

BALANCED FOAL NUTRITION

A balanced diet is very important in raising healthy foals. For most horse owners, it is a big question mark for the foal's genetic potential to achieve success and how much feed it should consume in order to become a strong racehorse.

The main factors affecting the development of bone and cartilage problems are genetic predisposition, trauma, wrong exercise, rapid growth and nutritional imbalances.'

Although more than one factor plays a role in the development of skeletal system diseases such as OCD (fragment fractures), osteoarthritis (bone weakness), synovitis (joint fluid disorder), which are frequently encountered in racehorse foals, nutrition all over the world from past to present are these. It has undoubtedly attracted the most attention in the scientific world and the equine industry.

“Growth” consists of skeletal system development and weight gain, “balanced growth” is separated from the term growth with a very fine line, it is the gradual development of the skeletal and muscular system together with weight gain, in accordance with race, age and genetic potential. Figure 1 shows the average weight gain of an English foal with an ideal adult weight of 500 kg. Although monthly weight gains are ideal, it is possible to determine whether there is a balanced growth, but by analyzing the ration program according to the individual characteristics of the horse, the vitality of protein, carbohydrate, fat, vitamins and minerals. determines the need to meet the changing needs according to the phases

Tablo 1.

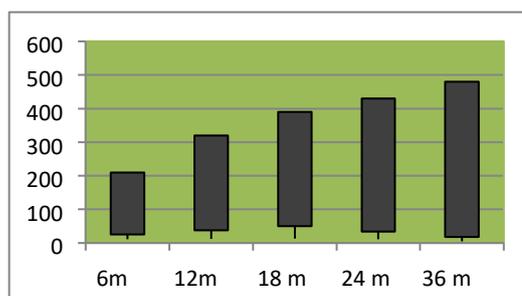


Fig 1. Development of British foal with an adult weight of 500 kg

Table 1. Average values of the most important nutrients needed by the English foal (Nrc 2007)

Age	Enerjy Mcal	Protein g	Lizin e g	Ca g	P g
6 mk	15	680	30	38	21
12 m	18	840	36	37	20
24 m	21	820	35	36	20
Low egzersiz					
24 M intense	28	960	40	36	20



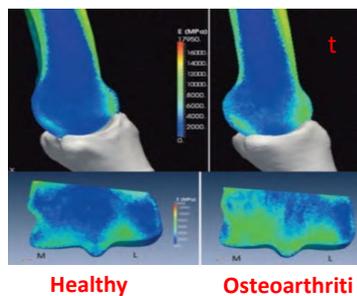
Another important point is that giving too much of all nutrients is risky and disrupts the mineral balance. Let's continue by examining 4 different rough ration programs, which are prepared assuming the paddock, grass, clover and all other

feed raw materials of a 6-month-old, 220 kg, female, English foal that goes to the paddock during the day:

Ration	A	B	C	D
Hay-alfalfa (kg)	4.5	4.5	4.5	4.5
Oats (kg)	1.8-2.2	1.5	1.5	1.5
Soybean meal (kg)				0.3
Cracked corn (kg)				0.2
% 25-30 protein supplements (kg)		0.5	0.5	
Ca supplements (g)			60	
*Premiks (g)				50
Salt lick	+	+	+	+
Total (kg)	6.2-6.4	6.5	6.5	6.5

* Specially formulated vitamin mineral complex

Ration A, Since the energy provided by the ration is sufficient in the foals fed with ration A, the horse will not be weak, but it is inevitable to encounter skeletal system problems because feeds such as oats are insufficient and unbalanced in terms of protein, especially amino acids such as lysine and minerals. It can lead to the breeding of foals with bone structure as in Photo 1.



Healthy

Osteoarthritis

Photograph 1. Guelph

University green areas high risk of osteoarthritis (bone weakness)

Ration B, The energy of Ration B, which is approximately 10 MJ/KM provided by oats, was utilized, and it was tried to be completed by combining the protein and vitamins-minerals needed at a high level in this period with feed additives. The ration is more balanced compared to A.

Ration C, Although feed additives, especially calcium-containing, added on top of ration B are used at the recommended rates on the package, they may adversely affect the mineral and vitamin balance. It should not be forgotten that giving a vitamin or mineral more than the need in horse nutrition does not mean raising good and healthy foals! On the contrary, it negatively affects balanced growth.

Ration D, will meet both the energy and protein needs of the foal, but it must be formulated as a premix according to feed raw materials, in this case, balanced nutrition and foal growth can be achieved and it is very advantageous especially for those who want to make economic breeding

In summary, the most important point that I want to share with you with this article is that the balanced ration is different for every farm and even for every horse in some conditions. Let's not forget that no farm's paddock conditions, roughage or concentrate feed quality are the same as the genetic characteristics of foals. The first step in raising a good racehorse is to raise well-balanced foals from well-fed mares.



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