TECHNICAL RESEARCH REPORT

# Effect of Protected B Vitamins for Lactation
## on reproductive performance in dairy cows

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### OBJECTIVE

Evaluate the impact of feeding the **Jefo blend of Protected B Vitamins for Lactation** (Folic Acid, B12, Biotin, Pyridoxine and Pantothenic acid) during the lactation period on reproductive performance in dairy cows.

### MATERIAL AND METHODS

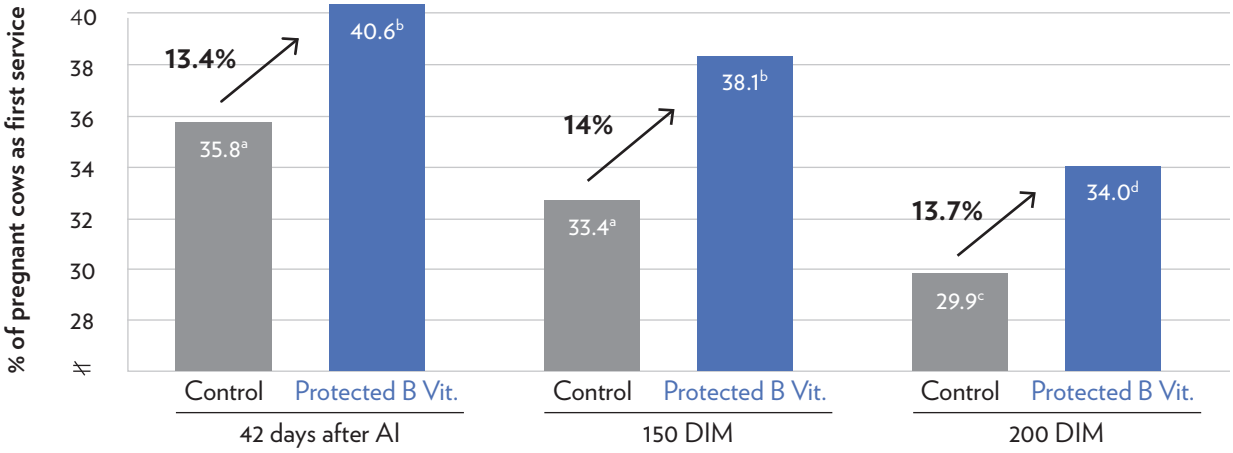
Multiparous cows, housed in free-stall barn, were fed a typical Californian Total Mixed Ration (TMR).

- Conducted on a commercial farm by the **University of California at Davis**.
- **949 multiparous Holstein cows**, calving between November 2007 and April 2008
- **Feeding period:** from 22 DIM until confirmed pregnant.
- Diet typically consisted of Corn silage, Dry alfalfa hay, wheatlage, by product feeds, flaked corn, soy/canola/DDGS, almond hull blends and Premix
- **Control group: No Protected B vitamins**
  **Treatment group: Jefo blend of Protected B Vitamins for Lactation (Folic acid, B12, Biotin, Pyridoxine and Pantothenic acid)**
- No voluntary period and no synchronization program
- Visual estrus detection (tail chalking), pregnancy by manual rectal palpation.
- DairyComp data used until 200 Days in Milk (DIM), cows which were not bred by 200 DIM were removed from the trial.

### RESULTS

With the supplementation of the blend of protected B vitamins :

- **13% increased in first service conception rate** when cows were fed the protected B Vitamins blend.
- The **improvement** in pregnancy was maintained **up to 200 DIM**.
- **20% reduction in culling rate** from 22 to 200 DIM.




**Graphic 1.** Effect of a dietary supplementation **Jefo blend of Protected B Vitamins for Lactation** on first service conception rate.

### CONCLUSION

**A dietary supplementation of the Jefo blend of Protected B Vitamins for Lactation during the lactation period improved the reproductive performance of dairy cows with a 13% increased in first service per conception.**

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