

## **The Influence of Various Feed Additives in Complete Feed to Energy Consumption and Digestible Energy (De) on Dairy Cattle**

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### **ABSTRACT**

This research aim was to know the influence of various feed additives in complete feed to energy consumption and the digestible energy (DE) in dairy cattle. The research had been done in Teaching Farm, Faculty of Veterinary Medicine of Airlangga University, Surabaya during forty two days. The research used 21 females Friesian Holstein with body weight about 350 kg, lactating 4<sup>th</sup> - 5<sup>th</sup> month; milk production was around 10 liters per day. This research used the Complete Randomized Design and it was consisted of seven treatments and each treatment about three replications. Seven complete feed with different feed additives (F1, F2, F3, F4, F5, F6 and F7) used in the research. The responses taken were feed intake, total of fecal excretion, gross energy (GE) and fecal energy (FE), Result of research indicated that feed additive in complete feed had significantly effect on the energy consumption and the digestible energy ( $p < 0.05$ ). The highest digestible energy was F5 that with 3945.21 Kcal/kg and the lowest on F6 test with 3538.18 Kcal/kg. The highest energy consumption was F3 that with 38.31 Mcal/day and the lowest was F6 with 25.29 Mcal/day. Even so, seventh of complete feed in qualitative was able to answer the demand energy requirement of dairy cattle.

**Key words:** complete feed, digestible energy, energy consumption, dairy cattle.