

**Attention to Journal of Animal Science and Biotechnology**

June 19, 2020

Dear Editor,

I wish to submit a new manuscript entitled **“Porcine digestible peptides (PDP) in weanling diets improves gut barrier function, immune response and nutrient transport in nursery pigs”** to be considered for publication in the Journal of Animal Science.

The co-authors and I confirm that this work is original and has not been published elsewhere nor is it currently under consideration for publication in any other journal.

In the present manuscript, we describe newest and relevant data on the role of porcine digestible peptides as selected protein source for piglet nutrition focusing on intestinal health under a challenging scenario (like it is now faced in swine production no antimicrobials and no ZnO and high CP content from vegetal origin) for newly weaned piglets. The present work is based on nutrition, metabolism and physiology aiming to study the different modes of action of digestible peptides on barrier function, immune response, oxidation, digestive enzymes and hormones, nutrient transport and metabolism to explain or understand gut integrity and health. The intestinal function is evaluated by studying the expression in jejunum and ileum tissues of 56 selected genes using the Open Array technology, a quantitative real-time PCR method for the high-throughput analysis of the gene expression. General performance parameters are also reported as basis to understand positive effect on the overcoming process of weaning challenge. We think that the present work could be of interest for the swine scientific nutritionist, but also useful for nutrition practitioners in the swine industry that may found novel information to design feeding strategies based on digestible peptides supplementation in weanling diets focusing on maximum performance, piglet health and wellbeing. So, the manuscript should be of interest to any reader interested in swine nutrition and production.

Please address all correspondence concerning this manuscript to my e-mail address: david.sola@uab.cat

Thank you for your consideration of this manuscript.

Yours faithfully,



David Solà-Oriol.

Animal Nutrition and Welfare Service, Department of Animal and Food Sciences,  
Universitat Autònoma de Barcelona  
Facultat de Veterinària Office: V0-301  
Travessera dels Turons, Edifici V, Campus de la UAB  
08193 Bellaterra (Cerdanyola del Vallès), Barcelona, Spain