

Beneficial effects of Actisaf® on milk yield and composition in dairy goats

Objective: To measure the effect of Actisaf® supplementation on milk yield and milk composition in dairy goats.

Trial design

Comparative field trial
Location: The Netherlands

Species/life stage

Dairy goats, more than 250 days in milk
Breed: French and Dutch Saanen, Nubian, British Toggenberg, Alpine

Main criteria

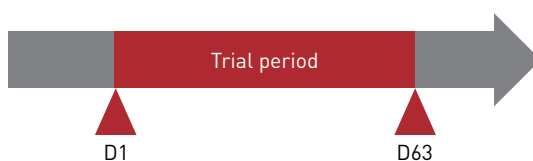
Milk yield, fat content, protein content.

Reference

Data on file – The Netherlands, 2012.

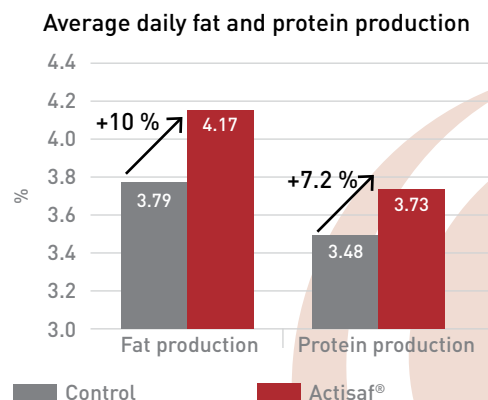
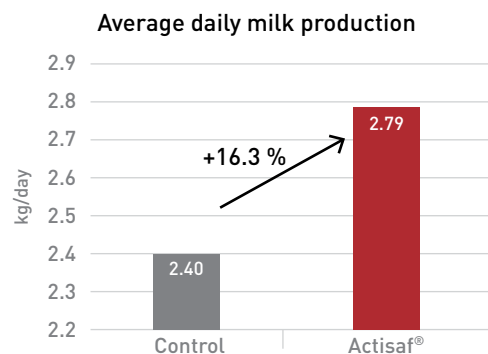
Protocol

	Control	Actisaf®
Goats	38	38
Dose	-	1 g/goat/day



Main results

- ↑ Milk production +16.3 %
- ↑ Fat production +10.0 %
- ↑ Protein production +7.2 %



Conclusion

In this trial, Actisaf® supplementation at 1 g/goat/day in mid-lactation helped to increase milk production by 390 g/d and fat and protein production by 10.0% and 7.2% respectively, compared with the Control group.



Introduction

In the Netherlands, the price paid to farmers for their goats' milk does not only depend on the quantity of milk, but also on the fat and protein content, which has a major effect. In this trial, Actisaf® Sc 47 supplementation was used not only to support rumen health, but also to investigate its effect on milk production and composition.

Materials and methods

76 dairy goats were split into 2 groups of 38. Grouping was based on milk production, milk composition, cell count, lactation number and days in milk. The average lactation number was 2.34 for goats in the Control group and 3.37 for goats in the Actisaf® group. Average days in milk were 330 and 314 respectively.

Both groups were housed in the same barn, but on different sides.

- **Control group:** goats were fed a basal diet, as shown in the table below.
- **Actisaf® group:** goats were fed the same basal diet + 1 g Actisaf® per animal per day.

Basal diet composition	Kg
Grass silage (56 % dry matter)	1.1
Compound feed	2.0
Hay	0.5
Straw	0.5
Minerals	0.2

The trial started in October and ended in December of the same year. It lasted 9 weeks in total, and milk was tested 3 times during this period (1 test every 3 weeks). A preliminary test was carried out when the goats had been grouped, but before the start of the trial, and the results of this test were used as a reference point.

Conclusion

This trial demonstrated the beneficial effect of Actisaf® supplementation in dairy goats, at 1 g/goat/day (i.e. 10 billion CFU/goat/day). A higher level of milk production was maintained by the Actisaf® group than the Control group. In addition to the increased milk production, milk composition also improved, which proves that supplementation with Actisaf® did not dilute the milk.

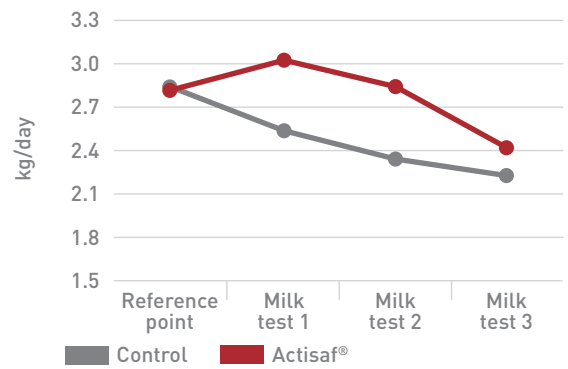
Keywords Actisaf®, dairy goats, mid-lactation, milk production, fat production, protein production.

Reference Data on file – The Netherlands, 2012.

Results and discussion

Average daily milk production was 16 %, or 390 g, higher in the Actisaf® group than the Control group. Average daily fat and protein production also increased, by 10.0 % and 7.2 % respectively.

Milk production throughout the trial period



Average daily production

	Control	Actisaf®	Deviation
Milk, kg/d	2.40	2.79	+16.3%
Fat, %	3.79	4.17	+10.0%
Protein, %	3.48	3.73	+7.2%