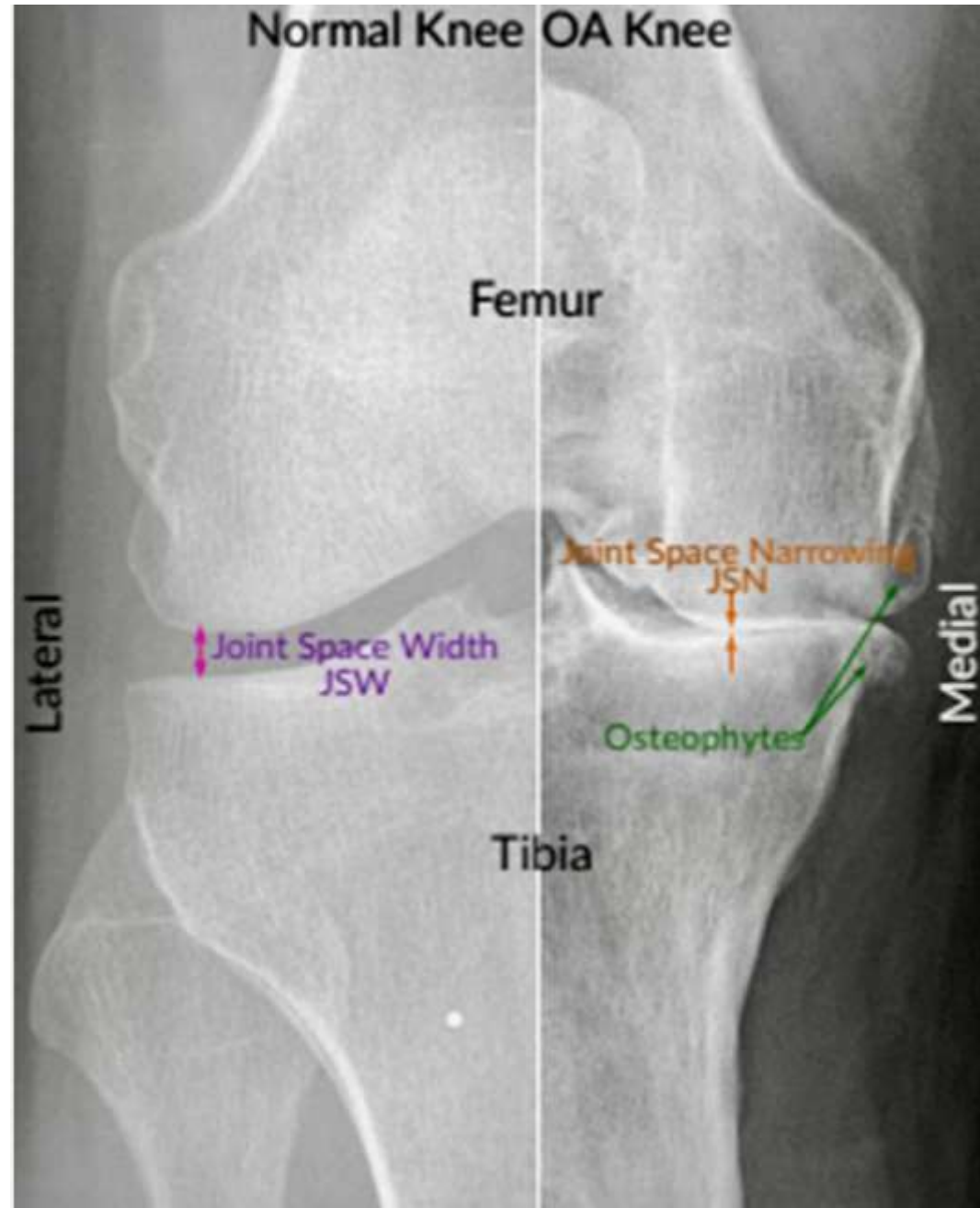


# Old Age: don't take it lying down - a physiotherapy perspective

Jules Reilly

# Ageing effects on the musculoskeletal system

# AGEING EFFECTS ON THE MUSCULOSKELETAL-SKELETAL SYSTEM



Joints

Muscles/tendons

Bones

Ligaments

Nerve endings

# WHAT IS ARTHRITIS?

Not everyone develops osteoarthritis

More common as we get older

Predisposing factors are:

previous injury/

genetically susceptible/

not totally understood

# HIPS

Stiffness

Physically demanding sports as youngster can contribute

Joint replacement highly successful

# TIPS FOR HIPS

Lose weight

Shock absorbing shoes/insoles

Mobility exercises on land or pool (better)

Balance exercises (more about this later)

Raised toilet seat

Walking poles

# KNEES

Two joints involved as kneecap (patella) forms joint with knee also

Coordinated muscular control needed to limit shearing forces

Some folk have better genetic boney alignment than others

Knock knees & bow legs..... the bad news





# TIPS FOR KNEES

Correct poor alignment when sitting to standing (centre of knee should be over 2nd toe).

Don't get heavy - the knees just can't take it!

Bannisters on each side of stairs

Higher seats easier

Walking poles

Strengthen your gluteal (bottom) and thigh muscles

Hamstring stretches

A word about sticks .....opposite side to bad leg please

# FEET

Has to mould to ground/ propel body forward and balance that big body on top

Ligaments stretch/ feet splay/ arches often flatten

Has repercussions on knees, hips and back

Bunions - genetic tendency/ poor footwear

Poor foot function and tight calf muscles

Plantar fasciitis (policeman's heel)

**\* A serious word about worn footwear**







**Before | After**

# TIPS FOR FEET

Medial arch supports (not squashy ones)

Podiatry (made to measure insoles)

Shock absorbing footwear/insoles

For arthritis of small foot joints try firm soled shoes

Calf stretches (especially for bunions & plantar fasciitis)

**\* invest in supportive slippers, consider integral or separate arch supports**

# SHOULDERS

All movements become stiffer, arm elevation often only 120 degrees

Muscular control poorer as tendons prone to deterioration



# TIPS FOR SHOULDERS

Reposition items that are high up

Fill gap between shoulder and neck with enough pillows

Keyboard work - keep things close

Sieve for boiling potatoes?

Painful arm in first when dressing and out last

Don't push into pain - tendons will just get more painful

Find alternative ways of doing painful tasks

Long handled aids may help

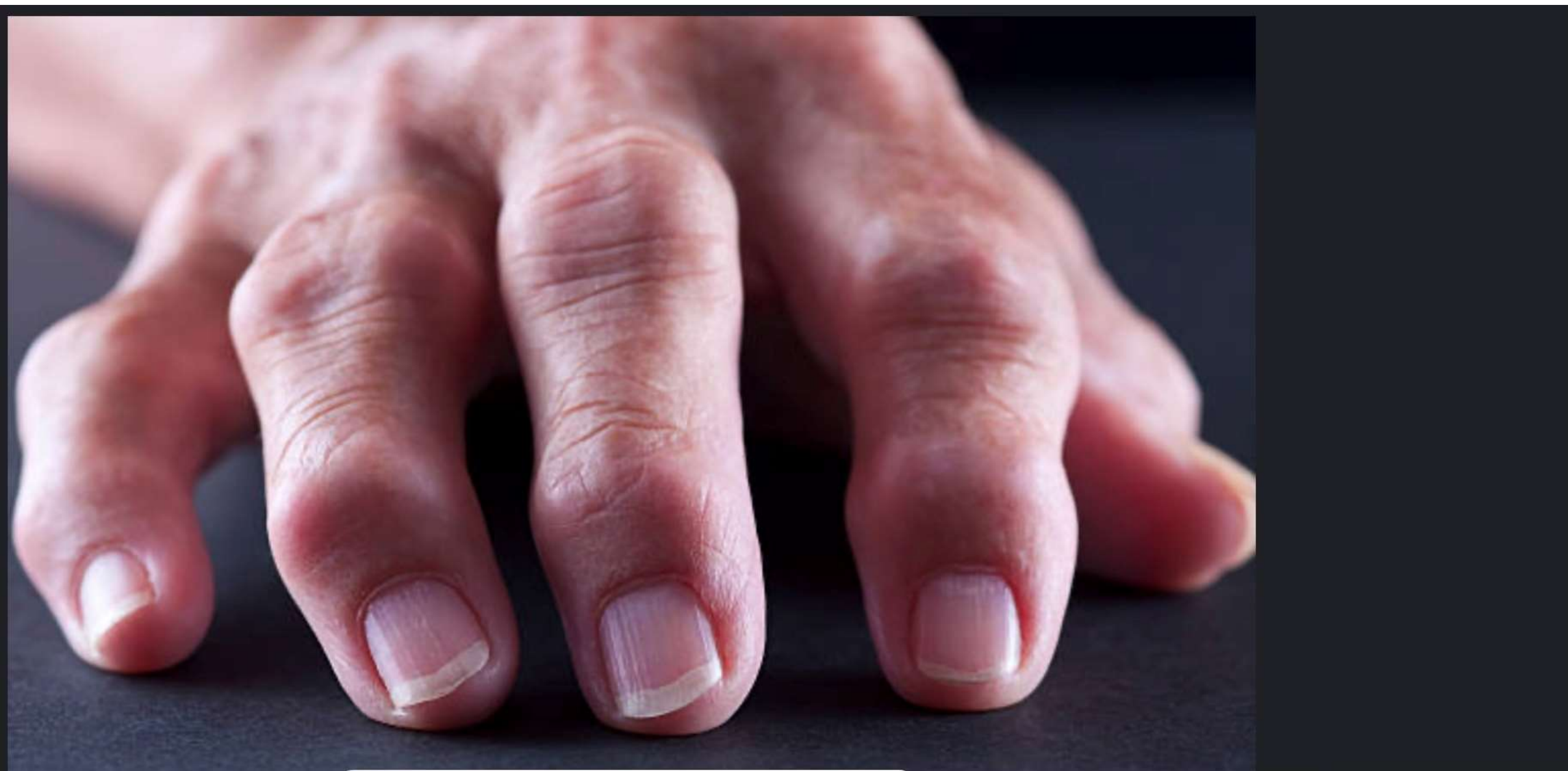
# HANDS

Base of thumb prone to arthritis. Overuse as we have opposing thumbs

Muscular control of thumb weakens so results in poorer support

Finger joints get knobbly. Can become hot & angry but usually settles down





# TIPS FOR HANDS

Wear thumb splint for aggravating activities

Thicker barrel pen / cutlery

Jar/ bottle opener gadget

Strengthening exercises. Thumb tip to little finger tip and press together

[Visit the PUSH Store](#)

4.4 ★★★★★ (426)

PUSH CMC Thumb Brace Size 2 Right

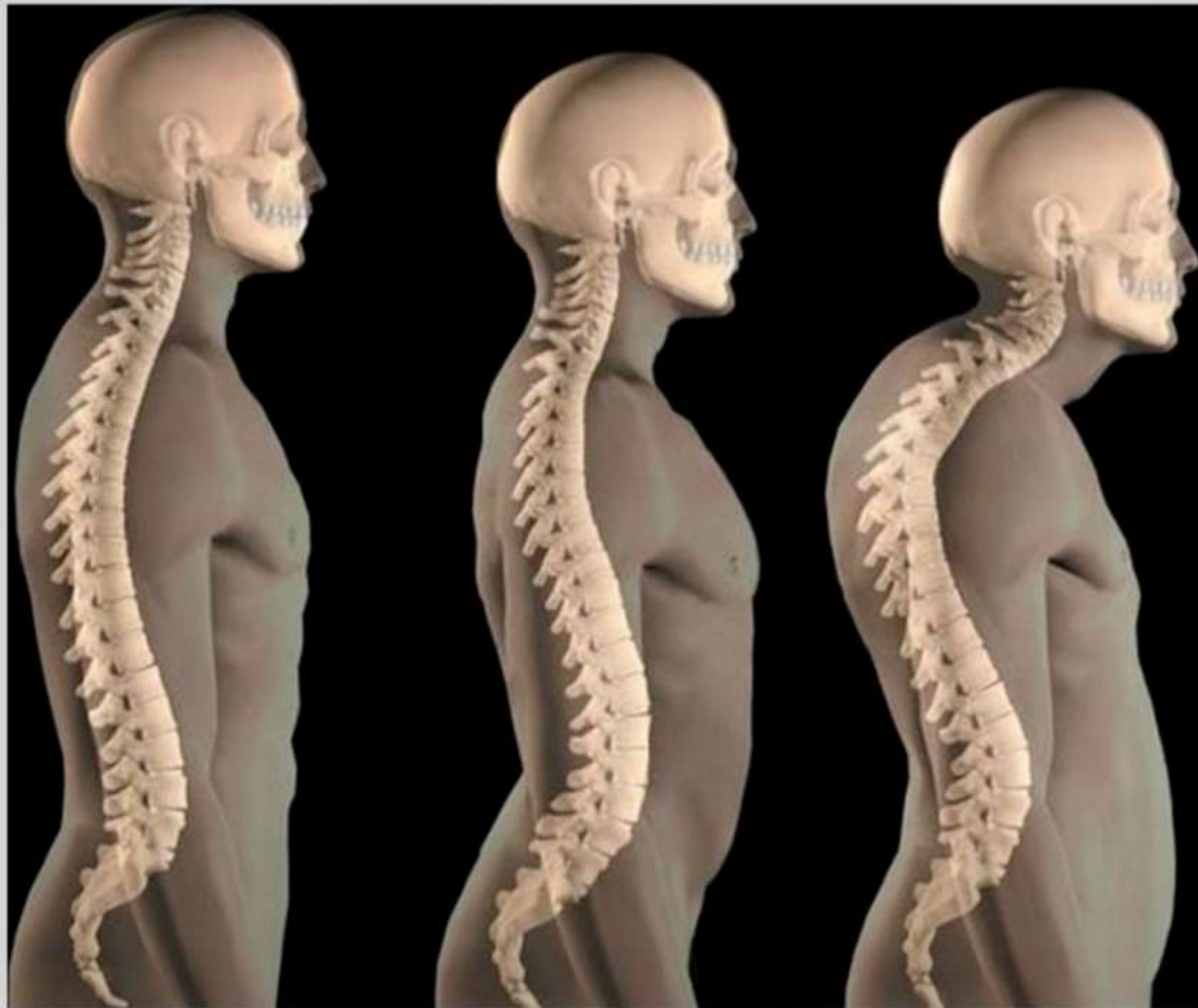


# THE SPINE

We become shorter due to disc dehydration

Spinal facet joints are more compressed together

Narrow exit for spinal nerves may be compromised causing limb pain





# THE NECK

Inward curve accentuated leading to “poking chin”

Adaptive shortening of muscular “guy ropes”

Neck turning limited in the “poking chin” position

\* If you get dizzy turning your head or looking up- don't do it! Discuss with GP

# TIPS FOR THE NECK

Tuck chin in and adjust activities to help improve posture (keyboard & craft work are both frequent culprits)

Pillows to fill gap between ear & point of shoulder. Some find memory foam ones good.

Neck mobility exercises keeping chin in (ie face vertical)

# THE THORACIC SPINE

Outward curve accentuated (kyphosis)

Prone to osteoporotic collapse (bones become wedge shaped ) ie permanent shape change

Rib cage changes shape leading to reduced lung capacity and more abdominal protrusion

# TIPS FOR THORACIC SPINE

Raise breast bone (sternum) to improve posture

Deep breathing exercises in correct posture

Reclining is fine

Being propped up in bed with legs straight  
can aggravate pain

This is a good stretch

# THE LUMBAR SPINE

Natural inward curve (lordosis) often accentuates and muscles at back tighten

Prone to stiffness, often causing the low back to have to do all the movement

Leg pain may occur if exiting spinal nerves don't have enough room

Don't be hard on folk who lean on trolleys - they may have spinal stenosis

# TIPS FOR THE LUMBAR SPINE

Exercises see NHS website (search: physical activity guidelines for older adults [www.nhs.uk](http://www.nhs.uk))

Pool exercises/aqua aerobics

Tighten core muscles 30% (our natural corset)

Walking can help

The “golf bend” for picking up things

Helping hand gadget

# CONSIDER THESE ACTIVITIES

Mobility and strengthening exercises regularly

Walking

Yoga/Tai Chi/Pilates

Pool exercises

Gardening

Balance exercises at home – **very important**

Dancing (any type except break dancing). Good for the brain too

# IN CONCLUSION

“So far the only thing that has been shown consistently to increase life expectancy and allow those extra years to be spent in good health is getting off our bottoms”

(from “The Book About Getting Older” by Dr Lucy Pollock)



