

# OSTEOCHONDRITIS DISSECANS (OCD) OR DEVELOPMENTAL ORTHOPEDIC DISEASE (DOD)

## ETIOLOGY

- Osteochondritis dissecans (OCD) is a condition in young, rapidly growing horses that is classified as part of a group of conditions called Developmental Orthopedic Disease (DOD). It affects the bone and cartilage in joints during development.
- OCDs can occur in most all joints, but they occur most often in the hock, stifle and fetlock joints.
- Lesions develop in the cartilage and bone of joints in growing horses. OCD is when the lesion separates from the underlying bone.

### OCD IS USUALLY CAUSED BY A COMBINATION OF SEVERAL FACTORS, INCLUDING:

1. Rapid growth and large body size
2. Nutrition: Diets that are high in energy or have an imbalance in trace minerals
3. Genetics: OCD may be partially inherited
4. Hormonal imbalances: Insulin and thyroid hormones
5. Trauma and exercise: Trauma (including routine exercise) is often involved in the formation and loosening of the OCD flap

## SYMPTOMS

- Symptoms have been observed in 5 to 25% of horses across all breeds.
- Swelling in the joint, particularly in a young horse, is often the most common symptom of OCD that is initially observed. Signs of OCD have been observed in horses as young as 5 months of age but signs may not be seen until they begin work.
- The severity and location of OCD will determine the degree of lameness. Many horses suffering from OCD will be sound at a walk but show signs of lameness at a faster pace.

## RISKS AND/OR COMPLICATIONS

- Veterinarian examination is recommended with any joint swelling or lameness in order to diagnose OCD and to rule out other causes. Your veterinarian may complete the following diagnostics:
  - Physical Exam
  - Lameness Exam
  - Radiographs

## MANAGEMENT RECOMMENDATIONS

- It is important to maintain regular but not excessive levels of exercise for normal foals, weanlings and yearlings to aid in normal development and growth.
- When a horse has been diagnosed or is suspected to have OCD it is important to ensure they are given stall rest to prevent further damage to the inflamed or abnormal joint.

## DIETARY RECOMMENDATIONS

- It is important to ensure that both the weanling/yearling and the pregnant/lactating mare are receiving a properly balanced diet with the required levels of vitamins and minerals to aid in preventing the development of OCD.
- A ration balancer can be used to ensure a balance of minerals including micros and macros -
- Excessive mineral supplementation can be as critical a problem as being deficient so a correct mineral ratio is needed. For example, the zinc: copper and calcium: phosphorous ratios.
- A diet low in NSC is necessary to ensure a feed that produces a low glycemic response.
- A feed that incorporates fat and fibre as an energy source is important to help minimize the amount of sugar and starch in the diet thereby reducing the chances of OCD.
- It is recommended to have your hay tested to ensure there is an accurate balance of nutrients in the grain ration to compliment the hay analysis.

## SUGGESTED PURINA PRODUCTS

### FEED NOTES:

- Minimize starch and sugar intake by utilizing fats and soluble fibre as safe sources of calories/energy that do not produce a high glycemic response
- A foal/yearling with a nutritional deficiency or receiving a diet that is not well balanced (incorrect ratios or below recommended levels) can be more prone to OCD
- A calorie blend designed to help minimize DODs by controlling insulin response
- Supplementation with a Ration Balancer can provide a higher level of fortification and balanced diet
- The addition of Horse Plus to support proper immune function and overall health
- Balanced amino acids with added lysine and methionine for improved muscle and joint development
- Pre and probiotics to promote healthy gut bacteria and protect against harmful bacteria
- Added Omegas for cognitive development and anti-inflammatory properties
- Always aim for an ideal body condition

Recommended for Broodmares:

**EVOLUTION MATERNITY  
OMOLENE MATERNITY 300**



Recommended for Foal/Weanling and Yearlings:

**EVOLUTION JUVENILE  
OMOLENE MATERNITY 300**



Ration Balancer:

**EQUILIBRIUM OPTIMAL**

#### FEED RATE PROTOCOL NOTICE

This feeding protocol described here pertains only to Cargill Limited Horse Feeds. There is not established feeding protocol that all feed companies must follow. Purina provides two feeding rates on their tag a "Minimum" and a "Purina Superior". The "Minimum" meets the levels established by the NRC Nutrient Requirements of Horses (2007), which will prevent all classic nutritional deficiencies. The "Purina Superior" is a greater level of fortification that promotes an optimal level of performance and immunity. By no means does that imply "Minimum" is subpar, and for the non-competitive horse, that stays home year round and has no health issues there is probably no need to exceed this level. However, if you are feeding a true equine athlete, with all the immune stresses associated with that level of competition, then the "Purina Superior" level is paramount to ensure an optimal level of performance and immunity.