

## Supplementary materials:

**Figure S6. Soluble plantain NSP reduces *Clostridioides difficile* binary toxin mediated inflammation, and cytotoxicity in Intestine-407 cells.** Cell monolayers were treated with *C. difficile* binary toxin (CDT), at 10 and 100 ng/mL for 24h, in the absence (black bars) or presence of 10 mg/mL plantain NSP (white bars) or oat NSP (grey bars). Media harvested from cells was analysed for release of (A) IL-8 (by ELISA) and (B) cytotoxicity marker adenylate kinase (by Toxilight bioassay). Significant increases in inflammation and cytotoxicity in CDT-treated cells versus untreated controls; ## $P < 0.01$ , ### $P < 0.001$ , #### $P < 0.0001$ ; one-way ANOVA, with Dunnett's post-hoc test. Plantain NSP significantly reduced CDT-mediated actions on Intestine-407 cells; \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ ). No similar blockade was seen with oat NSP. N=2 experiments, n=3 replicates. No significant changes were seen in protein levels in cell lysates measured by bicinchoninic acid (BCA) assay.

