

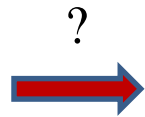
The effect of Triton X-100 on the growth of *Faecalibacterium prausnitzii* in vitro

Lu Wang, Gabriela Bravo-Ruseco, Rieks L. Hoekman and Hermie J.M. Harmsen

Department of Medical Microbiology, University of Groningen, University Medical Center Groningen, Groningen, the Netherlands

Research question :

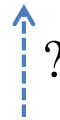
Hygiene hypothesis
(Triton X-100)



F. prausnitzii



Butyrate



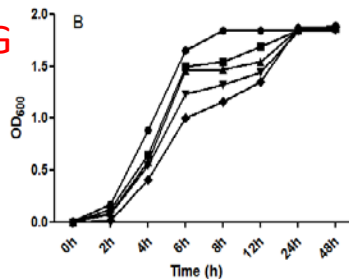
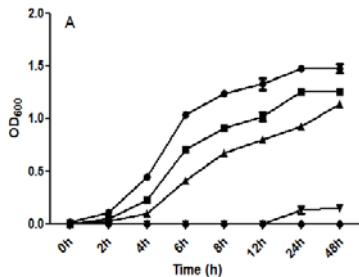
Acetate



B. thetaiotaomicron

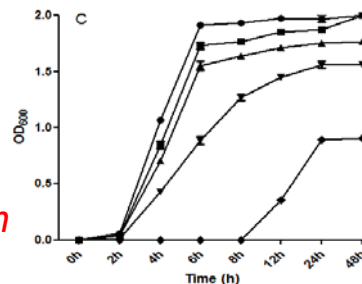
Results: The effect of Triton X-100 on the growth

F. prausnitzii in YCFAG

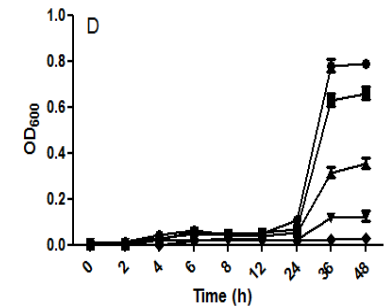


B. thetaiotaomicron in YCFAG

Co-culture

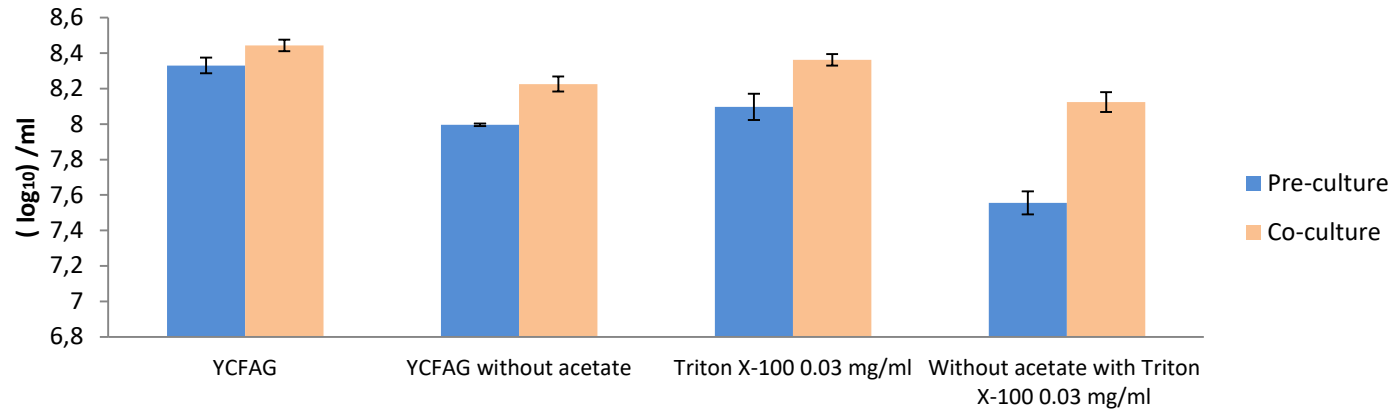


- ◆ YCFAG
- with Triton X-100 0.015mg/ml
- ▲ with Triton X-100 0.03mg/ml
- ✦ with Triton X-100 0.06mg/ml
- ★ with Triton X-100 0.12mg/ml



F. prausnitzii in YCFAG medium without acetate.

Results :



Fluorescence *in situ* hybridization (FISH) counting of *F. prausnitzii* with Triton X-100 at 48h

Conclusions

- ❖ Triton X-100 can inhibit the growth of *F. prausnitzii*.
- ❖ *B. thetaiotaomicron* stimulated the growth of *F. prausnitzii* independent of the presence of Triton X-100 and the absence of acetate.