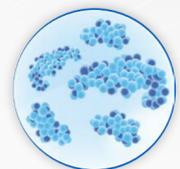


# IMPACT OF SYNBIOTICS ON GUT MICROBIOTA COMPOSITION AND ACTIVITY DURING EARLY LIFE

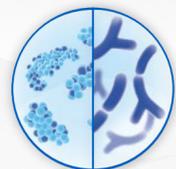
This double-blind randomized study demonstrates how an **intact protein** formula with **scGOS/ lcFOS (9:1)** and *Bifidobacterium breve M-16V* at levels close to the bacterial levels that can be found in human milk, created a gut environment closer to the breastfed reference group in healthy infants.



**Prebiotics**  
scGOS/lcFOS (9:1)



**Probiotics**  
*B. breve M-16V*



**Synbiotics**  
Are the combination of Pre- and Probiotics

## COLOR STUDY OVERVIEW

290 healthy infants aged 6 to 19 weeks

Breastfed reference  
N=42

Syn4 scGOS/lcFOS + 10<sup>4</sup> CFU of *B. Breve M-16V*/ ml  
N=78

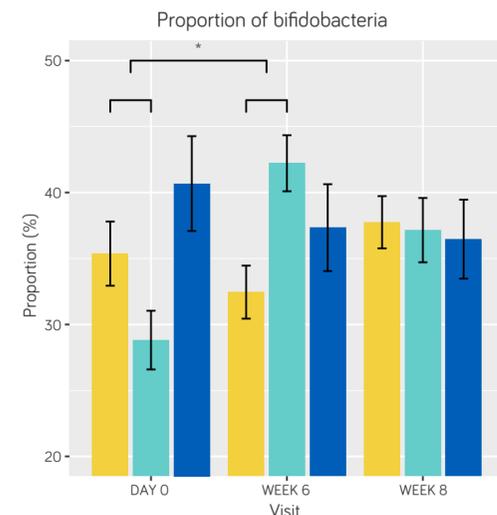
Syn6 scGOS/lcFOS + 10<sup>6</sup> CFU of *B. Breve M-16V*/ ml  
N=78

Control product  
N=83

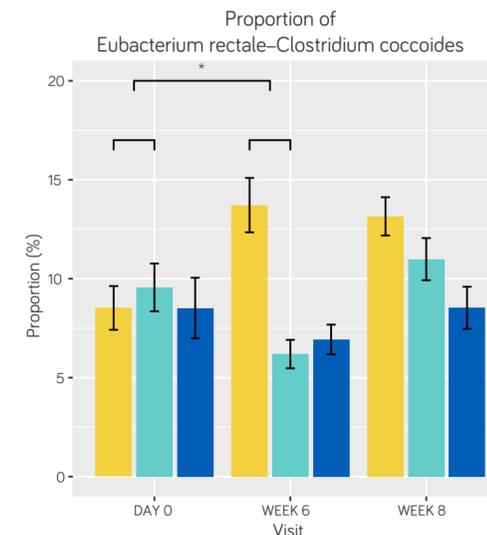
\*Syn6 results omitted from results graphs due to similarity to Syn4

## RESULTS

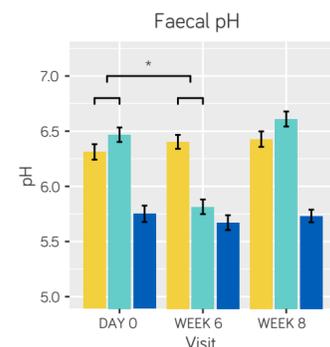
Proportion of bifidobacteria significantly larger in Syn4 group as compared to the control group



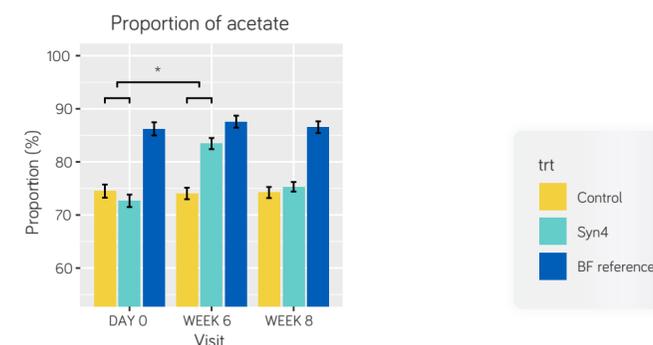
Proportion of *Eubacterium rectale*-*Clostridium coccooides* significantly lower in Syn4 group as compared to the control group



Faecal pH significantly lower in Syn4 group as compared to the control group



Proportion of acetate significantly larger in Syn4 group as compared to the control group



Infants were randomized to receive the control formula or either one of the two investigational formula; for 6 weeks (weeks 0-6). After the intervention period, infants received control formula for a wash-out period of 2 weeks (weeks 6-8). Non-randomized, exclusively breastfed infants were included as a reference.

## CONCLUSIONS

An **intact protein** formula with **scGOS/ lcFOS (9:1)** and *Bifidobacterium breve M-16V* at levels close to the bacterial levels that can be found in human milk:

- Created a gut environment closer to the breastfed reference group in healthy infants
- Resulted in softening of the stools
- Promoted an acidic environment by increasing the production of acetate and lactate, resembling the gut environment of healthy breastfed infants



Human milk is the best possible nutrition for all infants. We support World Health Organization's recommendation of exclusive breastfeeding for the first six months, with continued breastfeeding along with appropriate complementary foods for two years and beyond.