

# The Compositional and Hormonal Difference between Organic and Conventional Meat, Year II

Wanjura, Sarah

Organic and conventional beef, chicken, and turkey were tested for both hormonal and compositional levels. It was hypothesized that the organic samples would have lower hormone levels than the conventional samples. FOSS, an infrared analyzer was used to test the compositional levels of each sample including the fat, moisture, protein, and collagen levels. After the samples were tested using the FOSS analyzer, the samples were prepared for testing with the LCMS. All samples were tested for trendione, 17Beta-trenbolone, 17alpha-trenbolone, estrone, beta-estradiol, alpha-estradiol, and melendestrol acetate. Results were collected and analyzed, and it was concluded that naturally occurring hormones were found in higher levels in organic samples, while synthetic hormones were found in higher levels in conventional samples. The hypothesis was therefor not supported. All data was collected and testing completed in a controlled lab.

**Awards Won:**

