

# Adaptation of fresh lactating dairy cows to grazing

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Uruguay



## Introduction

- The **transition period** (21 days pre and postpartum) is an important period of dramatic changes (Grummer, 1995)
- **Adaptation** to the strong requirements for milk production
- **Management** determines the status of the health, welfare, productive and reproductive's cow performance



Introduction

Predominant Dairy System in Uruguay

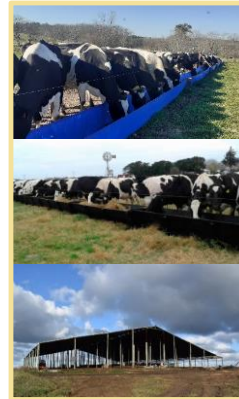


Calving



Grazing

+



Supplementation

- Grazing with supplementation
- Different options of infrastructure



Introduction



**Intensification** has involved the **improvement in the infrastructure** such as the implementation of strategies with total mixed ration (TMR)



**Interrogation** about strategic use of this infrastructure in Uruguay

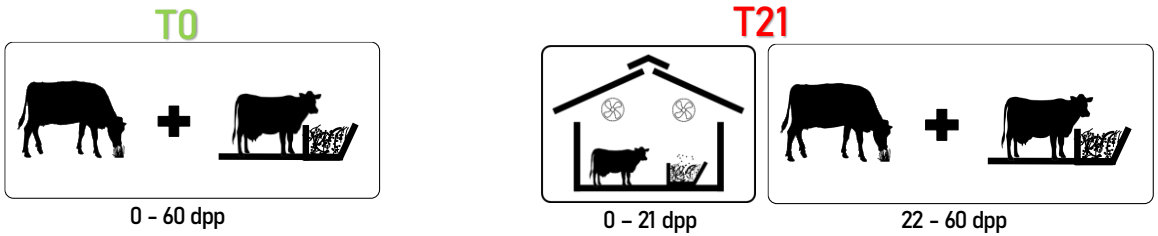


To study the **productive performance and behavioral adaptation** of dairy cows after a period of differential feeding management during the first 21 days postpartum (transition period)

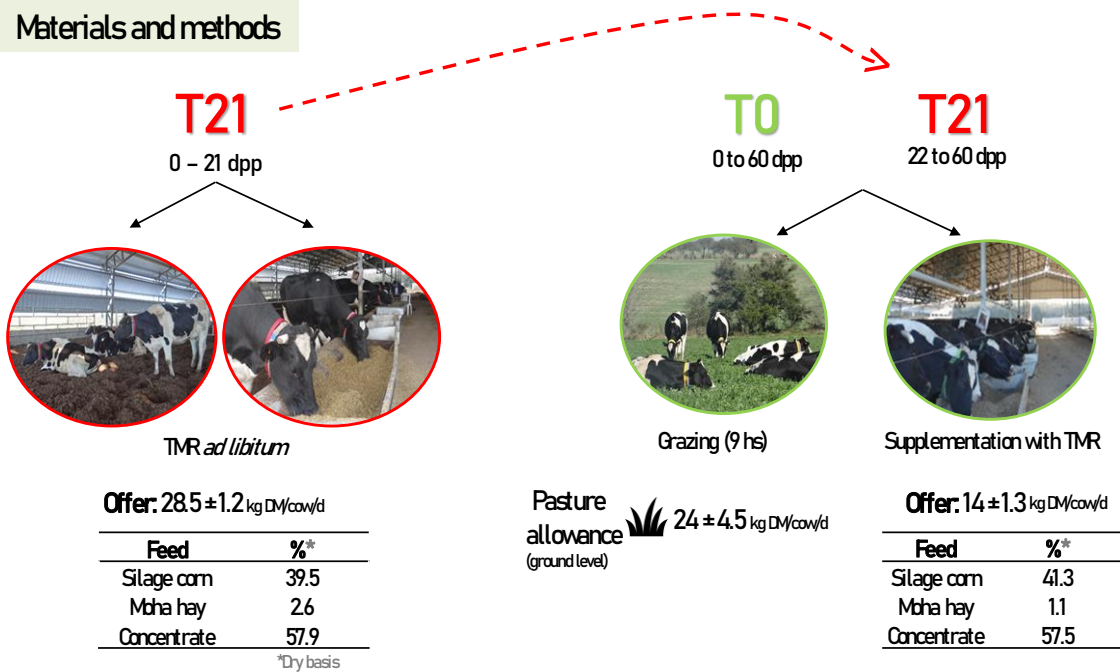


## Materials and methods

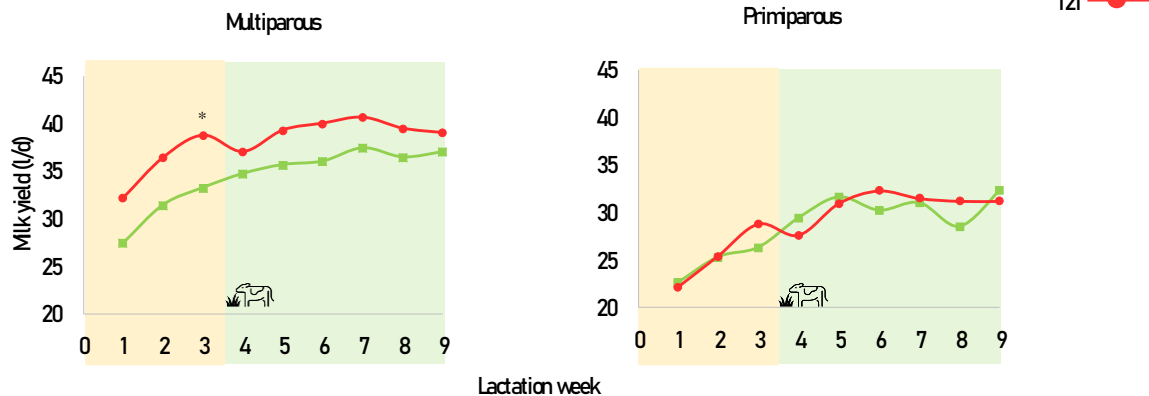
- Location: Research Station Dr. Mario A. Cassinoni of the School of Agronomy (Paysandú, Uruguay)
- Animals: 30 Holstein dairy cows blocked (by: parity BW, BCS and calving date)
- Treatments: based on 2 feeding strategies



## Materials and methods



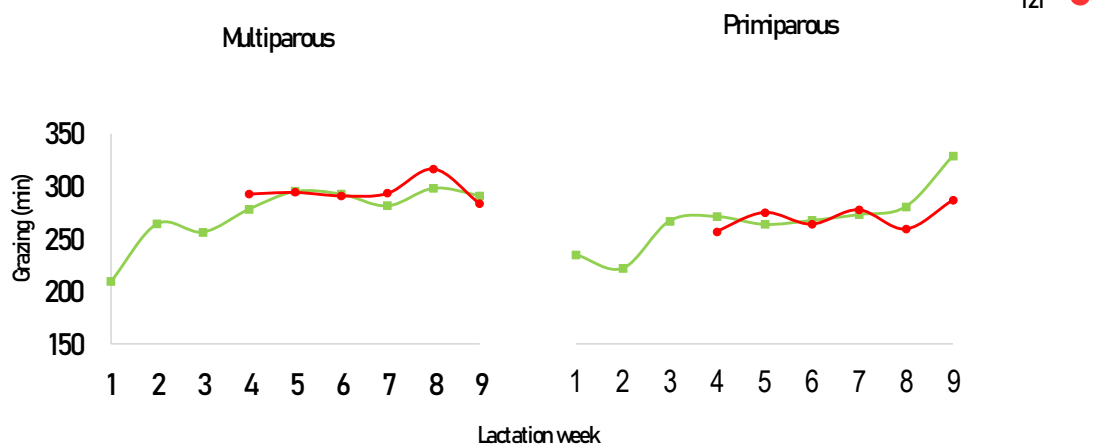
Results and discussion



Direct	T0	T2I	P-value
Treatment	27.6	30.6	0.01
Multiparous	30	35.7	<0.01
Primiparous	24.6	25.4	ns

Residual	T0	T2I	P-value
Treatment	34.6	34.5	ns
Multiparous	37.2	38.9	0.1
Primiparous	31.5	30	ns

Results and discussion

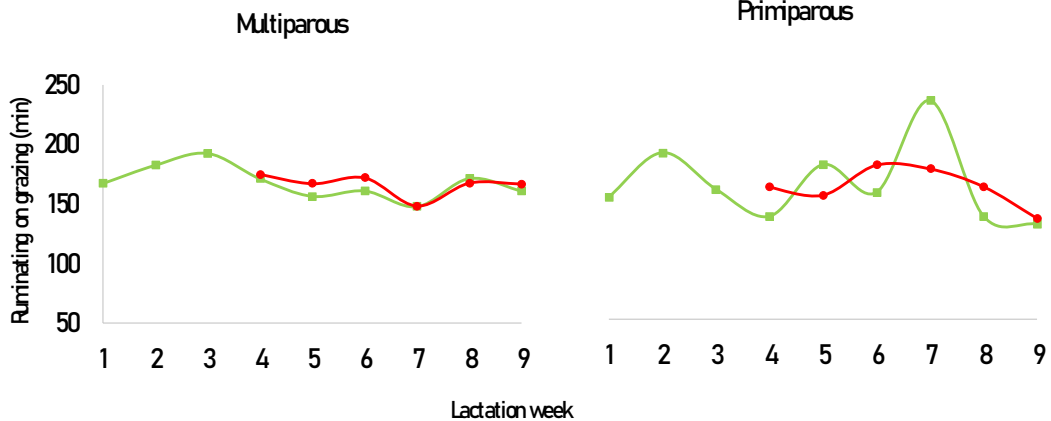


Treatment = 0.5  
 Parity = 0.009  
 Treatment x parity = 0.2  
 T x P x lactation week = 0.7

🕒 Daily access time = 569 ± 56 min

## Results and discussion

TO   
T21 



Treatment = 0.8  
Parity = 0.5  
Treatment x parity = 0.7  
T x P x lactation week = 0.13



 Daily access time = 569 ± 56 min

## Final conclusions

- Changes in feeding strategy during the first 21 DIM **positively impacted** on performance and grazing ingestive behavior of dairy cows
- The **impact was different** according to **parity**. **Multiparous** cows showed a higher **direct** and **residual** response on milk production than primiparous ones.
- Further research is required for a more **comprehensive understanding** of the adaptation of dairy cows to grazing during the **first weeks in milk**.





¡Thank you for your attention!



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