Host responses to *Clostridium perfringens* challenge in a chicken model of chronic stress

Sarah J.M. Zaytsoff,^{a,b} Sarah M. Lyons,^c Alexander M. Garner,^d Richard R.E. Uwiera,^b Wesley F. Zandberg,^{c,e} D. Wade Abbott,^a G. Douglas Inglis^a#

^aAgriculture and Agri-Food Canada, Lethbridge, Alberta, Canada
^bDepartment of Agricultural, Food, and Nutritional Science, University of Alberta, Edmonton, Alberta, Canada
^cDepartment of Biology, University of British Columbia (Okanagan Campus), Kelowna, British Columbia, Canada
^dDepartment of Biochemistry, University of British Columbia (Okanagan Campus), Kelowna, British Columbia, Canada
^eDepartment of Chemistry, University of British Columbia (Okanagan Campus), Kelowna, British Columbia, Canada

SUPPLEMENTAL MATERIAL

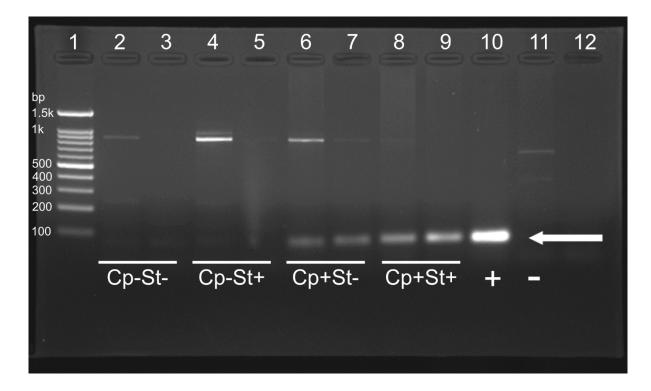


Fig. S1 A 2% agarose gel of NetB gene PCR product (78 bp). Fecal samples were collected 24 h post inoculation with control broth or CP1 *C. perfringens* (NetB toxin positive), DNA was extracted, and subjected to conventional PCR. Lane 1: SMOBIO 100 bp DNA Ladder; Lane 2/3: PCR product of negative control birds (Cp-St-); Lane 4/5: PCR product of birds receiving 20 mg/L corticosterone (Cp-St+); Lane 6/7: PCR product of birds receiving *C. perfringens* inoculation (Cp+St-); Lane 8/9: PCR product of birds receiving both *C. perfringens* inoculation and 20 mg/L corticosterone (Cp+St+); Lane 10: PCR of positive control containing DNA isolated from CP1 *C. perfringens* strain; Lane 11: PCR of negative control containing DNA isolated from confirmed NetB negative *C. perfringens*; and Lane 12: PCR of negative control water blank. Positive bands for NetB gene amplification are seen only in samples obtained from Cp+St- and Cp+St+ treatment groups.

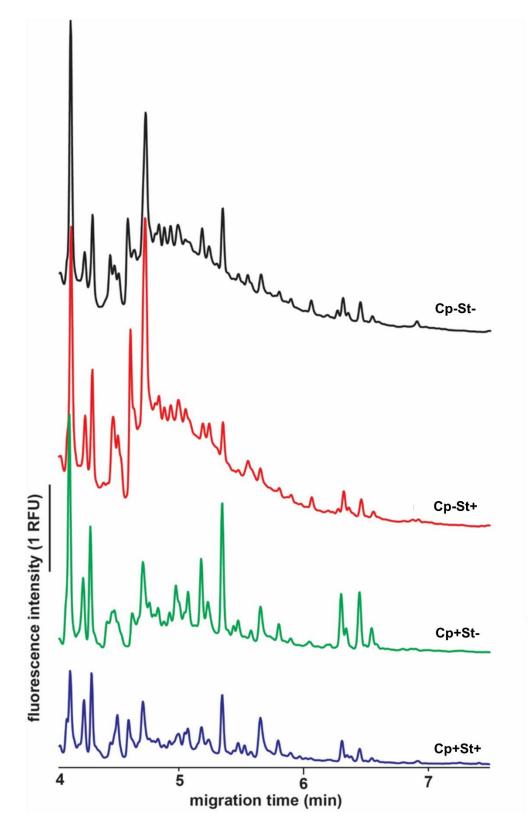


Fig. S2 Representative CE electropherograms of APTS-labelled *O*-glycans derived from intestinal mucus of chickens in the four treatment groups.

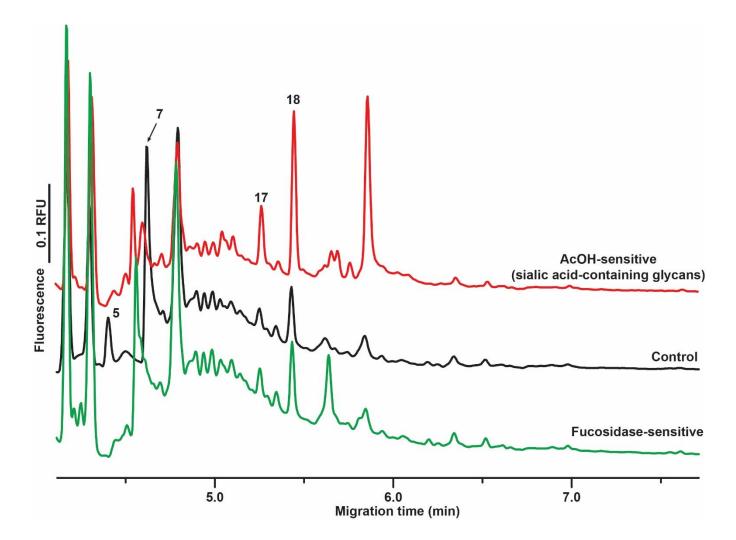


Fig. S3 Representative CE electropherograms indicating sialic acid and fucose-containing *O*-glycans as inferred after their loss upon acetic acid (AcOH) or fucosidase-treatments, respectively. Selected glycans are numbered as described in Fig. 3A.