

CORRECTION

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Correction: Dietary L-tryptophan alleviated LPS-induced intestinal barrier injury by regulating tight junctions in a Caco-2 cell monolayer model

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Correction for 'Dietary L-tryptophan alleviated LPS-induced intestinal barrier injury by regulating tight junctions in a Caco-2 cell monolayer model' by Mengdie Chen *et al.*, *Food Funct.*, 2019, **10**, 2390–2398, <https://doi.org/10.1039/C9FO00123A>.

In the original article, Fig. 5 was not clearly presented. The authors apologise for the lack of clarity in the original figure and a new Fig. 5 is presented below to aid understanding.

The relevant changes to the citations in the section 3.5 text are as follows:

3.5 Dietary L-Trp prevents the LPS-induced down regulated expression of tight junction protein Claudin-1, Occludin and ZO-1.

When the monolayer was previously disrupted by LPS, dietary L-Trp at high concentrations (80 μ M) significantly alleviated the decrease in claudin-1 ($P < 0.05$), with no significant differences between other concentrations in the PC group. Western blot analysis confirmed that dietary L-Trp could not improve the levels of tight junction proteins (ZO-1 and occludin), which were reduced after LPS injection (Fig. 5e and f); the results indicated that the reparative effects of dietary L-Trp are weaker than the protective effects on tight junction proteins.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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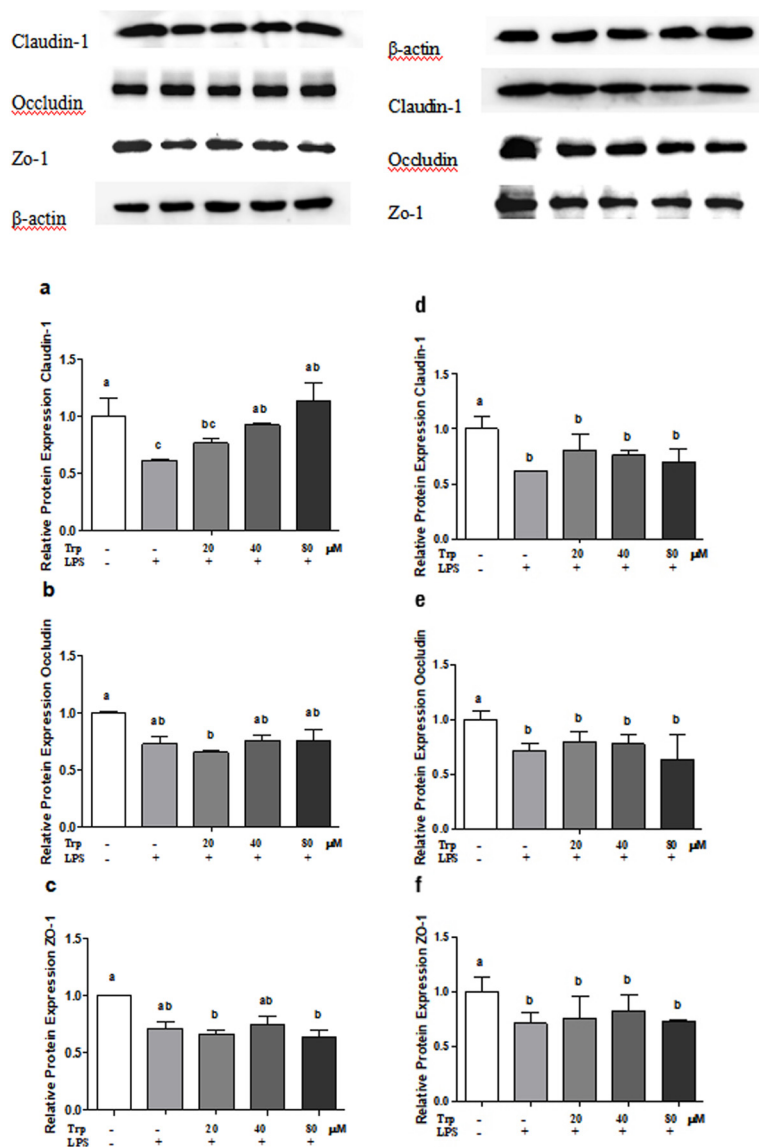


Fig. 5 The effect of dietary L-Trp on the expression of (a) Claudin-1, (b) occludin, and (c) ZO-1 in LPS-induced Caco-2 cells. Fully differentiated Caco-2 cells are incubated with 20, 40 and 80 μM dietary L-Trp (24 h) after (a–c, left) or at the same time (d–f, right) as $100 \mu\text{g mL}^{-1}$ LPS (24 h). Cells without tryptophan and LPS treatments are designated as the negative control (NC) and those treated with LPS only as the positive control (PC). Results are expressed as protein expression (normalized with β -actin) relative to unstimulated cells as mean \pm SD of three independent experiments. Different letters indicate significant differences using Tukey's multiple comparison test, $\alpha = 0.05$.

