# THE EQUINE JOINT STRUCTURE & FUNCTION

### BROUGHT TO YOU BY:



www.thehorsevet.com.au

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Where two or more bones meet, with most enabling movement and load transfer from one bone to another.

# TYPES OF JOINTS

FIBROUS or fixed, such as the skull structure.

CARTILAGINOUS such as between the intervertebral discs.

SYNOVIAL or free-moving, the most common in horses

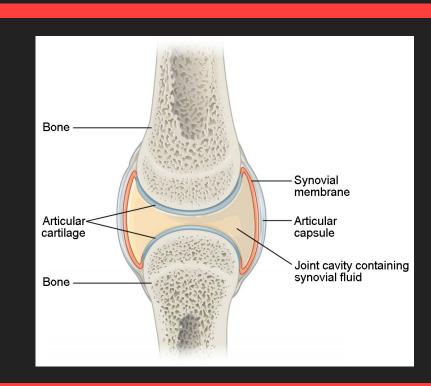


70-80%



of articular cartilage is water.

The horse's body has 18 synovial joints that are either ball and socket, hinge, or gliding types.



#### Shoulder

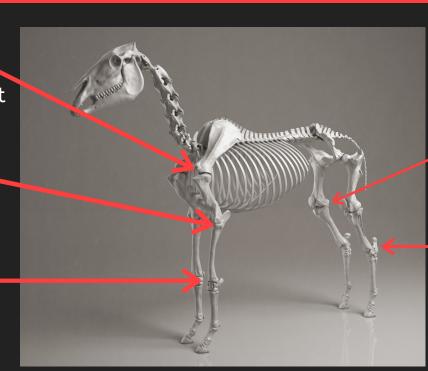
Ball and socket joint

#### Elbow

Hinge joint

#### Knee

Gliding joint (Equivalent to human wrist)



#### Stifle

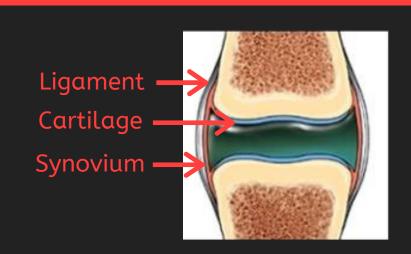
Hinge joint (Equivalent to human knee)

#### Hock

Gliding joint (Equivalent to human ankle)

#### **Healthy Joint**

- Joint cartilage between the bones for cushioning.
- Some synovial fluid to lubricate the joint action.
- Fibrous capsule around the "action" area helps stabilise joint.
- Tendons and ligaments healthy and in tact for joint stabilisation.



#### **Damaged or Diseased Joint**

- Osteoarthritis: progressive degradation and destruction of articular cartilage.
- Osteochondrosis: developmental problems affecting joint cartilage.
- Bone Chips: bone fragments within a joint.

#### Causes

- Tendon and ligament wear.
- Wear and tear.
- Trauma
- TraumaConformation





## **Looking After The Equines Joints**

**VET** 

Work with your veterinarian to diagnose and treat developmental and other joint issues early.

Consultation
Lameness exam
Nerve blocks
X-rays
Treatment



#### **Local Treatment**

Targeted, highly effective treatment.

Joint injections: \*Cortiocosteroids.

Biologicals: \*Platlet Rich Plasma (PRP)

#### **Systemic Treatment**

Treats the "whole horse" either orally, intramuscular or intravenous.

\*Non-steroidal anti inflammatory drugs (i.e. phenylbutazone).

\*Hyaluronic Acid \*Pentosan \*4Cyte Epiitalis \*Other joint supplements

\*As directed by your veterinarian





## **Balanced Diet and Nutrition**

Adequate vitamins and minerals (especially during stages of growth).

High Omega 3 rich feeds for anti inflammatory benefits (CEN Oil).



#### HEAT

Warming joints, ligaments and muscles BEFORE exercise:

- Increases blood circulation and cell activity.
  - -Promotes healing.
  - -Improves flexibility.



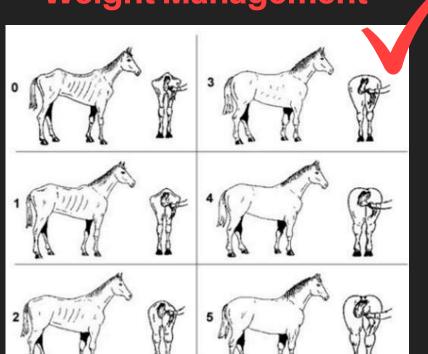
#### ICE

Icing joints AFTER vigorous exercise:

- Reduces swellings and inflammation.
  - Reduces pain.
- Promotes quicker healing.



### **Weight Management**



# Regular Exercise and Movement

