# Ask the Nutritionist

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Ask the Nutritionist is a monthly column featuring questions answered by PhD equine nutritionists and sponsored by Purina Animal Nutrition. Have a nutrition question you want to see featured? Email Marie Rosenthal. For clinics looking for specific nutritional advice, **visit purinamills.com/ask-an-expert.** 

## What nutritional strategies support proper joint development in young horses?

Joint and bone abnormalities, collectively known as developmental orthopedic disorders (DODs), are a common growth complication in young horses. There are several nutritional strategies to support proper joint development, but it's critical to remember that DODs are a function of many factors, including genetics, management and nutrition. A multifaceted approach may limit the incidence and severity of DODs. Here are some guidelines when thinking about young horse growth:

- Plan and determine your growth goals early: rapid vs. moderate vs. slow rate of gain.
- Continually monitor growth by measuring the horse's
- body weight, wither height and/or hip height. Look for steady growth without the fits and starts often associated with greater incidences of DODs.

#### FEEDING PRINCIPLES FOR YOUNG GROWING HORSES

Feed a young growing horse a diet composed of forage (minimum 1% of bodyweight) and a concentrate feed formulated specifically for young growing horses. Feeds like Purina<sup>®</sup> Ultium<sup>®</sup> Growth Horse Formula, Purina<sup>®</sup> Omolene<sup>®</sup> 300 Mare & Foal Horse Feed or Purina<sup>®</sup> Impact<sup>®</sup> Professional Mare & Foal Horse Feed are specifically formulated to provide energy for growth while supporting optimal bone growth and development.

Feeding good quality forages ensures that the foal will receive the fiber necessary to develop hindgut function. However, one must account for the nutritional contribution of forage. Forage intake should be monitored and possibly restricted in faster growing foals to avoid excess calorie intake. In cases where forage alone can supply adequate calories to the young horse, a ration balancer such as Purina<sup>®</sup> Enrich Plus<sup>®</sup> Ration Balancing Horse Feed can be fed to provide the protein, vitamins and minerals necessary in the precise balance required for sound growth.

When forage quality is poor, providing a complete feed, such as Purina<sup>®</sup> Equine Junior<sup>®</sup> Horse Feed is an ideal way to ensure the foal is receiving the necessary roughage plus the required energy and nutrients in the optimal ratios.

If a growing horse shows signs of a DOD, start with nutrition and reduce energy intake. The goal is to reduce dietary calories without restricting necessary nutrients. Consider a ration balancer, like Purina<sup>®</sup> Enrich Plus<sup>®</sup> Ration Balancing Horse Feed to



provide essential nutrients, in addition to feeding forage to supply calories.

Here are some specific feeding strategies by life stage: **NEWBORN FOAL** 

Early in a foal's life, the mare's colostrum and milk supply all the nutrients it needs. Ensuring the mare eats a nutritionally balanced diet during gestation and lactation will help her to produce nutrient-rich milk, which can lay the foundation for sound foal growth. As the mare's milk decreases in quantity and nutrients, support the nutritional requirements of growth with nutrients

from other feed sources, such as Purina Ultium Growth®.

#### WEANING

Prior to weaning, ensure the foal is consuming adequate levels of a concentrate specifically formulated for growing horses to help maintain a steady growth rate. Weaning can be a stressful time and young horses may experience gastric discomfort. Feeding Purina<sup>®</sup> Outlast<sup>®</sup> Gastric Support Supplement can support proper pH of the young horse's stomach during this stressful period.

Feeding the young growing horse is an exercise in patience and planning. The goal of any feeding program should be to promote sound growth and development by providing optimal nutrition. Each foal and DOD case is unique, so create an individualized nutrition plan based on the specifics of each animal.

Contact a Purina Ph.D. nutritionist for consultations through Purina Customer Service, 800-227-8941 or send us a message at www.purinamills.com/ask-an-expert.

### **UPCOMING TOPICS**

March: Foal nutrition • April: Special needs of the competition horse Have a question you want to see featured? Send them to modernequinevet@gmail.com.



#### ABOUT THE AUTHOR

Dr. Robert Jacobs is the Equine Innovation Manager at Purina Animal Nutrition. He is responsible for conducting research aimed at better understanding how nutrition impacts various areas of equine physiology.