Decreasing the level of hemicelluloses in sow’s lactation diet affects the milk composition and postweaning performance of low birthweight piglets.

Editor:

The authors have addressed many concerns raised by the two reviewers. However, it remains not totally clear why the rationale of the experiment focused on decreasing rather than increasing hemicellulose content at a similar crude fiber content in the diets. One or two sentences to explain expected benefits on the content or activity of beneficial bacteria, either direct or indirect (through the modulation of other fiber components) should be added at the end of the introduction. According to diets analysis, total DF varied from 203 to 227, so that it remains difficult to know if the objective to compare diets at similar DF content but different HC content was reached. These questions can be easily addressed in a second round of revision.

AU:
Firstly, we would like to thank the editor for the second round of reviewing. In the present study, the initial goal was to have four diets with similar total DF content in order to change only the proportion of the fibrous fractions, mainly IDF and SDF. Mentioning the similar crude fibre content is confusing and not important in our study; therefore, we decided not to mention this further. As HC can be considered as a source of SDF, we expect different proportion of IDF and SDF when decreasing the HC level. This goal was partially reached as total DF varied from 203 to 227 g/kg, resulting in a quadratic effect for the total DF intake. Nevertheless, there was no linear effect and the proportion of IDF and SDF effectively changed. With the decrease in HC level, the proportion of IDF increased from 70% to 79% and the one of SDF decreased from 20% to 14%. Two sentences were added to clarify this (L 340-343): “In the present study, one goal was to have a similar total DF intake among the sows in the four treatments but different intakes of IDF and SDF. This objective was only partially achieved as there was no linear effect but a quadratic effect for total DF intake.”

The introduction was slightly modified to explain the relationship between the IDF intake and the growth and activity of some beneficial bacteria (L 32-66).