Base Feeds

for the

"Keep It Simple Diet"

By The Nude Horse
(Equine Epidemiologist)

Finding economic, safe feed types is simple once you know what they are and why they are your best choice.

Your priority:

1) Supply a calorie controlled base feed, high in fibre and low in starch and sugars - no grain if possible.

2) Add a high quality, balanced and preferably chelated and organic mineral supplement along with important vitamins, we recommend FLOWERS GOLD by Wattlelane Stables as the most bio available and scientifically balanced feed supplement. You should easily achieve weight gain, quality coat lustre and strong hooves when the diet is sustained with the right nutrients.

The truth about carbohydrates

Most grains are high in the polysaccharide carbohydrates of sugar and starch (NSC). This type is connected with metabolic disorders.
Feeds such as beet-pulp, lupin and copra by comparison are high in the fibre type polysaccharide carbohydrates.

Issues with feeding grains

During the digestive process, both sugars and starches are turned into the sugars. Horses have a limited capacity to digest substantial amounts of sugar and starch in the stomach and small intestine. The excess supply of sugar and starch travels through the small intestines and on into the hindgut where the trouble begins. An increase of sugar fermentation creates lactic acid. Lactic acid lowers the pH causing an acidic environment, this in turn kills off the good microbes. The dead microbes give off endotoxins that now enter the blood stream, this chain reaction often culminates in poor gut health, ill thrift (or obesity) and potentially laminitis.

Benefits of feeding Copra, Beet-Pulp and Lupins

Copra, Beet pulp and Lupins are rich sources of 'super fibre' type of polysaccharides. These super fibres have a high water-binding capacity (viscosity increases from the presence of fibrous polysaccharides). The fibres carry volumes of water and nutrients un-digested through the small intestines and on into the hindgut (large intestine) to release their nutrients and feed the good microbes such as Clostridium, Bifidobacterium, Lactobacillus, Staphylococcus, Enterococcus, Streptococcus, Enterobacter and Escherichia hence stimulating colonization of intestinal microflora.

Fibre types of Polysaccharides provide sustainable energy (slow release energy) and help stabilize blood sugar levels (reduction in glycaemic response). Polysaccharides fibre have also been claimed to increase the amount of feel-good chemicals in the brain, decrease gastric emptying, increase satiety, improve immune system health and assist liver function.

Lucerne Chaff has been recommended as preferable after comparing the content of non-structural carbohydrates or NSC of alternative chaff types. Carbohydrates also include starch, water-soluble sugar, and fructan. Of note Lucerne hay does not contain appreciable levels of fructan carbohydrate when compared to other types of hay. It has been shown when lucerne is baled later in the growing season with a stalkier appearance, the sugar content will be at its lowest. <u>Common NSC levels in hay/chaff:</u>

- Grass hays average of 13.8%
- Lucerne average of 11.3%
- Oat hay average of 22%
- Rye grass average 39.1%
- Clover hay average 11-18%

Minerals and Vitamins

By adjusting the volume of the base feeds to meet calorie needs, you can still guarantee the exact mineral and vitamin supply to meet daily dietary needs. How so?
We recommend adding 'Flowers Gold' by Wattlelane Stables, as it offers superior bio-availability (organic & chelated) of both macro and micro nutrients needed daily and each delivered in co-dependent proportions for the most beneficial uptake and utilization.

YouTube

Watch the video on how to make the '**Keep It Simple Diet'**: *https://youtu.be/rS8AeB1VPTU*

Of further interest:

Lupins contain around 40% proteins, great for building muscle.

Copra: The nutritional composition reveals that the fibre fractions are like those of pasture grasses. Copra is approximately 8-10% coconut oil supply which is a cool low gL - sustainable energy source.

Beet Pulp: The digestible energy content of beet pulp is greater than most hay and less than most grain ingredients, making its reputation as a weight building feed supplement. It also contains about 7% protein and a nice low 0.07% Phosphorus. Soaked beet pulp is an efficient way to increase a horse's water consumption (soak fully to maximum size 1 hour at least before feeding in 5X volume of added water). The fibre in beet pulp is mostly soluble fibre, so it is more readily digestible than pasture, hay or chaff.

Reservations some have regarding COPRA

Feeding copra solely on its own is an unbalanced feed source. For example, it has a calcium:phosphorus ratio of 0.25:1. A balanced feed should be 4:1. The other observation is copra's zinc to copper ratio is 2:1, yet ideally it should be 4:1. However rarely is copra fed as a sole feed, so usually these issues are resolved easily by adding a fortified balanced feed supplement (such as Flowers Gold).

Although copra is recognized as being high in protein, 40% of the protein is bound in the fibrous fraction of the copra, thus reducing its bio availability. If copra is used as a major component of the diet for young, growing horses, additional lysine, threonine, and methionine supplementation should be a consideration. Again, Flowers Gold compensates for these deficiencies.

References of interest for further reading:

* http://www.thenudehorse.com.au/keep-it-simple-diet.html
https://kppusa.com/2012/05/03/laminitis-whats-grain-overload/
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