



Supplementary Figures & Table

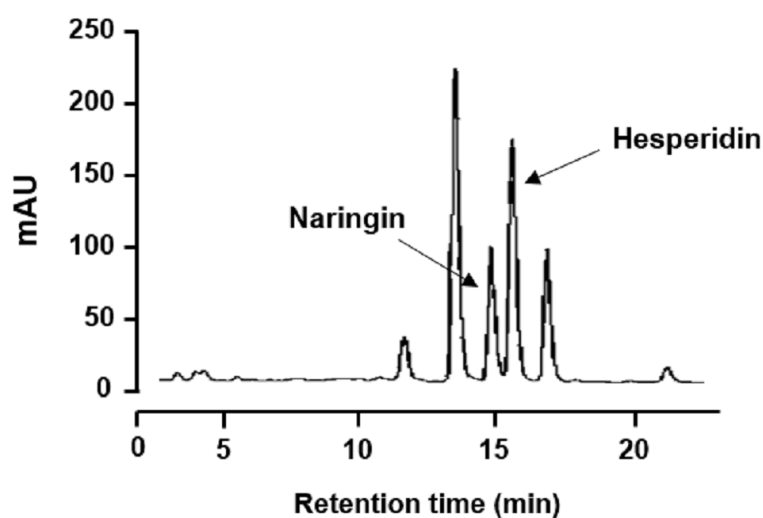


Figure S1. Chromatographic result for ethanolic Yuzu extract with detection at 280 nm.

Table S1. Contents of hesperidin (HSP) in ethanolic extract of Yuzu.

| | Hesperidin | Naringin |
|------------------------------|-----------------|-----------------|
| Contents (mg/g of F.wt Yuzu) | 0.97 ± 0.08 | 0.31 ± 0.03 |

All samples were tested in triplicate. Data are means \pm SDs. F.wt, fresh weight

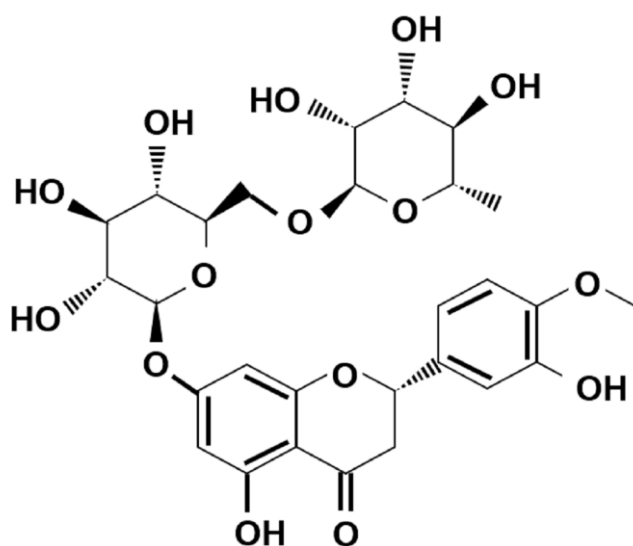


Figure S2. The structure of hesperidin.

11 **Supplementary methods**

12 **Extraction of Yuzu and quantitative HPLC analysis**

13 A mixture of 5 g (fresh weight) of sample and 25 mL of ethanol-DMSO (V/V; 50:10) was
14 homogenized in a tube, and stirred on a magnetic stirrer for 10 min. Then 1 mL of the
15 sample was centrifuged at 10,000g for 15 min at 4°C. The supernatant was collected and
16 filtered through a 0.45 µm membrane filter before HPLC analysis. Reversed phase HPLC
17 was used to assay hesperidin and naringin concentrations. An agilent 1100 Series System
18 (Japan) consisting of a binary pump (DE43618438) and UV detector (DAD: G1315B) was
19 used. The column was a Mightysil RP-C18 column (250 x 4.5; 2.5 i.d.), and the mobile
20 phase was composed of (A) 2% acetic acid (aqueous) and (B) 0.5% acetic acid
21 (aqueous)-acetonitrile (v/v; 50:50). Gradient elution was performed as follows: 0 min, 95:5;
22 10 min, 90:10; 40 min, 60:40; 55 min, 45:55; 60 min, 20:80 and 65 min, 0:100. The mobile
23 phase was filtered under vacuum through a 0.45 µm membrane filter before use, and a
24 flow rate of 1 mL/min was used. UV absorbance was measured at 280 nm. The column
25 temperature was maintained at 25°C.