## TIS | AHV BOOSTER TABLET

TRIAL INFORMATION SHEET





# Impact of BOOSTER TABLET on milk yield, efficiency and profitability

## **KEY FINDINGS**

Cows which had AHV Booster Tablet administered 15-20 days before calving showed:

- An increase of +2.9 kg of energy corrected milk / day /cow during the first 30 days in milk.
- +1.8 g/L in milk protein content and +0.9 g/L in milk fat content.
- This enhanced performance was associated with a net return on investment of 9 (€221.30 per cow).

Based on the information gathered, this field trial confirms that **additional milk yields and better feed energy efficiency** can be expected, resulting in a very healthy return on investment when Booster Tablet is administered 15-20 days before calving.

## INTRODUCTION

The transition period (3 weeks before and 3 weeks after calving) is one of the most complex physiological stages in the production cycle of dairy cows (Alhussien, Dang, et Bu 2023).

Poor adaptation to these changes can lead to all kinds of health issues during the postpartum period (Pascottini, Leroy, et Opsomer 2020).

By promoting liver metabolism, rumen function and dry matter intake, AHV Booster Tablet is aimed to a healthier transition.

Previous trials have shown very substantial increases in daily yield and time spent ruminating in cows fed AHV Booster Tablet. However, information on protein and butyric levels was lacking.

Here, we present a trial, investigating in more detail the potential effect of Booster Tablet, in different breeding systems, on milk yield and milk content during the first 30 days in milk.

## **RECOMMENDATIONS** (AHV protocol)

AHV recommends applying Booster Tablets to transition cows 14 days prior to expected calving, and again 7 days after calving.

BOOSTER BOOSTER



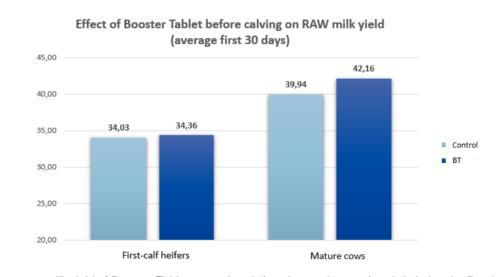
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## **RESULTS**

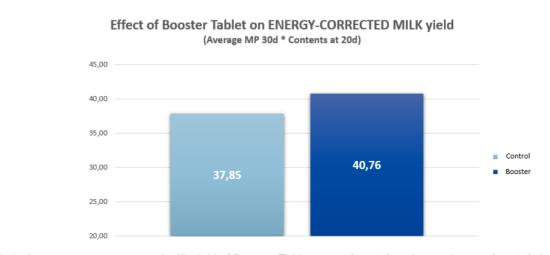
9 farms in France.			
Parameters	Control Group: No tablet (n=34)	Booster Group : - 16 (n = 34)	p-value
Median lactation number	3 (1-6)	3 (1-6)	P = 0.5441
Energy corrected Milk Yield	37.85 (24.85-56.16)	40.76 (21.56-56.81)	P = 0.0856
(kg/d/cow) (average of 30 DIM)			
Extra milk yield (kg/day/cow)	N/A	+2.9	N/A
Milk Fat content (g/L) at 20 DIM	38.27	40.07	P = 0.1487
Extra fat content (g/L)	N/A	+ 1.8	N/A
Milk Protein content (g/L) at 20 DIM	32.13	33.07	P = 0.2423
Extra protein content (g/L)	N/A	+0.94	N/A
Average extra net income / cow	N/A	€221.30	
ROI**		9:1	

Table 1: 30-day milk yield and milk quality parameters for farms.

<sup>\*\*</sup>NB: only parameters for which statistically significant differences are detected between the groups (shown in bold font) are included in the ROI calculations.



**Fig.1**. Average raw milk yield of Booster Tablet group (n = 34) and control group (n = 34) during the first 30 days in milk.



**Fig.2.** Average energy-corrected milk yield of Booster Tablet group (n = 34) and control group (n = 34) during the first 30 days in milk.

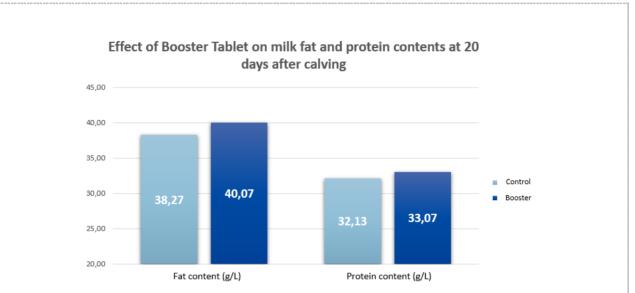
<sup>\*</sup> p – value for appropriate test for significance in differences between the groups.

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**Fig.3.** Average milk fat content and protein content of Booster Tablet group (n = 34) and control group (n = 34) at 20 days in milk.

TRIAL FARM INFORMATION		
Date	Winter-spring 2023-2024	
Number of trial cows	68	
Number of trial farms	9	
Location	Farms across France (Brittany, Normandy, Northeast, Auvergne Rhone-Alpes)	
Average herd size	118	
Calving pattern	All-year round	
Access to pasture	No (during the trial period)	
Diets	Given the number of herds, the pre-calving rations were different, but all	
	distributed in sufficient quantity and respecting the crude protein criterion (min	
	13% CP)	
Milking system	Robots, milks 3 times a day on average	
Age at first calving	25.9 months	
Average interval between calving	392 days	

## TRIAL SCOPE

The trial began on November 3, 2023 and ended on March 10, 2024.

The choice to run the trial on 9 different farms was intended to demonstrate the effectiveness of the protocol across geographical diversity, different diets, and different management systems.

Cows were selected according to calving date (application of the Booster tablet according to expectations and actual calving date).

Of the 72 cows in the trial, 4 were excluded for trial independent reasons (viral diseases).

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## **RETURN ON INVESTMENT (ROI)**

The ROI of 9 calculated from data from the 9 farms in the trial, was based on a milk price of €0.42 per liter and an investment of €23.10 per Booster tablet.

The average estimated ROI, based on measurements taken on 9 farms, is 9.

## **ASK US ABOUT BOOSTER TABLET!**

Visit www.ahvint.com to schedule an appointment with an AHV Farm Advisor.

#### Literature

Alhussien, Mohanned Naif, Ajay Kumar Dang, et Dengpan Bu. 2023. « Editorial: Strategies for Mitigating the Transition Period Stress in Dairy Cattle ». Frontiers in Veterinary Science 10 (mars). https://doi.org/10.3389/fvets.2023.1157526.

Pascottini, Osvaldo Bogado, Jo L. M. R. Leroy, et Geert Opsomer. 2020. « Metabolic Stress in the Transition Period of Dairy Cows: Focusing on the Prepartum Period ». Animals: an Open Access Journal from MDPI 10 (8): 1419. https://doi.org/10.3390/ani10081419.