

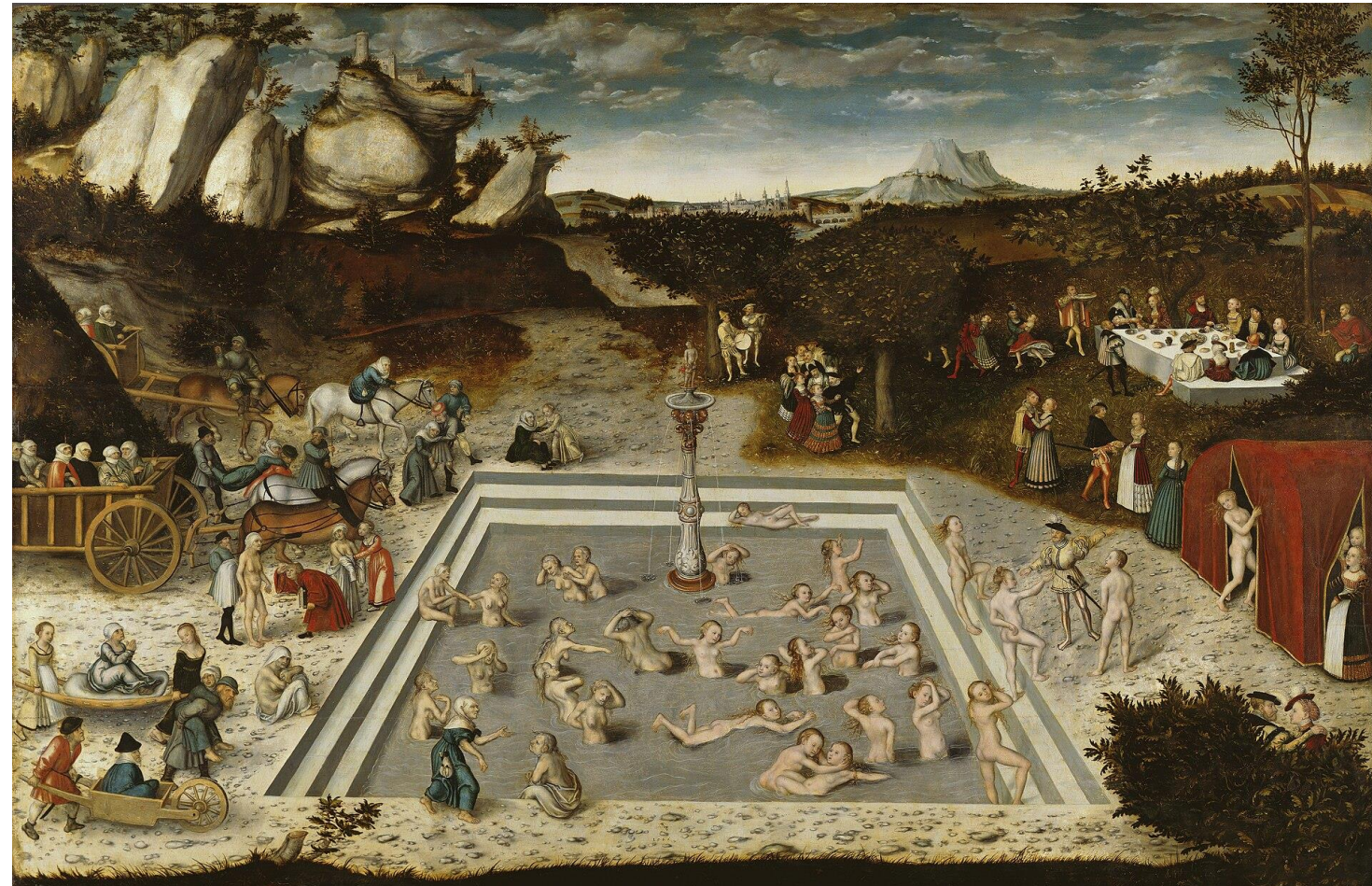
Springen und Bücken mit Spritzen und Krücken

Die Alterung des Bewegungsapparates - und was wir zur Optimierung tun können

Dr. med. Ralph Melzer, Chefarzt Rheumatologie LUKS

KKL 07.03.2024

Uebersicht



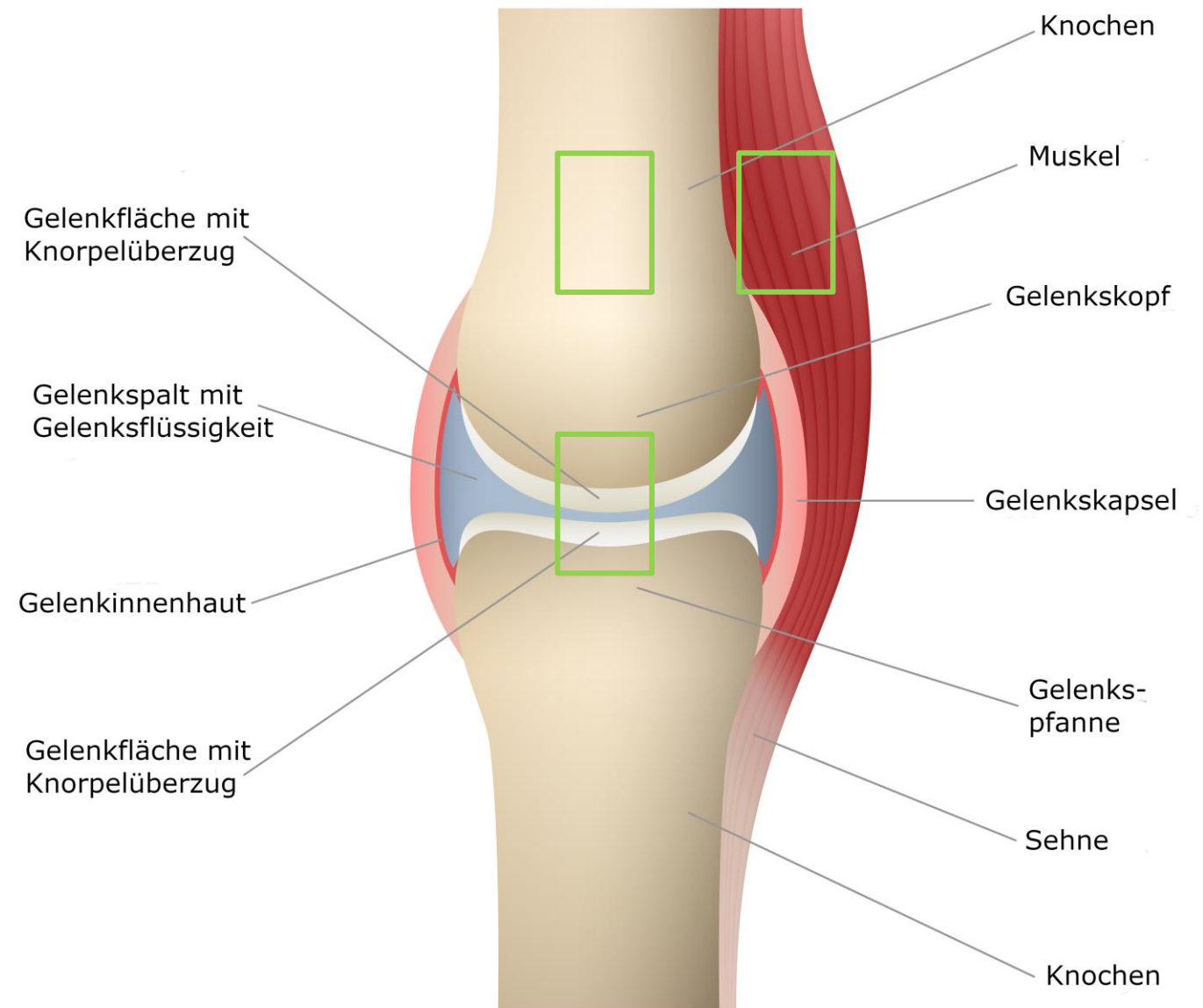
Uebersicht

Wir werden mutmassen, welche
alterstypische Gebrechen am
Bewegungsapparat diese
Damen plagen...

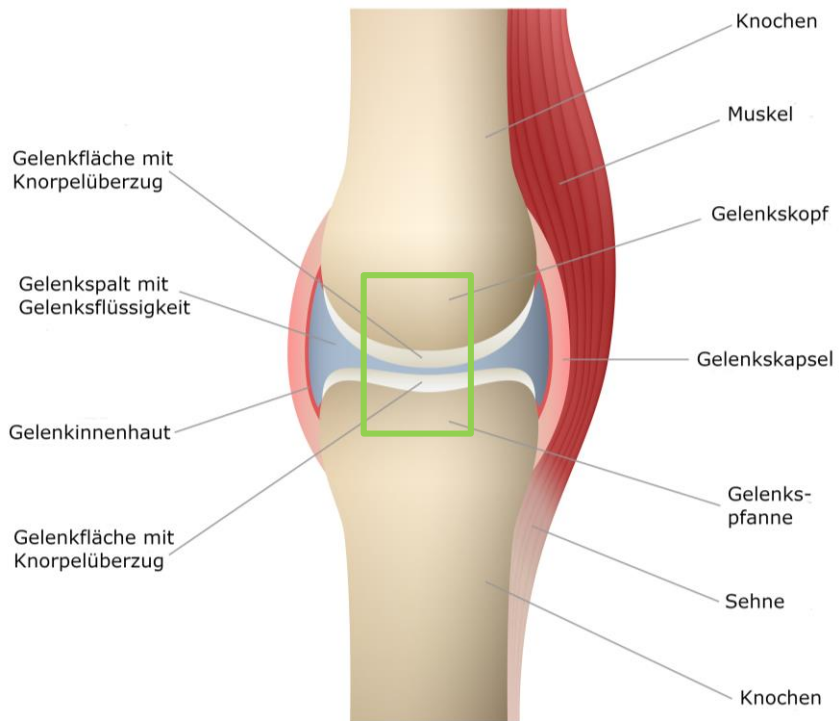


Der Bewegungsapparat:

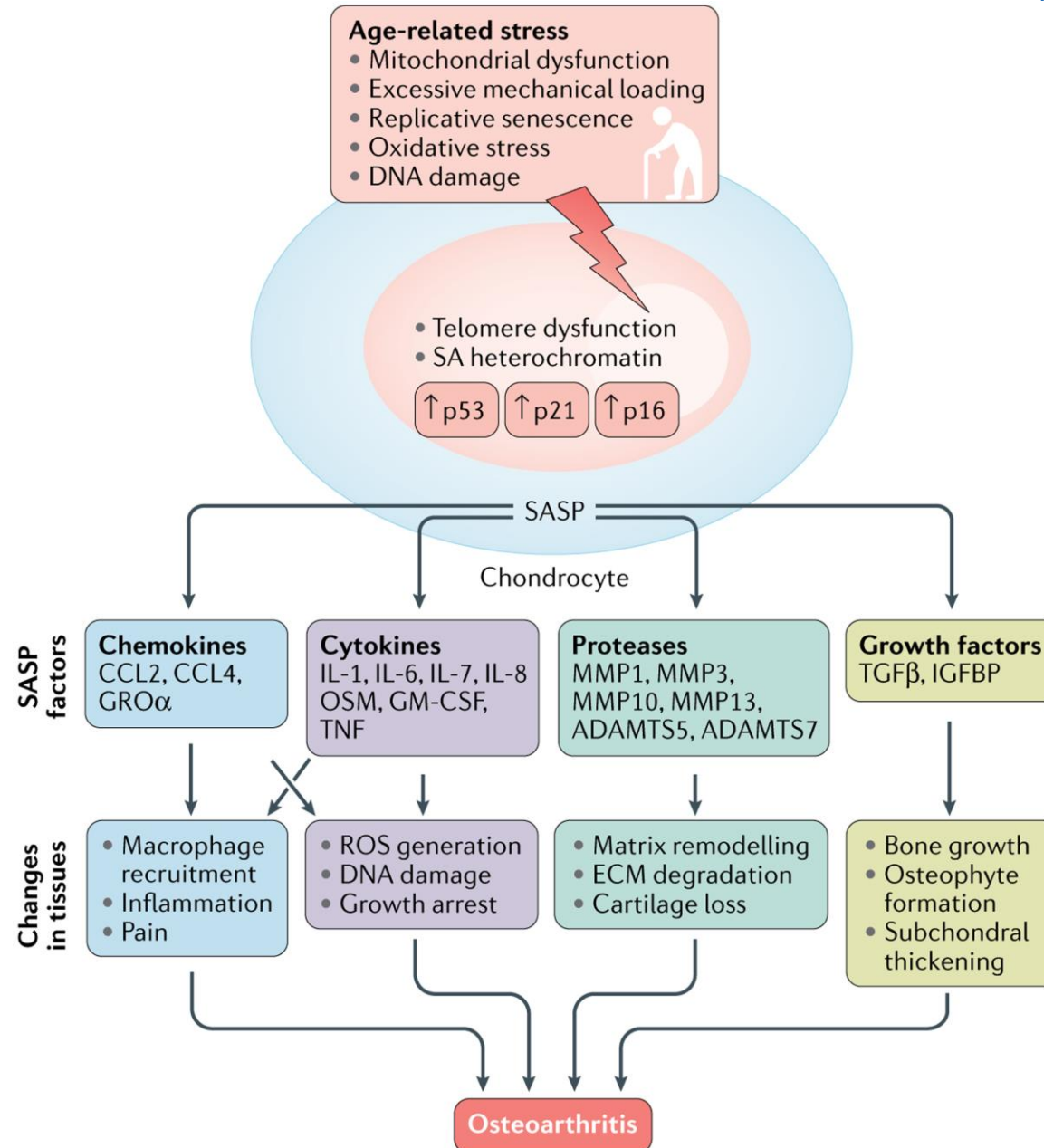
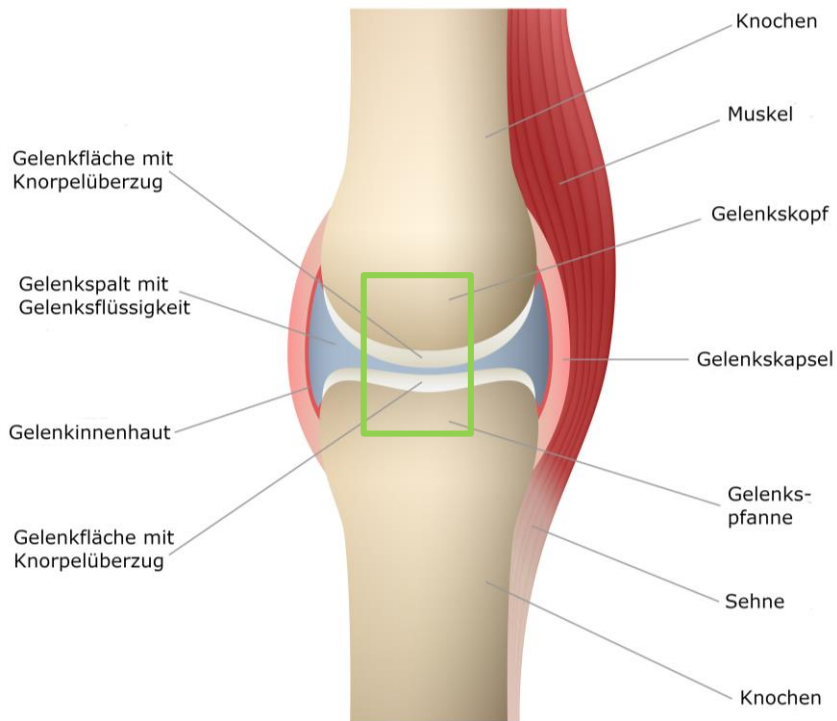
Schematischer Aufbau eines Gelenkes



Knorpel

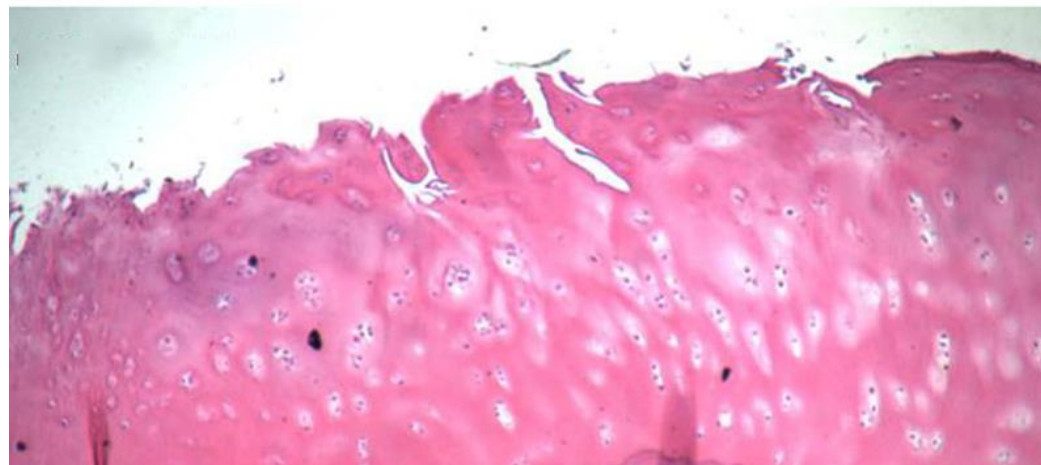
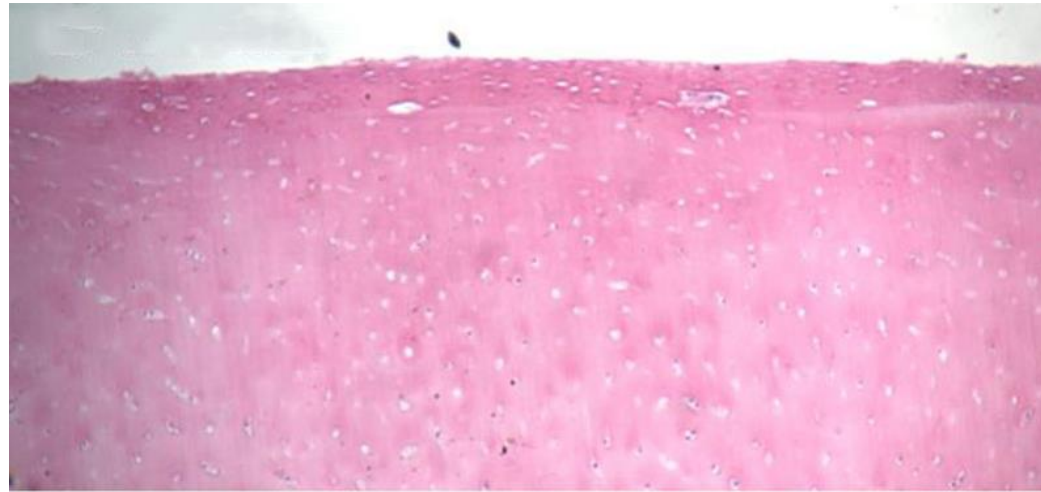
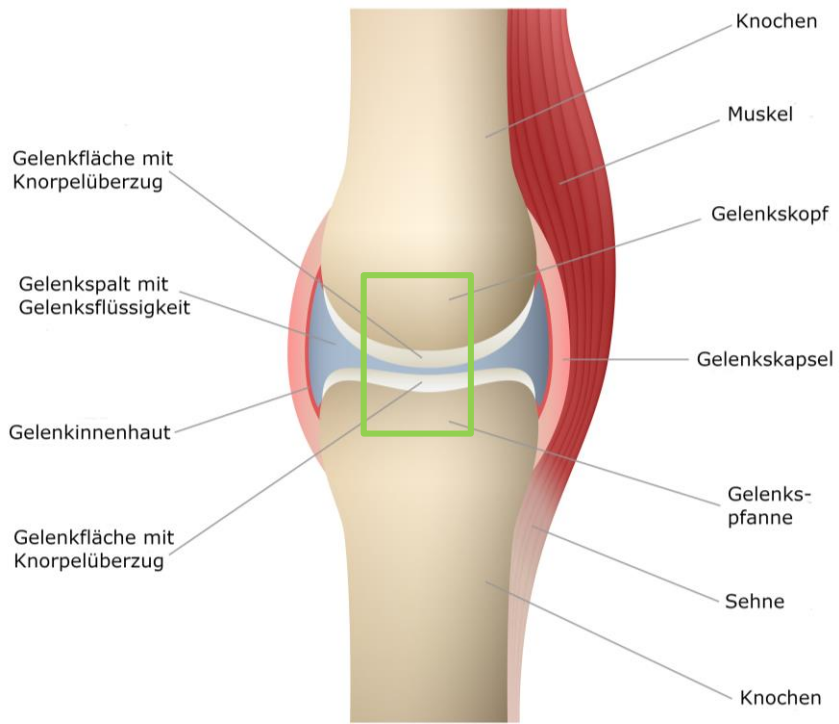


Knorpel



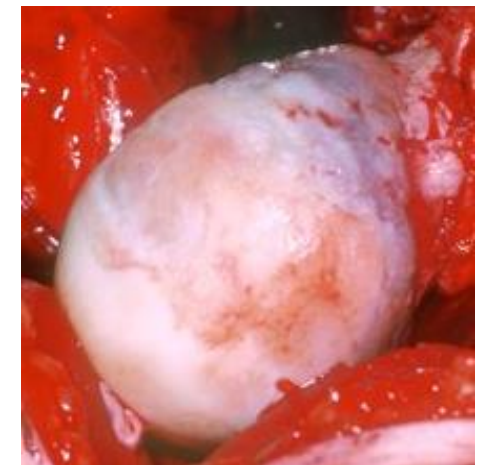
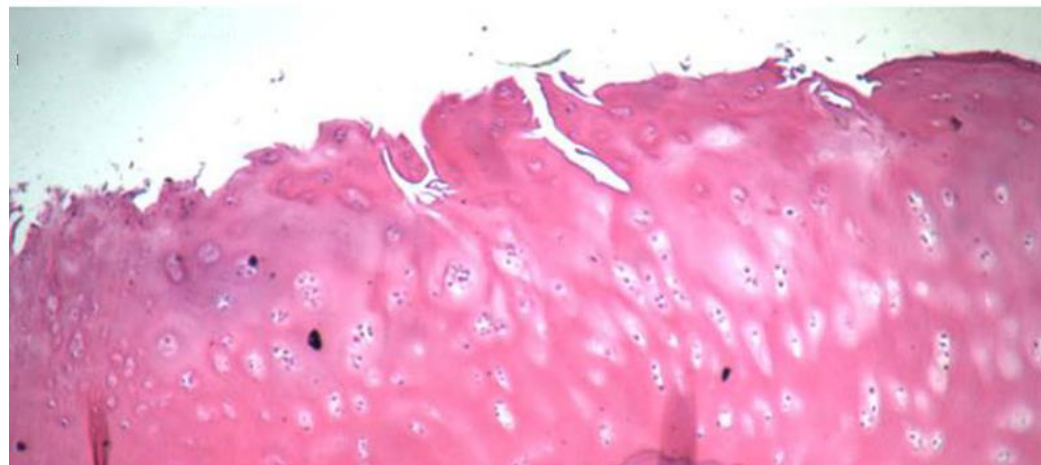
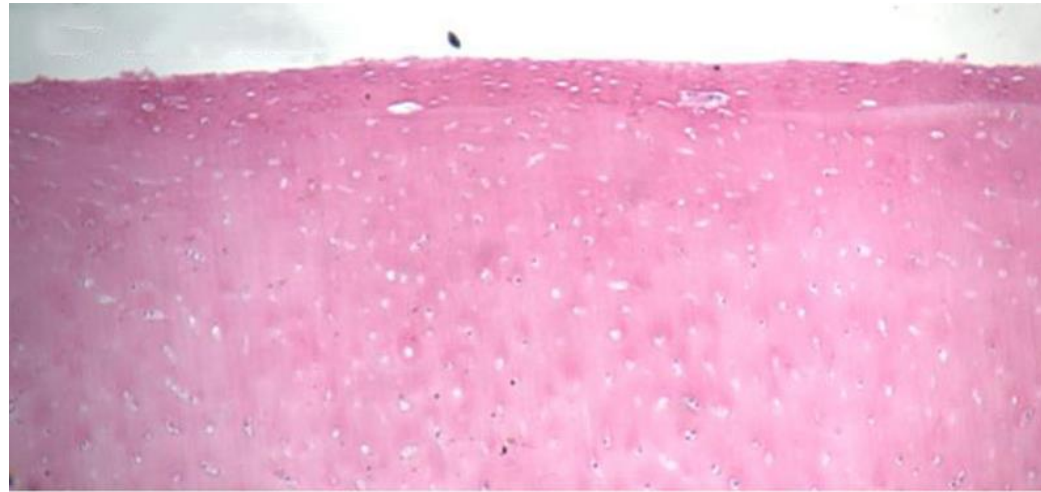
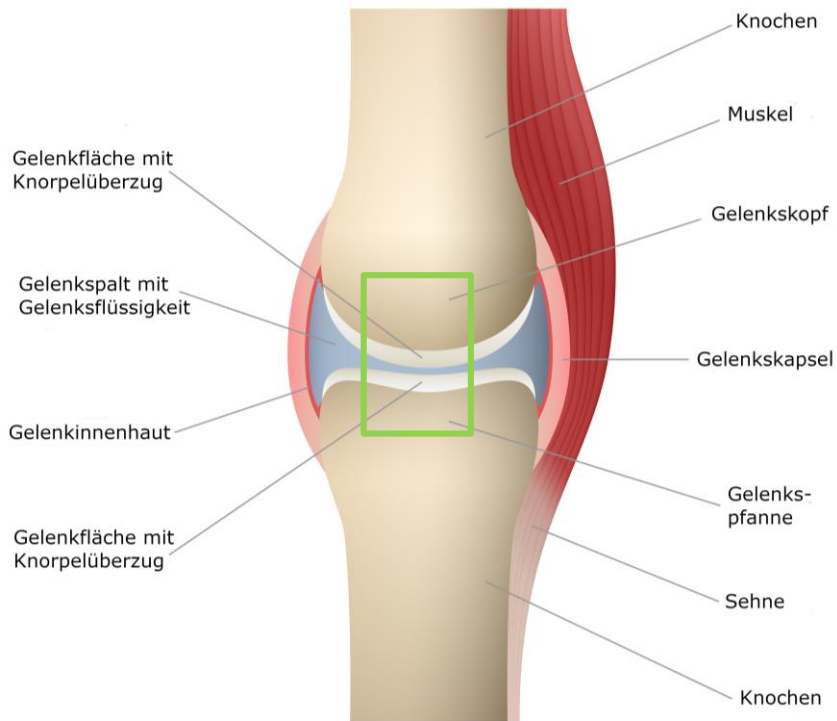
Knorpel

– Arthrose

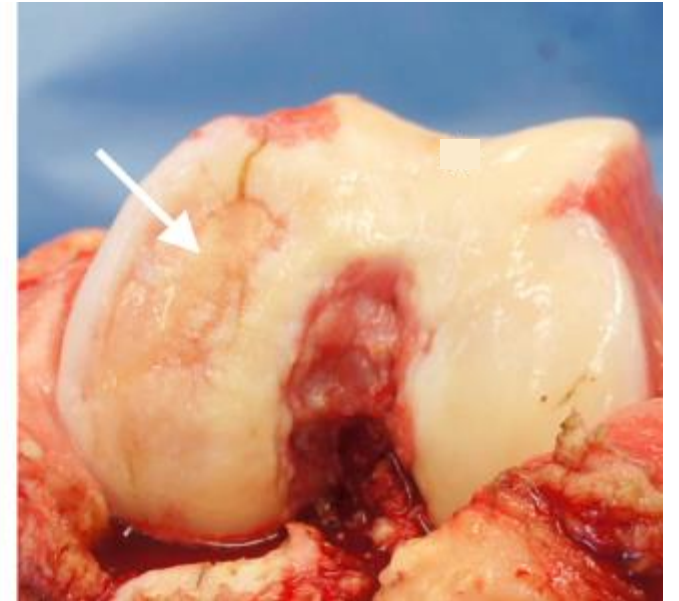
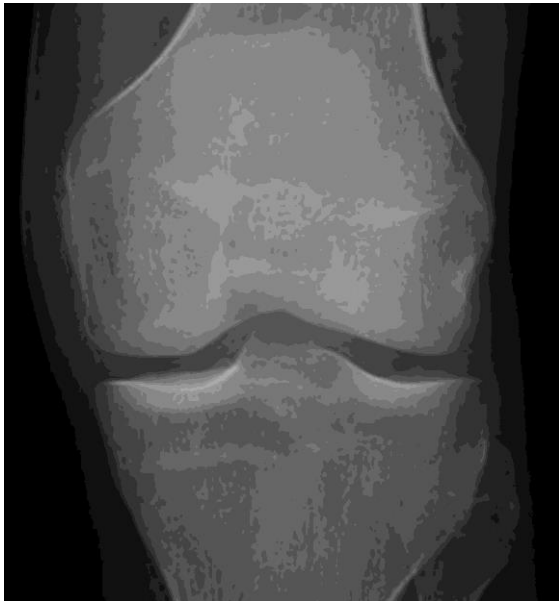


Knorpel

– Arthrose

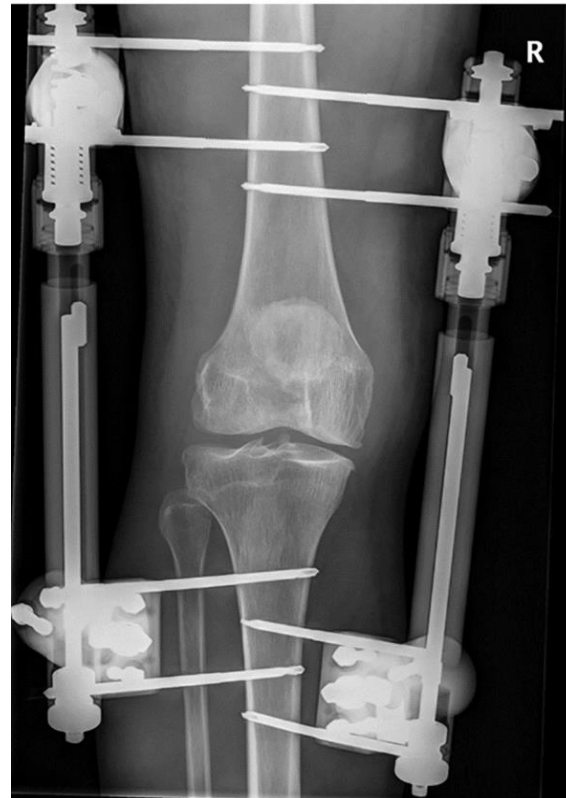
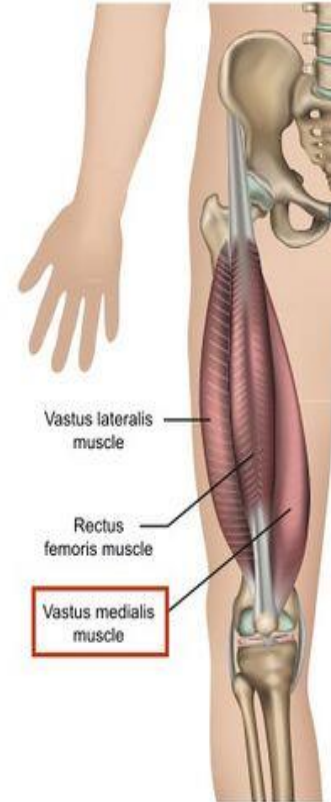


Arthrose im Röntgen

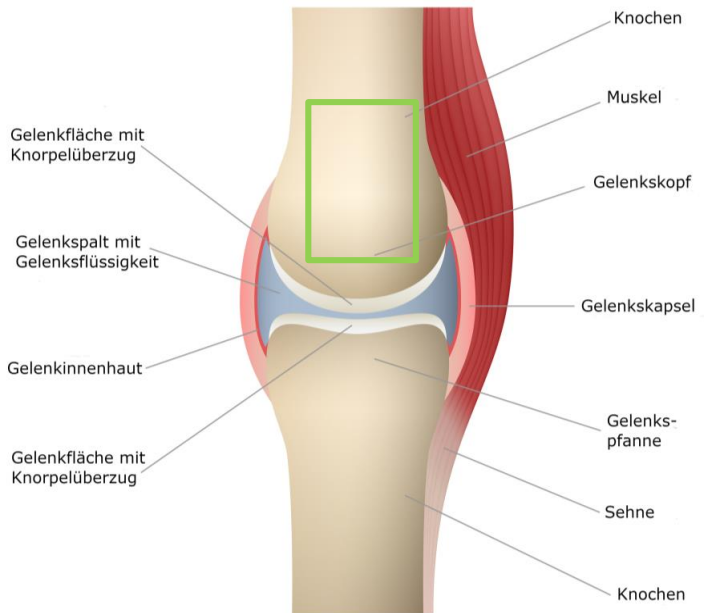


Arthrose-Therapien

Bewegung 
Belastung 

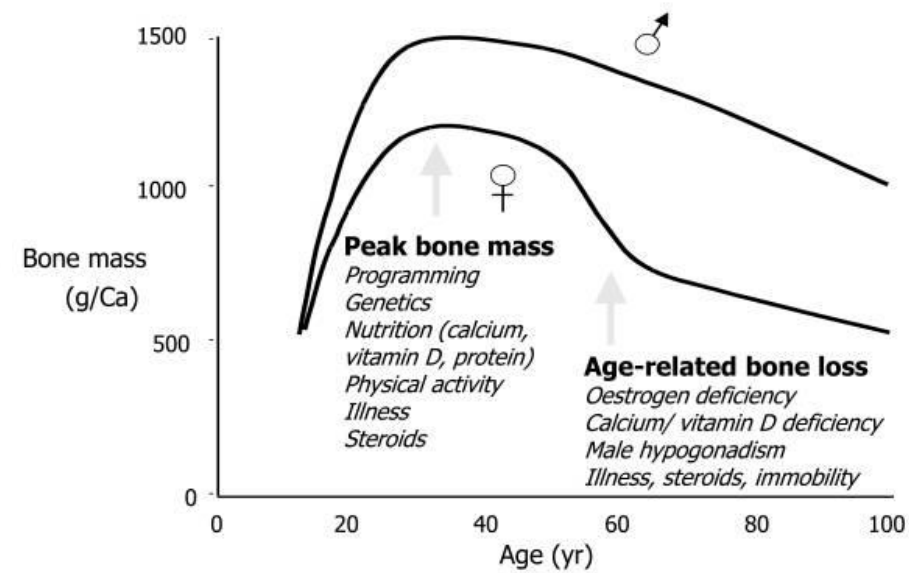
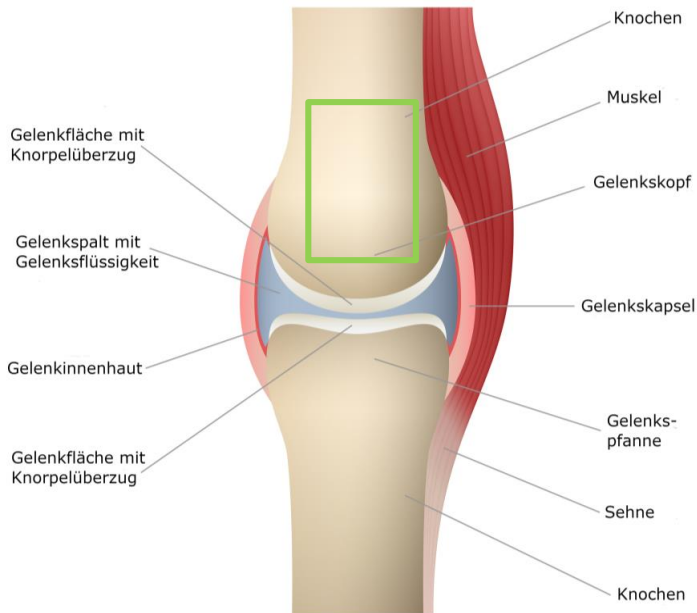


Knochen



Knochen

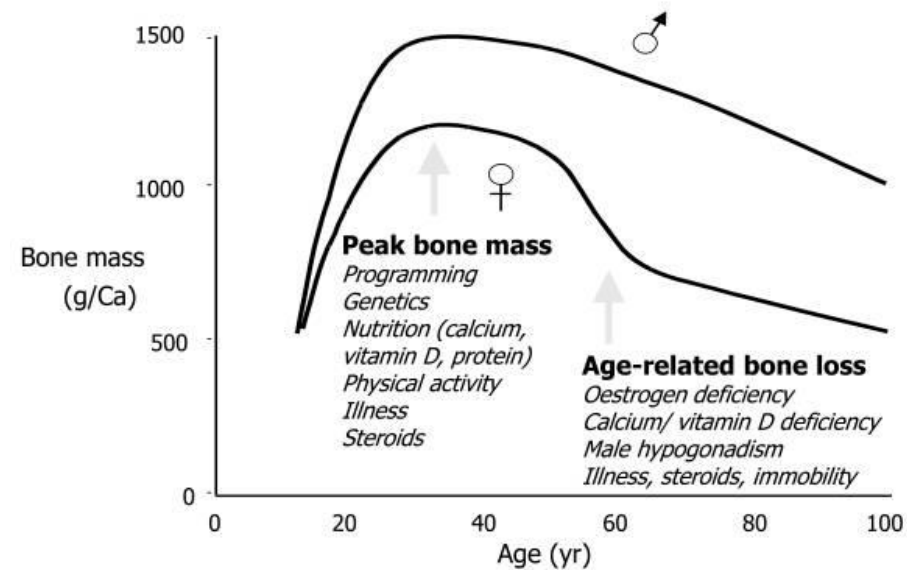
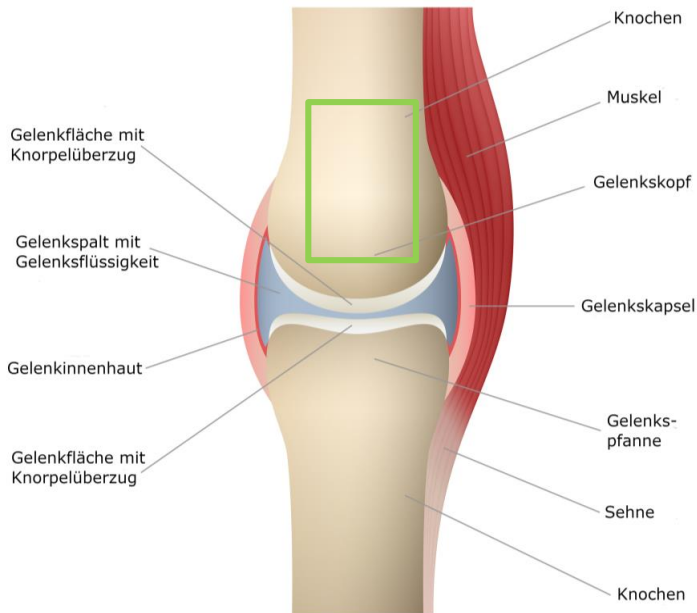
- Osteoporose



Knochen

- Osteoporose

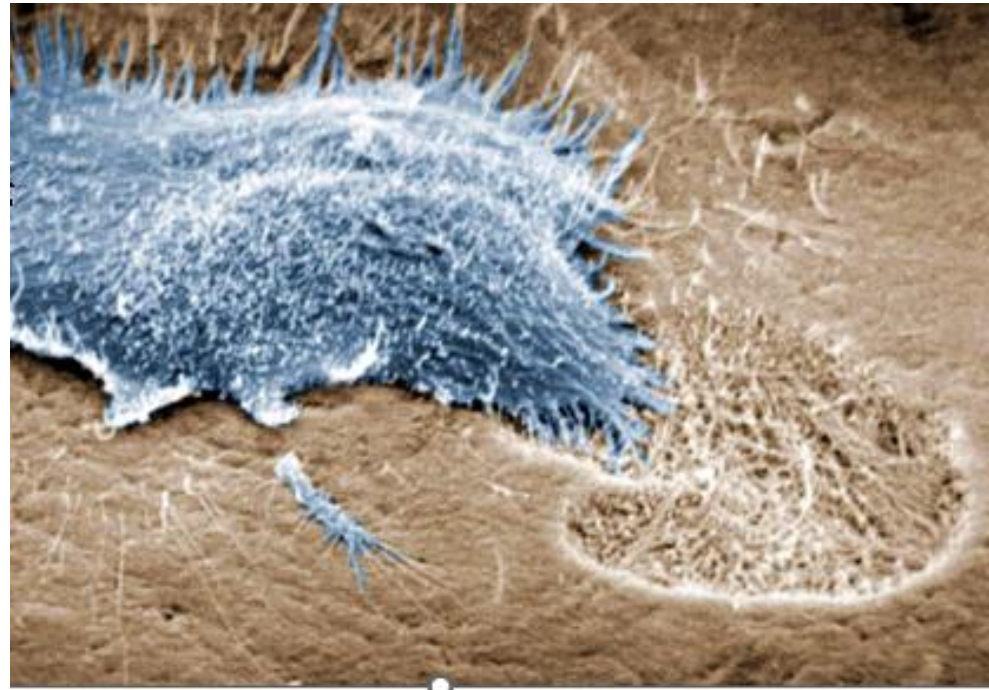
- Frakturen



Osteoporose



Normaler Knochen

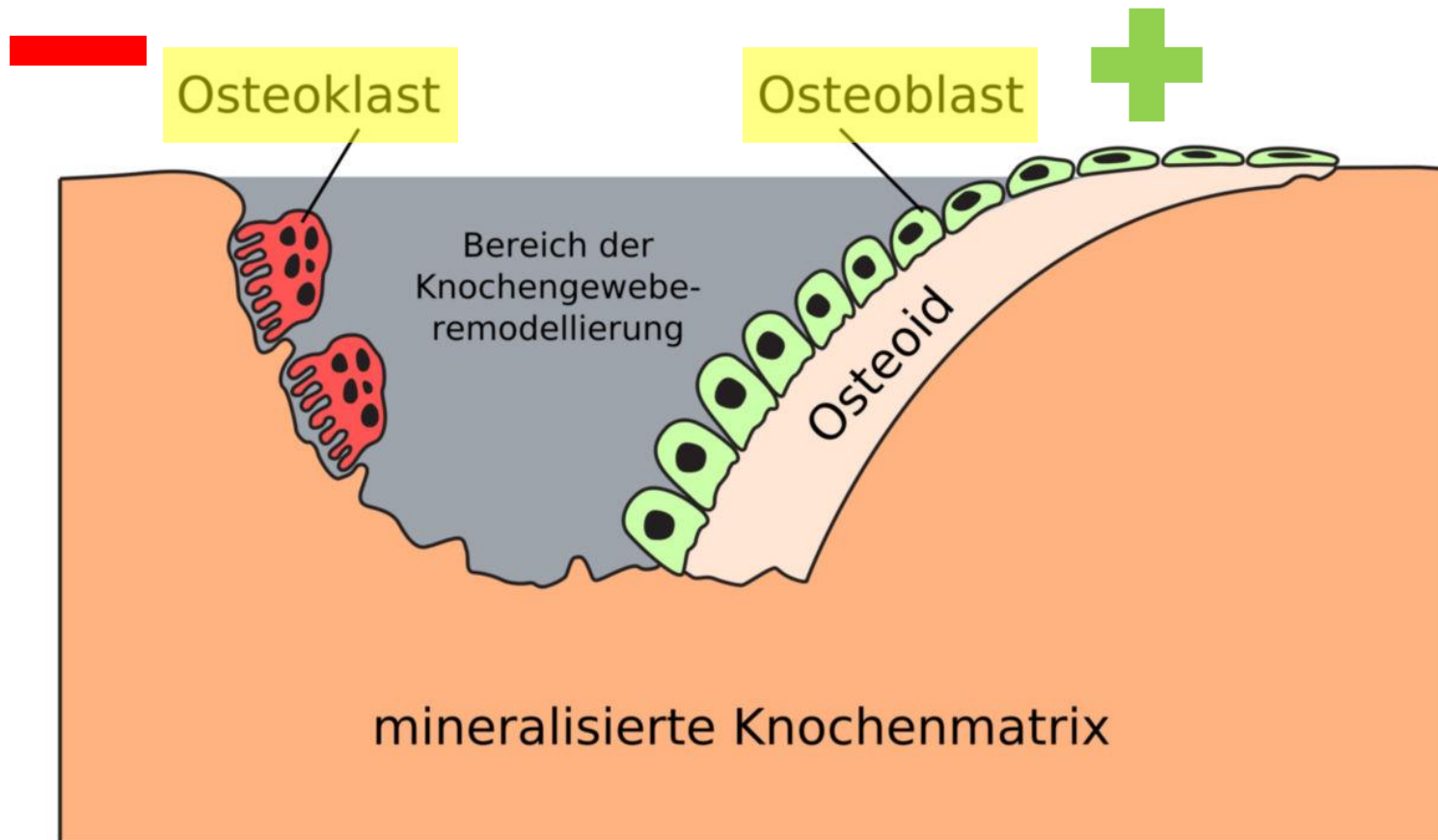


Osteoklast



Osteoporose

Osteoporose-**Prophylaxe**/-Therapien

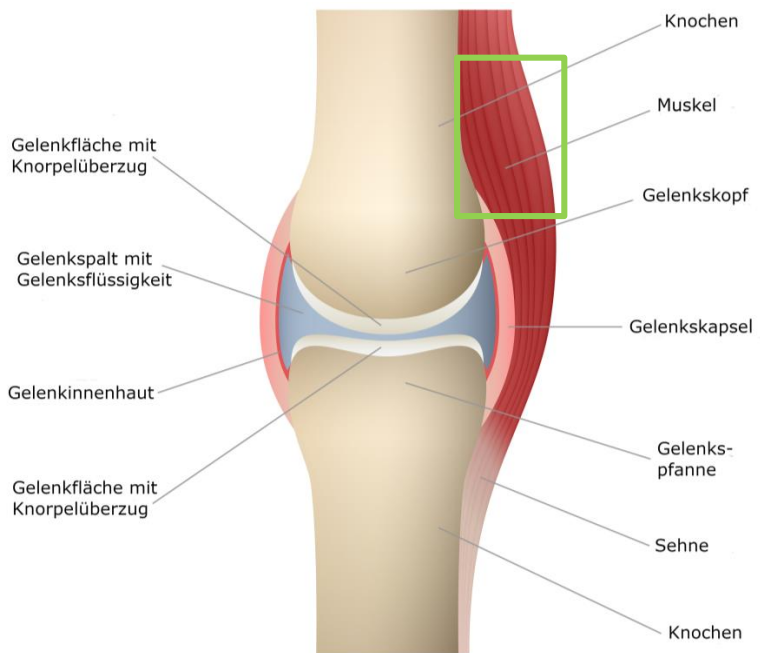


Bisphosphonate (po; iv)
Antikörper-Therapien (sc)

Calcium
Vitamin D
Protein

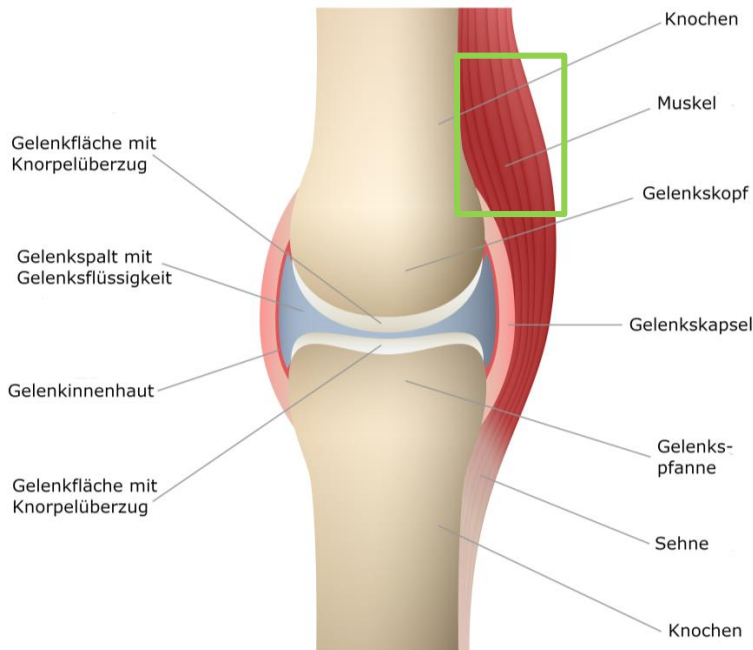
Bewegung/(Tanzen,...)

Muskulatur

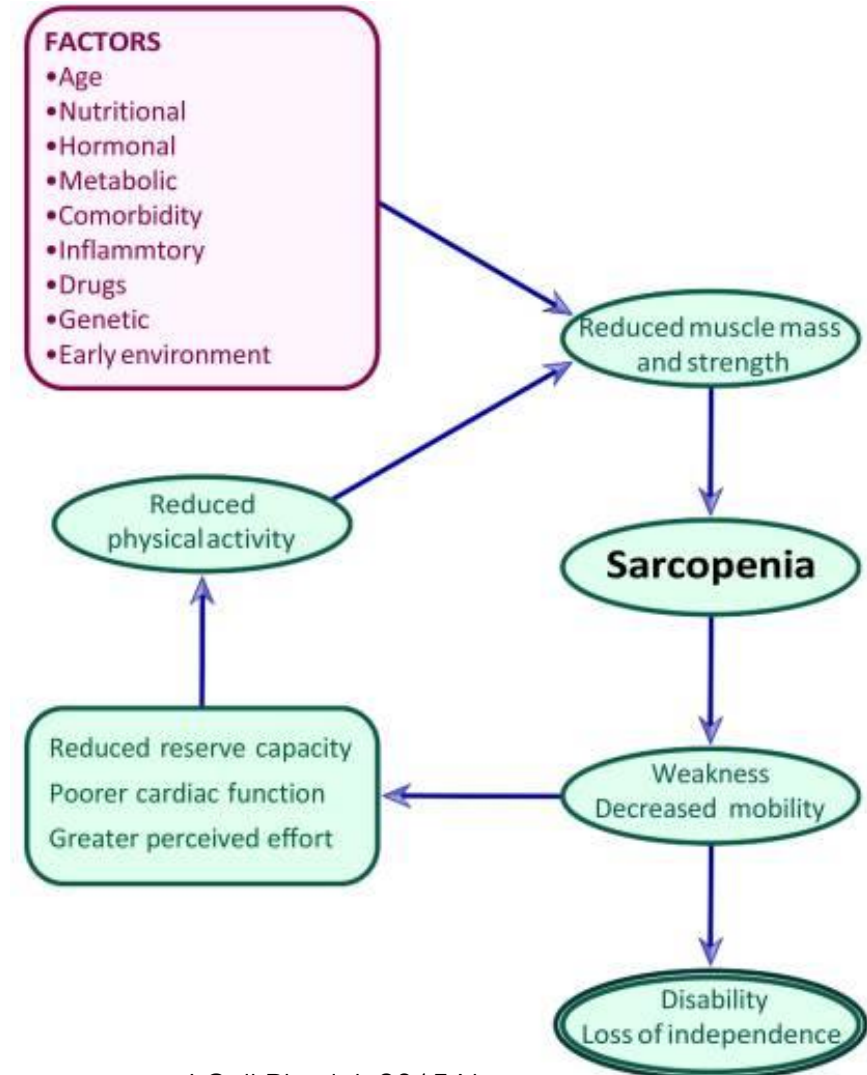


Muskulatur

- Abnahme von ca. 1% Muskelmasse pro Jahr nach dem 40. LJ



- Sarkopenie - Schwäche



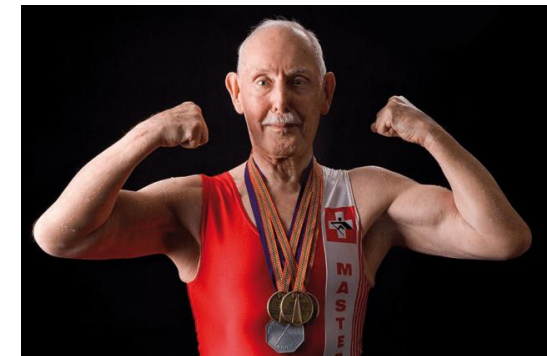
Muskel-Aufbau

- **Bewegung/Training** (Maximal-Last und Schnellkraft), **KOMBINIERT** mit:
 - Eiweiss (1-1,2g pro kg Körpergewicht pro Tag; = ca. 70-100g/Tag)
 - Leucin (2x3g/Tag)
 - Vitamin D (ca. 1'000E/Tag)

- Omega-3 Fettsäuren
- Testosteron
- Kreatin
- ...???

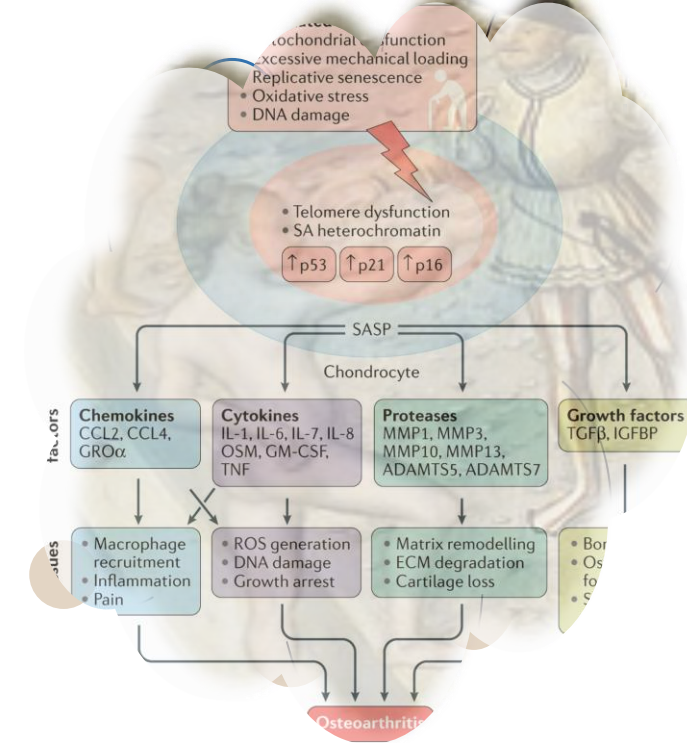
2,5 h pro Woche
1,25 h pro Woche
2x pro Woche

Ausdauer mit mittlerer Intensität
Ausdauer mit hoher Intensität
Kraft-/Gleichgewichtstraining

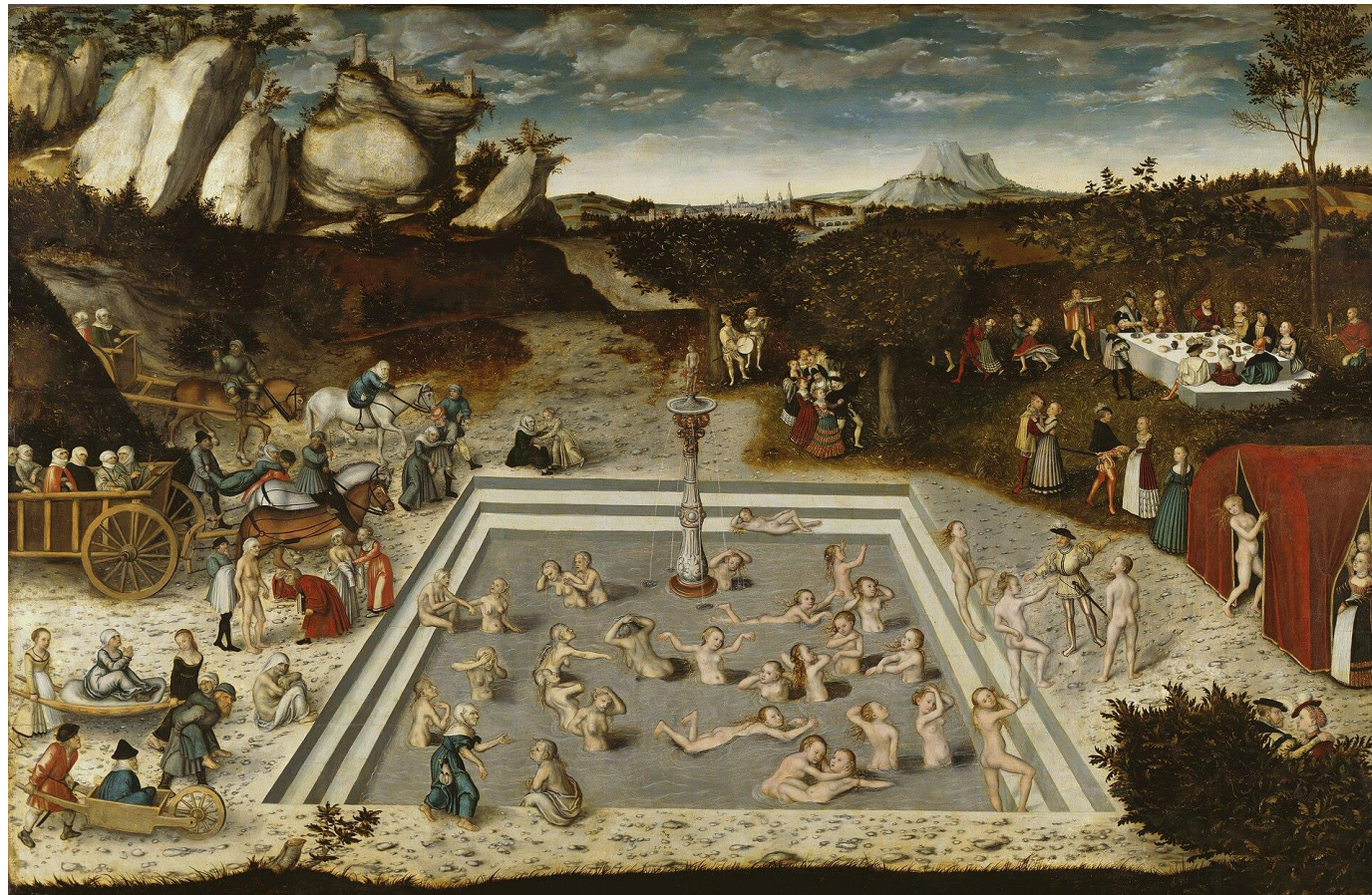


FAZIT: Was die **Medizin** zur Optimierung tun kann

- Prophylaxe (Alterungs-Verlangsamung): rel. wenig
- Regeneration («Jungbrunnen»): (noch) sehr wenig
- Reparation (von Krücke bis Prothese): viel
- Symptom-Linderung (von Salbe bis Spritze): sehr viel



FAZIT: Was **SIE** zur Optimierung tun können



L. Cranach Werkstatt 1546

FAZIT: Was **SIE** zur Optimierung tun können

Der Bewegungsapparat
MUSS **bewegt** werden!

