SUPPLEMENTARY INFORMATION

A SYNBIOTIC CONCEPT CONTAINING SPORE-FORMING BACILLUS STRAINS AND A PREBIOTIC FIBER BLEND CONSISTENTLY ENHANCED METABOLIC

ACTIVITY BY MODULATION OF THE GUT MICROBIOME IN VITRO

Cindy Duysburgh¹, Pieter Van den Abbeele¹, Kiran Krishnan², Thomas F. Bayne² and Massimo Marzorati^{1,3}

¹ ProDigest bvba, Technologiepark 82, 9052 Ghent, Belgium; ² Microbiome Labs, 1332 Waukegan Road, Glenview Illinois 60025, USA; ³ Center of Microbial Ecology and Technology (CMET), Ghent University, Coupure Links 653, 9000 Ghent, Belgium

Running title: Modulatory effect of novel synbiotic formulation in the human gut

* Corresponding author: Massimo Marzorati, Phone: +3292411190, Fax: +3292411191, E-mail: massimo.marzorati@prodigest.eu

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Figure S1. Microbial Metabolic Activity In Terms Of SCFA Production. Average (\pm stdev) acetate (A-C; mM), propionate (D-F; mM) and butyrate (G-I; mM) production during the control (C1-C2; n = 3/donor) and the treatment (TR1-4; n = 3/donor) weeks in the ascending (AC), transverse (TC) and descending colon (DC) of the human gastro-intestinal tract for three donors tested. Statistically significant differences relative to the first control week are indicated with * (p<0.05).

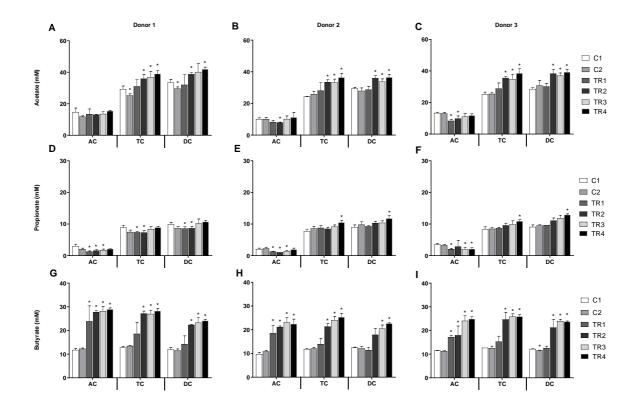


Figure S2. Mucosal Microbial Community Composition As Assessed Via qPCR. Average $(\pm \text{ stdev})$ (A) *Bifidobacterium*, (B) *Lactobacillus*, (C) *Faecalibacterium prausnitzii* and (D) *Akkermansia muciniphila* levels (16S rRNA gene copies/g) over the entire control (C; n = 2/donor) and treatment (TR; n = 4/donor) period in the mucosal environment of the ascending (AC), transverse (TC) and descending colon (DC) of the human gastro-intestinal tract for three donors tested. For optimal observation of consistent effects over the different donors tested, the average of the three donors is presented (n = 6 for C; n = 12 for TR). Statistically significant differences between the control and treatment period are indicated with * (p<0.05).

