

Foods

Article

Supplementary materials

**Development of a Simultaneous Normal-Phase HPLC Analysis of Lignans, Tocopherols, Phytosterols and Squalene in Sesame Oil Samples**

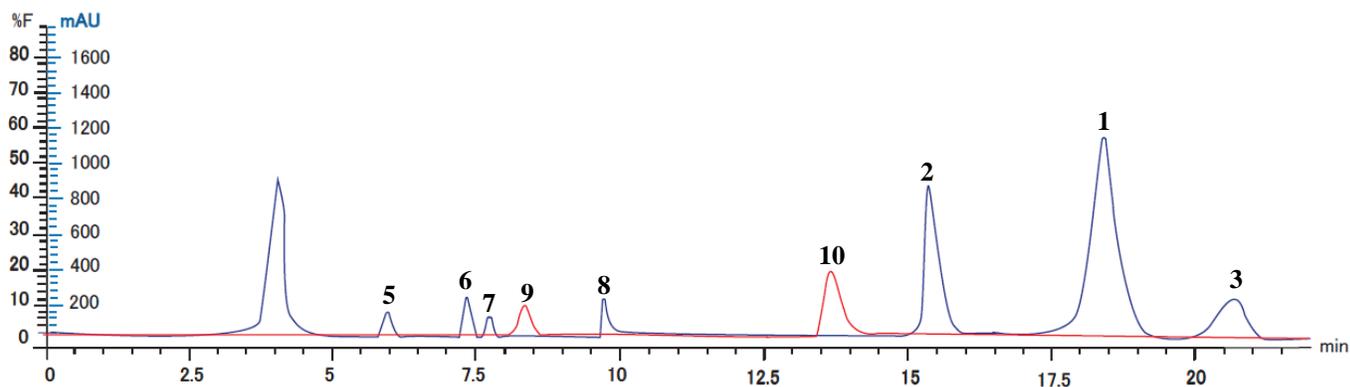
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[Supplementary Table 1](#). Detail of sesame oil samples used in this study.

| Sample SO          | Description   | Source    |
|--------------------|---|-----------|
| <b>CPO-1 (1)</b>   | Cold-pressed white sesame oil (100%)                                      | Thailand  |
| <b>CPO-2 (2)</b>   | Cold-pressed black sesame oil (100%)                                      | Thailand  |
| <b>CPO-3 (3)</b>   | Cold-pressed black sesame oil (100%)                                      | Thailand  |
| <b>CPO-4 (4)</b>   | Cold-pressed black sesame oil (100%)                                      | Thailand  |
| <b>CPO-5 (5)</b>   | Cold-pressed black sesame oil (100%)                                      | Thailand  |
| <b>CPO-6 (6)</b>   | Cold-pressed black sesame oil (100%)                                      | Thailand  |
| <b>CPO-7 (7)</b>   | Cold-pressed black sesame oil (100%)                                      | Thailand  |
| <b>SOS-1 (8)</b>   | Cold-pressed black sesame oil (100%) in soft gel                          | Thailand  |
| <b>SOS-2 (9)</b>   | Cold-pressed black sesame oil (100%) in soft gel                          | Thailand  |
| <b>SOS-3 (10)</b>  | Cold-pressed black sesame oil (100%) in soft gel                          | Thailand  |
| <b>SOS-4 (11)</b>  | Cold-pressed black sesame oil (100%) in soft gel                          | Thailand  |
| <b>SCO-1 (12)</b>  | Sesame oil from roasted white sesame seeds                                | China     |
| <b>SCO-2 (13)</b>  | Sesame oil from roasted white sesame seeds                                | Korea     |
| <b>SCO-3 (14)</b>  | Sesame oil from roasted white sesame seeds                                | Korea     |
| <b>SCO-4 (15)</b>  | Sesame oil from roasted white sesame seeds                                | Japan     |
| <b>SCO-5 (16)</b>  | Sesame oil from roasted black sesame seeds                                | China     |
| <b>SCO-6 (17)</b>  | Sesame oil from roasted black sesame seeds                                | China     |
| <b>SCO-7 (18)</b>  | Sesame oil from roasted black sesame seeds                                | China     |
| <b>SCO-8 (19)</b>  | Sesame oil from roasted white sesame seeds (95%) +black sesame seeds (5%) | China     |
| <b>SCO-9 (20)</b>  | White sesame oil (100%)   | Thailand  |
| <b>SCO-10 (21)</b> | White sesame oil (100%)   | Thailand  |
| <b>SCO-11 (22)</b> | Black sesame oil (100%)   | India     |
| <b>SCO-12 (23)</b> | Black sesame oil (100%)   | Singapore |
| <b>MSCO-1 (24)</b> | White sesame oil (50%) +soybean oil (50%)                                 | Singapore |
| <b>MSCO-2 (25)</b> | Black sesame oil (70%) +soybean oil (30%)                                 | Thailand  |
| <b>MSCO-3 (26)</b> | Black sesame oil (70%) +soybean oil (30%)                                 | Thailand  |
| <b>MSCO-4 (27)</b> | Black sesame oil (80%) +soybean oil (20%)                                 | Thailand  |
| <b>MSCO-5 (28)</b> | Sesame oil from roasted black sesame seeds (80%) +soybean oil (20%)       | China     |

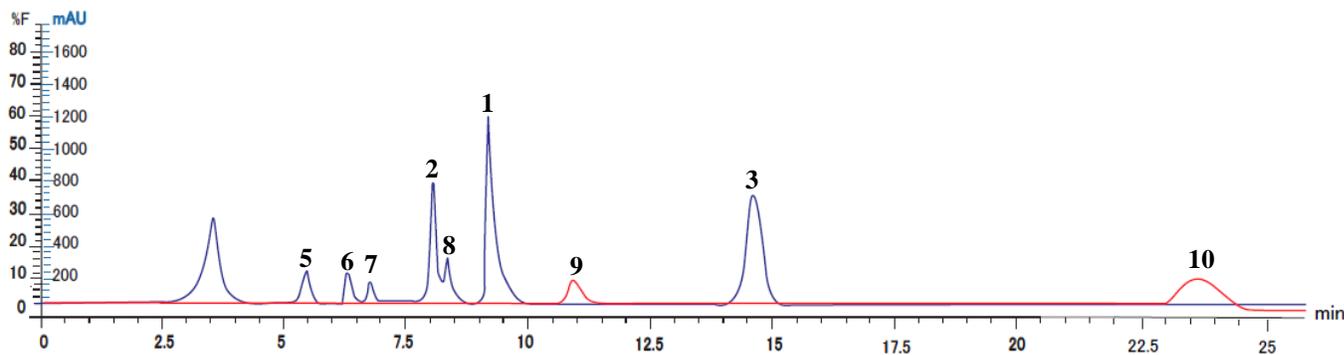
Supplementary Figure 1. Chromatograms of some mobile phase ratios showed effective in the separation of the targeted compounds from the four conditions.

**A**

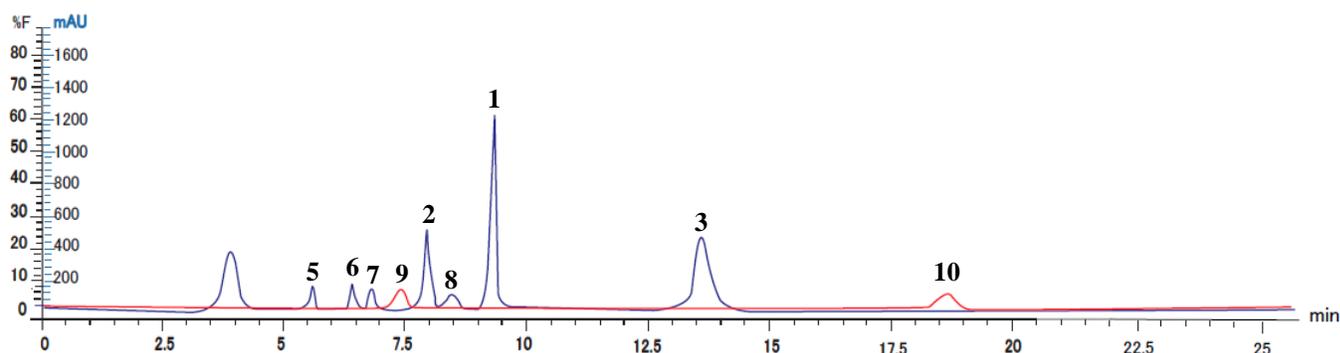


Condition A, a mixture of n-hexane/tetrahydrofuran/acetonitrile/2-propanol (93:6:0.5:0.5, v/v/v/v)  
using a flow rate of 0.8 mL min<sup>-1</sup>

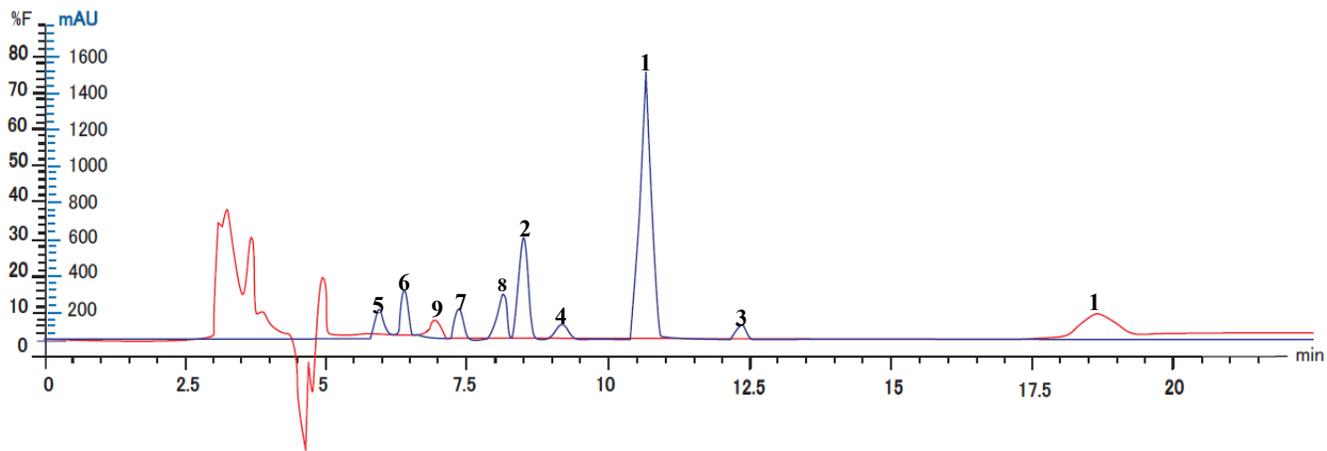
**B**



Condition B, a mixture of n-hexane/tetrahydrofuran/acetonitrile/2-propanol (92:6:1:1, v/v/v/v)  
using a flow rate of 0.5 mL min<sup>-1</sup>.

**C**

Condition C, a mixture of n-hexane/tetrahydrofuran/acetonitrile (93:6:1, v/v/v)  
using a flow rate of 1.2 of mL min<sup>-1</sup>

**D**

Condition D, a mixture of n-hexane/tetrahydrofuran/2-propanol (93:6:1, v/v/v)  
using a flow rate of 0.8 of mL min<sup>-1</sup>

Peak identification: 1 = Sesamin, 2 = Sesamol, 3 = Sesamol, 4 = Asarinin,  
5 =  $\alpha$ -Tocopherol, 6 =  $\beta$ -Tocopherol, 7 =  $\gamma$ -Tocopherol, 8 =  $\delta$ -Tocopherol, 9 = Squalene, and  
10 = Phytosterol.