

Leveraging nutrition to support optimal hindgut function alongside appropriate medical treatment is an important management strategy in horses with poor fecal consistency. While the causes may vary, the recommended nutrition strategies are similar but may require some trial and error to determine what is most effective for a particular horse.

## **General Nutritional Objectives:**

- Keep ration as consistent as possible. Make all changes (including forage) gradually. Reduce mealtime stress.
- Feed easily digestible and high-quality forages, concentrates, and/or complete feeds.
- Reduce mechanical and physiologic demand on the colon by reducing total bulk and particle size of ration components.
- Support intestinal mucosa by promoting butyrate production (via fiber fermentation) and supplying glutamine (amino acid utilized directly by enterocytes) in the ration.
- Promote a healthy gut microbiome and support optimal immune function.

## **Nutrition Strategies:**

	Mild	Moderate to Severe
<b>Forage</b> Assess forage program first; making alterations here often have the most impact	<ul> <li>Remove all overly stemmy, mature hay from ration and replace with more digestible forage options</li> <li>Feed only high-quality grass or grass/alfalfa mix hay (RFV ≥ 86) with lower ADF (≤43%) and NDF (≤61%)</li> <li>Maximize access to fresh pasture unless symptoms are exacerbated</li> </ul>	<ul> <li>Partially replace long-stem hay in ration with beet pulp, hay cubes, chopped forages, pelleted forage replacements (hay pellets, Impact<sup>®</sup> Hay Stretcher) or a complete feed with forage built in (Equine Senior<sup>®</sup>)</li> <li>Utilize higher calorie complete feeds (Omolene<sup>®</sup> 400) for horses with elevated calorie requirements</li> <li>For extreme cases, eliminate all long-stem forage and implement a low-bulk diet (see low-bulk diet section for further detail)</li> </ul>
Concentrate	<ul> <li>Feed higher fiber, lower soluble carbohydrate concentrates (i.e. Ultium<sup>®</sup> Competition, Equine Senior<sup>®</sup> Active, Strategy<sup>®</sup> Healthy Edge<sup>®</sup>)</li> <li>Utilize ration balancers for easy keepers (Enrich Plus<sup>®</sup>, Enrich Plus<sup>®</sup> Senior, Omega Match<sup>®</sup> ration balancer)</li> </ul>	<ul> <li>Use a complete feed to supply essential calories, nutrients, and fiber in the ration (Equine Senior<sup>®</sup>, Omolene<sup>®</sup> 400)</li> </ul>
Supplements	<ul> <li>Promote butyrate production in the hindgut — RepleniMash<sup>®</sup> (especially for horses with a poor appetite and/or to promote hydration), psyllium or chia seed (at least 1 cup per day; introduce gradually), or beet pulp (at least ½ lb per day)</li> <li>Supply glutamine — WellSolve<sup>®</sup> WellGel<sup>®</sup> (1 - 2 cups per day) or SuperSport<sup>®</sup> amino acid supplement</li> <li>Provide gastric support (especially for horses on a low-bulk diet) — Outlast<sup>®</sup> gastric support supplement</li> <li>Optimize the microbiome to support normal fecal consistency and support immune function — Systemiq<sup>™</sup> probiotic supplement</li> </ul>	

## Low-Bulk Diet-for extreme cases

Reducing or eliminating long-stem forage from the ration for 3 to 8+ months reduces the mechanical load on the colon and helps alleviate mucosal trauma by decreasing ingesta particle size and minimizing total dry matter intake. The required length of time for improvements to be seen varies and will be dictated by the horse's response.

- Select a high-quality pelleted complete feed (i.e. Equine Senior®) with forage built in to provide an easily digestible ration that meets all the horse's nutrient requirements.
- Divide the daily ration into small, frequent meals (at least 4 to 6 per day, more is better) to promote consistent intake and encourage normal gastrointestinal motility. May consider utilizing an automatic feeder.
- In some cases, a small amount of high-quality forage may be included in the ration to alleviate boredom, but only if the horse can tolerate it.

- Alfalfa hay should be used with caution in horses with chronic diarrhea, as alfalfa is known to have a laxative effect in some horses.
- The horse may also be allowed to graze fresh grass; start with 10- to 15-minute intervals and monitor response.
- Long-stem forage can gradually be reintroduced to the ration once symptoms have improved and stabilized for at least several weeks, to identify if, how much, and what type of forage the horse can tolerate on a long-term basis.

## **Owner Compliance**

The implementation of a low-bulk ration can sometimes be met with owner resistance, but discussing the rationale behind this approach and explaining the (potentially) temporary nature of the feeding plan can help to increase owner compliance and overall success. Remind owners that these horses seem to be more sensitive to dietary and management changes and will likely require more conservative and gradual diet transitions in the future.