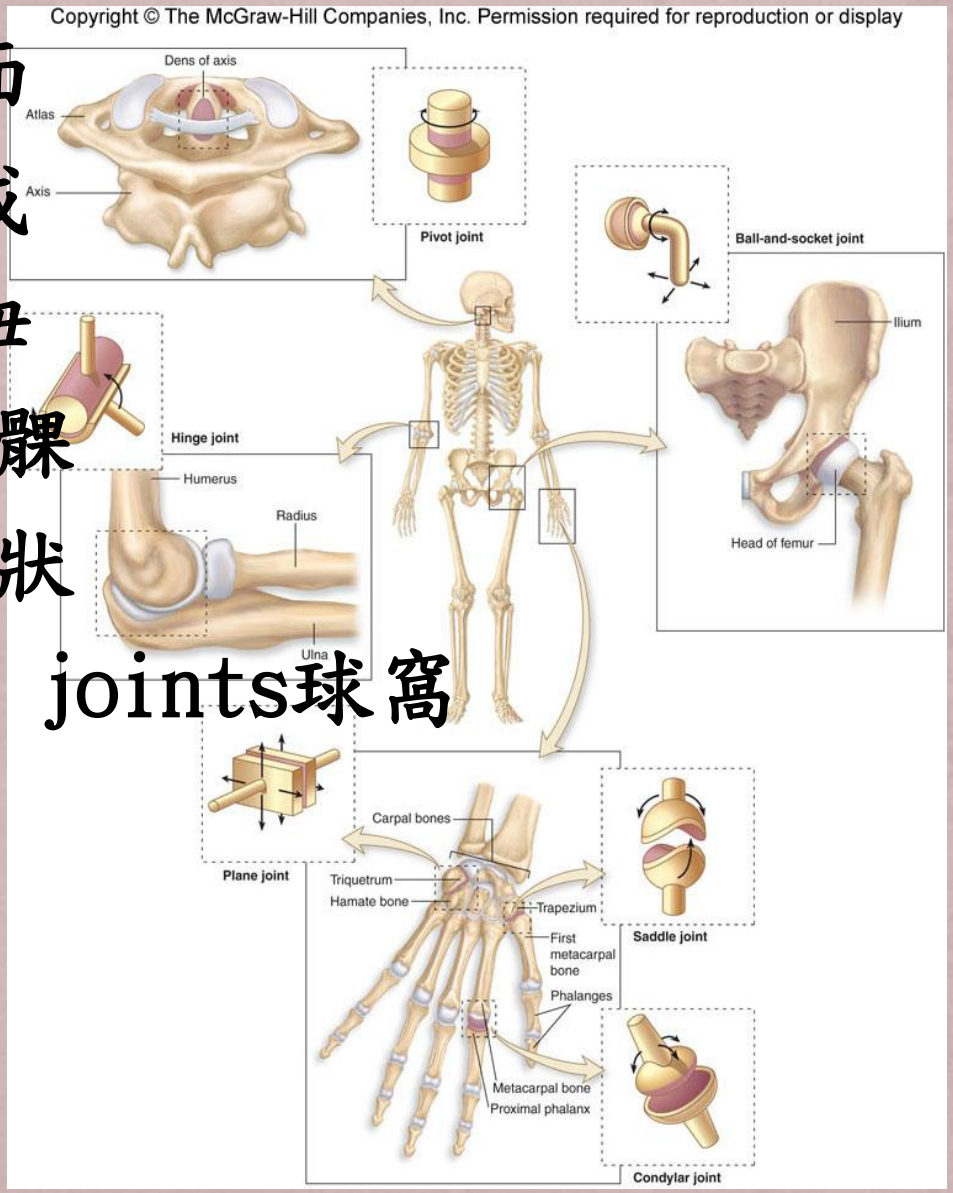
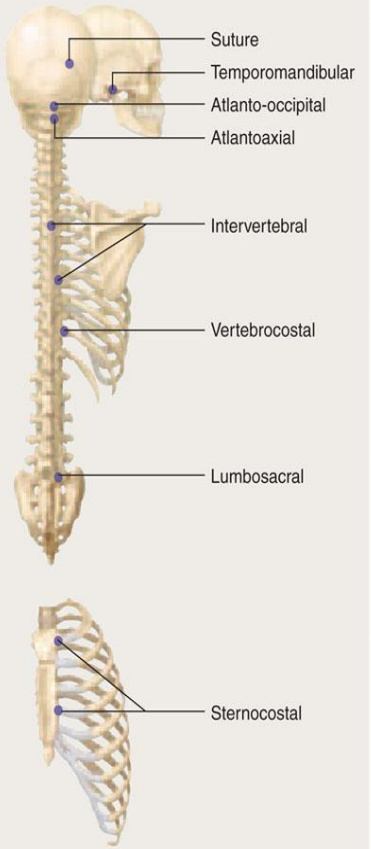


Table 9.3 Axial Skeleton Joints



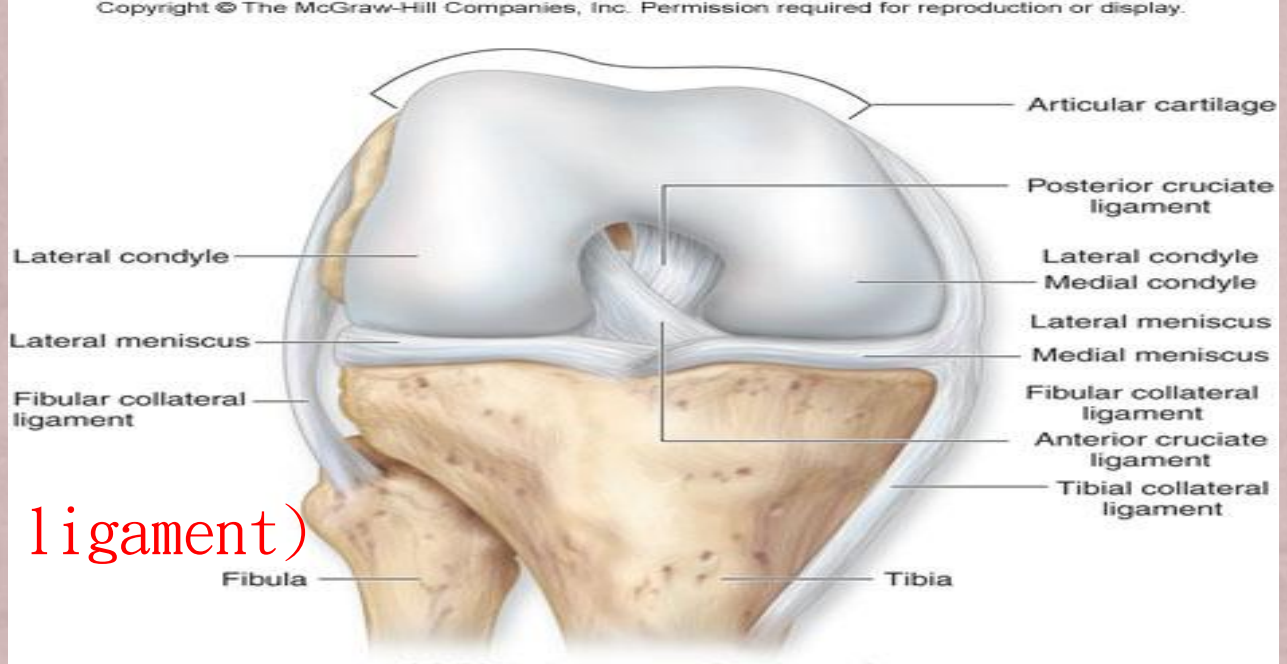
Joint	Articulation Components	Structural Classification	Functional Classification	Description of Movement
Suture	Adjacent skull bones	Fibrous joint	Synarthrosis	None allowed
Temporomandibular	Head of mandible and mandibular fossa of temporal bone Head of mandible and articular tubercle of temporal bone	Synovial (hinge, plane) joints	Diarthrosis	Depression, elevation, lateral displacement, protraction, retraction, slight rotation
Atlanto-occipital	Superior articular facets of atlas and occipital condyles of occipital bone	Synovial (condylar) joint	Diarthrosis	Extension and flexion of the head; slight lateral flexion of head to sides
Atlantoaxial	Anterior arch of atlas and dens of axis	Synovial (pivot) joint	Diarthrosis	Head rotation
Intervertebral	Vertebral bodies of adjacent vertebrae Superior and inferior articular processe of adjacent vertebrae	Cartilaginous joint (symphysis) between vertebral bodies; synovial (plane) joint between articular processes	Amphiarthrosis between vertebral bodies; diarthrosis between articular processes	Extension, flexion, lateral flexion of vertebral column
Vertebrocostal	Facets of heads of ribs and bodies of adjacent thoracic vertebrae and intervertebral discs between adjacent vertebrae Articular part of tubercles of ribs and facets of transverse processes of thoracic vertebrae	Synovial (plane) joint	Diarthrosis	Some slight gliding
Lumbosacral	Body of the fifth lumbar vertebra and base of the sacrum Inferior articular facets of fifth lumbar vertebra and superior articular facets of first sacral vertebra	Cartilaginous joint (symphysis) between lumbar body and base of sacrum; synovial (plane) joint between articular facets	Amphiarthrosis between body and base; diarthrosis between articular facets	Extension, flexion, lateral flexion of vertebral column
Sternocostal	Sternum and first seven pairs of ribs	Cartilaginous joint (synchondrosis) between sternum and first ribs; synovial (plane) joint between sternum and ribs 2–7	Synarthrosis between sternum and first ribs; diarthrosis between sternum and ribs 2–7	No movement between sternum and first ribs; some gliding movement permitted between sternum and ribs 2–7

人體解剖學：P264　P266　P274

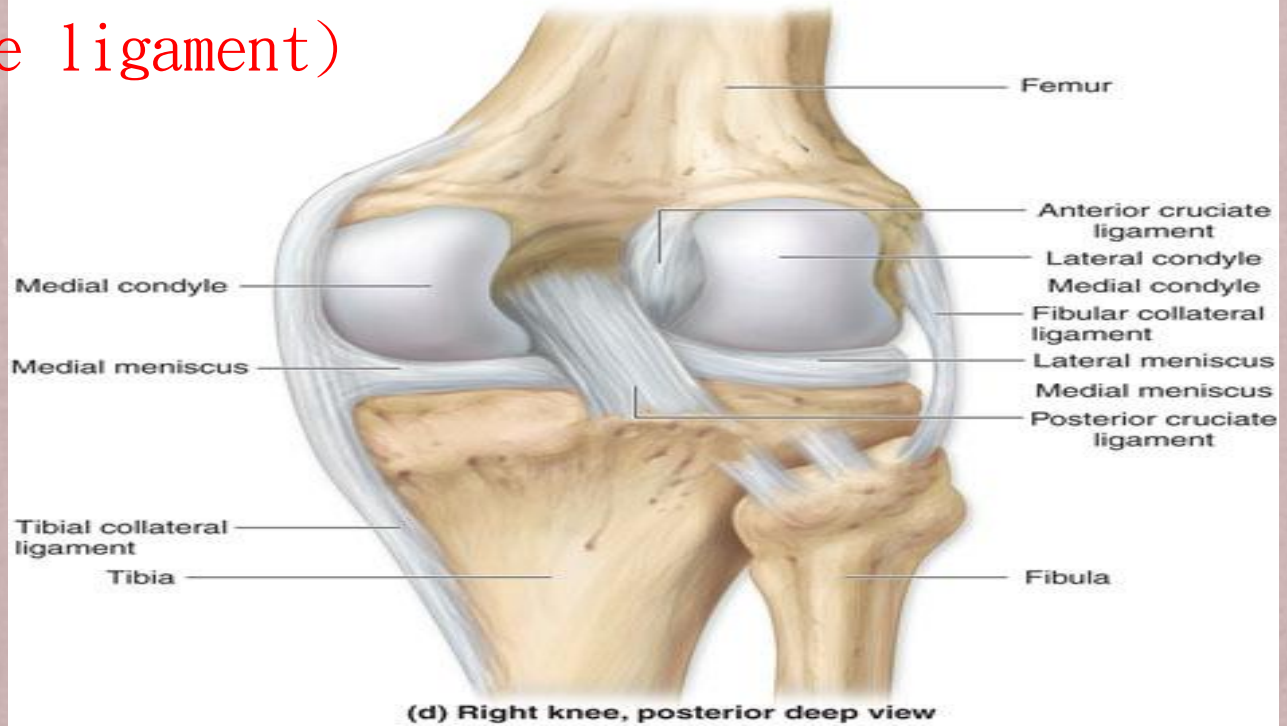
膝蓋後之重要韌帶：

1.前十字韌帶(anterior cruciate ligament)=ACL

2.後十字韌帶(posterior cruciate ligament)=PCL

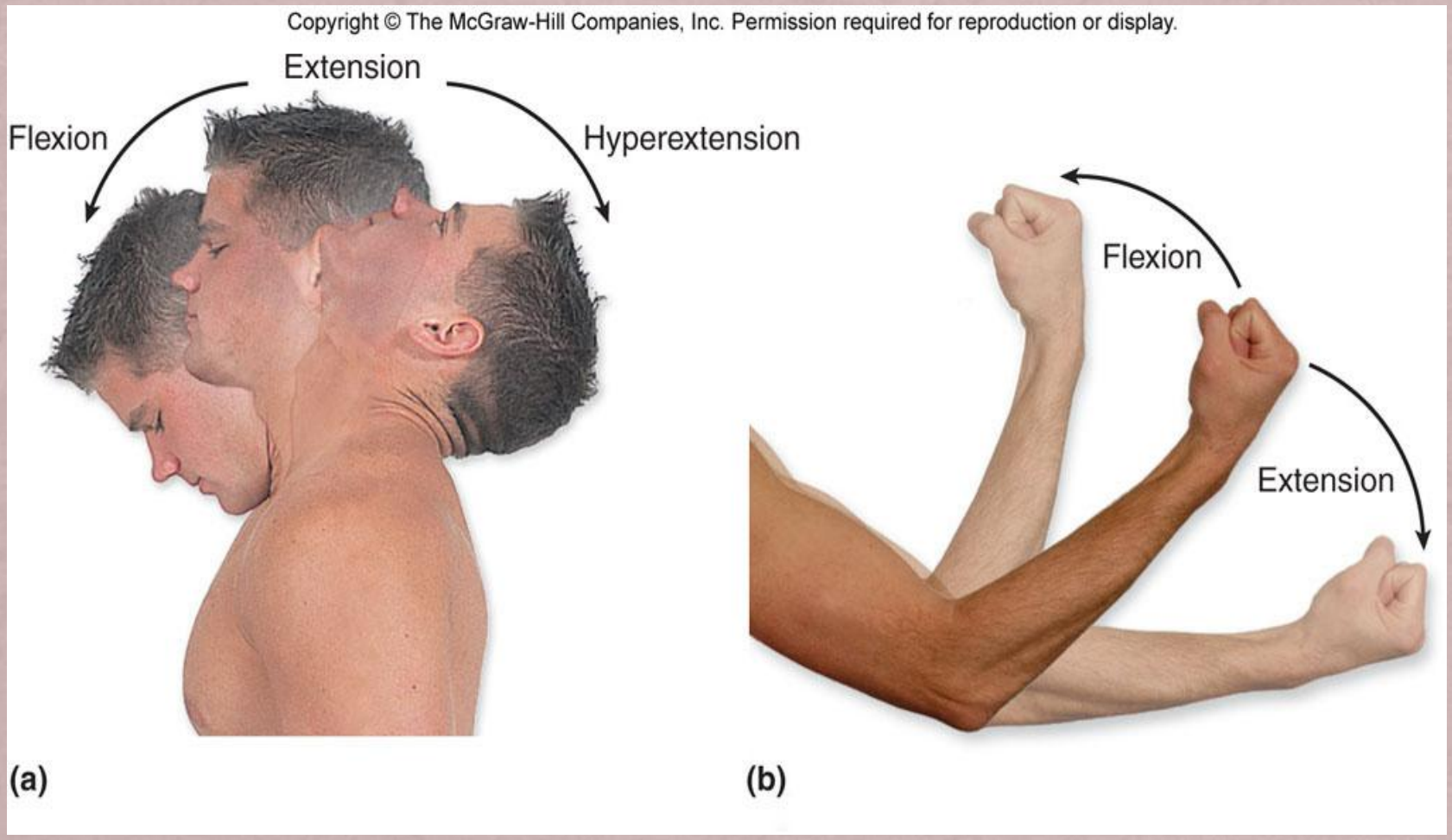


(c) Right knee, anterior deep view

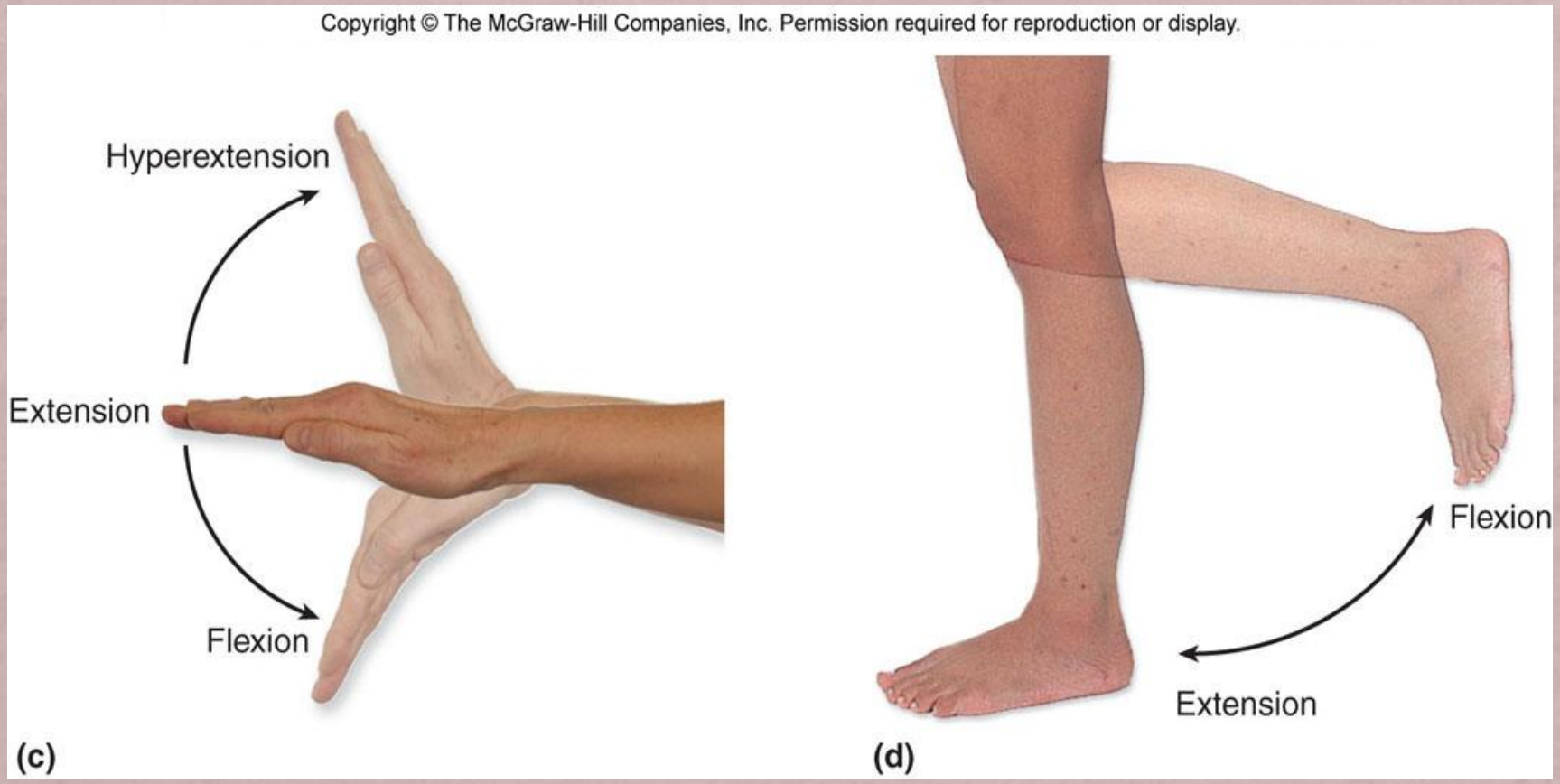


(d) Right knee, posterior deep view

FLEXION(屈曲) VS. EXTENSION(伸展)

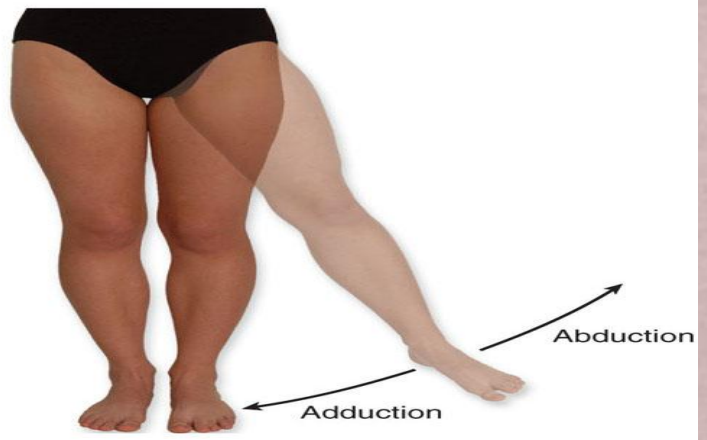


FLEXION(屈曲) VS. EXTENSION(伸展)

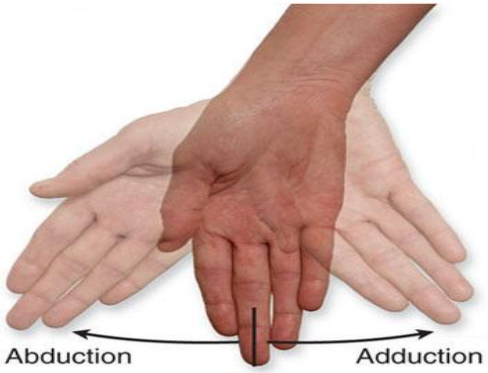


ABDUCTION(外展) VS.ADDUCTION(內收)

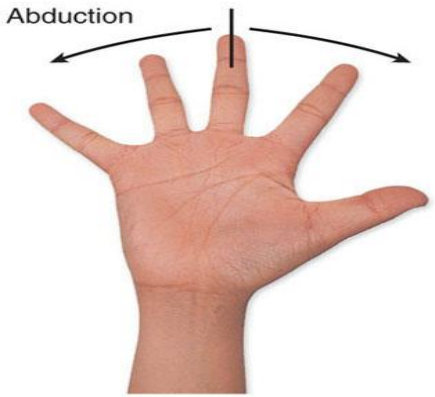
(a)

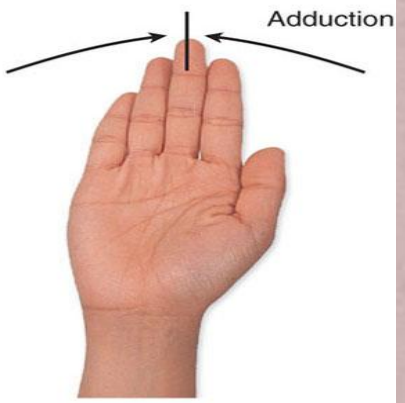


(c)



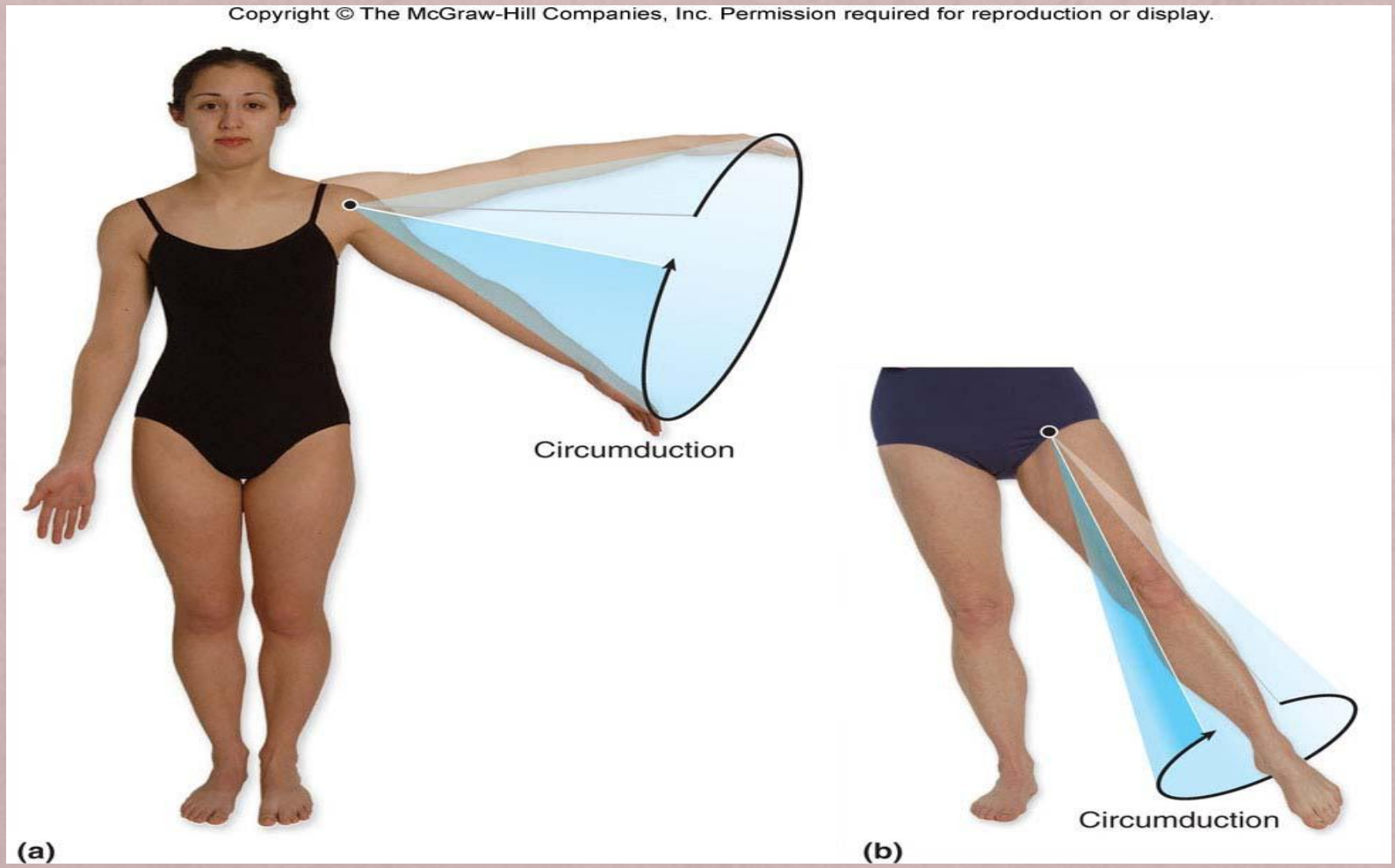
(b)



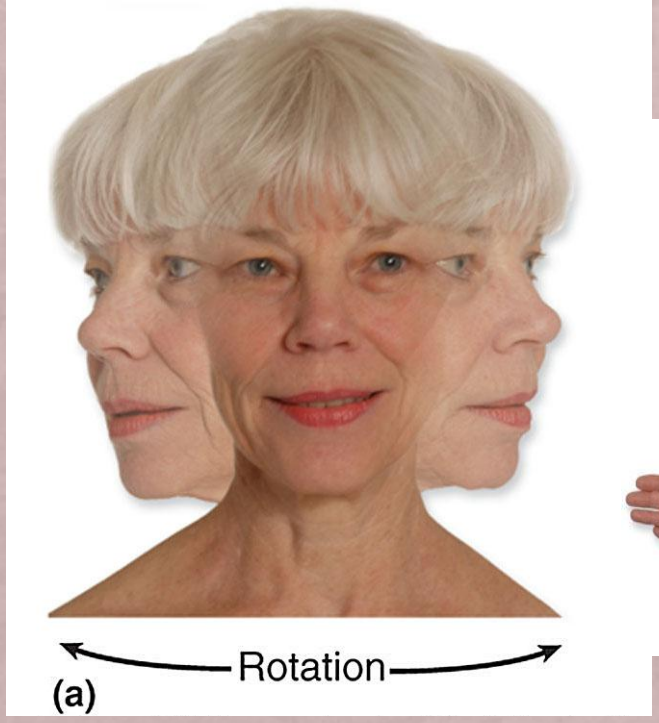


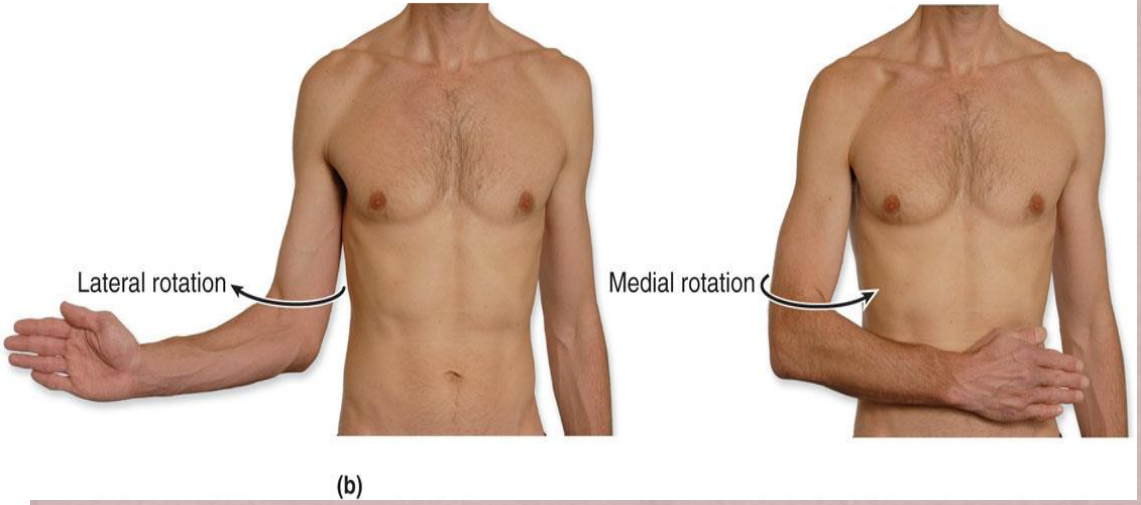
(d)

CIRCUMDUCTION(迴旋)



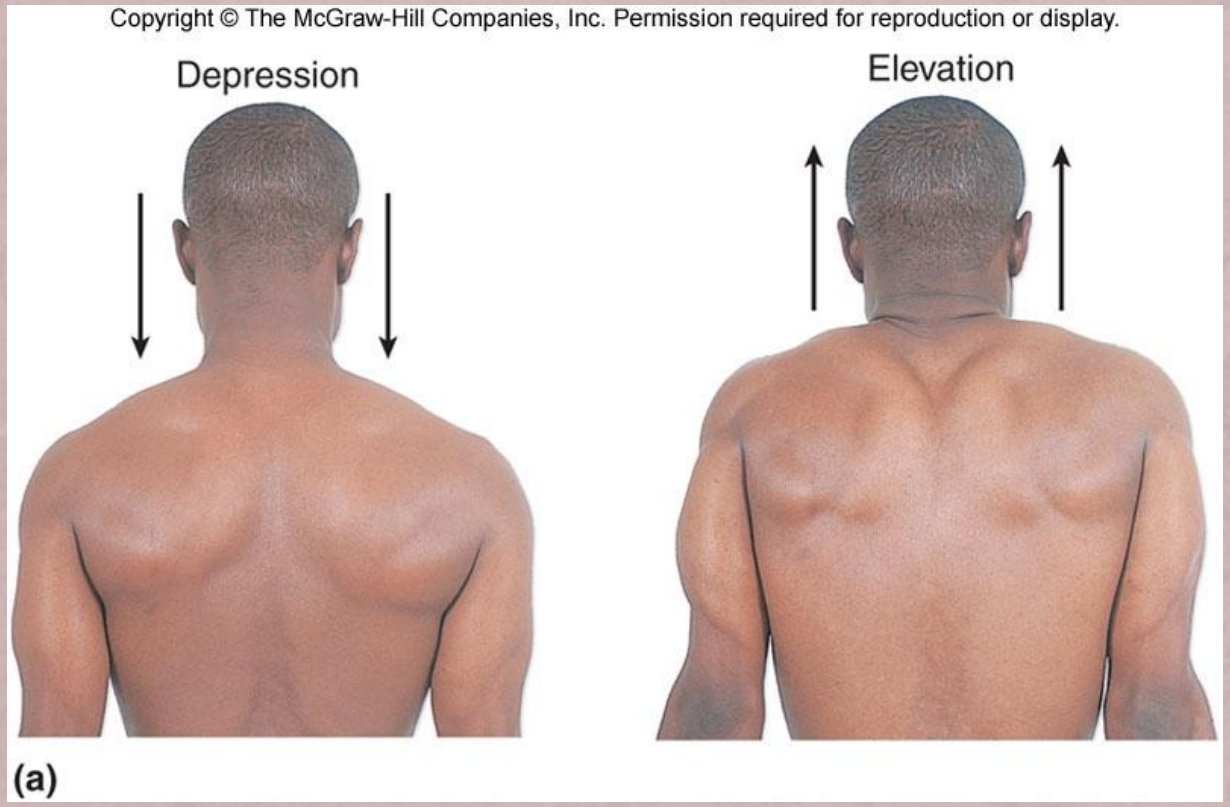
MEDIAL AND LATERAL ROTATION (內、外旋轉)





PRONATION(旋前) VS. SUPINATION(旋後)

DEPRESSION(下壓) VS. ELEVATION(上提)

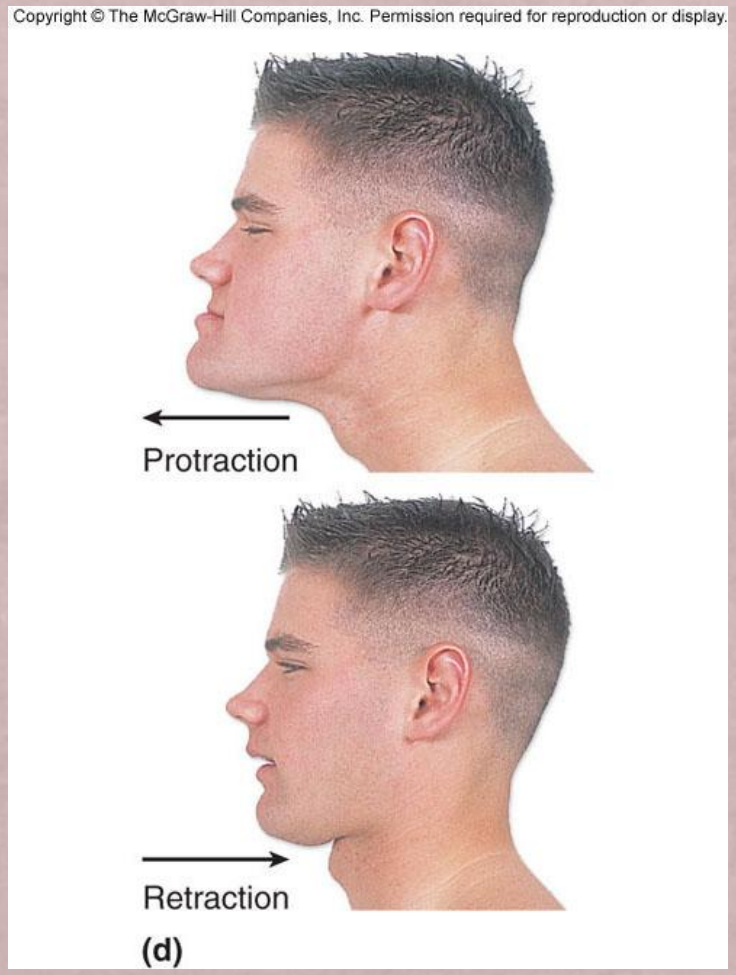


DORSIFLEXION (足被屈曲)VS. PLANTAR FLEXION(足底屈曲)

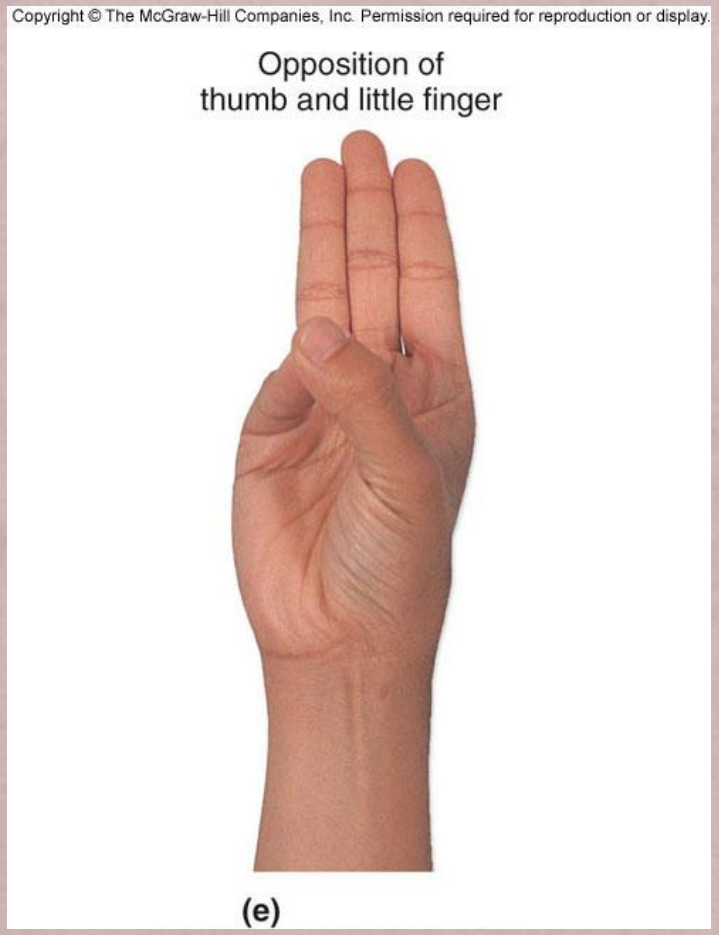
(b)

INVERSION(內翻) VS. EVERSION(外翻)

PROTRACTION(前突) VS. RETRACTION(後縮)



OPPOSITION(對掌~大拇指與小指)



小試身手

+ 1. 下列何者屬於髁狀關節（ condyloid joint ）？(A)肘關節 (B)掌指關節 (C)腕骨間關節 (D)指骨間關節 【100二技入學考】 (B)
+ 7. 下列何者屬於滑動關節 (Gliding joint)？(A)踝關節 (B)腕骨間關節 (C)肩關節 (D)上橈尺關節 【90年四技入學考】 (B)
+ 9. 下列何者屬於膝關節內韌帶？ (A)膝韌帶 (B)腓側韌帶 (C)十字韌帶 (D)股骨頭韌帶 【91年四技入學考】 (C)

+ 19.(D)下列那種關節不具關節腔及滑液？ (A)髖關節 (B)肩關節 (C)膝關節 (D)脊椎間關節 【94護理師(高二)】(D)

小試身手

- 11. 打呵欠時用力過度，會造成下列何關節的脫位現象（dislocation）？ (A)胸鎖關節（sternoclavicular joint） (B)顳頷關節（temporomandibular joint） (C)寰枕關節（atlanto-occipital joint） (D)肩鎖關節（scapuloclavicular joint【91護理師(二)】(B)
- 12. 運動員經常受傷斷裂的前十字韌帶與後十字韌帶，是位於哪一個關節內？ (A)肩關節(shoulder joint) (B)肘關節 (elbow joint) (C)髖關節 (hip joint) (D)膝關節 (knee joint)【92二技入學考】(D)

+ 資料來源:

+ 1.人體解剖學(HUMAN ANATOMY)

原著:McKinley 0'Loughlin

*2.*解剖學正課McKinley 3e ppt

教授:周光儀 老師

*3.*國考題庫

+ PPT內容、製作:郭琳筑、李若薇

+ 題目整理:郭琳筑、李若薇