

Article title: Characterizing microbiota-independent effects of oligosaccharides on intestinal epithelial cells: insight into the role of structure and size

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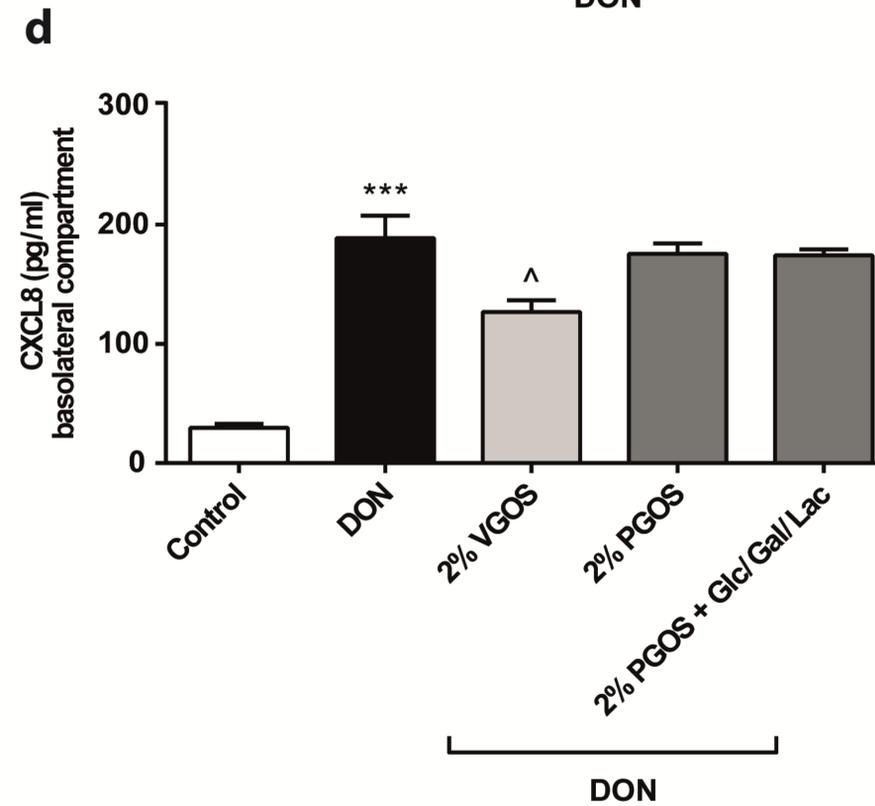
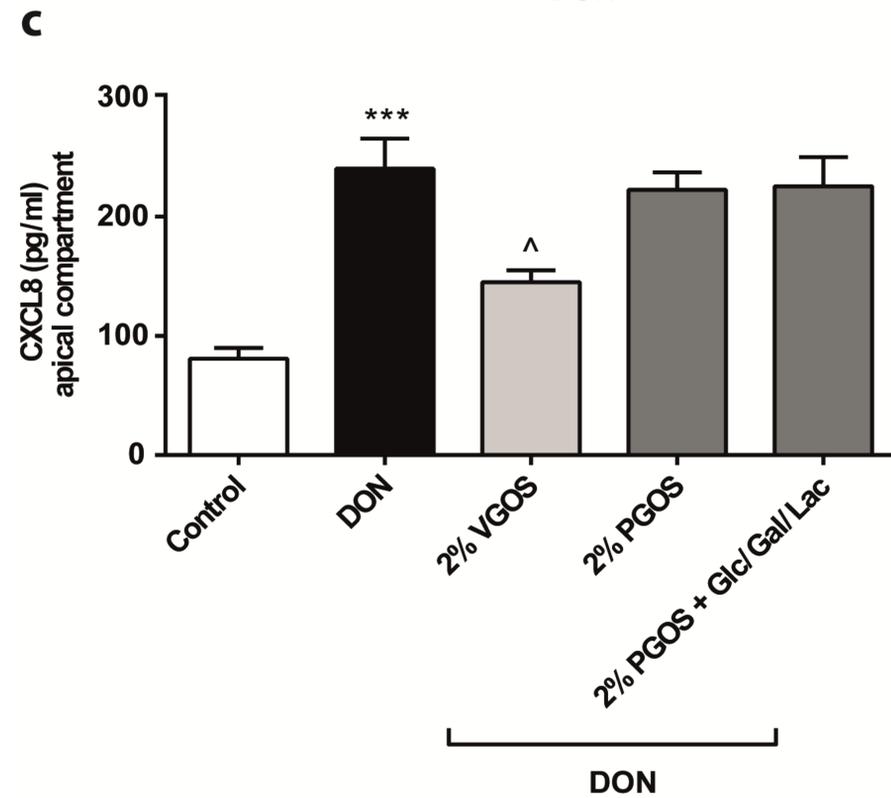
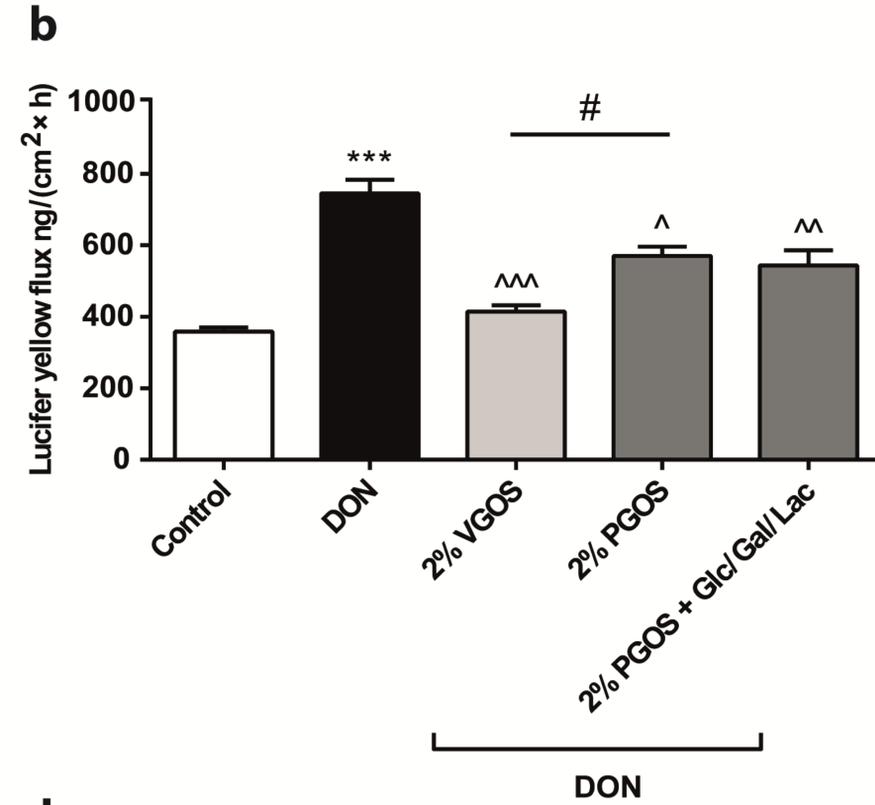
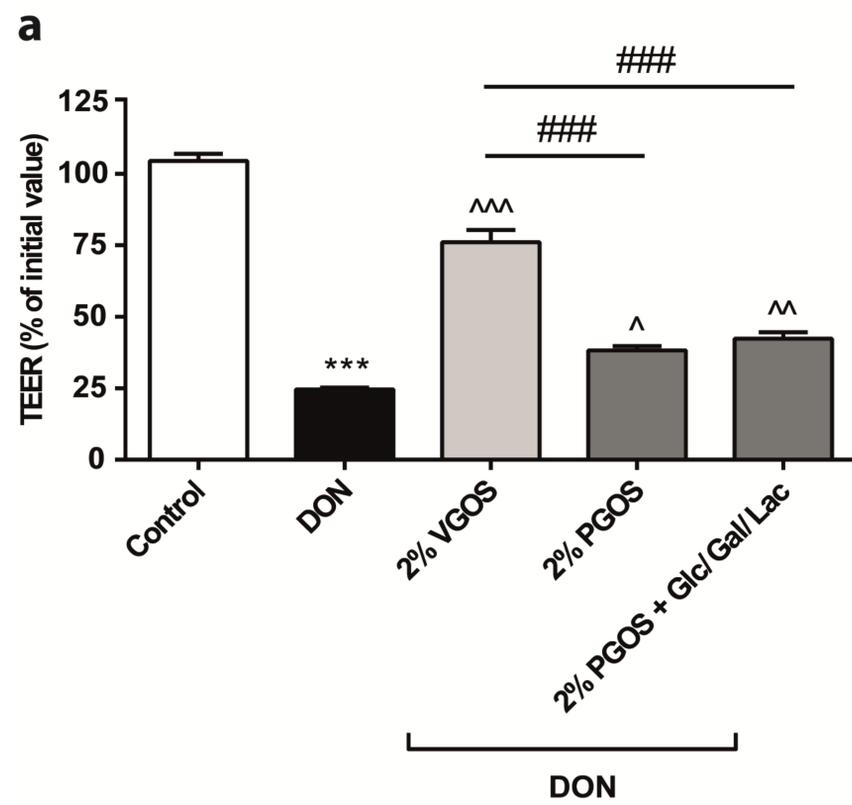
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Supplementation of glucose, galactose and lactose to PGOS did not mimic the effect of VGOS against DON-induced barrier disruption and CXCL8 release. Caco-2 cells were pretreated apically and basolaterally with VGOS and PGOS with or without supplementation with glucose (Glc), galactose (Gal) and lactose (Lac) (24 h) prior to the addition of DON (4.2 μ M) (apical and basolateral compartments) for 24 h. Subsequently, TEER (**a**), the transport of lucifer yellow (**b**) and CXCL8 release into the apical (**c**) and basolateral (**d**) compartment were measured. Results are expressed as a percentage of initial value (TEER), the amount of tracer transported [ng/(cm² × h)] or pg/ml CXCL8 as means \pm SEM of three independent experiments, each performed in triplicate (***) $P < 0.001$; significantly different from the unstimulated cells. ^ $P < 0.05$, ^^ $P < 0.01$, ^^ $P < 0.001$; significantly different from the DON-stimulated cells. # $P < 0.05$, ### $P < 0.001$; significantly different from each other).