

Supplementary data for article:

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## Supplementary material

### Antioxidative capacity and binding affinity of the complex of green tea catechin and beta-lactoglobulin glycated by the Maillard reaction

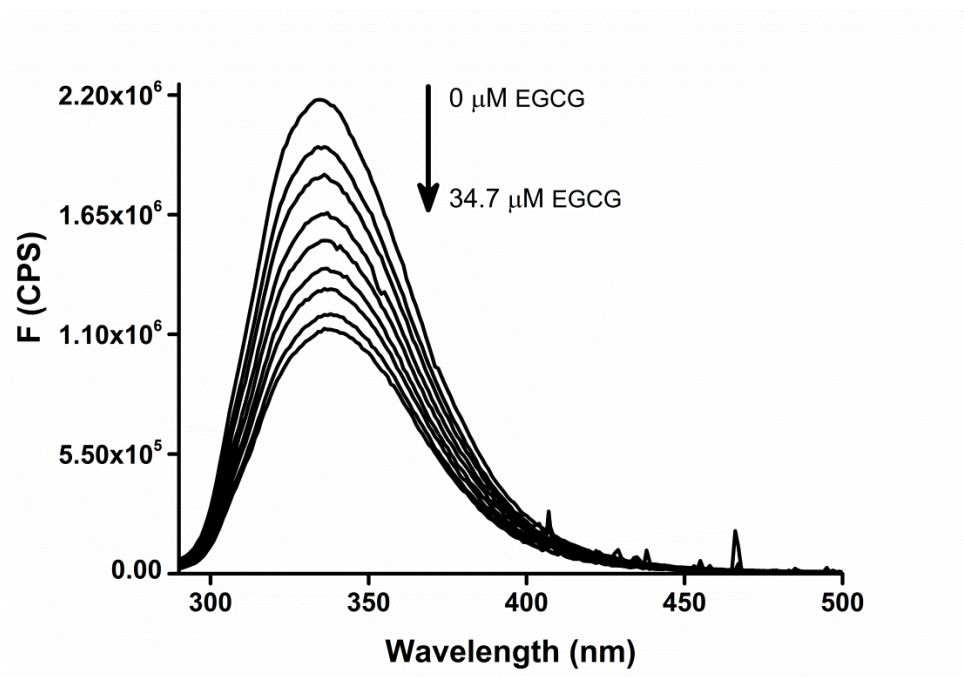
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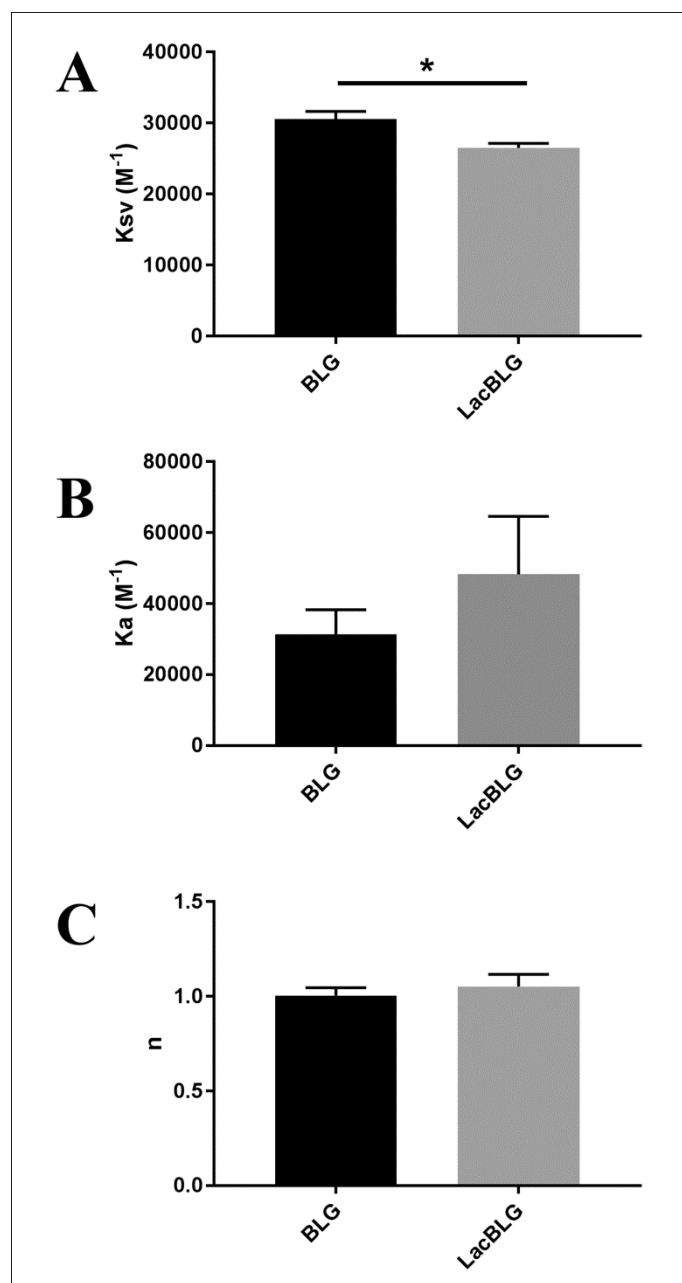
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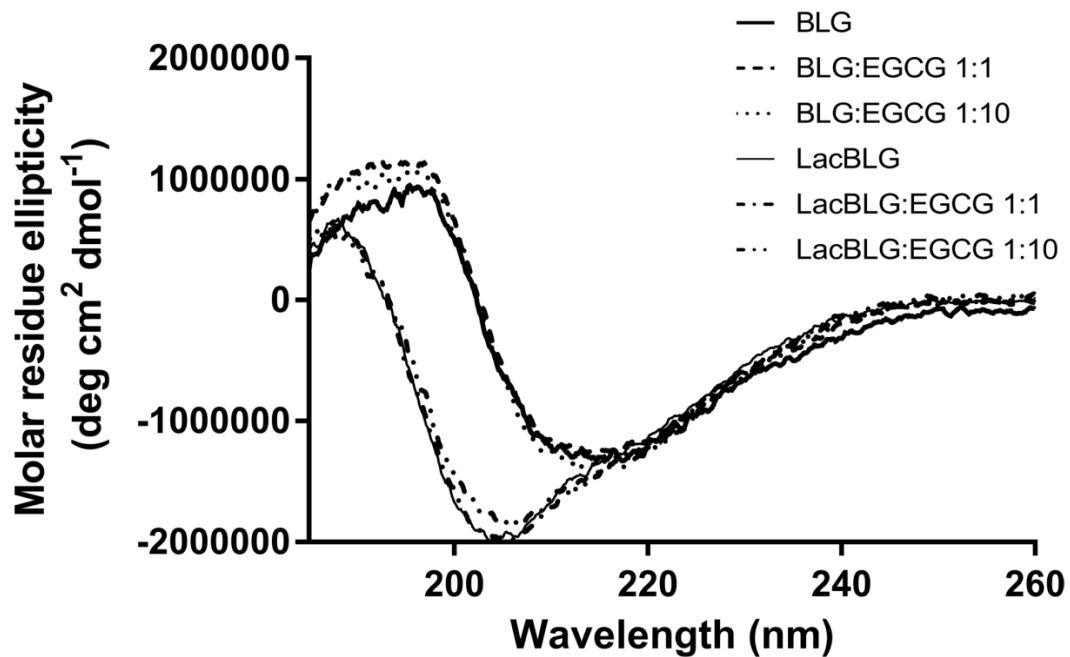


**Figure S1.** Fluorescence quenching of native  $\beta$ -lactoglobulin (25  $\mu\text{g/mL}$ ) by EGCG (0 – 34.7  $\mu\text{M}$ )

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**Figure S2.** Statistical analysis of EGCG binding parameters to native (BLG) and glycosylated (LacBLG)  $\beta$ -lactoglobulin. Two sample  $t$ -test only showed significant difference between  $K_{sv}$  of the two BLG forms (A), while there was no significant difference in the  $K_a$  (B) or the number of binding sites (C) at  $p < 0.05$ .



**Figure S3.** EGCG induces conformational changes in both forms of BLG as shown by CD spectra. The protein CD spectra were recorded in 20 mM PBS buffer (pH 7.2) with and without EGCG. The following molar ratios were used: BLG (—), BLG:EGCG 1:1 (- - -), BLG:EGCG 1:10 (· · ·), LacBLG (—), LacBLG:EGCG 1:1 (- - -), LacBLG:EGCG 1:10 (· · ·)