

Induction of Estrus in Post Partum Anestrus Cows by Feeding Bypass Fat

M. Karunakaran^{1*}, Ajoy Mandal², Mohan Mondal³,
M.K. Ghosh⁴, S. Dutta⁵ and Saroj Rai⁶

^{1,2,3}ICAR- National Dairy Research Institute Eastern Regional Station Kalyani, West Bengal- 741 235
E-mail: ¹drmkarunakaran@gmail.com

Abstract—The post partum period plays an important role in cows' reproduction. The duration of post partum anestrus has significant effect on the duration of inter calving period. Energy balance in dairy cow is the result of energy intake minus energy used for maintenance and milk yield. After parturition nutritional requirements of dairy cows increase rapidly due to milk production and the energy requirements are not met by dietary intake results in negative energy balance. Cows in negative energy balance may preferentially divert nutrients away from reproduction thereby limits the follicular development leads to post partum anestrus condition. 28 numbers of Jersey x Sindhi crossbred cows in 2nd to 5th lactation not showing estrus after more than 90 days of parturition were selected. Anestrus condition was confirmed by rectal palpation of ovaries at weekly interval over a period of 21 days. All the cows ration was supplemented with 100 grams of bypass fat (Moomagic: calcium salt of palm oil) along with the concentrate mixture @ 2 kg for maintenance plus 1 kg for every three liters of milk produced. Cows were also provided with 30 kg of green fodder and two kg of dry fodder per day for a period of 60 days. Cows were observed for signs of estrum twice a day and estrus was confirmed by rectal examination. Cows were inseminated upon observed estrum. Out of 28 cows fed supplemented with bypass fat, 15 cows came into estrum within 60 days of start of bypass fat supplementation. It can be concluded from the study that supplementation of bypass fat in the ration could help in overcoming post partum anestrus in crossbred dairy cows.

Keywords: Cow: Post Partum: Anestrus: Bypass fat