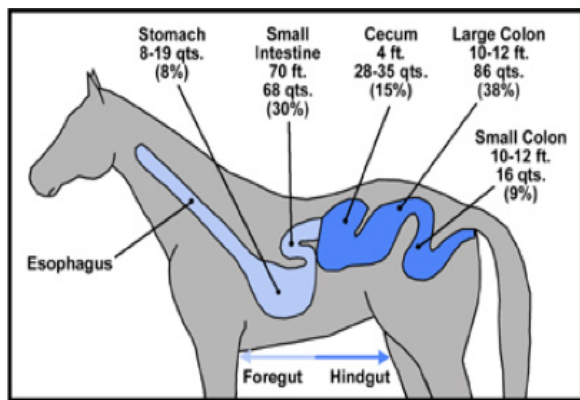


# Hindgut Microbiome & Fermentrics

## - Part 1

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Terminology such as “hindgut microbes” or “hindgut fermentation” have become the buzz words in equine nutrition. Scientists and Nutritionists were quick to recognize that when the hindgut is kept stable this equates to a healthier and more efficient horse.

Research efforts are focusing around understanding the function of the hindgut microbes in addition to how best to feed those microbes. One of many challenges with this research has been the extremely dynamic environment of the microbiome.

Microbial populations rapidly modify their form and function depending on nutritional components, physical attributes and environmental factors. In this article and in a series of articles to follow, we will discuss what is the microbiome, what is Fermentrics, how are we nutritionally classifying horses according to their microbiome and what does that mean for feeding our horses.

Essentially, we are feeding microbes, which become the nutritional foundation for the horse.

Have you ever wondered why it is that some commercial complete feeds or supplements will work for a group of horses, but there are typically one or two horses that just do not thrive on the feed or supplement? Often horse owners will say to me, “My horse is unique and feeding him is a challenge.” In fact, horses have their own individualized microbiome.

Several studies have determined that every horse has their own unique microbiome and regardless of how much we try to manipulate it, we cannot change that microbiome. In fact, when Scientists evacuated the hindgut contents of a test horse and introduced the microbes from a donor horse they discovered that within a matter of weeks the test horse’s microbiome had re-established and there was no evidence of the donor’s microbes.

This significant discovery has led to the research community isolating populations within the microbiome and developing what is called Fermentrics, or the nutritional classification of the horse’s microbiome. Next time we will discuss what populations are in the microbiome and how we are nutritionally classifying horses. 🐾

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