



**HAL**  
open science

## **Influence of birth mode and pre- and post-biotic supplementation on the fecal microbiota: a randomized controlled trial in Charolais calves**

Melanie Save, Claire A.M. Becker, Anaïs Bompard, Bertrand Guin, Séverine Barry, Emilie Bard, Bernard Schmitt, Isabelle Delporte, Zouheira Djelouadji, Xavier Bailly, et al.

### ► To cite this version:

Melanie Save, Claire A.M. Becker, Anaïs Bompard, Bertrand Guin, Séverine Barry, et al.. Influence of birth mode and pre- and post-biotic supplementation on the fecal microbiota: a randomized controlled trial in Charolais calves. European Buiatrics Congress and ECBHM Jubilee Symposium 2023, Aug 2023, Berlin, Germany. pp.34-?. hal-04202057

**HAL Id: hal-04202057**

**<https://hal.inrae.fr/hal-04202057>**

Submitted on 11 Sep 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Copyright

## Influence of birth mode and pre- and post-biotic supplementation on the fecal microbiota: a randomized controlled trial in Charolais calves

Melanie Save<sup>1</sup>, Claire Becker<sup>2</sup>, Anais Bompard<sup>3</sup>, Bertrand Guin<sup>4</sup>, Severine Barry<sup>3</sup>, Emilie Bard<sup>3</sup>, Bernard Schmitt<sup>5</sup>, Isabelle Delporte<sup>6</sup>, Zoree Djelouadji<sup>7</sup>, Xavier Bailly<sup>3</sup>, Thibaut Lurier<sup>3,8</sup>

<sup>1</sup>Veterinary clinic "des amognes", Saint-Benin-d'Azy, France

<sup>2</sup>Universite de Lyon, VetAgro Sup, Anses, UMR Mycoplasmoses animales, Marcy L'Etoile, France

<sup>3</sup>Universite Clermont Auvergne, INRAE, VetAgro Sup, UMR EPIA, Saint-Genes-Champanelle, France

<sup>4</sup>Veterinary clinic "Vet'Alliance", La Clayette, France

<sup>5</sup>CERNh - Centre d'Enseignement et de Recherche en Nutrition Humaine

<sup>6</sup>Original Process, Lille, France

<sup>7</sup>Universite de Lyon, INRAE, VetAgro Sup, USC 1233 UR RS2GP, Marcy l'Etoile, France.

<sup>8</sup>Universite de Lyon, INRAE, VetAgro Sup, UMR EPIA, Marcy l'Etoile, France

Corresponding author: [thibaut.lurier@vetagro-sup.fr](mailto:thibaut.lurier@vetagro-sup.fr)

---

### OBJECTIVES

To our knowledge, there are no studies that have investigated the impact of the mode of birth on the composition of the calf microbiota. Similarly, while many pre-pro- or post-biotic products are commercialized for calves, few have been scientifically proven to induce changes in gut microbiota.

The objective of this study was to describe the modifications of the gut microbiota (in terms of richness, diversity and composition) of calves during their first 20 days of life according to their mode of birth and their supple-