

# 核心運動

馬偕紀念醫院

物理治療師

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# 核心肌群

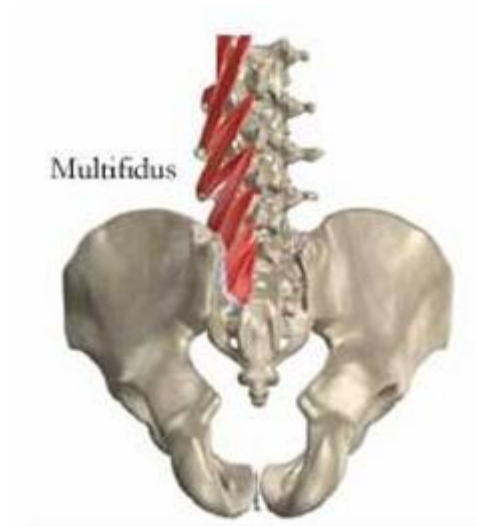
- 腹肌群：腹橫肌、腹直肌、腹內斜肌、腹外斜肌
- 背肌群：多裂肌、背部伸直肌群、腰方肌
- 橫隔膜
- 骨盆肌肉
- 交錯骨盆及下肢的肌肉群

# 核心肌肉

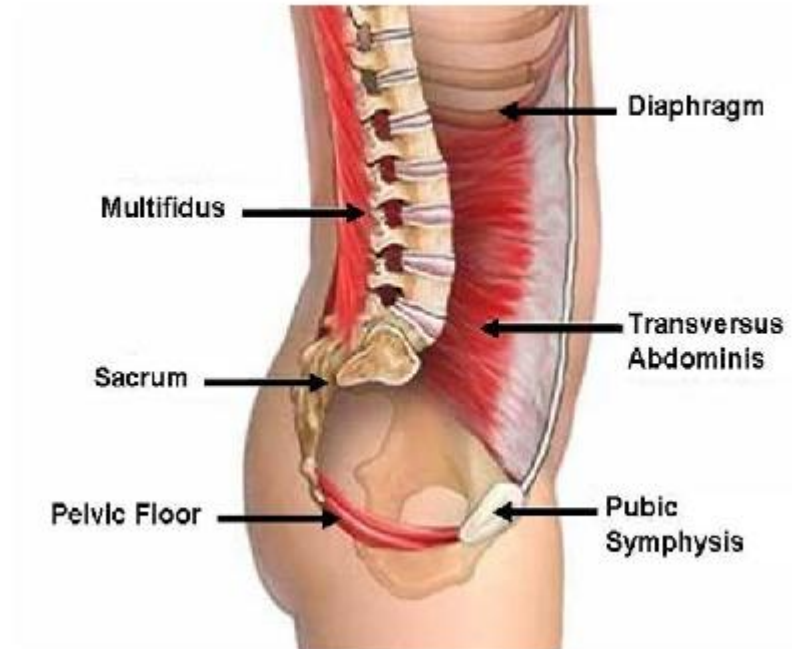
Transversus Abdominis



Multifidus



Pelvic Floor & Diaphragm



# 下背痛發生率

- 60%~90%的人一生之中會經歷下背痛
- 80%~90%的人會復發
- 85%的下背痛找不到明顯病理因素
- 45歲以下常見的失能原因



# 下背痛原因

- 軟組織拉傷:70%
- 姿勢不良
- 脊柱側彎
- 脊椎退化:10%
- 椎間盤凸出:4%
- 骨質疏鬆導致之壓迫性骨折:4%
- 脊髓狹窄症:3%
- 脊椎滑脫症:2%
- 外傷性骨折:<1%
- 先天性問題:<1%

# Dangers of Forward Head Posture

## The Domino Effect



Normal



Forward Head Posture

1. The head moves forward shifting the Center of Gravity.

2. To compensate, the upper body drifts backward.

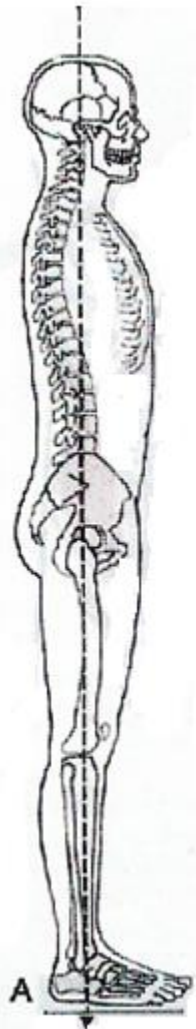
3. To compensate for the upper body shift, the hips tilt forward.

So, the forward head position can be the cause of not only head/neck problems, but also mid-back and low back problems.

# 姿勢體態評估



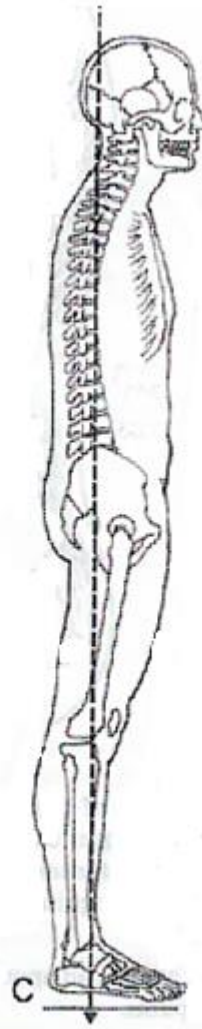
# 側面體態



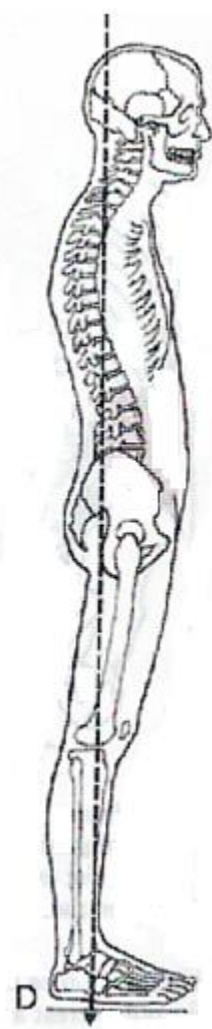
A  
Ideal alignment.



B  
Kyphosis-lordosis posture.



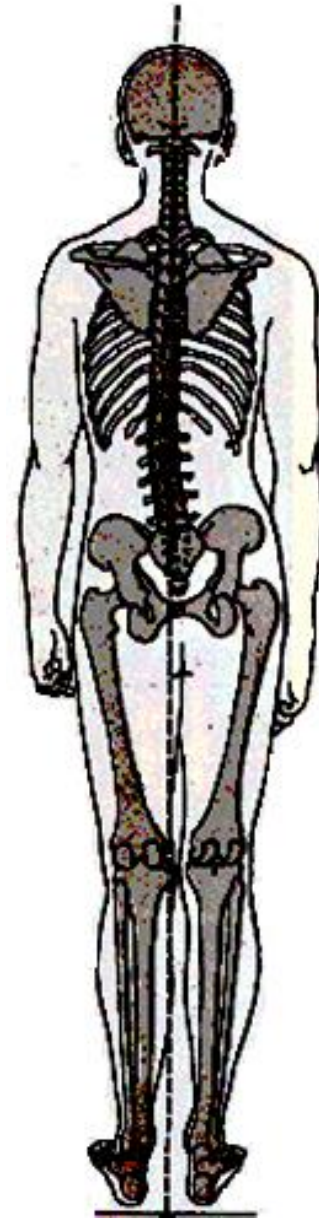
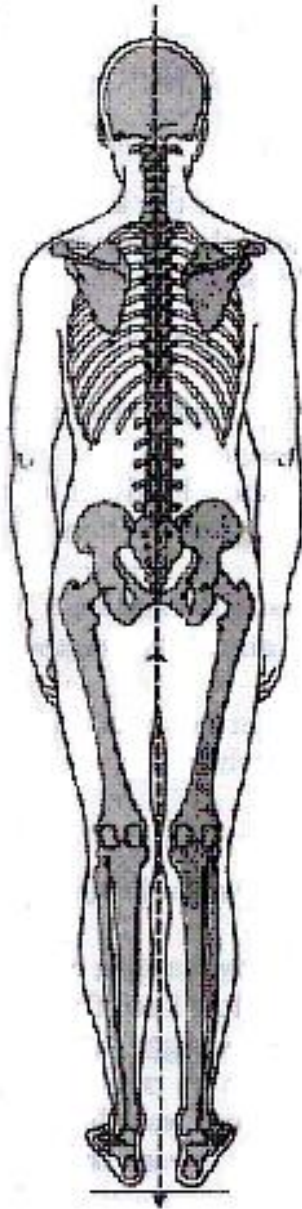
C  
Flat back posture.



D  
Sway-back posture.

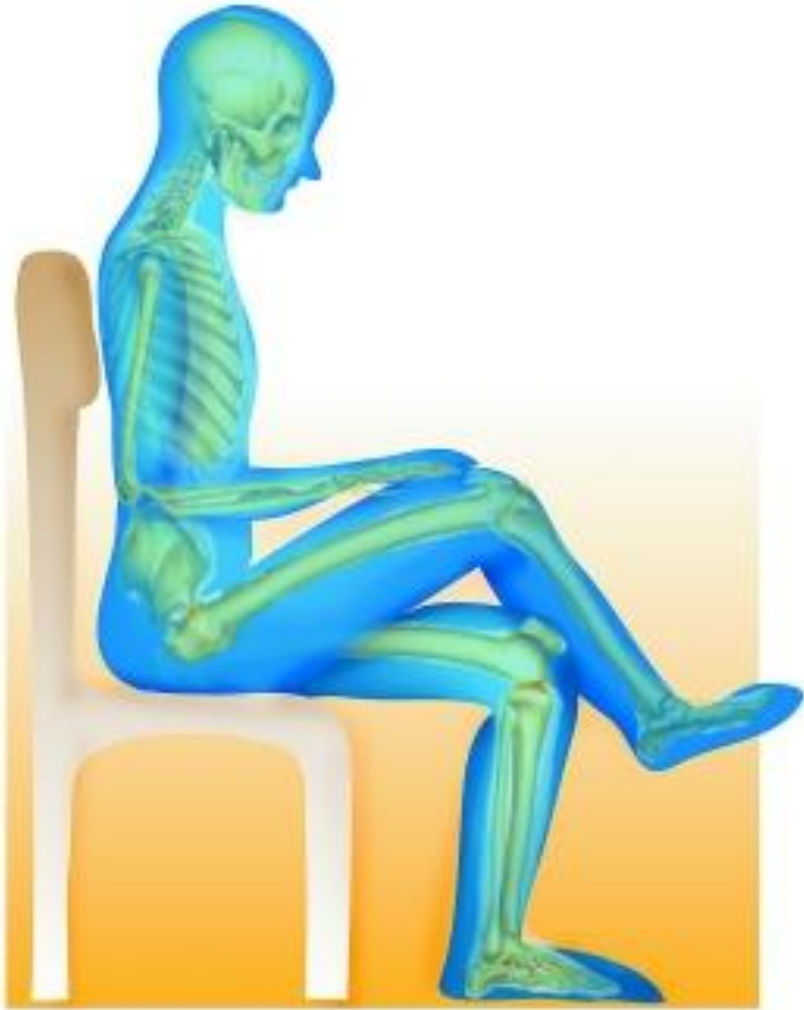


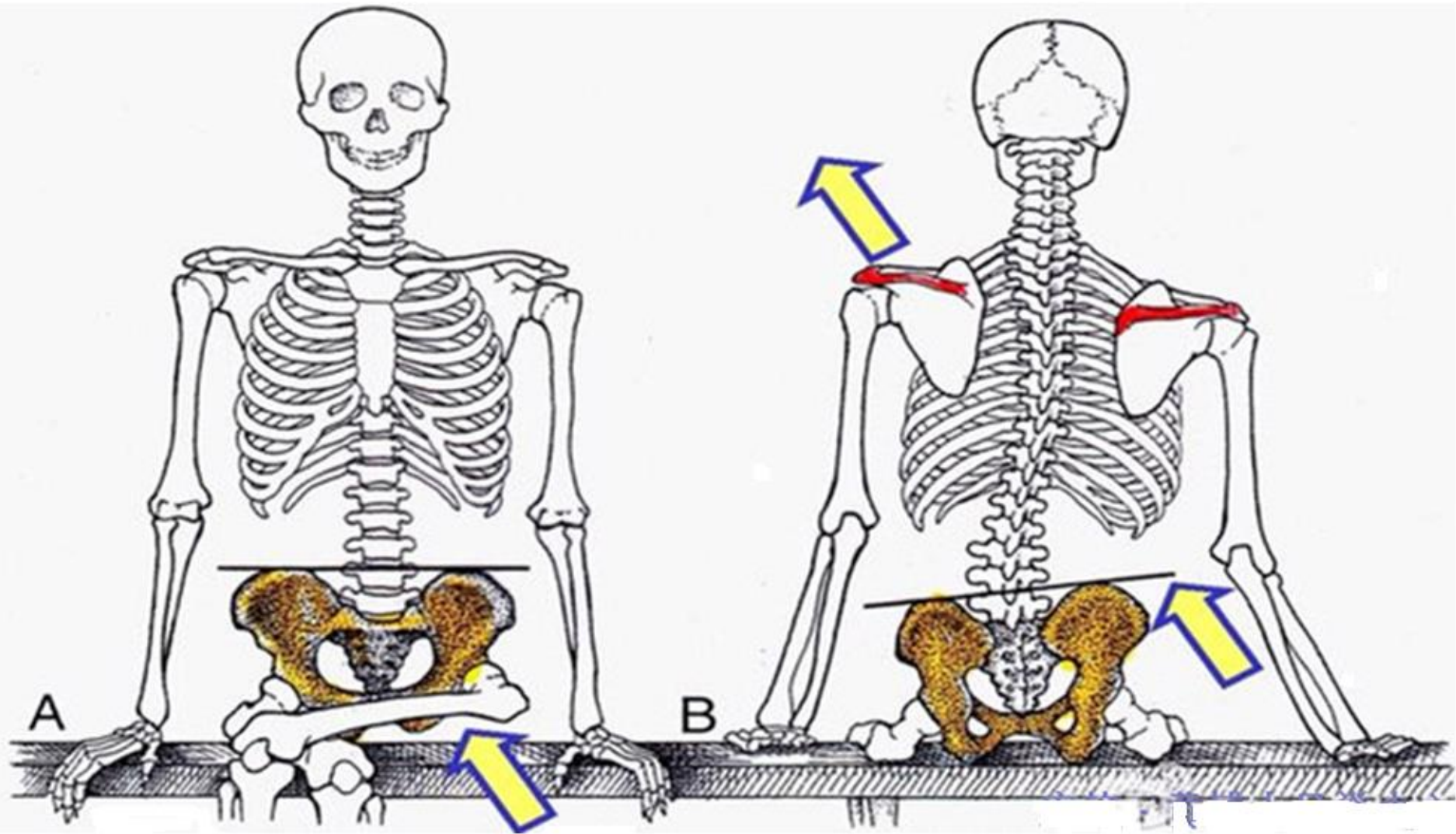
# 背面體態



# 錯誤站姿

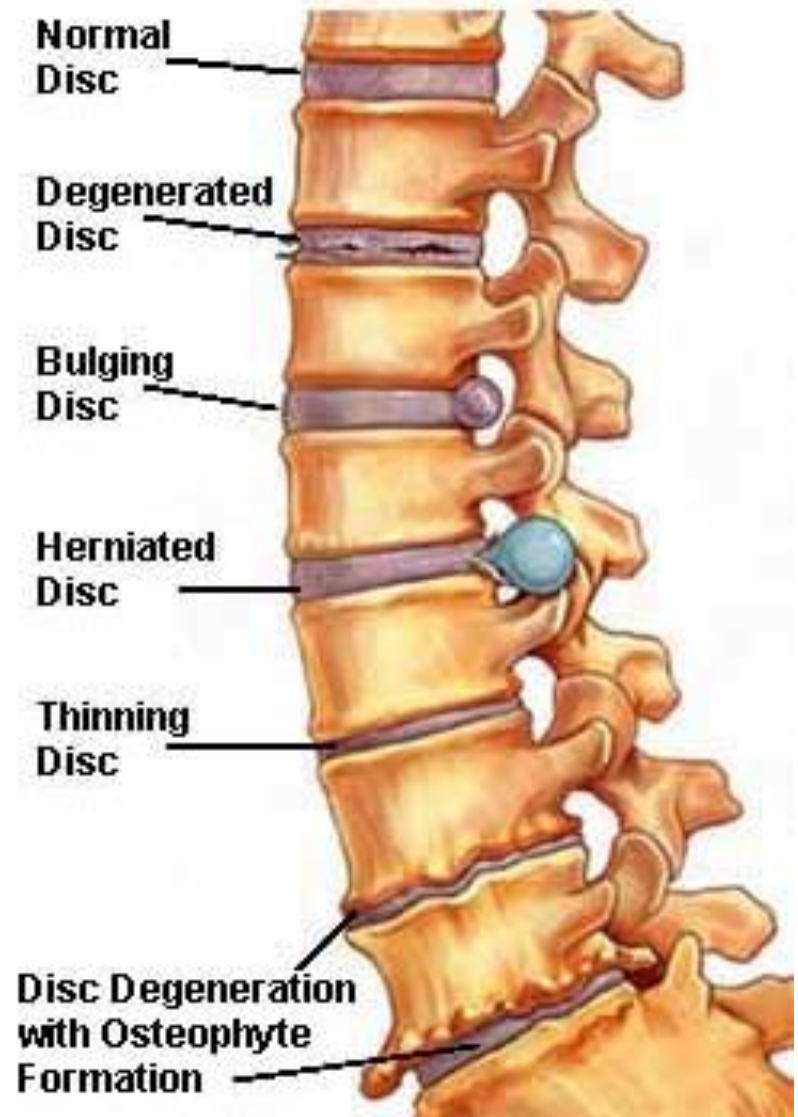






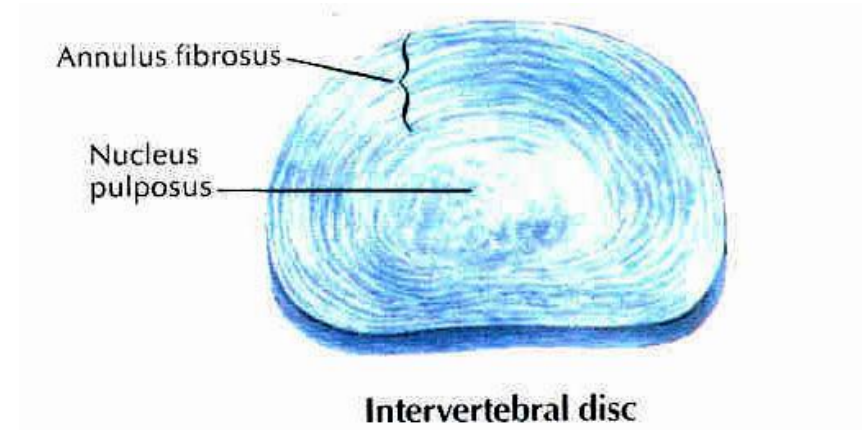
# 脊椎退化

- 35歲有明顯脊椎退化
- 50歲以上90%有明顯脊椎退化
- 最常發生在 L5-S1 and L4-L5之間



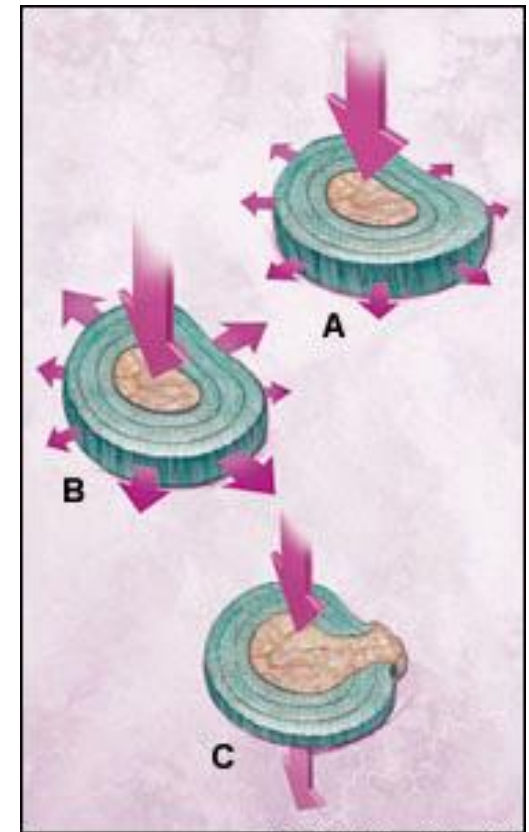
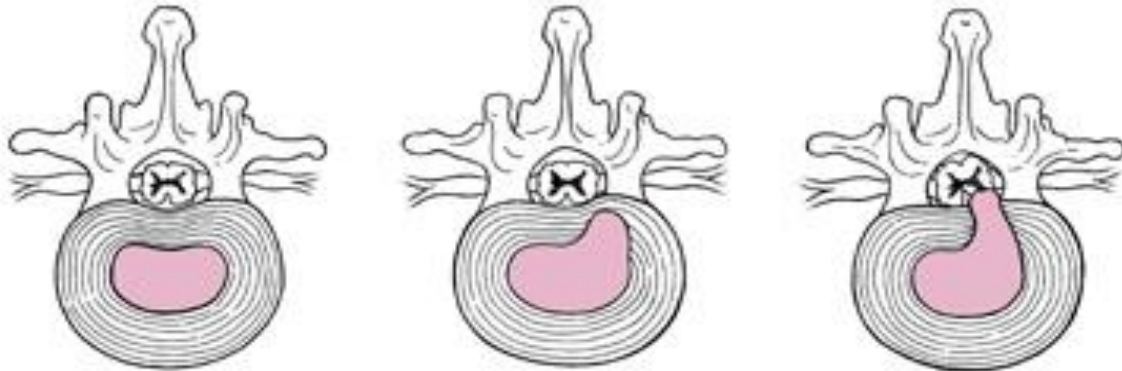
# 椎間盤

- 內層：髓核
- 外層：環狀纖維
- 組成：80~90%水分  
結締組織
- 神經分佈：外側1/3
- 功能：  
承重、吸震、活動



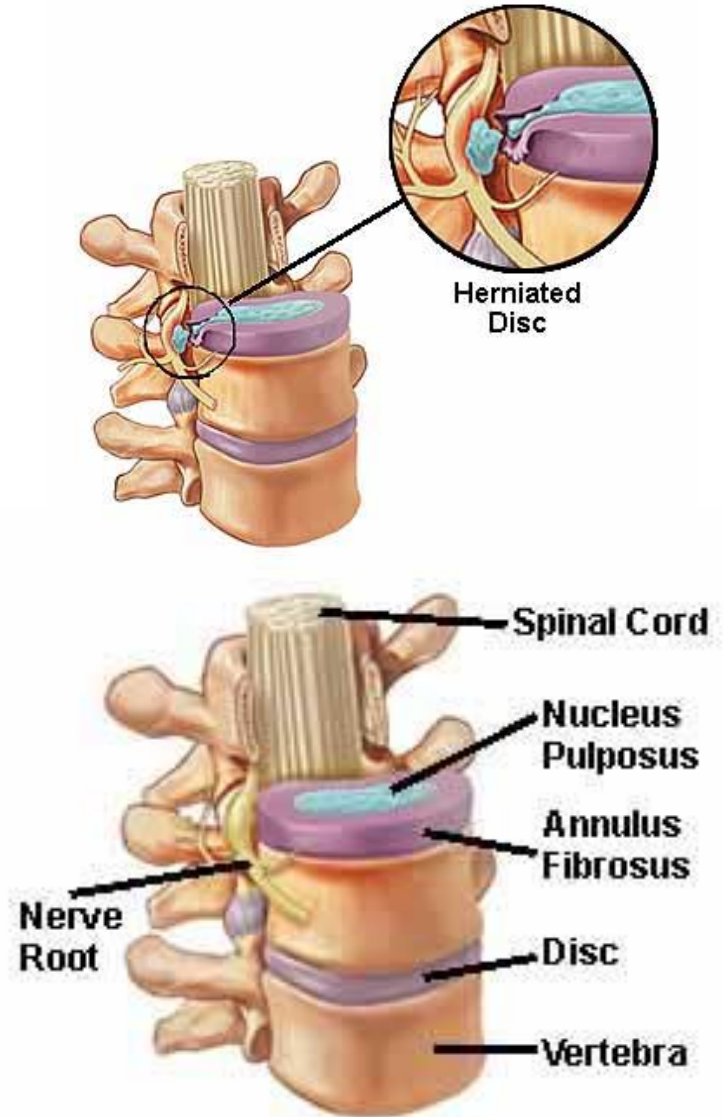
# 椎間盤突出

- 因年齡、姿勢不良、體重過重、運動傷害而退化  
使環狀纖維變脆弱
- 90%發生於 L4-L5與 L5-S1
- 80 % ~90 %不需開刀



# 椎間盤凸出壓迫神經

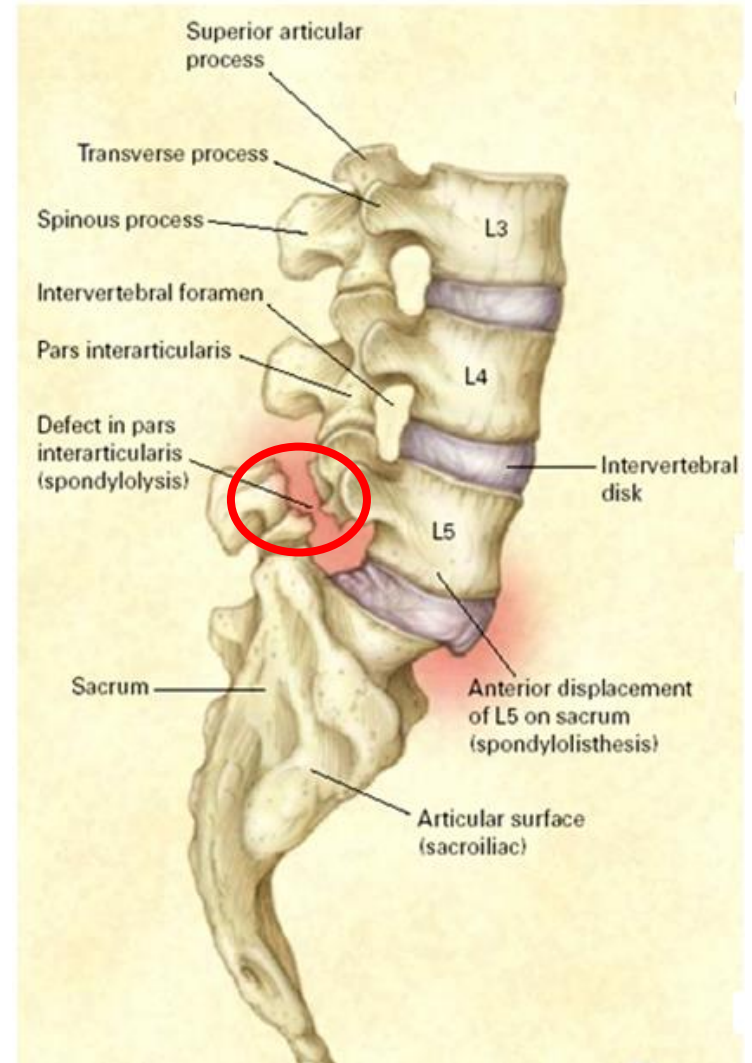
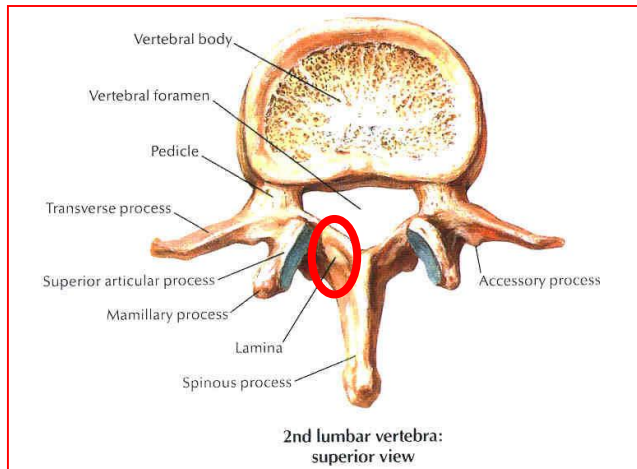
- 疼痛
- 肌肉痙攣
- 坐骨神經痛
- 下肢無力
- 彎腰、如廁、咳嗽、  
擤鼻涕引發症狀





# 脊椎滑脫症

- 最常發生於  
L5-S1(70%)  
L4-L5(25%)



# 下背痛治療

- 臥床休息：勿超過2天
- 良好睡眠
- 物理治療：熱療、電療、牽引、**運動治療**
- 藥物
- 開刀

# 運動治療

- 增加肌力
- 增加柔軟度
- 增加肌肉耐力
- 改善體態：維持脊椎正常位置
- 減緩疼痛
- 促進復原
- 減輕背部問題之嚴重程度
- 減低開刀機率
- 預防背痛發生

# 核心肌肉運動

# 骨盆運動

骨盆前傾



骨盆後傾



# 脊椎伸展

拱背



平背



前屈背



# 背肌訓練



# 腹肌訓練(1)

吸氣



吐氣





## 腹肌訓練(2)

吸氣



吐氣



## 腹肌訓練(3)



# 腹肌訓練(4)

吸氣



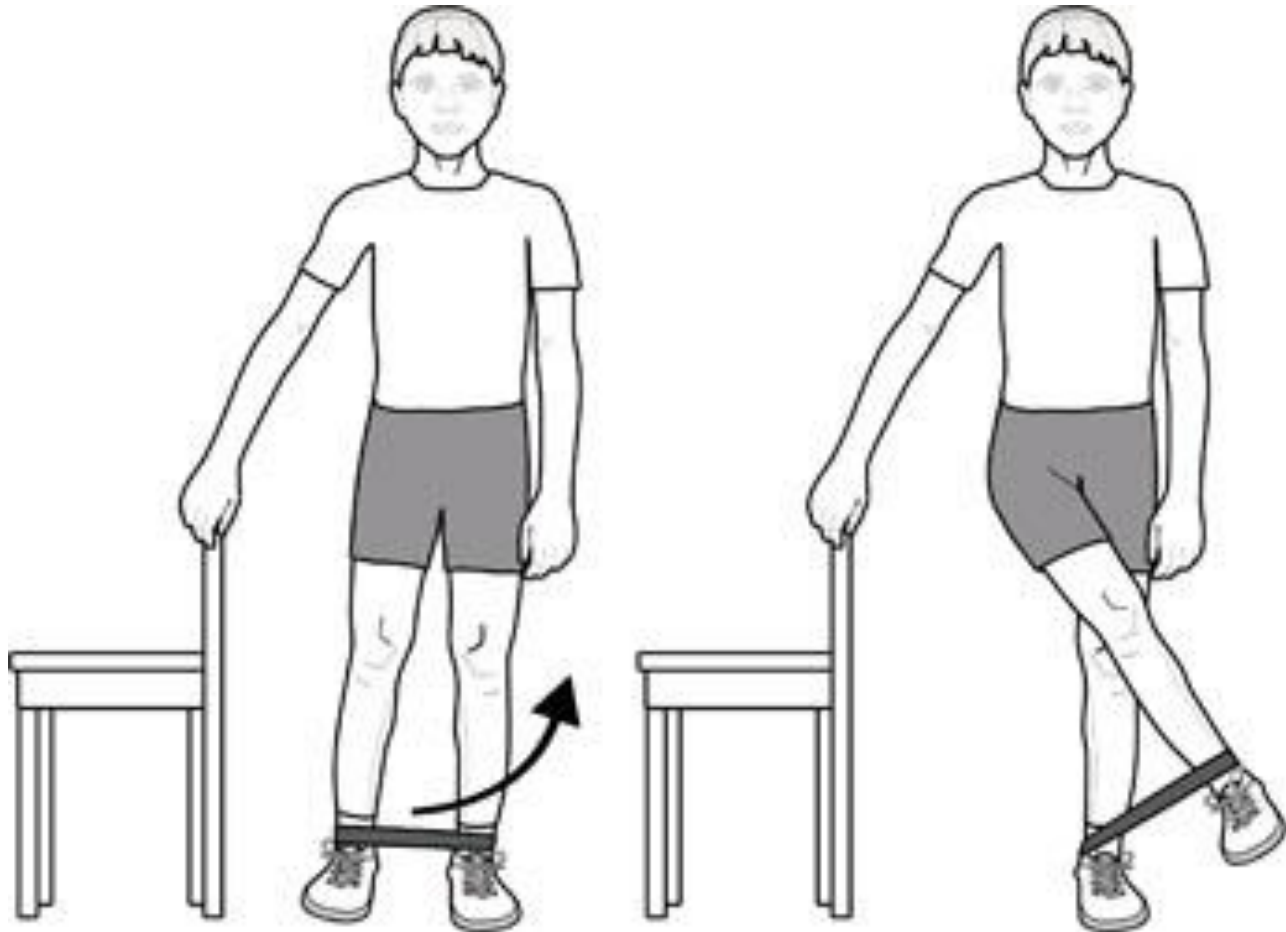
吐氣



# 髂外展肌訓練

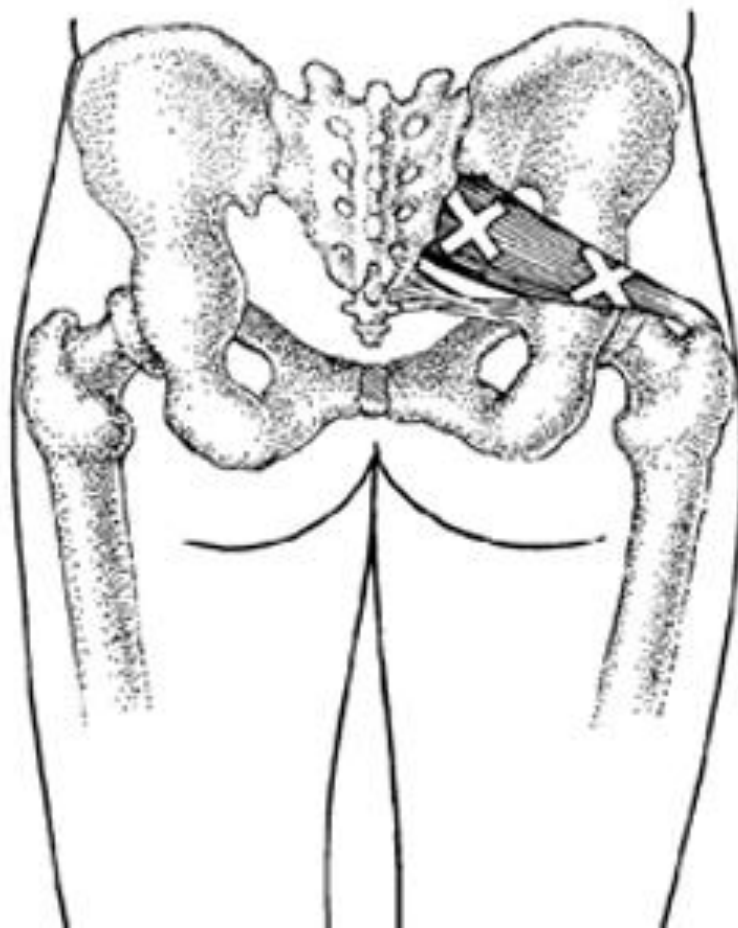
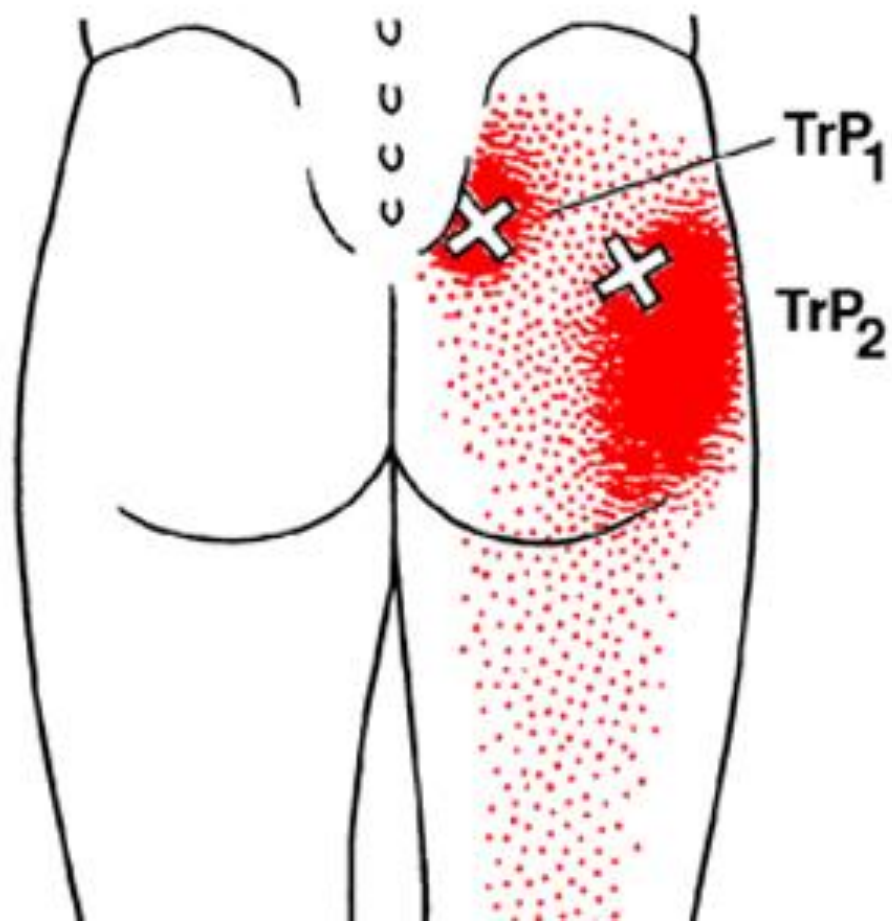


# 髖內收肌訓練

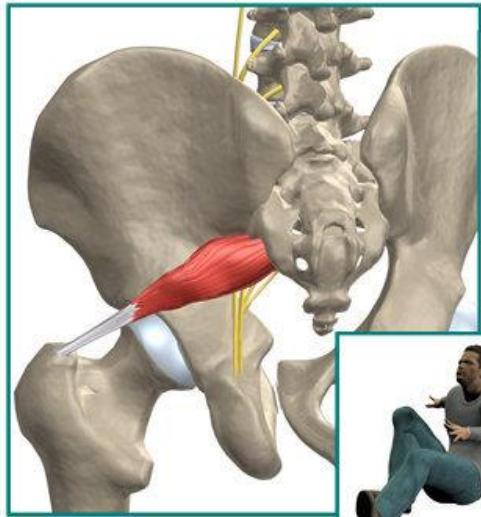


# 伸展運動

# 梨狀肌



# 梨狀肌症候群

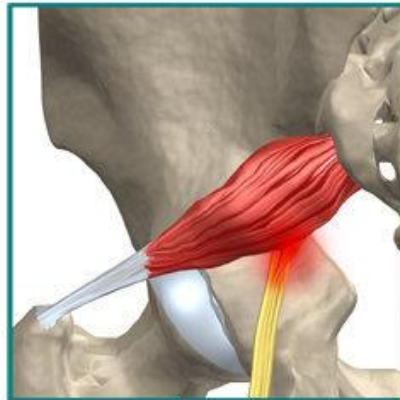


Normal

Injury

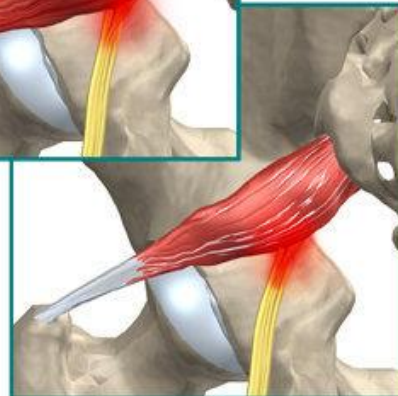


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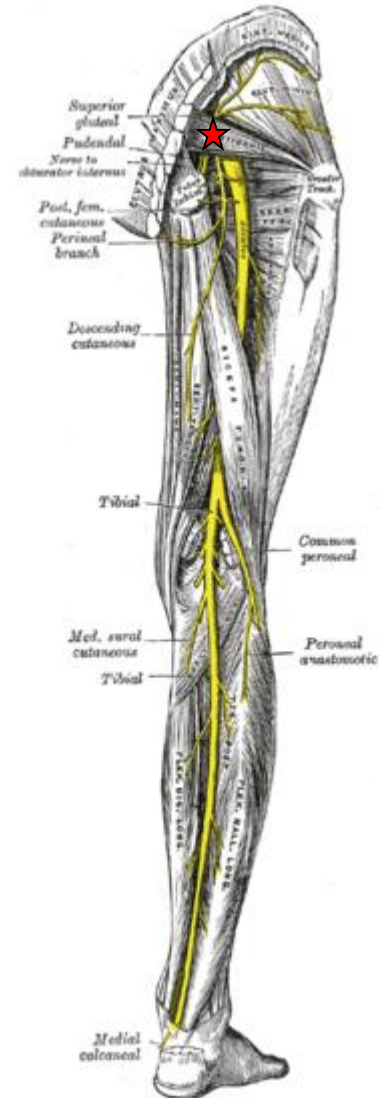


Hematoma

Scar tissue



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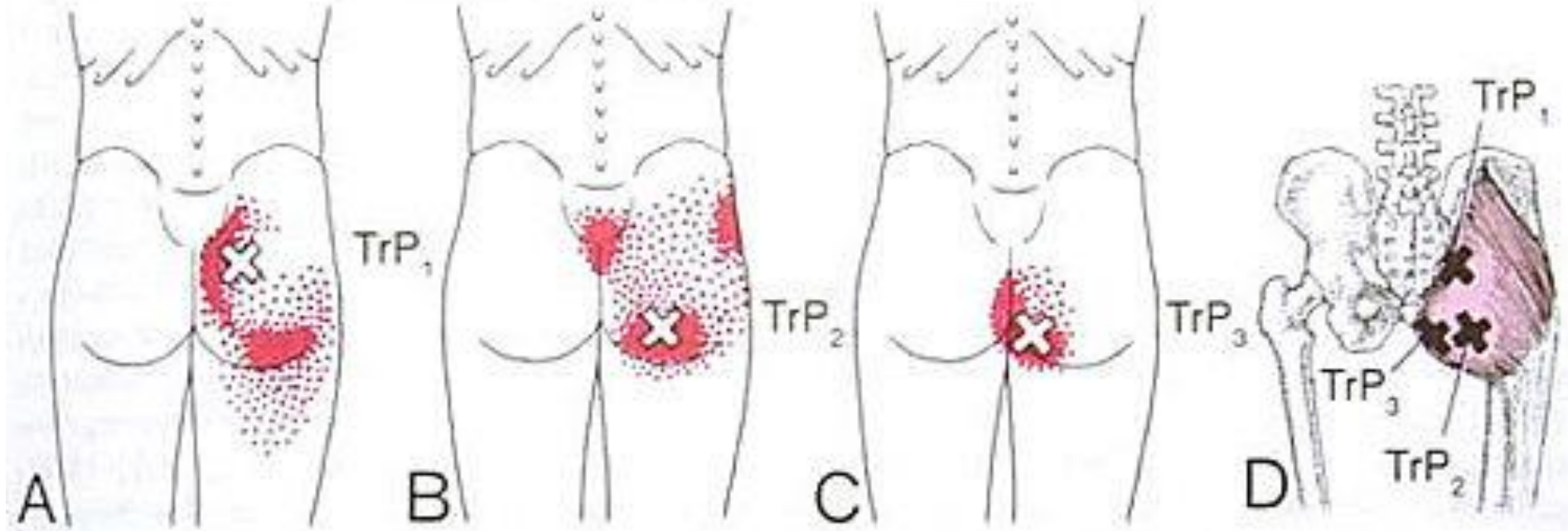


# 梨狀肌伸展



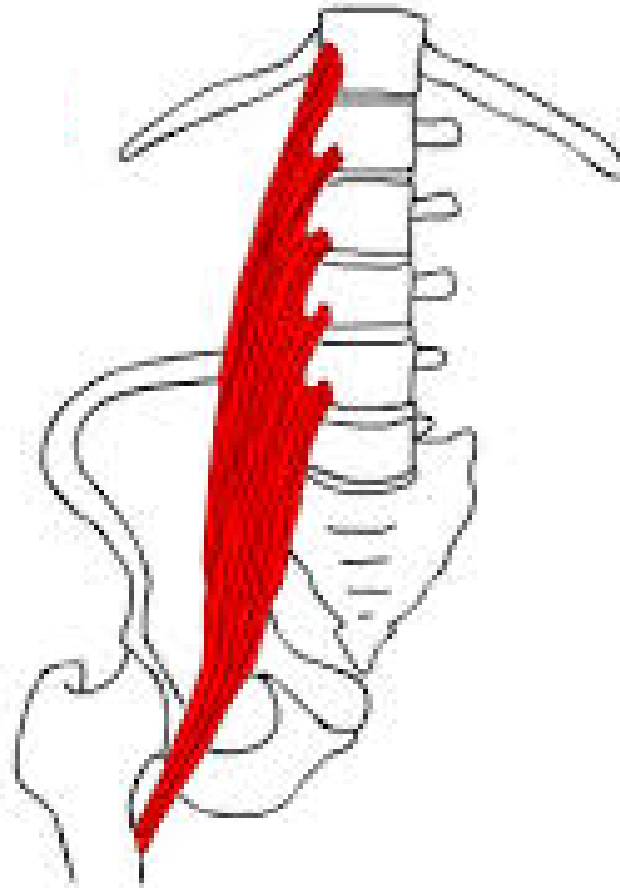
# 臀大肌

Gluteus maximus



# 髂腰肌

Psoas Major Muscle



# 髂腰肌伸展



# 正確站姿訓練



# 預防下背痛

# 不同姿勢下椎間盤壓力



35kg



100kg



150kg



220kg



140kg



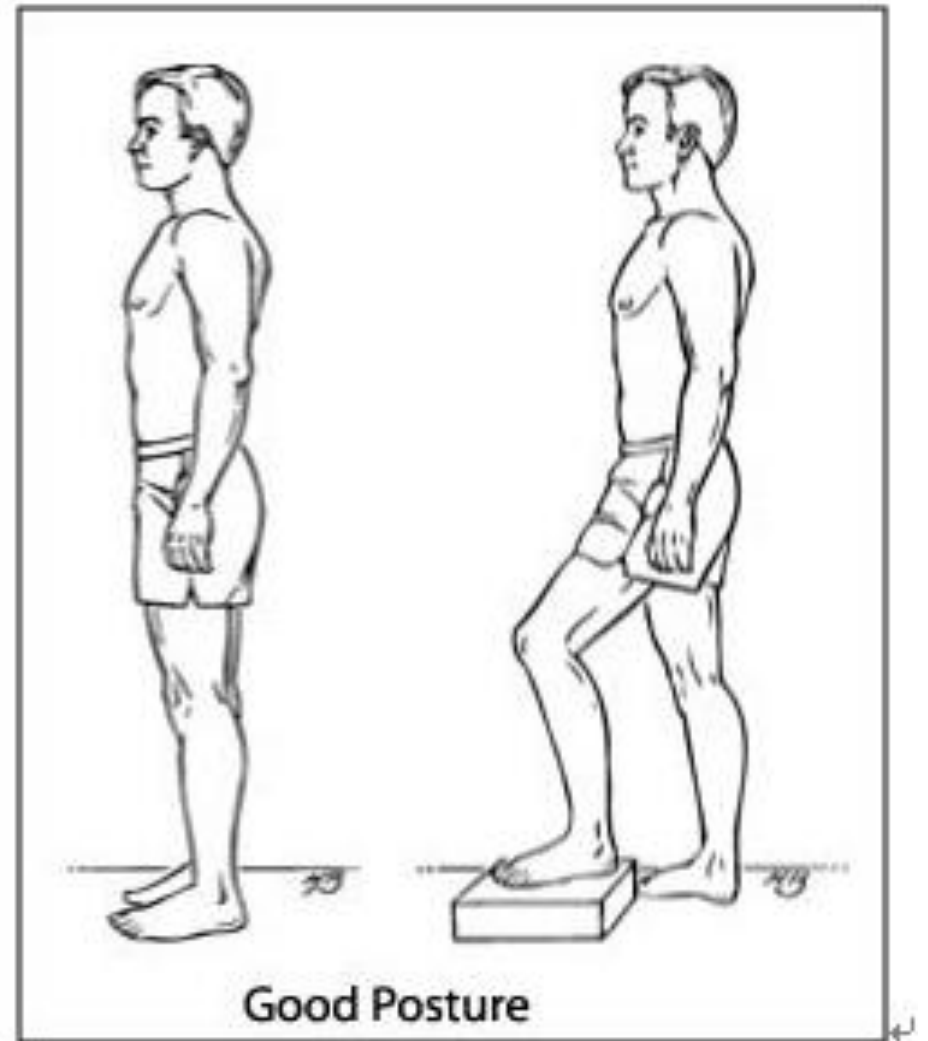
185kg



275kg

# 正確站姿

- 兩足間距離與肩同寬
- 手自然垂放於身旁
- 若工作需長時間站立：  
準備小板凳  
讓兩腳輪流站上去休息  
(每5~15分鐘換腳)
- 鞋內放置鞋墊
- 勿穿高跟鞋
- 避免久站



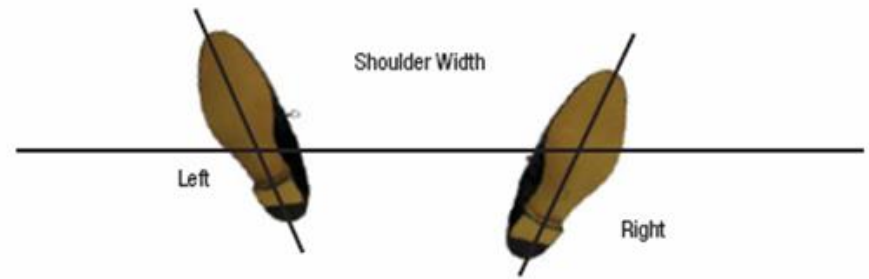


# 直背與曲背之差異



# 正確搬重物方法

- 兩腳分開與肩同寬
- 彎曲膝蓋而非彎腰
- 物品要靠近身體重心
- 收縮核心肌肉
- 逐步抬起重物
- 搬重物時使用腿部肌肉
- 轉身時以腳為支點
- 找人協助



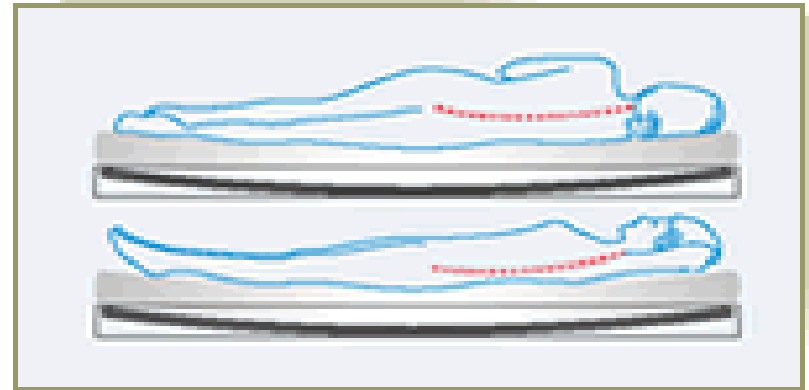
# 日常保健

- 減重
- 規律運動
- 儘可能維持好體態
- 活動前先暖身，活動後拉筋伸展
- 久坐者每小時要做伸展運動
- 睡姿：仰躺或側睡不要俯臥
- 選用好的椅子、枕頭、床墊
- 皮包勿過重或長時間背著：改用有輪子的包包
- 持續追蹤脊椎健康狀態

# 床墊選擇

- 軟硬適中
- 維持脊椎正中位置

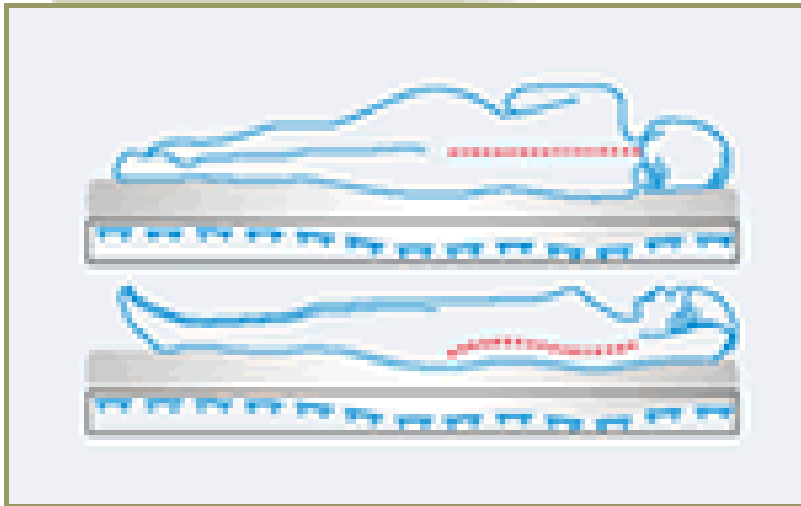
a



b

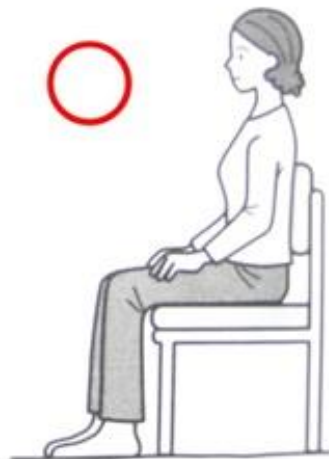


c



# 正確睡姿





背部要緊貼椅背，臀部與椅背間沒有空隙，椅背最好沒有中空。



臀部並無緊靠椅背，臀部與椅背出現空隙，上半身的重量集中在上背及臀部與椅子的接觸點，對腰部形成極大的壓力。



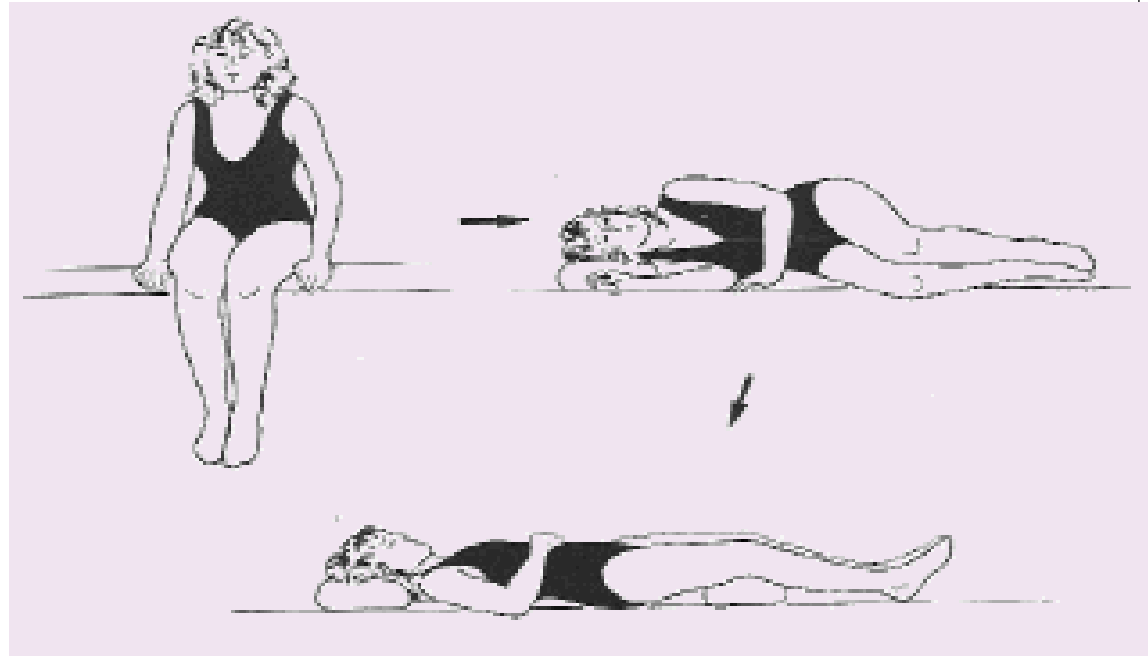
坐在柔軟的沙發上過久，這樣會對腰部形成極大的壓力，容易造成背肌緊繃。



上半身過度前傾，沒有緊貼椅背。

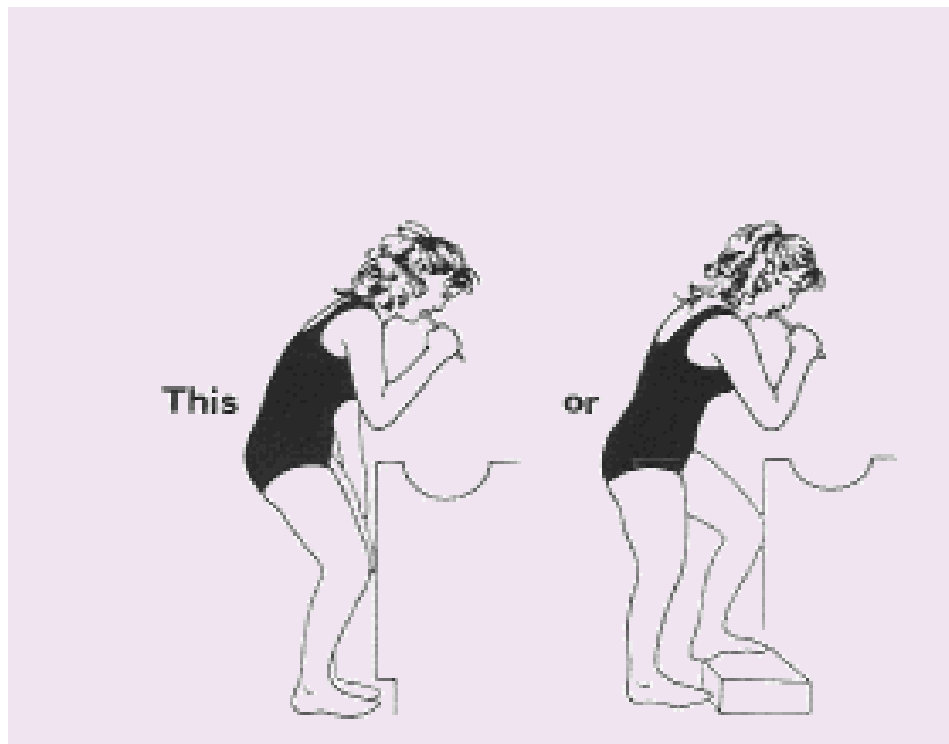
# 上下床方式

- 上床時先側躺  
再轉成平躺
- 下床時先側躺再  
以手協助支撐身  
體坐起



# 刷牙姿勢

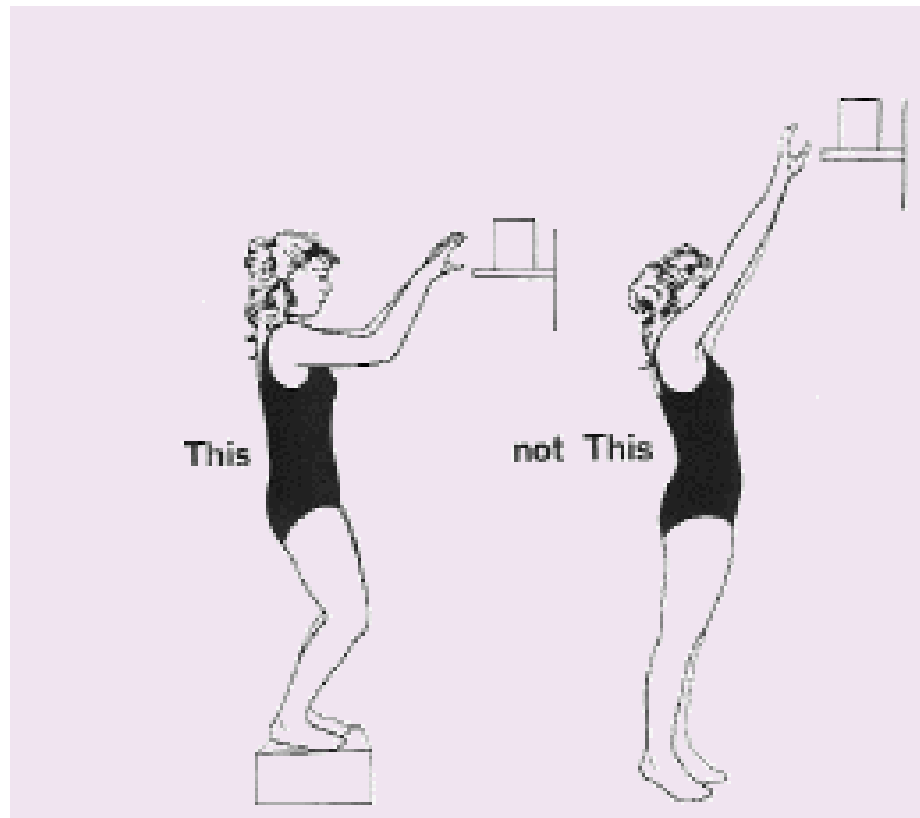
- 洗臉台高度不夠時應採‘雙膝微彎或前弓後箭的姿勢’





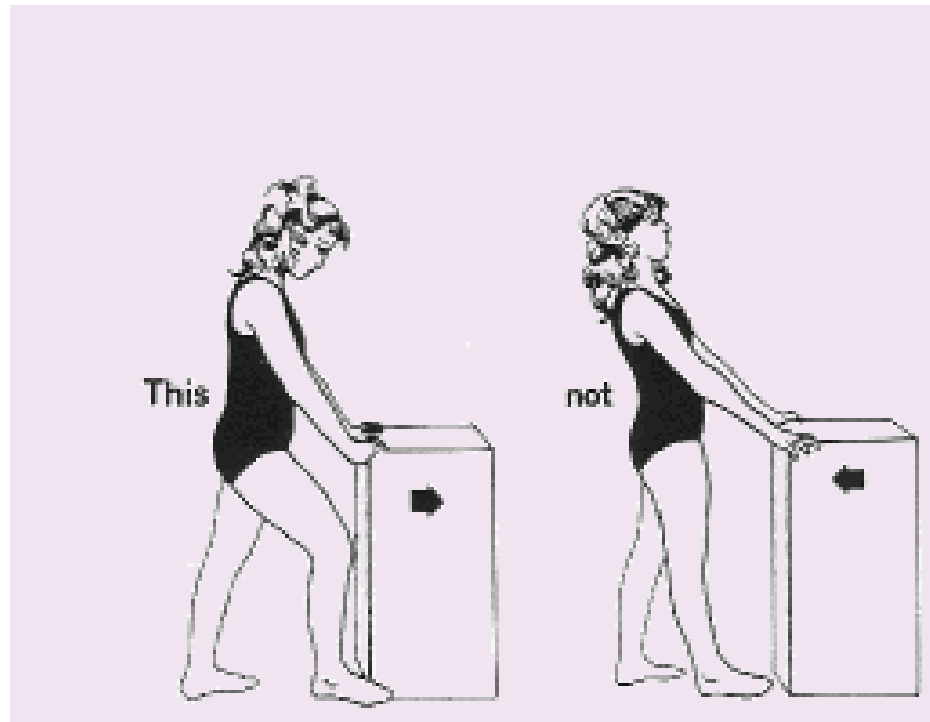
# 高處取物

- 從高處取物時應踩腳墊不要以踮腳尖方式拿取



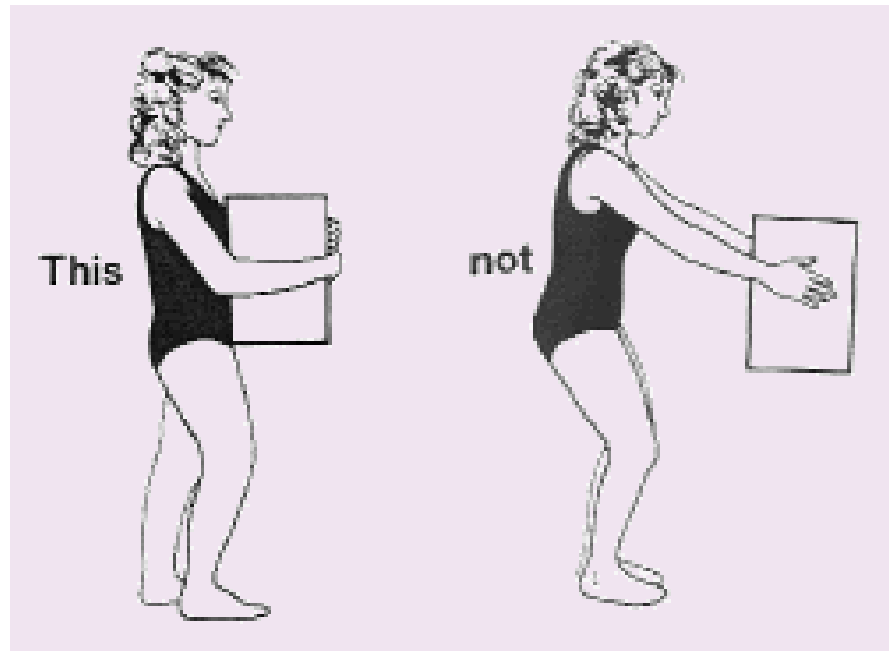
# 移動重物

- 移動重物時宜推不宜拉



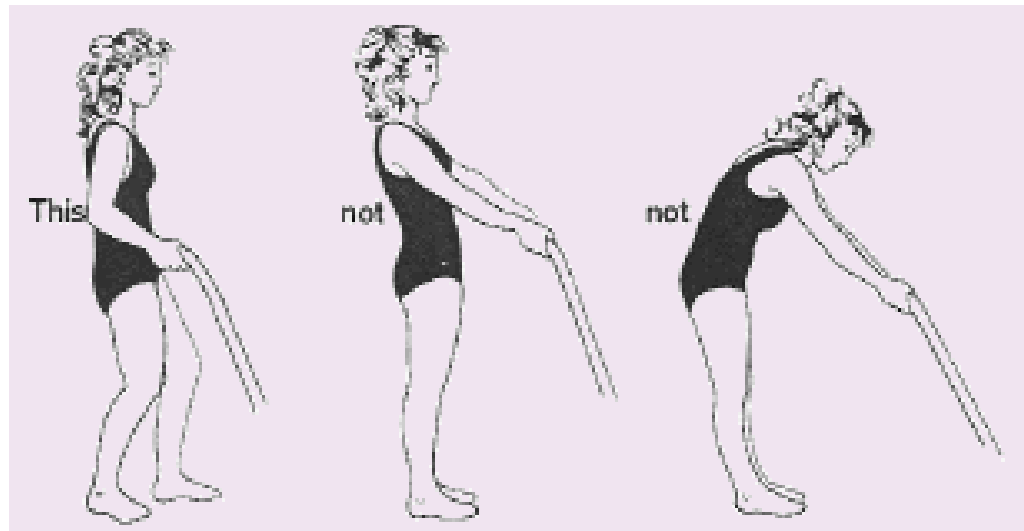
# 抱重物

- 手持物品時越靠近身體越省力



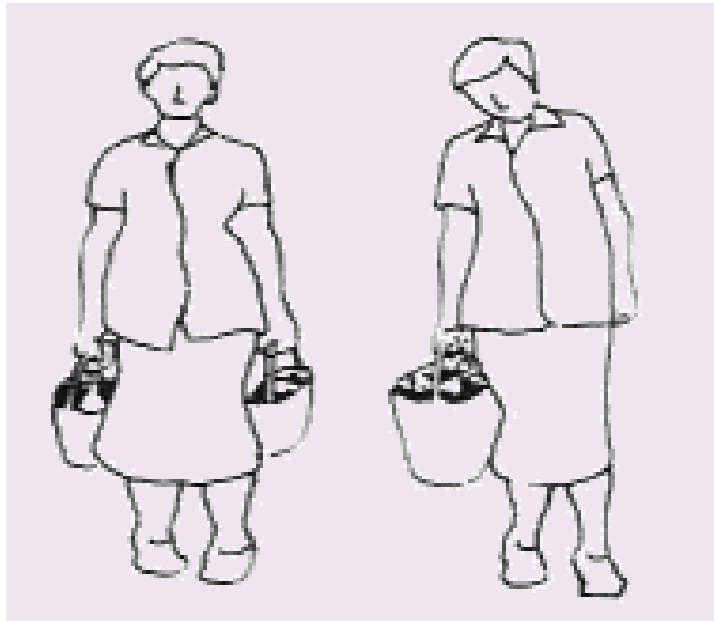
# 清掃姿勢

- 打掃時拖把或掃帚長度要夠長才不至於彎腰駝背
- 若以右手 拿掃帚則左腳略為向前



# 分散重量

- 物品重量應平均分配在雙手可避免脊柱側彎



謝謝聆聽