

Why **JointOK** is different 為什麼**關捷健**與其他關節產品不同?

**(A) UNIQUE formula with MORE benefits 獨特配方更多好處**

(1) 指甲 Nail



(2) 軟骨 Cartilage

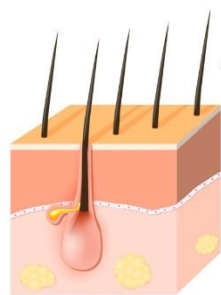


(3) 肌腱韌帶  
Tendon Ligament  
Bone 骨骼



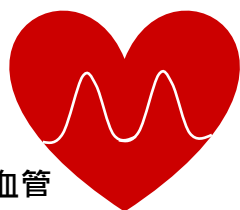
**JointOK 關捷健**

專利膠原微分子  
Patented Collagen Peptides



Skin Hair

(1) 皮膚頭髮



(4) 心血管  
Heart

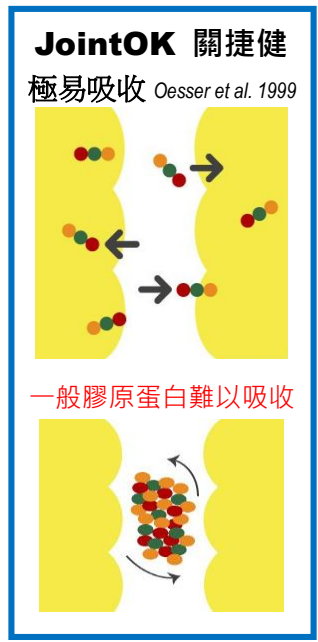
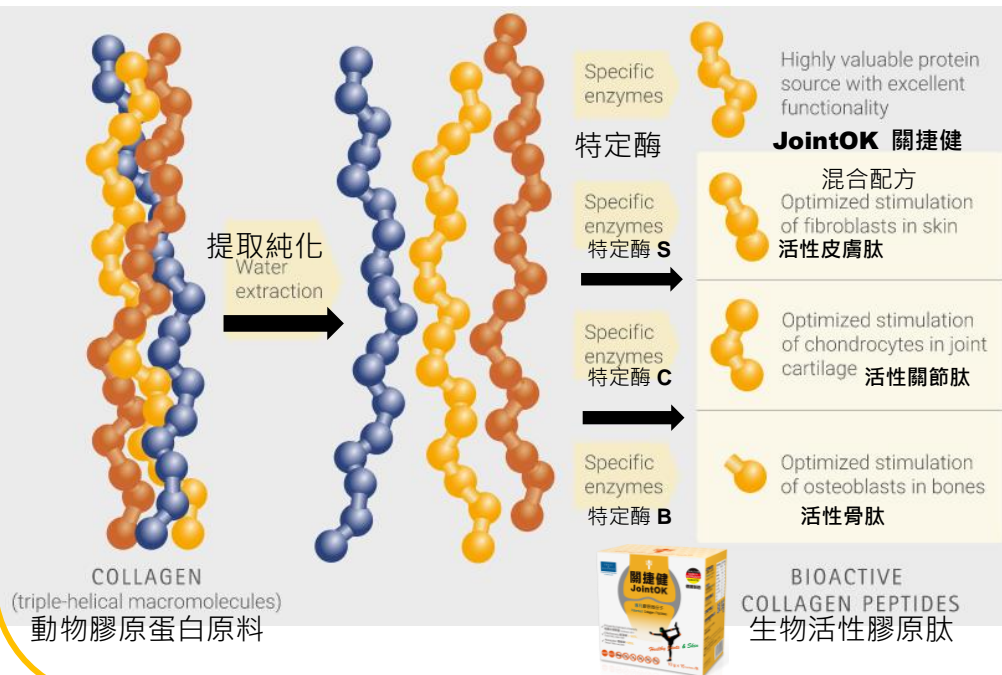


(5) 肌肉 Muscle

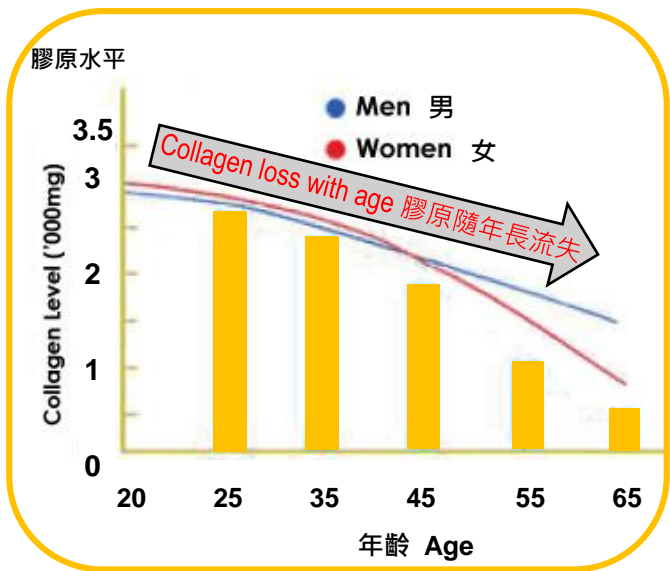
**參考文獻 References:**

- (1) 皮膚·指甲·頭髮: *Journal of Cosmetic Dermatology* · August 2017
- (2) 軟骨 Osteoarthritis & Cartilage 19 (2011) 399-405
- (3) 骨骼 Nutrients. 2018 Jan; 10(1): 97 / 肌腱韌帶 Nutrients 2019, 11, 76
- (4) 心血管: *J Atheroscler Thromb*, 2017; 24: 530-538 / *Molecular Cell Biology*. 4th edition. Section 22.3
- (5) 肌肉: *British Journal of Nutrition* (2015), 114, 1237-1245

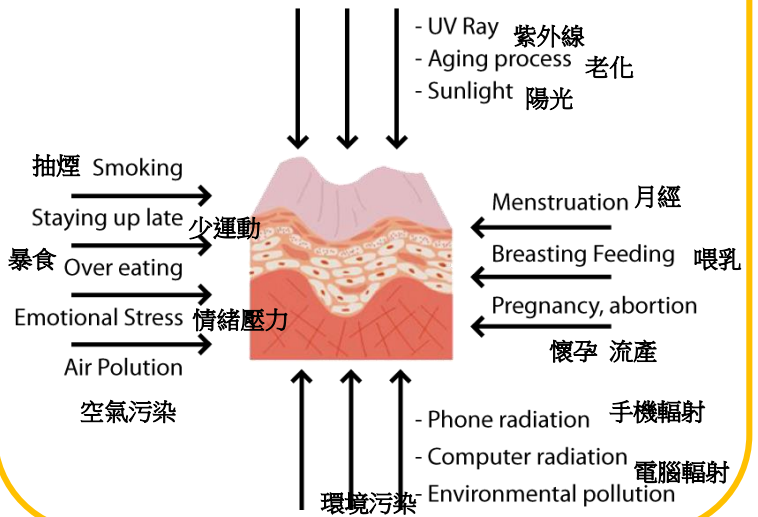
**(B) Excellent German technology 德國科技 質優功效佳**



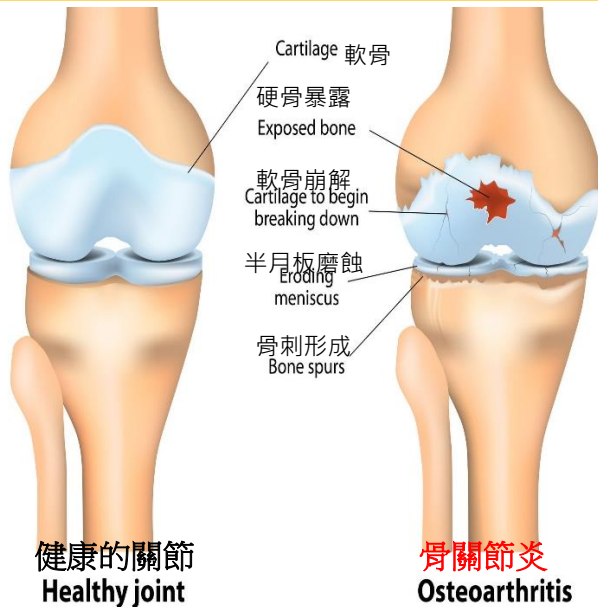
## (C) Why need JointOK to replenish collagen? 為何需要關捷健?



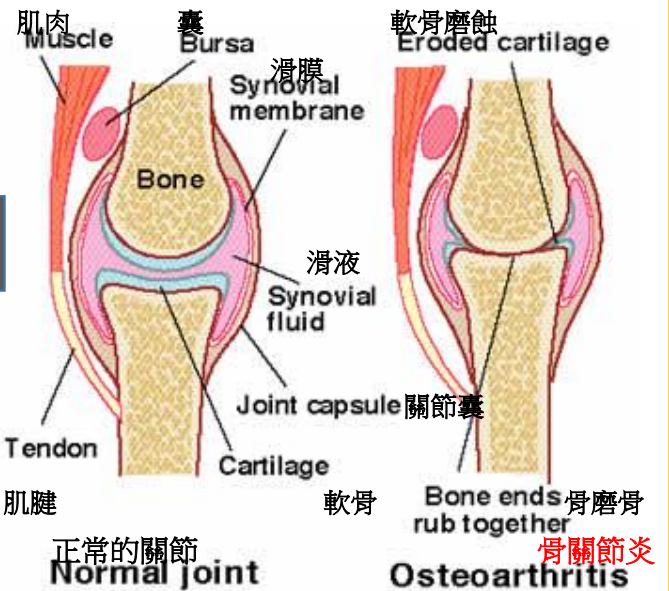
### Casues of collagen loss 膠原流失的原因:



## (D) Clinically proven to promote joint health 臨床證明有助關節健康

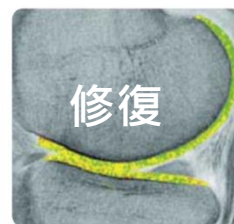
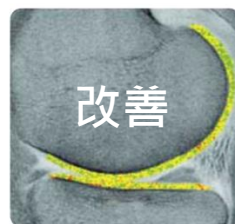
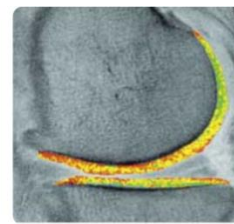
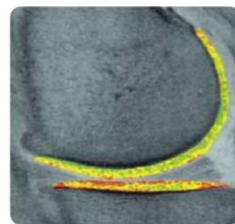
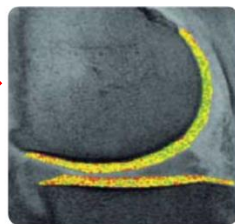


退化



### PLACEBO 安慰組

(沒有服用關捷健)



修復

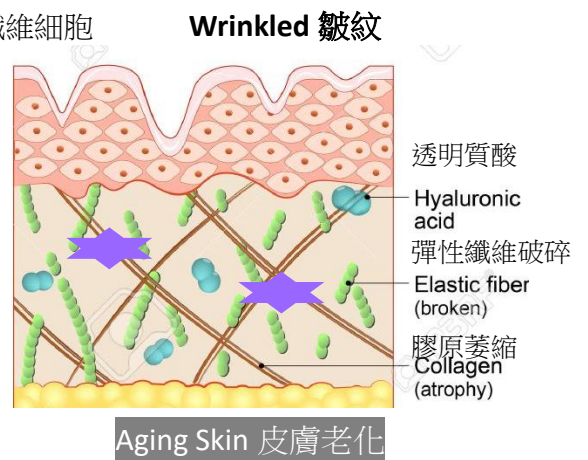
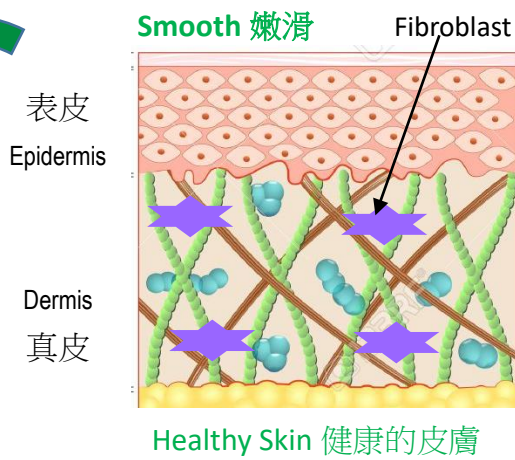
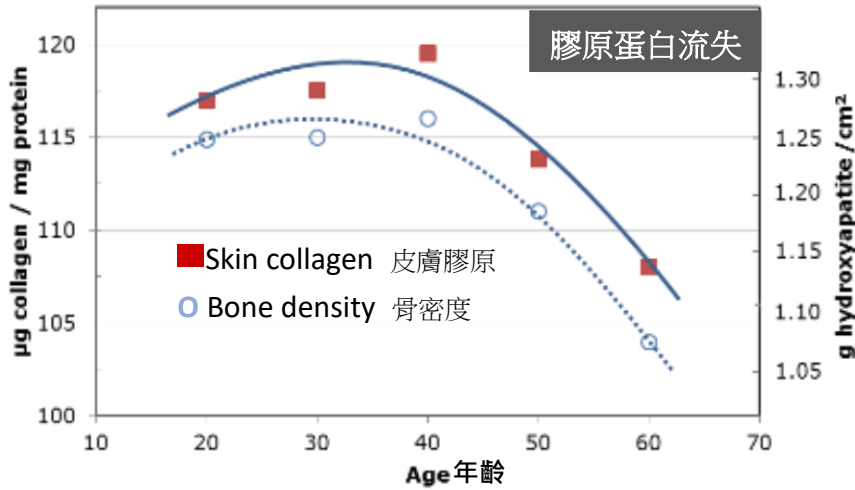


Osteoarthritis & Cartilage 19 (2011) 399-405

Diseased Cartilage 病態的關節

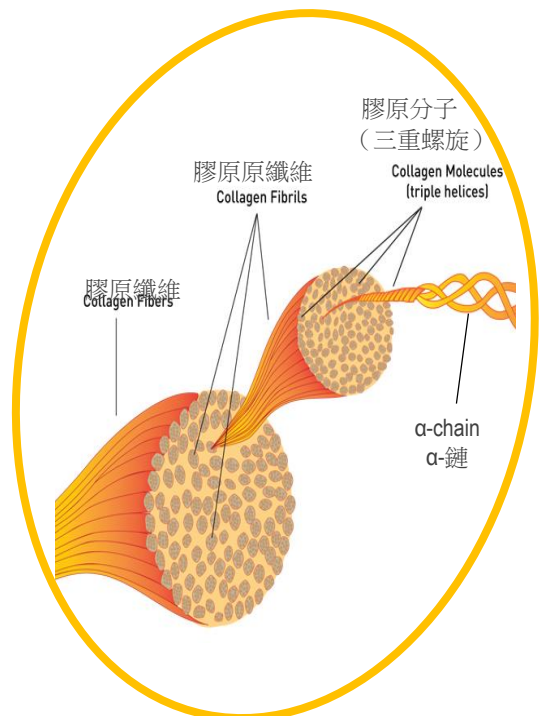
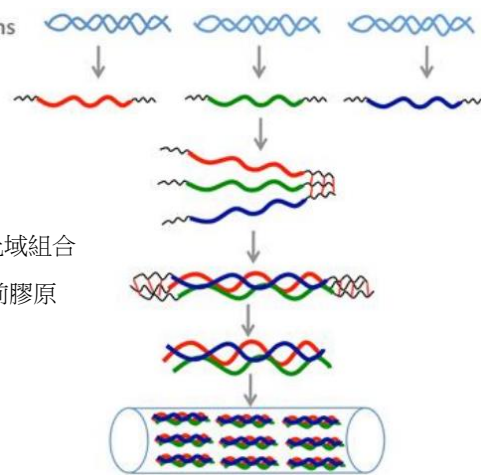
Healthy Cartilage 健康

**(E) Good for beauty (improve skin, nails & hair)美容(改善皮膚指甲頭髮)**



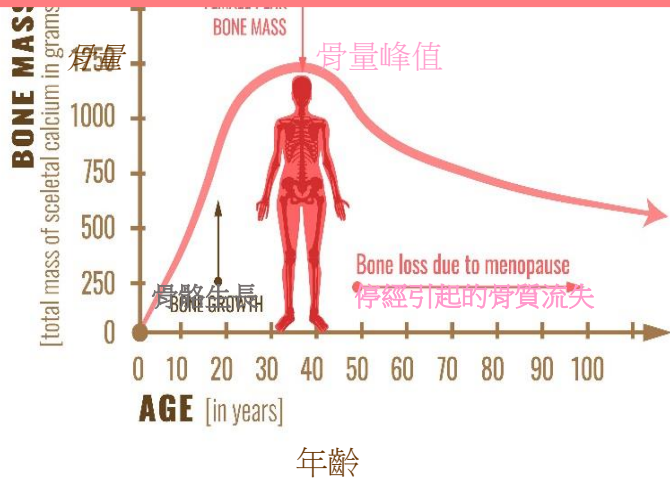
**Activated Fibroblast**  
成纖維細胞 被激活  
合成膠原蛋白  
**修復 皮膚指甲頭髮**

- BIOSYNTHESIS STEPS**  
生物合成步驟
- 1 DNA genes coding for  $\alpha$  chains  
 $\alpha$ -鏈 基因編碼
  - 2 Transcription and translation of DNA  
DNA 轉錄和翻譯
  - 3 Assembly of  $\alpha$  chains through a trimerization domain  
 $\alpha$ -鏈通過三聚化域組合
  - 4 Formation of Pro-Collagen  
形成前膠原
  - 5 Formation of Collagen  
形成膠原
  - 6 Formation of Collagen Fibrils  
形成膠原原纖維



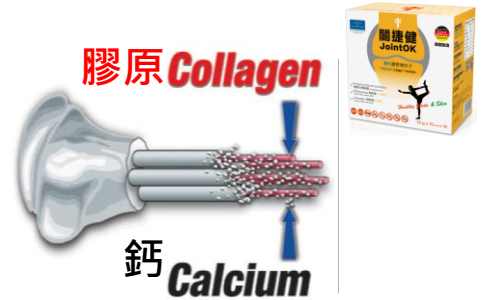
## (F) Clinically proven to promote bone health 臨床證明有助骨骼健康

### Decreasing bone mass with age in women 骨量隨年齡減少

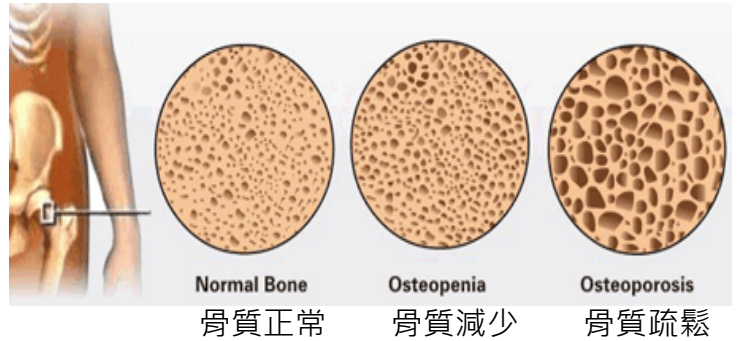
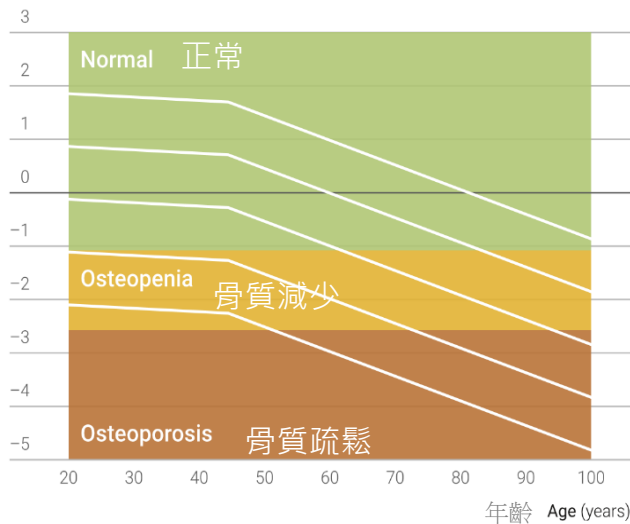


### Bones need more than calcium !

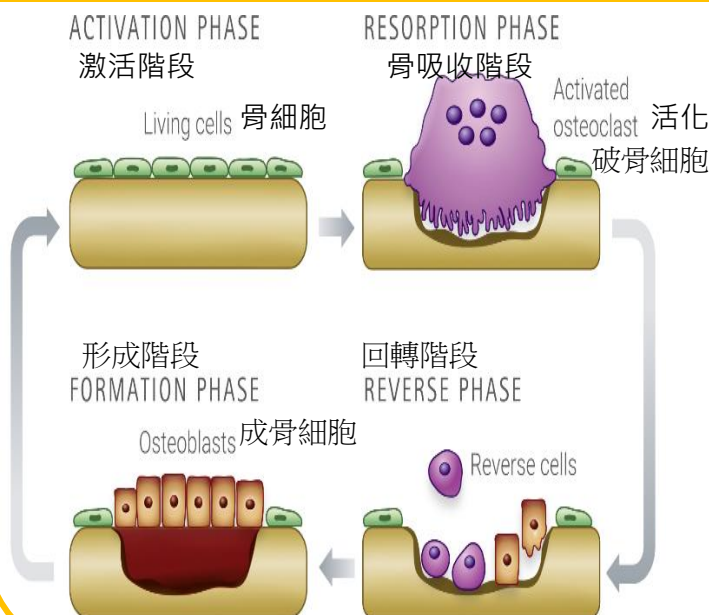
Collagen is essential for bone flexibility & elasticity. **JointOK** helps keep the skeletal system healthy. **骨骼不單需要鈣**, 更需要膠原維持柔韌性和彈性。 **JointOK** 有助保持骨骼健康。



### T- Score



## Bone support from within with JointOK 關捷健支持骨骼健康



**JointOK** stimulates osteoblast activity and reduces osteoclast degradation activity to build collagenous matrix essential for bone mineralization, resulting in increase in bone mass and density.

關捷健激活成骨細胞並降低破骨細胞骨吸收活動，維持膠原蛋白基質讓骨礦化，從而增加骨量和密度。

*Nutrients. 2018 Jan; 10(1): 97*

