

Prebiotic effects of novel nondigestible carbohydrates on bacterial community in presence of *S. Typhimurium* in an *in vitro* system

Tran T.H.T.^{1,3}, Bindelle J.¹, Portetelle D.², Thewis A.¹, Boudry C.¹

¹ Animal Science Unit and ² Microbial Biology Unit, Gembloux Agro-Bio Tech, University of Liege, Belgium

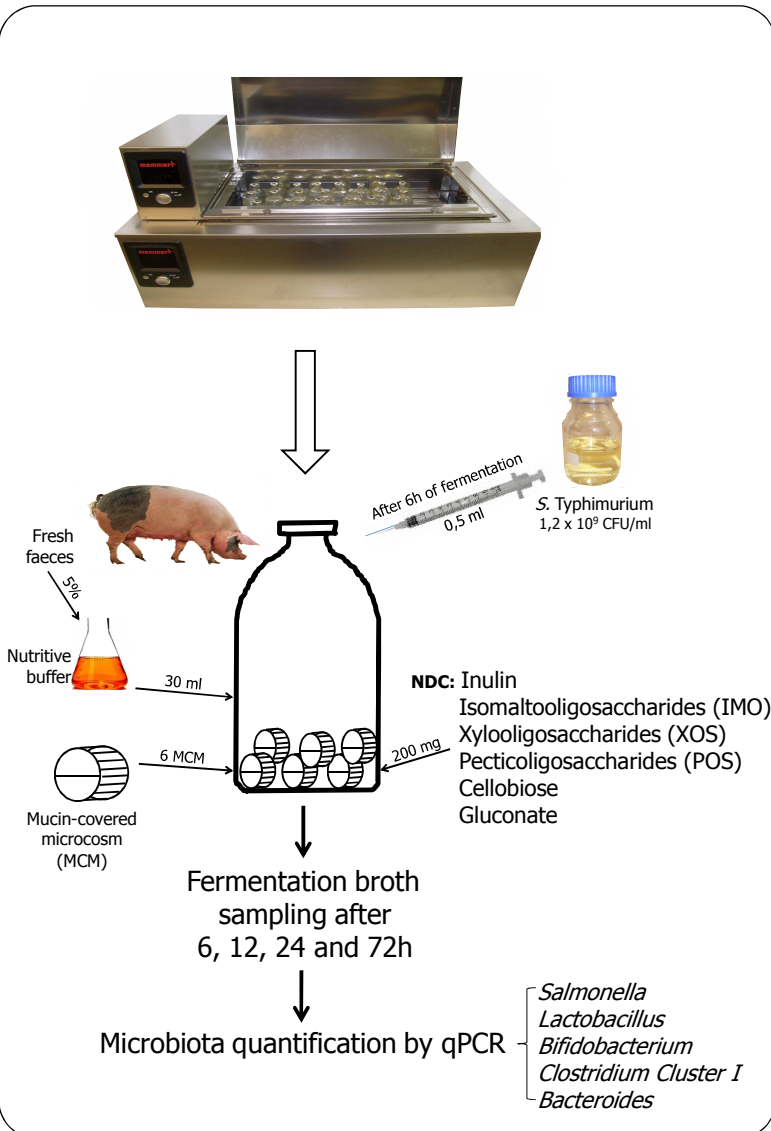
³ Wallonie-Bruxelles International, Brussels, Belgium

Introduction

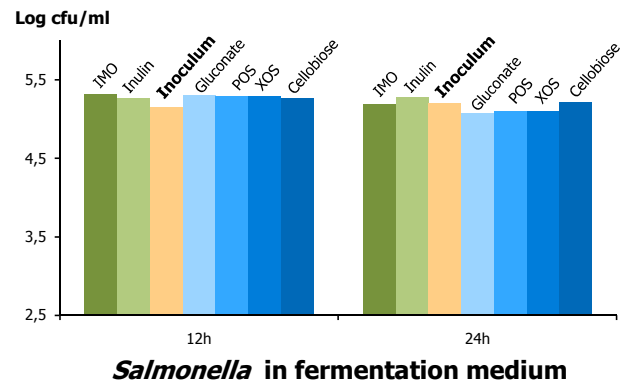
Prebiotics are used to modulate the intestinal microbiota with the possible effect of reducing acute gastroenteritis induced by *Salmonella* infection.

Objective: Prebiotic effects of nondigestible carbohydrates (NDC) on the microbiota in presence of *S. Typhimurium* using an *in vitro* gas fermentation model.

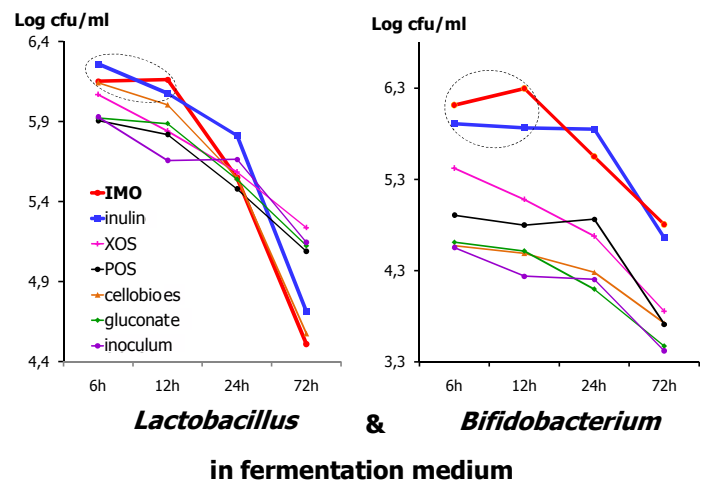
Materials & Methods



Results



❖ No effects of the NDC on *Salmonella* populations



❖ IMO: high and stable *Lactobacillus* and *Bifidobacterium* concentration

Conclusion

Even if no effects of the NDC were observed on *Salmonella* populations, IMO showed the highest prebiotic potential.