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## The effect of replacing maize with dried apple pomace in the concentrate on performance of Jersey cows grazing kikuyu pasture

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### Highlights

- DAP can be used as a supplemental feed to dairy cows in TMR systems
- The effect of maize substituted with DAP in a concentrate supplement is investigated
- Substitution resulted in a decrease in 4% FCM yield and fat yield
- Substitution of maize with DAP is viable for production
- The possible decrease in milk yield should be considered

### Abstract

Dried apple pulp (DAP) is a by-product of the apple juice industry. It has a comparable ME and CP content to maize but has a higher NDF content. It has been used as a substitute to maize with success in various TMR systems, offering an affordable alternative to maize. The aim of the study was to determine whether the replacement of maize with DAP would be beneficial to milk production and rumen health of Jersey cows grazing kikuyu pasture. Seventy two lactating Jersey cows were blocked according to milk yield, days in milk and lactation number. Cows within blocks were randomly allocated to one of four treatments. Treatments were: 0% DAP inclusion (AP 0), 25% DAP inclusion (AP 25), 50% DAP inclusion (AP 50) and 75% DAP inclusion (AP 75). Cows received 6 kg as is/day of the allocated concentrate in the milking parlour. Cows of all four treatments strip grazed kikuyu-

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