Co-exposure to the food additives SiO2 (E551) or TiO2 (E171) and the pesticide boscalid increases cytotoxicity and bioavailability of the pesticide in a tri-culture small intestinal epithelium model : potential health implications

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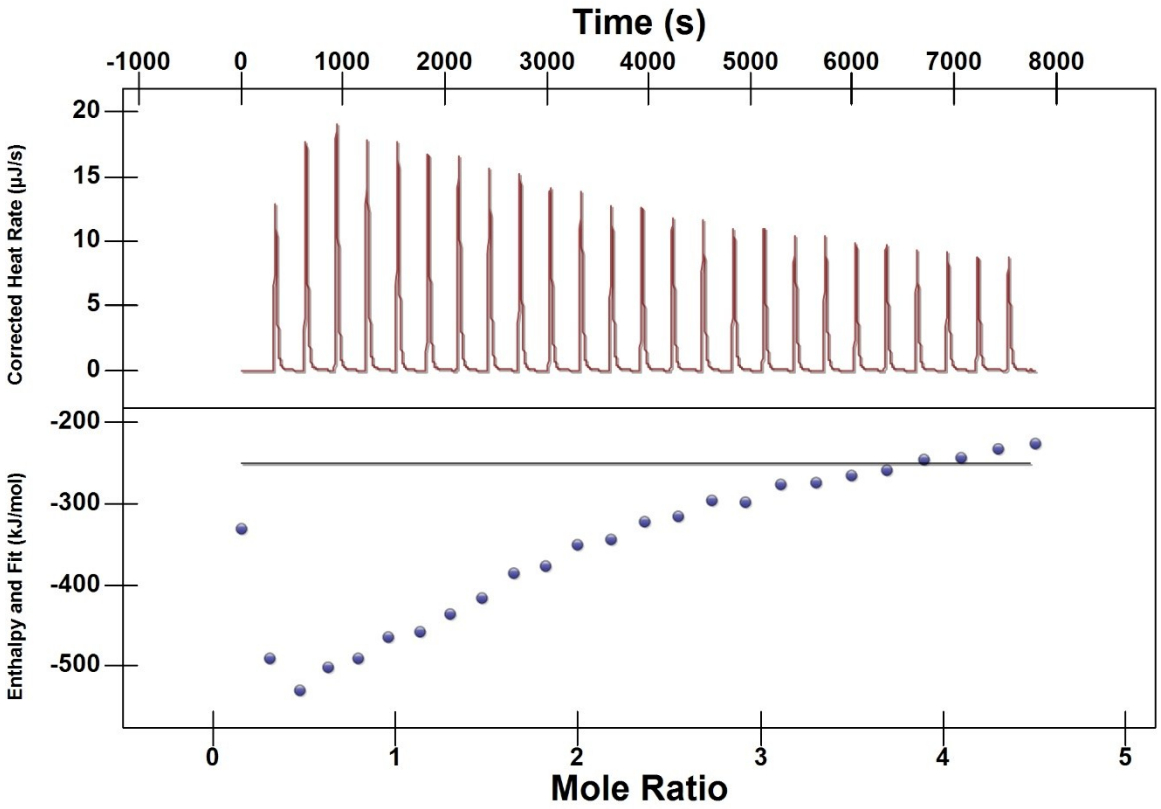

Figure S1. Isothermal titration calorimetry (ITC) of boscalid (500 µM) into TiO_2 (E171) (37.6 µM) in water. Thermogram showing the experimentally derived curve with raw heat rate µJ/s versus time (s) (*top*); and the calculated binding isotherm with change in enthalpy kJ/mol versus boscalid-TiO_2 molar ratio (*bottom*)

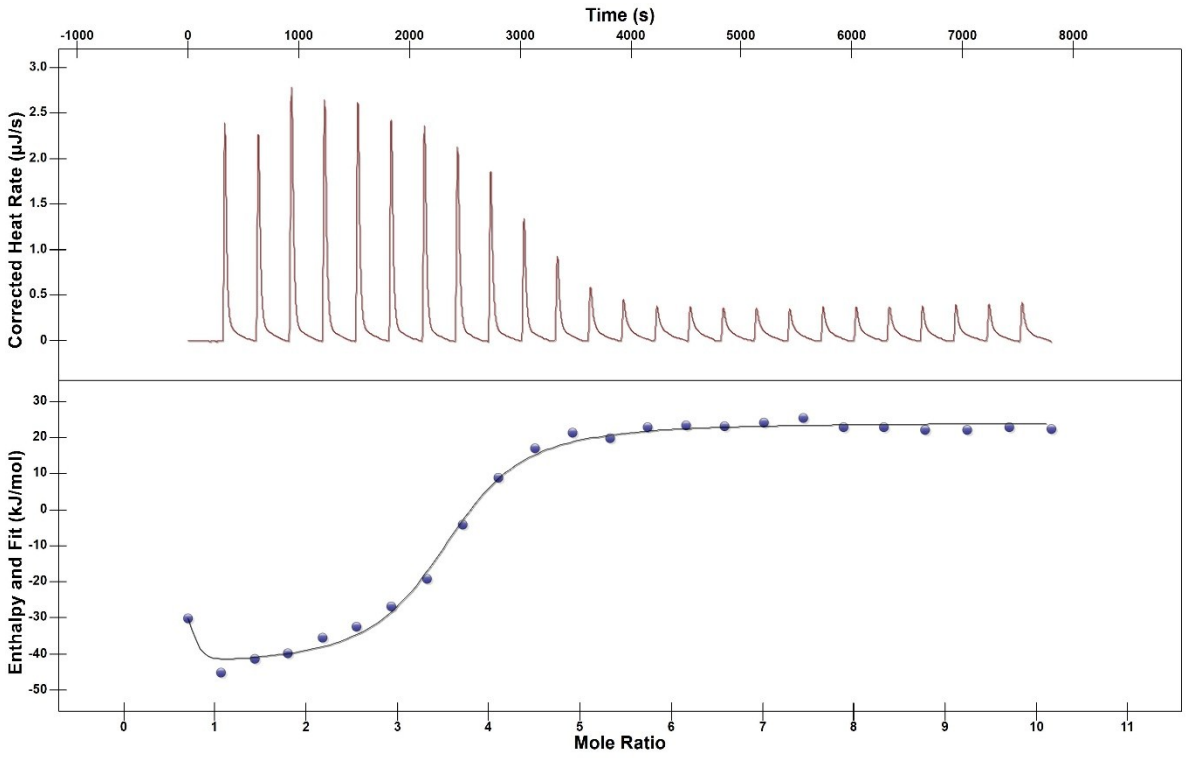

Figure S2. Isothermal titration calorimetry (ITC) of boscalid (500 µM) into SiO_2 (E551) (16.6 µM) in water. Thermogram showing the experimentally derived curve with raw heat rate µJ/s versus time (s) (*top*); and the calculated binding isotherm with change in enthalpy kJ/mol versus boscalid-SiO_2 molar ratio (*bottom*)

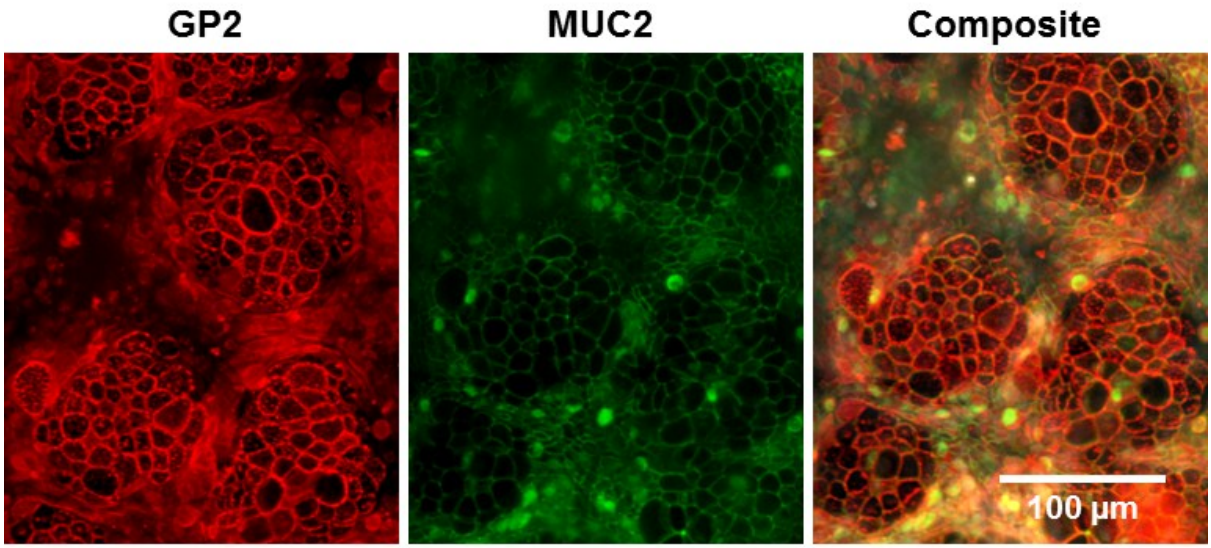

Figure S3. Triculture small intestinal model morphology by confocal microscopy. Mature tricultures grown on transwell inserts were fixed, permeabilized, immunostained for mucin (MUC2) and the M-cell marker, glycoprotein 2 (GP2). Adapted from DeLoid et al., Part. Fibre Toxicol., 2017, 14, 40.