# Supplementary Information

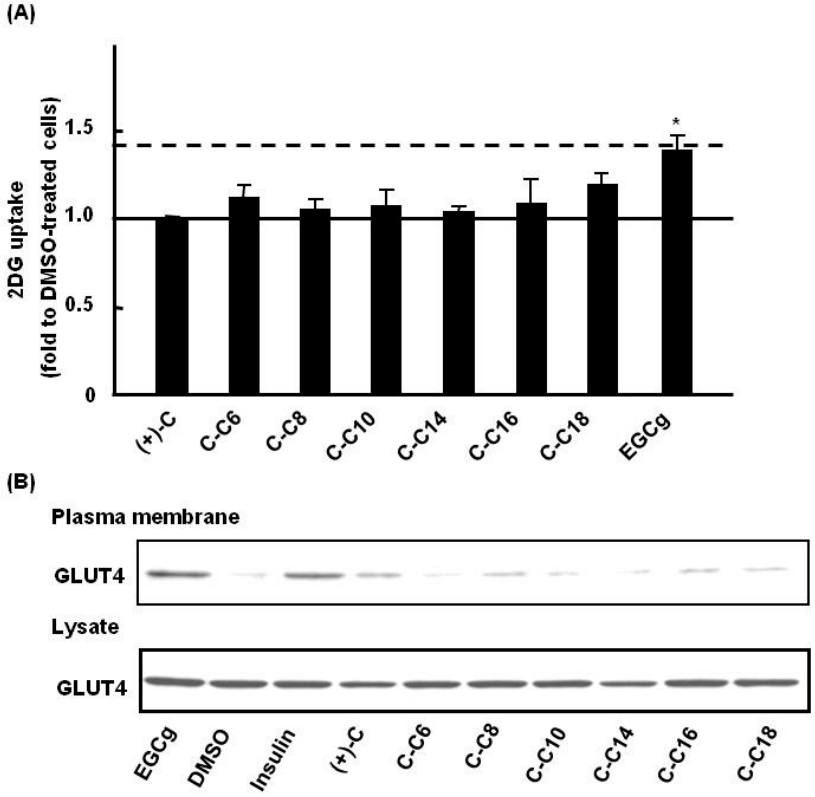


**Figure S1.** Effects of 3-*O*-acylcatechins on glucose uptake activity and GLUT4 translocation in L6 myotubes. Differentiated L6 cells were incubated with 100 nM catechins and 3-*O*-acyl-catechins for 15 min. (**A**) Glucose uptake activity was measured using [$^3$H]-2DG as described in the Experimental section. Data are shown as the mean ± SE ($n$ = 3). ***** $p < 0.05$ *vs.* DMSO-treated control cells (Dunnett multiple comparison test); (**B**) GLUT4 in the plasma membrane and the cell lysate were detected by Western blot analysis.

**Table S1.** Effects of acyl-catechins on cell viability of L6 myotubes.

| Catechin (M) | Cell Viability (% of DMSO-Treated Cells) | | |
|---|---|---|---|
| | $10^{-7}$ | $10^{-6}$ | $10^{-6}$ |
| (+)-C | 100 ± 1.95 | 97 ± 2.86 | 88 ± 3.66 |
| C-C6 | 96 ± 2.35 | 100 ± 4.53 | 75 ± 2.17 * |
| C-C8 | 99 ± 2.02 | 94 ± 1.49 | 49 ± 2.41 * |
| C-C10 | 96 ± 2.70 | 90 ± 1.80 | 38 ± 1.19 * |
| C-C14 | 89 ± 3.46 | 88 ± 2.78 | 42 ± 7.67 * |
| C-C16 | 109 ± 3.07 | 97 ± 2.78 | 77 ± 1.62 * |
| C-C18 | 106 ± 2.05 | 96 ± 3.67 | 57 ± 0.91 * |
| (−)-EC | 98 ± 2.80 | 96 ± 3.21 | 101 ± 3.23 |
| EC-C14 | 101 ± 6.17 | 94 ± 2.03 | 76 ± 5.49 * |
| EC-C16 | 103 ± 1.73 | 98 ± 2.67 | 87 ± 1.86 * |

Differentiated L6 cells were incubated with the indicated concentration of catechins for 24 h. Cell viability was measured by WST-1 assay. Data are represented as % of control cells treated with 0.1% DMSO and expressed as the means ± SE ($n$ = 3). Asterisks indicate significant differences from the DMSO-treated control cells, $p < 0.05$ by Student's $t$-test.