

Calories Count

McGregor, Hal (School: Cascade Public Schools)

Calories are one of the most important nutrients needed when building muscle and fat in cattle. Using the food calorimetry method I tested the hypothesis that cake pellets will be more calorie-dense than alfalfa pellets, oats, cracked corn, and COB (corn, oats, barley). Feed samples of cake pellets, alfalfa pellets, oats, cracked corn, and COB (corn, oats, barley) were measured out into two-gram portions. The samples were placed in a tin dish containing holes on each side. The dish was then placed on a hot plate where the sample was heated for five minutes. The samples were then burned under a soda can containing fifty milliliters of water. To help the sample burn more efficiently, pure oxygen from an oxyacetylene torch was used. Once the samples completely ceased burning the temperature of the water was measured and recorded. The study showed that alfalfa pellets contained more calories than cake pellets, oats, cracked corn, and COB (corn, oats, barley). Alfalfa pellets contained 27.983 calories per gram which was greater than the other samples tested.