

MSc. Defence

Effects on Energy Source in Calf Milk Replacer on the Dairy Calf

Juanita Echeverry Munera

Date: August 20th, 2021 at 12:00pm

The MSc Defence for Juanita Munera has been scheduled for Friday August 20th, 2021 at 12:00pm. The defence will be held online via Teams: https://teams.microsoft.com/l/meetup-join/19%3ameeting_MDM4YzE0ZjYtMTc5MC00ZjgyLTlhMDYtOGZhM2IzMTI5M2Uy%40thread.v2/0?context=%7b%22id%22%3a%22be62a12b-2cad-49a1-a5fa-85f4f3156a7d%22%2c%22Oid%22%3a%22fbd28915-dda5-478f-8ecb-a3682dcf0c3a%22%7d

The exam committee will consist of:

Examining Chair: Dr. Anna-Kate Shoveller

Advisor: Dr. Mike Steele

Adv. Committee Member: Dr. Katie Wood

Additional Member: Dr. Dave Renaud

Abstract:

This thesis investigates the effects of increasing fat at the expense of lactose in milk replacer (**MR**) on growth, voluntary feed intake, feeding behaviour, and blood metabolites in Holstein calves. When investigating the effects high fat MR fed ad libitum, it was found that higher fat inclusion reduced voluntary MR intake without an evident effect on solid feed intake or growth. However, greater fat inclusion reduced hunger-related behaviours during the weaning period. When investigating the effects of high fat MR on growth, solid feed intake and blood metabolites in feed restricted calves, no alterations on growth or solid feed intake were observed. Nevertheless, changes in blood metabolites were detected. Calves consuming the high fat diet having higher blood NEFA and glucose concentrations than calves consuming a traditional MR. The findings of these studies suggest that increasing fat inclusion at the expense of lactose boasts promising results for enhanced feeding programs such as the reduction of hunger-like behaviours around weaning, and the comparable growth performance.