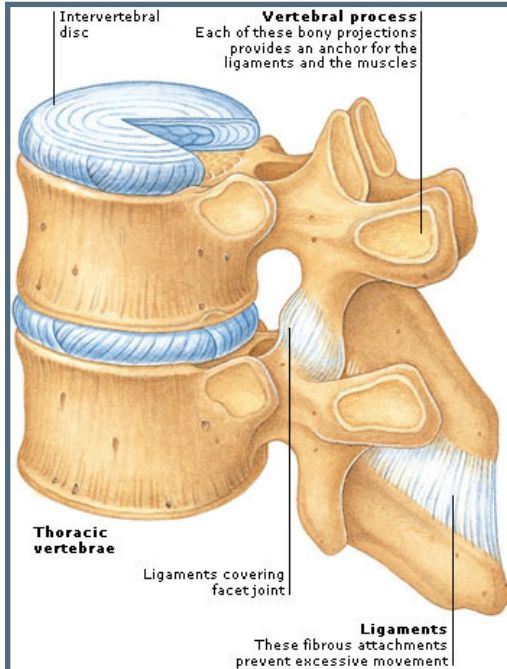


"A third of all reported accidents are as a result of poor or incorrect manual handling"

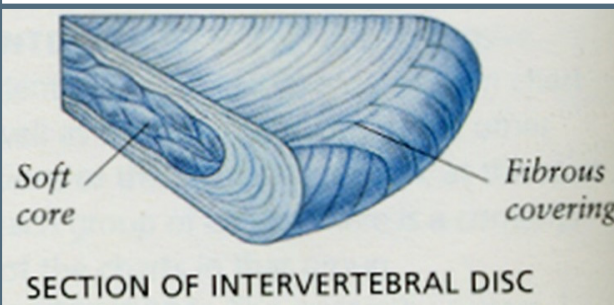
Q: What is manual handling? A: "any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or bodily force"

Structure of the human spine



Comprises Of:

- Vertebrae
- Disks (23 in total in the human spine, C6, T12, L5)
- Muscles
- Tendons
- Ligaments
- Nerves



Spinal Discs

- Act as shock absorbers
- Firmly attached to vertebrae act as ligaments
- No blood supply
- Annulus stretches and relaxes during movement.
- Regulate pressure on the back



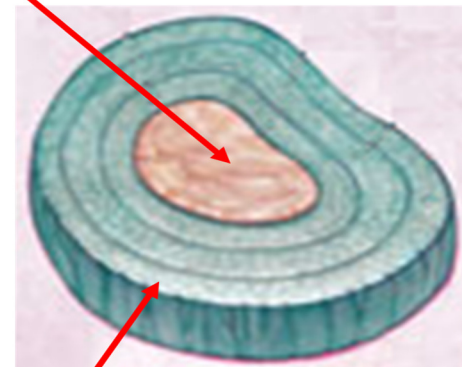
Spine - Strong and Flexible

- Gentle 'S' bend
- Move or lift in wrong way balance can be disturbed

Problems – contributory factors

- Poor physical condition
- Posture
- Lack of exercise
- Excess weight
- Illness

Nucleus



Disc

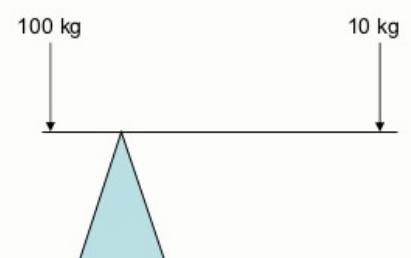
Annulus

Barriers To Good Lifting

Barriers Externally Include:	Barriers Internally Include:	Barriers Personally Include:
Cold Weather	Lack Of Personnel	Tired
Heat	Work Pressures	Medical Condition
Slippery Surfaces	Uneven Teams	Up Late Night
Wind	Lack of Room	Cold
Rain, Sleet, Snow		Hot
		Not Exercised/ Stretched



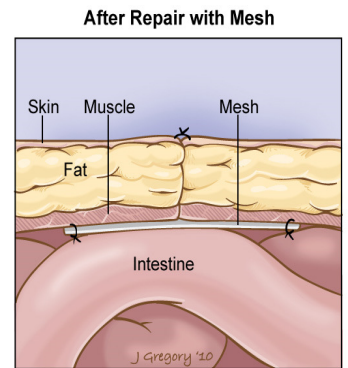
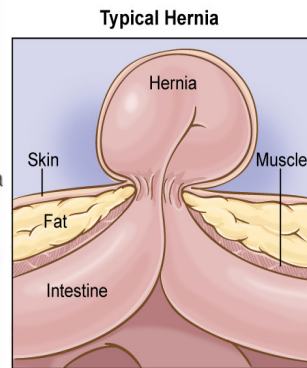
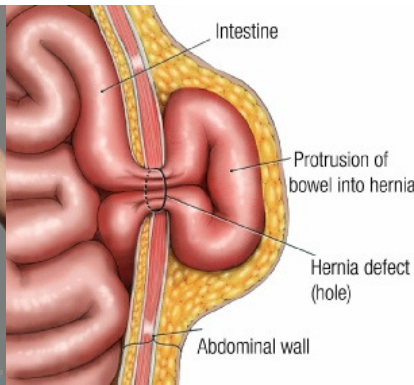
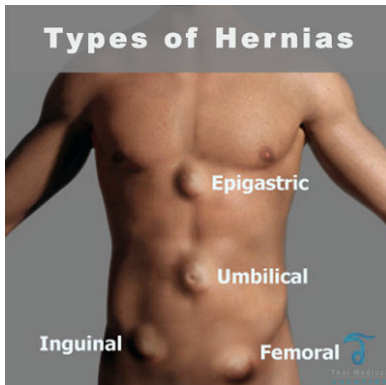
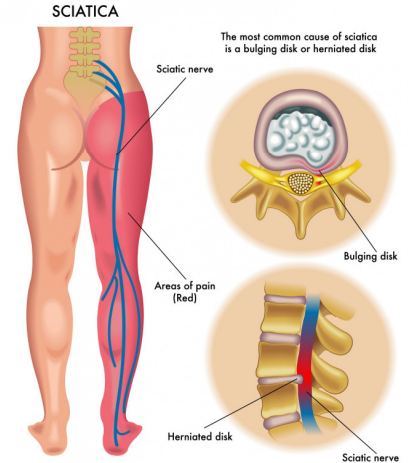
Leverage can increase the weight on your lumbar by a factor of 10



When lifting the back acts as a lever, the fulcrum (pivot point) is in the **Lower back** when lifting incorrectly, the leverage can increase the weight on your lower back by a factor of 10!!

Possible Injuries Include:

- Hernia
- Slipped Disk
- Trapped Nerve
- Fractures, Cuts & Abrasions
- Torn Ligaments, Tendons, Muscles
- Nerves
- Hyperextension Injuries
- Shock Loading Injuries (Muscle Detachments etc)



Manual Handling Regulations 1992

Hierarchy Of Measures:

- a) Avoid Hazardous Manual Handling Operations So Far As Is Reasonably Practicable
- b) Make A Suitable And Sufficient Assessment. (Competent Person)
- c) Reduce The Risk Of Injury

Manual Handling Risk Assessments

- | | |
|----------|---------------------------|
| T | Task |
| I | Individual's capabilities |
| L | Load |
| E | Environment |

Lifting Zones and Lifting Weights

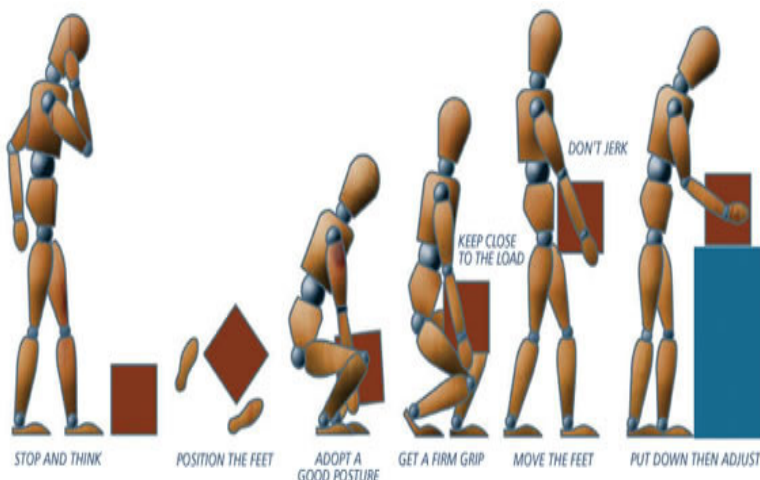
No Maximum Weight Limit

Lifting Considers Age, Weight, Fitness etc of individual performing task

Ideally Individuals Not To Lift Above Head Height

Ideally Individuals Not To Lift From Below Floor Level

Kinetic lifting (good lifting technique)



Stop and Think! – Can I Use Mechanical Aids?

- Position The Feet:
- Shoulder Width Apart, One Leg Slightly Further Forward (Leading Leg)
- Adopt A Good Posture:
- Keep Back Naturally Straight
- Tuck In Chin! – For Above Shoulder Lifts
- Head Up! – For Low Level Lifts
- Bend At The Knees (But do not overflex)
- Get A Good Grip
- Keep Close To The Load
- Don't Jerk
- Golden Rule – Hips & Shoulders Pointing In The Same Direction