In this project I wanted to find out which common equine feed would produce the most energy in a performance horse based on glucose level. This information will help anyone with performance horses give their horse enough energy to maximize their performance. In this project I had 2 performance quarter horses, both 5 years old. I fed each horse 3 different types of feed, Alfalfa, Purina Ultium with alfalfa mix, and Billy Allen's Sweet Feed with alfalfa mix. Each horse was fed twice a day, 2 days with just plain alfalfa, 4 days with Purina Ultium and Billy Allen's Sweet Feed. I tested the horses' glucose level with a glucose testing machine once a day for each day the different feeds were fed to them. In this project I discovered that Purina Ultium increases the horses' glucose level the most, and gave the horses more energy than they had before eating the feed.