

1 **Anti-obesity effects of red pepper (*Capsicum annuum* L.) leaf extract on 3T3-L1**
2 **preadipocytes and high fat diet-fed mice**

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4 Mi-Jin Oh,^a Hye-Bin Lee,^a Guijae Yoo,^a Miri Park,^a Chang-Hyun Lee,^b Inwook Choi,^a and
5 Ho-Young Park^{*,a}

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7 ^a *Research Division of Food Functionality, Korea Food Research Institute, Jeollabuk-do*
8 *55365, Republic of Korea*

9 ^b *Department of Anatomy, Woosuk University, Jeollabuk-do 54896, Jeollabuk-do 55338,*
10 *Republic of Korea*

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14 **Supplementary Data**

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16 **Supplementary table 1.** List of compounds identified by MS spectrum.

| No. | Identification | T _R (min) | Formula | Adduct | Neutral mass (<i>m/z</i>) | Observed (<i>m/z</i>) | Mass error (ppm) |
|-----|---|-------------------------|-----------|----------------|--------------------------------|----------------------------|---------------------|
| 1 | Fuzinoside | 0.5 | C15H28O13 | -H, +Cl, +HCOO | 416.15299 | 415.1447 | -2.6 |
| 2 | Pentose | 0.57 | C5H10O5 | +HCOO, -H | 150.05282 | 195.0515 | 2.7 |
| 3 | Citric acid | 0.64 | C6H8O7 | -H | 192.027 | 191.0203 | 3.2 |
| 4 | Taxifolin | 2.88 | C15H12O7 | +HCOO | 304.0583 | 349.06 | 1.0 |
| 5 | Chlorogenic acid | 3.05 | C16H18O9 | -H | 354.09508 | 353.0872 | -1.6 |
| 6 | Turpinionosides E | 3.78 | C19H32O8 | +HCOO, -H | 388.20972 | 433.2068 | -2.6 |
| 7 | Maltose | 4.09 | C12H22O11 | -H, +Cl, +HCOO | 342.11621 | 341.1089 | -0.1 |
| 8 | Luteolin 7-apiosyl-(1->2)-glucoside | 4.68 | C26H28O15 | -H, +Cl | 580.14282 | 579.1362 | 1.2 |
| 9 | Quercetin 3-O-rhamnoside | 4.75 | C21H20O11 | -H, +Cl | 448.10056 | 447.0935 | 0.4 |
| 10 | Apigenin-7-apiosylglucoside | 5.15 | C26H28O14 | -H, +Cl, +HCOO | 564.14791 | 563.1405 | -0.2 |
| 11 | Luteolin 7-(2-O-apiosyl-6-O-malonyl)glucoside | 5.24 | C29H30O18 | -H | 666.1432 | 665.1341 | -1.9 |
| 12 | Apigenin 7-O-glucoside | 5.29 | C21H20O10 | -H | 432.10565 | 431.0971 | -3 |
| 13 | Luteolin 7-O-β-D-(6"-acetyl)-glucopyranoside | 5.35 | C23H22O12 | -H | 490.11113 | 489.1029 | -2 |
| 14 | Apigenin 6-C-arabinoside 8-C-glucoside | 5.74 | C26H28O14 | -H | 564.1479 | 563.1301 | -3.2 |
| 15 | Capsicoside A3 | 5.92 | C33H52O8 | +HCOO | 576.36621 | 621.3619 | -3.3 |
| 16 | Luteolin | 6.44 | C15H10O6 | -H | 286.04774 | 285.0406 | 0.4 |
| 17 | Apigenin | 7.23 | C15H10O5 | -H | 270.05282 | 269.0457 | 0.6 |
| 18 | Capsianoside I | 7.42 | C32H52O14 | -H | 660.3357 | 659.3331 | -4.2 |
| 19 | Capsianoside II | 7.57 | C50H84O25 | -H | 1084.5301 | 1083.5071 | 0.9 |
| 20 | Andrographatoside | 8.18 | C26H42O9 | -H, +HCOO | 498.28288 | 497.2754 | -0.5 |
| 21 | Terrestrosin B | 9.71 | C45H74O17 | +Cl | 886.4926 | 921.4697 | 8.3 |
| 22 | Methyl 7,10-hexadecadienoate | 10.25 | C17H30O2 | +HCOO | 266.22458 | 311.2222 | -1.8 |
| 23 | trans-p-Feruloyl-β-D-glucopyranoside | 17.98 | C16H32O2 | -H | 256.24023 | 255.233 | 0.3 |
| 24 | Octadeca-carboxylic acid | 19.39 | C18H36O2 | -H | 284.27153 | 283.2639 | -1.3 |

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18 **Supplementary table 2.** Culture medium pH for different probiotic bacteria of water-soluble from pepper leaves extract (PLE) or inulin after
 19 incubation for 0–24 h.

| Concentration (%) | CON | | Inulin | | PLE | | | |
|-------------------------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
| | 0 | 24 | 0 | 24 | 0 | 24 | 0 | 24 |
| <i>Lacticaseibacillus paracasei</i> | 6.9±0.1 ^b | 6.8±0.2 ^c | 6.9±0.1 ^a | 6.6±0.0 ^b | 6.8±0.1 ^a | 6.5±0.1 ^a | 6.8±0.1 ^a | 6.3±0.1 ^a |
| <i>Lactococcus lactis</i> | 7.0±0.1 ^c | 6.9±0.1 ^b | 6.9±0.1 ^b | 6.6±0.1 ^b | 6.9±0.1 ^a | 6.5±0.1 ^a | 6.9±0.1 ^a | 6.3±0.1 ^a |
| <i>Bifidobacterium bifidum</i> | 7.1±0.1 ^d | 6.9±0.1 ^c | 7.0±0.1 ^b | 6.5±0.2 ^{ab} | 7.0±0.0 ^a | 6.4±0.0 ^b | 7.0±0.0 ^a | 6.4±0.0 ^b |
| <i>Bifidobacterium longum</i> | 7.0±0.1 ^b | 6.9±0.1 ^c | 7.0±0.1 ^b | 6.6±0.1 ^b | 7.0±0.0 ^a | 6.5±0.1 ^a | 7.0±0.0 ^a | 6.2±0.1 ^a |

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