## GATEWAY PRODUCTS



## Pellets: Good and Bad Supplements vs. Feeds



We are asked from time to time, why does Gateway have so few pelleted supplements?

Other supplement companies definitely have more pelleted supplements, and Gateway does mostly powders and liquids - why is that?

Pellets certainly have their place as a feed. A pelleted feed can help to reduce dust, reduce feed waste, and can help to keep your horse from sorting out the things they may not prefer to eat.

There are also obvious advantages in providing the proper balances of fiber, protein, fat, and carbohydrates specific to your horse's needs, in a concentrated form.

The equine stomach can only hold 2 to 4 gallons worth of feed at a time, so a pelleted concentrate is the best way to achieve balancing the diet in just a couple of feedings per day without overtaxing the entire digestive tract. Pellets are also extremely easy to feed, and generally well accepted. Given all those benefits, you would think supplements should also be pelleted, right?

We say absolutely not!

There are some negatives to feeding pellets of any type, and those issues are magnified in the case of pelleted supplements.

First and foremost is nutritional content. Pellets are typically created using water or steam to create the right texture, then fed into a pellet mill where extreme pressure and heat are applied to form a hard, durable pellet. Temperatures commonly reach what is called a "kill step" by design, where the temperature is high enough to kill off any potentially harmful bacteria or microbials that may be present.



The problem is that those harmful bacteria and microbials are not the only thing being eliminated, many helpful nutrients are heat sensitive, including amino acids, vitamins, and herbs. That means that manufacturers have to put in extra actives to make up for the loss during processing, and that increases the price of the product!

Many nutrients are quickly degraded or eliminated during the pelleting process!

There are also concerns about nutrients that can be oxidized, such as essential fatty acids. These healthy fats start to break down in the heat, and once severe oxidation begins, it may continue until all of the healthy fats are destroyed.

Supplements suffer more from these various instabilities than your typical feed, because supplements are often relied upon to deliver specific nutrients at a minimum level, and sometimes at a very specific amount.

Another challenge of pelleted supplements is that *many companies use uncommon*, *poor quality feedstuffs to make their pellets more durable!* With higher concentrations of nutraceutical-grade active ingredients than your typical feed, a pelleted supplement may have to rely on lower quality feed-grade ingredients such as waste products like dried distillers grains or other durable grain products to create a strong pellet. Not only does this commonly cause poor digestion of the pellet and it's contents, but ingredients like dried distillers grains can potentially introduce molds and mycotoxins to the feed. Supplement companies avoid this by cranking up the heat even higher, but again, that leads to destroying many of the vital nutrients you are attempting to feed in the first place.

Another general issue seen with pelleted supplements is the potential spike in stomach acid and digestive upset if the stomach is overloaded with these firm, dense pellets. This is a concern for horses with a history of ulcers, which affect a large percentage of horses. It also is a concern for seniors who do not have an efficient digestive process. Feed pellets are often designed to break down quickly in the stomach, but that is not the case with most pelleted supplements.

These are all valid reasons why we believe powders and liquids are far superior to pellets when it comes to delivering the highest quality, easily digested, and nutritionally specific supplements.

Our powders generally use a stabilized flax seed base, which is nutrient dense but easily digested, and gives the added benefit of supplying Omega 3 fatty acids, while maintaining low non-structural carbohydrate numbers (NSC) for horses with metabolic challenges or insulin resistance.

Our liquids are often preferred when a little moisture is needed to keep dry supplements or other feed additives from separating out, but they do not maintain low NSC numbers like our powders. The liquid supplements are highly palatable and very easy to dose accurately.

Both powders and liquids have EXCELLENT ABSORPTION RATES when compared to pellets, and are much easier on the digestive tract. Best of all, you are getting all of your amino acids, vitamins, and herbal components in a stable, uncompromised form that maintains the natural structure of the nutrient.

With the exception of psyllium pellets (a soluble fiber with no nutritional content), we recommend feeding unprocessed powders and liquids instead of pellets in almost every situation.