Writing Assignment #4

This article is an in-depth assessment of lactase activity after milk intake. The overall objective of this study was to examine various chemicals differences in small biological samples. The study was aiming to examine lactase persistence and non-persistence. In this case, the samples used were urine from 14 healthy men, after consuming an 800g dose of acidified milk and a yogurt, although due to a fermentation process in the yogurt that altered the lactose and galactose concentrations, the research continued only studying and reporting the effects of lactose in milk. Acidified milk (and probiotic yogurt) were used in this study due to the ability to reduce post-meal inflammation and to alter gut biota. Each of the subjects were provided the serving of milk withing 15 minutes of entering a “fasted state.” After this, a postprandial (or after meal) test was taken at 10 different times. After the morning, a urine sample was taken before the milk could digest. This study concluded that there was a high metabolite response (the alcohol galactitol and the acid galactonate) after ingesting lactose in those subjects that were lactase persistent, and a low metabolite response in the subjects that were lactase non-persistent.

Vionnet, N. *et al.* Assessment of lactase activity in humans by measurement of galactitol and galactonate in serum and urine after Milk Intake. *The American Journal of Clinical Nutrition* **109,** 470–477 (2019).