In this study, we delve into the effects that three different types of weaning have on beef calves in terms of performance and immune health. A set of spring-born Angus and Angus cross calves (n = 137) were observed over a 42-day period. Average daily gain was calculated in order to analyze the effect the weaning methods had on performance. Additionally, blood samples were taken to evaluate the stress response caused by the weaning process, as well as the immune response given to the ViraShield 6+ VL5 vaccine.