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Addition of flavonols and polysaccharides as excipient ingredients into epicatechins rich green tea extract inhibited free radical formation and glucose uptake

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<Supplementary data>

Table 1.Contents of three kinds of flavonolsflavonol extracts derived from green tea (FVN) and onion/whangchil mixture (OW) (mg/g).

| | Myricetin | Quercetin | Kaempferol | Total flavonol |
|-----|-----------------|------------------|-----------------|------------------|
| FVN | 4.91 ± 0.27 | 9.27 ± 0.57 | 3.76 ± 0.22 | 17.94 ± 1.05 |
| OW | 0.00 ± 0.00 | 78.49 ± 2.45 | 0.00 ± 0.00 | 78.49 ± 2.45 |

- a. Flavonols derived from green tea (FVN, AMOREPACIFIC Corp.) were obtained as previous research (https://doi.org/10.3390/antiox8080278). Briefly, green tea extract solution (1 %, w/v) was reacted with 1 % (v/v) cellulase (100,000 units/mL) in a thermos shaker (Eppendorf AG, Hamburg, Germany) for 14 h at 40 ed with 1% (v/v) cellulase (100,000 units/mL) in a t 90 r (Eppendorf AG, Hamburpulverized by using freeze dryer.
- b. Onion and whangchil mixture (OW) was a mixture of onion peel extract powder (OP) and

whangchil in a 4: 1 ratio(w : w). Onion peel extract powder (OP) was manufactured by Nutraceuticals International Group LLC (Bloomingdale, NJ,USA) and purified using a column. Powdered extract of whangchil, commonly known as Korean Dendropanax, was supplied by BK Bio Company (Jeju, SouthKorea) after two extractions with ethanol and purified water.