**Supplementary Material**

**Table S1A. Diet for reduced phenolic compounds intake**

**(To accomplish in the 48 h before the assay)**

|  |
| --- |
| **Breakfast** |
| Simple milk or natural yoghurt or Greek yoghurt (add sugar if needed) or aromatized yoghurt (it should not contain cereals or fruit) |
| White bread or non-integral *Croissant* |
| Butter or cheese (it should not contain herbs, garlic or spices) |
|  |
| **Morning Snack** |
| Simple milk or natural yoghurt or Greek yoghurt (add sugar if needed) or aromatized yoghurt (it should not contain cereals or fruit). |
|  |
| **Lunch** |
| Chicken soup with non-integral pasta. Exclude rice, onion, olive oil, vegetables (e.g. carrots….). |
| Boiled or grilled meat or fish or boiled egg (add only salt if needed). Canned fish in water and salt is allowed. If you prefer to fry the foods use only lard or butter. Do not use seasonings, herbs, spices, garlic, onion, sauces, *ketchup*, mayonnaise, olive oil, vegetable oils, vinegar, lemon. |
| White bread or non-integral *Croissant* |
| Non-integral pasta boiled only with water and salt. Do not use seasonings, herbs, spices, garlic, onion, sauces, *ketchup*, mayonnaise, olive oil, vegetable oils, vinegar, and lemon. Pasta can contain egg in composition. Exclude pasta with vegetables and/or spices and/or herbs in composition. |
| Cream ice-cream or simple yoghurt (without chocolate, coffee, fruit and spices – cinnamon, vanilla, anise…) |
| The only allowed drink is water. Do not consume juices, soft drinks, tea, coffee, alcoholic drinks – wine, beer, liqueurs. |
|  |
| **Afternoon Snack** |
| Identical to the Morning Snack |
|  |
| **Dinner** |
| Identical to the Lunch |
|  |
| **Supper**  **Allowed only on the first 24 h of the diet without phenolic compounds. On the previous day of the assay do not consume any food after dinner and keep the fasting until blood collection on FFUL.** |
| Identical to the Morning Snack |

**Table S1B. Diet for reduced phenolic compounds intake**

**(To accomplish in the 24 h of the assay day)**

|  |
| --- |
| **Breakfast** |
| Common beans meal |
|  |
| **Morning Snack** |
| Simple milk or natural yoghurt or Greek yoghurt (add sugar if needed) or aromatized yoghurt (it should not contain cereals or fruit). |
|  |
| **Lunch** |
| Chicken soup with non-integral pasta. Exclude rice, onion, olive oil, vegetables (e.g. carrots….). |
| Boiled or grilled meat or fish or boiled egg (add only salt if needed). Canned fish in water and salt is allowed. If you prefer to fry the foods use only lard or butter. Do not use seasonings, herbs, spices, garlic, onion, sauces, *ketchup*, mayonnaise, olive oil, vegetable oils, vinegar, lemon. |
| White bread or non-integral *Croissant* |
| Non-integral pasta boiled only with water and salt. Do not use seasonings, herbs, spices, garlic, onion, sauces, *ketchup*, mayonnaise, olive oil, vegetable oils, vinegar, and lemon. Pasta can contain egg in composition. Exclude pasta with vegetables, and/or spices and/or herbs in composition. |
| Cream ice-cream or simple yoghurt (without chocolate, coffee, fruit and spices – cinnamon, vanilla, anise…) |
| The only allowed drink is water. Do not consume juices, soft drinks, tea, coffee, alcoholic drinks – wine, beer, liqueurs. |
|  |
| **Afternoon Snack** |
| Identical to the Morning Snack |
|  |
| **Dinner** |
| Identical to the Lunch |
|  |
| **Supper**  **Keep the fasting after dinner until the last collection of urine in the next morning.** |
|  |

**Table S1C. List of allowed and not allowed food items**

**(To accomplish in the 48 h before the assay and in the 24 h of the assay day)**

|  |  |
| --- | --- |
| **Allowed** | **Not allowed** |
| Chicken soup without rice, olive oil or vegetables | Vegetable’s soup |
|  | Vegetables in salad, boiled, grilled, stewed, fried and roasted |
|  | Legumes (common beans, black eyed beans, peas, broad beans, lentils, chickpea, grass pea, soybeans) or derived food products (tofu…) |
|  | Herbs, spices, sauces, mayonnaise, *ketchup* |
|  | Boiled or raw fruit, dried fruits/ nuts/ candied fruits |
|  | Fruits jam, quince marmalade, jelly, honey |
| Boiled, grilled meat or fried meat in lard/ butter | Stewed, roasted, fried meat in olive oil/ vegetable oils |
| Boiled, grilled fish or fried fish in lard/ butter | Stewed, roasted, fried fish in olive oil/ vegetable oils |
| Boiled eggs or fried eggs in lard/ butter | Stewed, roasted, fried eggs in olive oil/ vegetable oils |
| Boiled or grilled seafood or fried seafood in lard/ butter | Stewed, roasted, fried seafood in olive oil/ vegetable oils |
| Canned fish in water | Canned fish in vegetable oil, olive oil, with seasonings (tomato, spices, herbs) |
| White bread | Wholegrain bread, bread with seeds, dried fruits/ nuts |
| Non-integral pasta (white pasta) It can contain egg in the composition. Without vegetables or spices in the composition | Potato, rice, oats, rye, barley, maize, quinoa, wholegrain pasta |
| Butter, lard, cream | Margarine, butter with herbs or spices. Peanut butter, olive oil, olives, vegetable oils |
| Simple milk | Milk with chocolate, milk with coffee, aromatized milk (vanilla, strawberry…), fruit milkshake |
| Natural yoghurt, natural yoghurt with sugar, Greek yoghurt, aromatized yoghurt (solid texture and white colour) | Yoghurt with fruit, cereals, chocolate |
| Cheese without spices or herbs | Cheese with spices or herbs, cheese preserved in olive oil |
|  | Processed meat products (sausages, ham…) |
| Water | Juices, soft drinks, coffee, tea, alcoholic drinks (wine, beer, liqueurs) |
|  | Chocolate, cream with chocolate, desserts or drinks with chocolate, candies, chewing gums |
| Gelatin leaf (not coloured) | Dessert of fruit, gelatin |

**Table S2.** Identification of phenolic compounds in *Moleiro* bean extracts by UPLC-Q-TOF-MS

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **RT (min)**  **Average ± SD (n=4)** | **Δ RT (min)\*** | **Predicted *m/z*** | **Observed *m/z***  **Average ± SD**  **Raw beans (n=2)** | **Error, ppm**  **Average ± SD**  **Raw beans**  **(n=2)** | **Observed *m/z***  **Average ± SD**  **Cooked beans (n=2)** | **Error, ppm**  **Average ± SD**  **Cooked beans (n=2)** |
| **Class** | **Benzoic acids** | **Gallic acid** | 1.65 ± 0.01 | 0.00 | 169.0142 | 169.0160 ± 0.0000 | -10.6 ± 0.0 | 169.0142 ± 0.0000 | 0.0 ± 0.0 |
| **Protocatechuic acid** | 2.83 ± 0.01 | 0.03 | 153.0193 | 153.0196 ± 0.0001 | -2.0 ± 0.9 | 153.0209 ± 0.0000 | -10.5 ± 0.0 |
| ***p*-Hydroxybenzoic acid** | 4.10 ± 0.01 | -0.20 | 137.0244 | 137.0243 ± 0.0001 | 1.1 ± 0.5 | 137.0251 ± 0.0001 | -5.1 ± 1.0 |
| **Cinnamic acids** | **Caffeic acid** | 5.61 ± 0.01 | 0.04 | 179.0350 | 179.0353 ± 0.0003 | -1.7 ± 1.6 | 179.0366 ± 0.0003 | -8.9 ± 1.6 |
| ***p*-Coumaric acid** | 6.95 ± 0.01 | 0.03 | 163.0401 | 163.0401 ± 0.0001 | 0.3 ± 0.4 | 163.0412 ± 0.0004 | -6.4 ± 2.2 |
| ***t*-Ferulic acid** | 7.48 ± 0.00 | 0.02 | 193.0506 | 193.0507 ± 0.0001 | -0.5 ± 0.7 | 193.0509 ± 0.0001 | -1.3 ± 0.4 |
| **Sinapic acid** | 7.57 ± 0.02 | 0.04 | 223.0612 | 223.0612 ± 0.0001 | 0.0 ± 0.6 | 223.0612 ± 0.0003 | 0.0 ± 1.3 |
| **Flavanols** | **Catechin** | 5.33 ± 0.01 | 0.05 | 289.0718 | 289.0742 ± 0.0005 | -8.1 ± 1.7 | 289.0761 ± 0.0000 | -14.9 ± 0.0 |
| **Epicatechin** | 6.62 ±0.00 | 0.02 | 289.0718 | 289.0721 ± 0.0001 | -0.9 ± 0.2 | 289.0762 ± 0.0001 | -15.0 ± 0.2 |
| **Procyanidin B1** | 4.87 ± 0.01 | - | 577.1351 | 577.1400 ± 0.0006 | -8.4 ± 1.1 | 577.1394 ± 0.0006 | -7.4 ± 1.1 |
| **Procyanidin B2** | 7.06 ± 0.13 | - | 577.1351 | 577.1352 ± 0.0006 | -0.1 ± 1.1 | 577.1404 ± 0.0011 | -9.1 ± 1.8 |
| **Flavonols** | **Quercetin** | 9.05 ± 0.01 | 0.00 | 301.0354 | 301.0360 ± 0.0001 | -1.8 ± 0.2 | 301.0356 ± 0.0003 | -0.7 ± 0.9 |
| **Kaempferol** | 9.17 ± 0.00 | 0.00 | 285.0405 | 285.0438 ± 0.0008 | -11.6 ± 3.0 | 285.0434 ± 0.0001 | -10.0 ± 0.2 |

\*ΔRT = Standards’ average RT – Common bean extracts’ average RT

**Table S3.** Identification of phenolic compounds and their metabolites in **plasma**, before (0 h) and after (1, 2, 4, 6, 8 h) cooked common beans’ consumption. Results for n=7, P1 – P7

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **1 h** | | **2 h** | | **4 h** | | **6 h** | | **8 h** | |
| **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** |
| **Pyrogallols** | **Pyrogallol-2-*O*-sulfate**  **(Predicted *m/z* 204.9812)** | **2.49 ± 0.02** | **-0.09** | **P1** | 204.9821 | -4.4 | 204.9821 | -4.4 | 204.9819 | -3.4 | 204.9818 | -2.9 | 204.9826 | -6.8 | 204.9818 | -2.9 |
| **P2** | 204.9831 | -9.3 | 204.9816 | -2.0 | 204.9817 | -2.4 | 204.9817 | -2.4 | 204.9816 | -2.0 | 204.9814 | -1.0 |
| **P3** | 204.9838 | -12.7 | 204.9819 | -3.4 | 204.9819 | -3.4 | 204.9818 | -2.9 | 204.9815 | -1.5 | 204.9825 | -6.3 |
| **P4** | 204.9831 | -9.3 | 204.9814 | -1.0 | 204.9826 | -6.8 | 204.9822 | -4.9 | 204.9821 | -4.4 | 204.9825 | -6.3 |
| **P5** | 204.9850 | -18.5 | 204.9819 | -3.4 | 204.9826 | -6.8 | 204.9826 | -6.8 | 204.9822 | -4.9 | 204.9820 | -3.9 |
| **P6** | 204.9836 | -11.7 | 204.9817 | -2.4 | 204.9821 | -4.4 | 204.9823 | -5.4 | 204.9823 | -5.4 | 204.9822 | -4.9 |
| **P7** | 204.9818 | -2.9 | 204.9818 | -2.9 | 204.9818 | -2.9 | 204.9819 | -3.4 | 204.9818 | -2.9 | 204.9817 | -2.4 |
| **1-Mehylpyrogallol-*O*-sulfate**  **(Predicted *m/z* 218.9969)** | **4.24 ± 0.02** | **-0.18** | **P1** | 218.9959 | 4.6 | 218.9968 | 0.5 | 218.9968 | 0.5 | 218.9968 | 0.5 | 218.9968 | 0.5 | 218.9968 | 0.5 |
| **P2** | 218.9955 | 6.4 | 218.9963 | 2.7 | 218.9967 | 0.9 | 218.9964 | 2.3 | 218.9968 | 0.5 | 218.9965 | 1.8 |
| **P3** | 218.9893 | 34.7 | 218.9926 | 19.6 | 218.9946 | 10.5 | 218.9970 | -0.5 | 218.9945 | 11.0 | 218.9959 | 4.6 |
| **P4** | 218.9959 | 4.6 | 218.9971 | -0.9 | 218.9946 | 10.5 | 218.9971 | -0.9 | 218.9959 | 4.6 | 218.9971 | -0.9 |
| **P5** | 218.9971 | -0.9 | 218.9971 | -0.9 | 218.9971 | -0.9 | 218.9971 | -0.9 | 218.9971 | -0.9 | 218.9971 | -0.9 |
| **P6** | 218.9971 | -0.9 | 218.9971 | -0.9 | 218.9971 | -0.9 | 218.9961 | 3.7 | 218.9957 | 5.5 | 218.9967 | 0.9 |
| **P7** | 218.9974 | -2.3 | 218.9973 | -1.8 | 218.9973 | -1.8 | 218.9973 | -1.8 | 218.9972 | -1.4 | 218.9973 | -1.8 |
| **Benzoic acids** | **Protocatechuic acid**  **(Predicted *m/z* 153.0193)** | **2.90 ± 0.03** | **-0.05** | **P1** | 153.0197 | -2.6 | 153.0196 | -2.0 | 153.0196 | -2.0 | 153.0193 | 0.0 | 153.0200 | -4.6 | 153.0197 | -2.6 |
| **P2** | 153.0193 | 0.0 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0193 | 0.0 | 153.0194 | -0.7 |
| **P3** | 153.0194 | -0.7 | 153.0195 | -1.3 | 153.0193 | 0.0 | 153.0194 | -0.7 | 153.0197 | -2.6 | 153.0196 | -2.0 |
| **P4** | 153.0197 | -2.6 | 153.0196 | -2.0 | 153.0195 | -1.3 | 153.0195 | -1.3 | 153.0195 | -1.3 | 153.0196 | -2.0 |
| **P5** | 153.0194 | -0.7 | 153.0195 | -1.3 | 153.0195 | -1.3 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0195 | -1.3 |
| **P6** | 153.0194 | -0.7 | 153.0196 | -2.0 | 153.0196 | -2.0 | 153.0194 | -0.7 | 153.0196 | -2.0 | 153.0196 | -2.0 |
| **P7** | 153.0197 | -2.6 | 153.0196 | -2.0 | 153.0195 | -1.3 | 153.0198 | -3.3 | 153.0194 | -0.7 | 153.0197 | -2.6 |
| **Vanillic acid-4-*O*-sulfate (predicted *m/z* 246.9918)** | **3.94 ± 0.02** | **-0.09** | **P1** | 371.0988 | -1.1 | 371.0986 | -0.5 | 371.0991 | -1.9 | 371.0986 | -0.5 | 371.0987 | -0.8 | 371.0981 | 0.8 |
| **P2** | 371.0984 | 0.0 | 371.0981 | 0.8 | 371.0976 | 2.2 | 371.0975 | 2.4 | 371.0975 | 2.4 | 371.0971 | 3.5 |
| **P3** | 371.0964 | 5.4 | 371.0961 | 6.2 | 371.0952 | 8.6 | 371.0978 | 1.6 | 371.0979 | 1.3 | 371.0977 | 1.9 |
| **P4** | 371.0986 | -0.5 | 371.0979 | 1.3 | 371.0979 | 1.3 | 371.0979 | 1.3 | 371.0981 | 0.8 | 371.0986 | -0.5 |
| **P5** | 371.0986 | -0.5 | 371.0983 | 0.3 | 371.0981 | 0.8 | 371.0984 | 0.0 | 371.0983 | 0.3 | 371.0980 | 1.1 |
| **P6** | 371.0990 | -1.6 | 371.0986 | -0.5 | 371.0988 | -1.1 | 371.0992 | -2.2 | 371.0993 | -2.4 | 371.0987 | -0.8 |
| **P7** | 371.0989 | -1.3 | 371.0990 | -1.6 | 371.0991 | -1.9 | 371.0987 | -0.8 | 371.0990 | -1.6 | 371.0989 | -1.3 |
| ***p*-hydroxybenzoic acid**  **(Predicted *m/z* 137.0244)** | **4.13 ± 0.01** | **-0.94** | **P1** | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0249 | -3.6 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0248 | -2.9 |
| **P2** | 137.0246 | -1.5 | 137.0244 | 0.0 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0248 | -2.9 |
| **P3** | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0248 | -2.9 |
| **P4** | 137.0250 | -4.4 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0249 | -3.6 | 137.0250 | -4.4 | 137.0250 | -4.4 |
| **P5** | 137.0255 | -8.0 | 137.0248 | -2.9 | 137.0254 | -7.3 | 137.0250 | -4.4 | 137.0255 | -8.0 | 137.0255 | -8.0 |
| **P6** | 137.0252 | -5.8 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0248 | -2.9 | 137.0250 | -4.4 | 137.0248 | -2.9 |
| **P7** | 137.0246 | -1.5 | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0248 | -2.9 | 137.0251 | -5.1 | 137.0248 | -2.9 |
| ***m*-Hydroxybenzoic acid**  **(Predicted *m/z* 137.0244)** | **5.36 ± 0.02** | **0.01** | **P1** | 137.0268 | -17.5 | 137.0273 | -21.2 | 137.0284 | -29.2 | 137.0295 | -37.2 | 137.0280 | -26.3 | 137.0291 | -34.3 |
| **P2** | 137.0274 | -21.9 | 137.0282 | -27.7 | 137.0266 | -16.1 | 137.0282 | -27.7 | 137.0289 | -32.8 | 137.0288 | -32.1 |
| **P3** | 137.0288 | -32.1 | 137.0283 | -28.5 | 137.0266 | -16.1 | 137.0281 | -27.0 | 137.0286 | -30.7 | 137.0281 | -27.0 |
| **P4** | 137.0290 | -33.6 | 137.0279 | -25.5 | 137.0347 | -75.2 | 137.0294 | -36.5 | 137.0280 | -26.3 | 137.0276 | -23.4 |
| **P5** | 137.0303 | -43.1 | 137.0301 | -41.6 | 137.0289 | -32.8 | 137.0306 | -45.2 | 137.0292 | -35.0 | 137.0324 | -58.4 |
| **P6** | 137.0273 | -21.2 | 137.0280 | -26.3 | 137.0280 | -26.3 | 137.0292 | -35.0 | 137.0285 | -29.9 | 137.0280 | -26.3 |
| **P7** | 137.0278 | -24.8 | 137.0278 | -24.8 | 137.0283 | -28.5 | 137.0296 | -37.9 | 137.0276 | -23.4 | 137.0278 | -24.8 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S3.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **1 h** | | **2 h** | | **4 h** | | **6 h** | | **8 h** | |
| **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** |
| **Benzoic acids** | ***o*-Hydroxybenzoic acid**  **(Predicted m/z 137.0244)** | **8.15 ± 0.01** | **-0.01** | **P1** | 137.0251 | -5.1 | 137.0253 | -6.6 | 137.0250 | -4.4 | 137.0249 | -3.6 | 137.0249 | -3.6 | 137.0247 | -2.2 |
| **P2** | 137.0245 | -0.7 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0245 | -0.7 | 137.0246 | -1.5 | 137.0244 | 0.0 |
| **P3** | 137.0243 | 0.7 | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0244 | 0.0 | 137.0244 | 0.0 |
| **P4** | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0248 | -2.9 | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0246 | -1.5 |
| **P5** | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0244 | 0.0 |
| **P6** | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0245 | -0.7 |
| **P7** | 137.0245 | -0.7 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0246 | -1.5 |
| **Benzaldehyde** | ***p*-Hydroxybenzaldehyde**  **(Predicted *m/z* 121.0295)** | **5.22 ± 0.01** | **0.00** | **P1** | 121.0295 | 0.0 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0293 | 1.7 |
| **P2** | 121.0293 | 1.7 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0293 | 1.7 | 121.0294 | 0.8 |
| **P3** | 121.0294 | 0.8 | 121.0293 | 1.7 | 121.0294 | 0.8 | 121.0293 | 1.7 | 121.0293 | 1.7 | 121.0293 | 1.7 |
| **P4** | 121.0293 | 1.7 | 121.0294 | 0.8 | 121.0293 | 1.7 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 |
| **P5** | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0294 | 0.8 |
| **P6** | 121.0293 | 1.7 | 121.0295 | 0.0 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0294 | 0.8 |
| **P7** | 121.0295 | 0.0 | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0295 | 0.0 | 121.0295 | 0.0 | 121.0294 | 0.8 |
| **Catechols** | **Catechol-*O*-sulfate**  **(Predicted *m/z* 188.9863)** | **3.03 ± 0.03** | **-0.07** | **P1** | 188.9870 | -3.7 | 188.9870 | -3.7 | 188.9867 | -2.1 | 188.9867 | -2.1 | 188.9870 | -3.7 | 188.9870 | -3.7 |
| **P2** | 188.9866 | -1.6 | 188.9867 | -2.1 | 188.9865 | -1.1 | 188.9864 | -0.5 | 188.9865 | -1.1 | 188.9866 | -1.6 |
| **P3** | 188.9865 | -1.1 | 188.9866 | -1.6 | 188.9865 | -1.1 | 188.9866 | -1.6 | 188.9868 | -2.6 | 188.9867 | -2.1 |
| **P4** | 188.9867 | -2.1 | 188.9866 | -1.6 | 188.9866 | -1.6 | 188.9867 | -2.1 | 188.9867 | -2.1 | 188.9870 | -3.7 |
| **P5** | 188.9867 | -2.1 | 188.9867 | -2.1 | 188.9866 | -1.6 | 188.9867 | -2.1 | 188.9869 | -3.2 | 188.9868 | -2.6 |
| **P6** | 188.9868 | -2.6 | 188.9868 | -2.6 | 188.9869 | -3.2 | 188.9868 | -2.6 | 188.9870 | -3.7 | 188.9870 | -3.7 |
| **P7** | 188.9870 | -3.7 | 188.9870 | -3.7 | 188.9869 | -3.2 | 188.9869 | -3.2 | 188.9869 | -3.2 | 188.9869 | -3.2 |
| **4-Methylcatechol-*O*-sulfate**  **(Predicted *m/z* 203.0020)** | **6.20 ± 0.08** | **-0.17** | **P1** | 203.0026 | -3.0 | 203.0027 | -3.4 | 203.0025 | -2.5 | 203.0027 | -3.4 | 203.0027 | -3.4 | 203.0028 | -3.9 |
| **P2** | 203.0022 | -1.0 | 203.0022 | -1.0 | 203.0023 | -1.5 | 203.0024 | -2.0 | 203.0024 | -2.0 | 203.0025 | -2.5 |
| **P3** | 203.0025 | -2.5 | 203.0026 | -3.0 | 203.0025 | -2.5 | 203.0029 | -4.4 | 203.0029 | -4.4 | 203.0029 | -4.4 |
| **P4** | 203.0024 | -2.0 | 203.0024 | -2.0 | 203.0023 | -1.5 | 203.0024 | -2.0 | 203.0024 | -2.0 | 203.0024 | -2.0 |
| **P5** | 203.0028 | -3.9 | 203.0028 | -3.9 | 203.0026 | -3.0 | 203.0026 | -3.0 | 203.0026 | -3.0 | 203.0025 | -2.5 |
| **P6** | 203.0026 | -3.0 | 203.0026 | -3.0 | 203.0026 | -3.0 | 203.0027 | -3.4 | 203.0027 | -3.4 | 203.0026 | -3.0 |
| **P7** | 203.0030 | -4.9 | 203.0028 | -3.9 | 203.0028 | -3.9 | 203.0028 | -3.9 | 203.0028 | -3.9 | 203.0027 | -3.4 |
| **Hippuric acids** | **4-Hydroxyhippuric acid**  **(Predicted *m/z* 194.0459)** | **3.17 ± 0.01** | **0.02** | **P1** | 194.0484 | -12.9 | 194.0474 | -7.7 | 194.0477 | -9.3 | 194.0480 | -10.8 | 194.0485 | -13.4 | 194.0485 | -13.4 |
| **P2** | 194.0478 | -9.8 | 194.0473 | -7.2 | 194.0474 | -7.7 | 194.0478 | -9.8 | 194.0477 | -9.3 | 194.0477 | -9.3 |
| **P3** | 194.0483 | -12.4 | 194.0471 | -6.2 | 194.0476 | -8.8 | 194.0478 | -9.8 | 194.0480 | -10.8 | 194.0484 | -12.9 |
| **P4** | 194.0485 | -13.4 | 194.0471 | -6.2 | 194.0477 | -9.3 | 194.0481 | -11.3 | 194.0481 | -11.3 | 194.0484 | -12.9 |
| **P5** | 194.0491 | -16.5 | 194.0480 | -10.8 | 194.0480 | -10.8 | 194.0485 | -13.4 | 194.0482 | -11.9 | 194.0487 | -14.4 |
| **P6** | 194.0481 | -11.3 | 194.0473 | -7.2 | 194.0474 | -7.7 | 194.0476 | -8.8 | 194.0476 | -8.8 | 194.0478 | -9.8 |
| **P7** | 194.0478 | -9.8 | 194.0472 | -6.7 | 194.0473 | -7.2 | 194.0482 | -11.9 | 194.0480 | -10.8 | 194.0477 | -9.3 |
| **3-Hydroxyhippuric acid**  **(Predicted *m/z* 194.0459)** | **3.53 ± 0.01** | **0.07** | **P1** | 194.0486 | -13.9 | 194.0492 | -17.0 | 194.0492 | -17.0 | 194.0486 | -13.9 | 194.0487 | -14.4 | 194.0484 | -12.9 |
| **P2** | 194.0492 | -17.0 | 194.0491 | -16.5 | 194.0491 | -16.5 | 194.0490 | -16.0 | 194.0487 | -14.4 | 194.0490 | -16.0 |
| **P3** | 194.0490 | -16.0 | 194.0492 | -17.0 | 194.0491 | -16.5 | 194.0489 | -15.5 | 194.0489 | -15.5 | 194.0490 | -16.0 |
| **P4** | 194.0493 | -17.5 | 194.0493 | -17.5 | 194.0494 | -18.0 | 194.0493 | -17.5 | 194.0492 | -17.0 | 194.0491 | -16.5 |
| **P5** | 194.0491 | -16.5 | 194.0492 | -17.0 | 194.0492 | -17.0 | 194.0489 | -15.5 | 194.0488 | -14.9 | 194.0491 | -16.5 |
| **P6** | 194.0492 | -17.0 | 194.0492 | -17.0 | 194.0492 | -17.0 | 194.0486 | -13.9 | 194.0486 | -13.9 | 194.0486 | -13.9 |
| **P7** | 194.0483 | -12.4 | 194.0483 | -12.4 | 194.0483 | -12.4 | 194.0486 | -13.9 | 194.0487 | -14.4 | 194.0487 | -14.4 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S3.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **1 h** | | **2 h** | | **4 h** | | **6 h** | | **8 h** | |
| **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** |
| **Hippuric acids** | **Hippuric acid**  **(Predicted *m/z* 178.0510)** | **4.70 ± 0.00** | **0.03** | **P1** | 178.0516 | -3.4 | 178.0517 | -3.9 | 178.0515 | -2.8 | 178.0517 | -3.9 | 178.0518 | -4.5 | 178.0517 | -3.9 |
| **P2** | 178.0515 | -2.8 | 178.0517 | -3.9 | 178.0516 | -3.4 | 178.0518 | -4.5 | 178.0517 | -3.9 | 178.0516 | -3.4 |
| **P3** | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0518 | -4.5 | 178.0518 | -4.5 | 178.0517 | -3.9 |
| **P4** | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0518 | -4.5 |
| **P5** | 178.0518 | -4.5 | 178.0516 | -3.4 | 178.0512 | -1.1 | 178.0517 | -3.9 | 178.0518 | -4.5 | 178.0518 | -4.5 |
| **P6** | 178.0521 | -6.2 | 178.0518 | -4.5 | 178.0519 | -5.1 | 178.0520 | -5.6 | 178.0520 | -5.6 | 178.0520 | -5.6 |
| **P7** | 178.0518 | -4.5 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 | 178.0517 | -3.9 |
| **Cinnamic acids** | **Ferulic acid 4-*O*-glucuronide**  **(Predicted *m/z* 369.0827)** | **4.80 ± 0.01** | **0.01** | **P1** | 369.0827 | 0.0 | 369.0836 | -2.4 | 369.0829 | -0.5 | 369.0826 | 0.3 | 369.0829 | -0.5 | 369.0828 | -0.3 |
| **P2** | 369.0824 | 0.8 | 369.0821 | 1.6 | 369.0820 | 1.9 | 369.0818 | 2.4 | 369.0818 | 2.4 | 369.0819 | 2.2 |
| **P3** | 369.0865 | -10.3 | 369.0823 | 1.1 | 369.0825 | 0.5 | 369.0824 | 0.8 | 369.0827 | 0.0 | 369.0827 | 0.0 |
| **P4** | 369.0829 | -0.5 | 369.0824 | 0.8 | 369.0824 | 0.8 | 369.0826 | 0.3 | 369.0828 | -0.3 | 369.0823 | 1.1 |
| **P5** | 369.0826 | 0.3 | 369.0829 | -0.5 | 369.0828 | -0.3 | 369.0825 | 0.5 | 369.0828 | -0.3 | 369.0825 | 0.5 |
| **P6** | 369.0837 | -2.7 | 369.0832 | -1.4 | 369.0834 | -1.9 | 369.0834 | -1.9 | 369.0835 | -2.2 | 369.0833 | -1.6 |
| **P7** | 369.0838 | -3.0 | 369.0832 | -1.4 | 369.0835 | -2.2 | 369.0836 | -2.4 | 369.0835 | -2.2 | 369.0835 | -2.2 |
| **Caffeic acid**    **(Predicted *m/z* 179.0350)** | **5.63 ± 0.01** | **0.02** | **P1** | 179.0348 | 1.1 | 179.0349 | 0.6 | 179.0345 | 2.8 | 179.0349 | 0.6 | 179.0352 | -1.1 | 179.0354 | -2.2 |
| **P2** | 179.0479 | -72.1 | 179.0345 | 2.8 | 179.0352 | -1.1 | 179.0343 | 3.9 | 179.0352 | -1.1 | 179.0345 | 2.8 |
| **P3** | 179.0354 | -2.2 | 179.0352 | -1.1 | 179.0343 | 3.9 | 179.0348 | 1.1 | 179.0342 | 4.5 | 179.0350 | 0.0 |
| **P4** | 179.0349 | 0.6 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0356 | -3.4 | 179.0356 | -3.4 |
| **P5** | 179.0349 | 0.6 | 179.0354 | -2.2 | 179.0354 | -2.2 | 179.0354 | -2.2 | 179.0350 | 0.0 | 179.0349 | 0.6 |
| **P6** | 179.0349 | 0.6 | 179.0341 | 5.0 | 179.0354 | -2.2 | 179.0353 | -1.7 | 179.0359 | -5.0 | 179.0346 | 2.2 |
| **P7** | 179.0352 | -1.1 | 179.0354 | -2.2 | 179.0357 | -3.9 | 179.0346 | 2.2 | 179.0354 | -2.2 | 179.0350 | 0.0 |
| **Dihydroferulic acid-4-*O*-*β*-D-glucuronide**  **(Predicted *m/z* 371.0984)** | **6.20 ± 0.08** | **-0.17** | **P1** | 371.0988 | -1.1 | 371.0986 | -0.5 | 371.0991 | -1.9 | 371.0986 | -0.5 | 371.0987 | -0.8 | 371.0981 | 0.8 |
| **P2** | 371.0984 | 0.0 | 371.0981 | 0.8 | 371.0976 | 2.2 | 371.0975 | 2.4 | 371.0975 | 2.4 | 371.0971 | 3.5 |
| **P3** | 371.0964 | 5.4 | 371.0961 | 6.2 | 371.0952 | 8.6 | 371.0978 | 1.6 | 371.0979 | 1.3 | 371.0977 | 1.9 |
| **P4** | 371.0986 | -0.5 | 371.0979 | 1.3 | 371.0979 | 1.3 | 371.0979 | 1.3 | 371.0981 | 0.8 | 371.0986 | -0.5 |
| **P5** | 371.0986 | -0.5 | 371.0983 | 0.3 | 371.0981 | 0.8 | 371.0984 | 0.0 | 371.0983 | 0.3 | 371.0980 | 1.1 |
| **P6** | 371.0990 | -1.6 | 371.0986 | -0.5 | 371.0988 | -1.1 | 371.0992 | -2.2 | 371.0993 | -2.4 | 371.0987 | -0.8 |
| **P7** | 371.0989 | -1.3 | 371.0990 | -1.6 | 371.0991 | -1.9 | 371.0987 | -0.8 | 371.0990 | -1.6 | 371.0989 | -1.3 |
| **Dihydroferulic Acid 4-*O*-sulfate**  **(Predicted *m/z* 275.0231)** | **6.01 ± 0.03** | **0.48** | **P1** | 275.0243 | -4.4 | 275.0240 | -3.3 | 275.0237 | -2.2 | 275.0234 | -1.1 | 275.0237 | -2.2 | 275.0238 | -2.5 |
| **P2** | 275.0223 | 2.9 | 275.0234 | -1.1 | 275.0230 | 0.4 | 275.0223 | 2.9 | 275.0228 | 1.1 | 275.0229 | 0.7 |
| **P3** | 275.0231 | 0.0 | 275.0224 | 2.5 | 275.0230 | 0.4 | 275.0229 | 0.7 | 275.0232 | -0.4 | 275.0216 | 5.5 |
| **P4** | 275.0233 | -0.7 | 275.0230 | 0.4 | 275.0235 | -1.5 | 275.0228 | 1.1 | 275.0233 | -0.7 | 275.0233 | -0.7 |
| **P5** | 275.0231 | 0.0 | 275.0224 | 2.5 | 275.0227 | 1.5 | 275.0234 | -1.1 | 275.0234 | -1.1 | 275.0236 | -1.8 |
| **P6** | 275.0229 | 0.7 | 275.0227 | 1.5 | 275.0212 | 6.9 | 275.0238 | -2.5 | 275.0240 | -3.3 | 275.0225 | 2.2 |
| **P7** | 275.0237 | -2.2 | 275.0236 | -1.8 | 275.0243 | -4.4 | 275.0256 | -9.1 | 275.0228 | 1.1 | 275.0237 | -2.2 |
| **Ferulic acid-4-*O*-sulfate**  **(Predicted *m/z* 273.0074)** | **8.15 ± 0.01** | **-0.01** | **P1** | 273.0086 | -4.4 | 273.0084 | -3.7 | 273.0082 | -2.9 | 273.0080 | -2.2 | 273.0081 | -2.6 | 273.0079 | -1.8 |
| **P2** | 273.0075 | -0.4 | 273.0077 | -1.1 | 273.0075 | -0.4 | 273.0073 | 0.4 | 273.0074 | 0.0 | 273.0074 | 0.0 |
| **P3** | 273.0083 | -3.3 | 273.0076 | -0.7 | 273.0074 | 0.0 | 273.0074 | 0.0 | 273.0075 | -0.4 | 273.0078 | -1.5 |
| **P4** | 273.0074 | 0.0 | 273.0081 | -2.6 | 273.0076 | -0.7 | 273.0079 | -1.8 | 273.0079 | -1.8 | 273.0080 | -2.2 |
| **P5** | 273.0082 | -2.9 | 273.0081 | -2.6 | 273.0079 | -1.8 | 273.0080 | -2.2 | 273.0082 | -2.9 | 273.0077 | -1.1 |
| **P6** | 273.0077 | -1.1 | 273.0080 | -2.2 | 273.0082 | -2.9 | 273.0082 | -2.9 | 273.0081 | -2.6 | 273.0081 | -2.6 |
| **P7** | 273.0082 | -2.9 | 273.0083 | -3.3 | 273.0082 | -2.9 | 273.0083 | -3.3 | 273.0084 | -3.7 | 273.0083 | -3.3 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S3.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **1 h** | | **2 h** | | **4 h** | | **6 h** | | **8 h** | |
| **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** | **Observed m/z** | **Error ppm** |
| **Cinnamic acids** | **Dihydroisoferulic acid 3-*O*-*β*-D-glucuronide**  **(Predicted *m/z* 371.0984)** | **6.49 ± 0.02** | **0.00** | **P1** | 371.1003 | -5.1 | 371.1030 | -12.4 | 371.0995 | -3.0 | 371.1006 | -5.9 | 371.0982 | 0.5 | 371.1007 | -6.2 |
| **P2** | 371.0978 | 1.6 | 371.0976 | 2.2 | 371.0978 | 1.6 | 371.0975 | 2.4 | 371.0979 | 1.3 | 371.0975 | 2.4 |
| **P3** | 371.0984 | 0.0 | 371.0976 | 2.2 | 371.0969 | 4.0 | 371.0982 | 0.5 | 371.0973 | 3.0 | 371.0971 | 3.5 |
| **P4** | 371.0977 | 1.9 | 371.0974 | 2.7 | 371.0980 | 1.1 | 371.0989 | -1.3 | 371.0986 | -0.5 | 371.1295 | -83.8 |
| **P5** | 371.0997 | -3.5 | 371.0985 | -0.3 | 371.0985 | -0.3 | 371.0979 | 1.3 | 371.0988 | -1.1 | 371.0988 | -1.1 |
| **P6** | 371.0998 | -3.8 | 371.0994 | -2.7 | 371.0982 | 0.5 | 371.0994 | -2.7 | 371.0996 | -3.2 | 371.0991 | -1.9 |
| **P7** | 371.0999 | -4.0 | 371.0987 | -0.8 | 371.0995 | -3.0 | 371.0982 | 0.5 | 371.0992 | -2.2 | 371.1003 | -5.1 |
| ***m*-coumaric acid**  **(Predicted *m/z* 163.0401)** | **7.57 ± 0.01** | **0.16** | **P1** | 163.0404 | -1.8 | 163.0404 | -1.8 | 163.0402 | -0.6 | 163.0401 | 0.0 | 163.0402 | -0.6 | 163.0403 | -1.2 |
| **P2** | 163.0400 | 0.6 | 163.0404 | -1.8 | 163.0404 | -1.8 | 163.0400 | 0.6 | 163.0404 | -1.8 | 163.0401 | 0.0 |
| **P3** | 163.0403 | -1.2 | 163.0398 | 1.8 | 163.0397 | 2.5 | 163.0402 | -0.6 | 163.0405 | -2.5 | 163.0403 | -1.2 |
| **P4** | 163.0403 | -1.2 | 163.0401 | 0.0 | 163.0403 | -1.2 | 163.0402 | -0.6 | 163.0402 | -0.6 | 163.0404 | -1.8 |
| **P5** | 163.0403 | -1.2 | 163.0401 | 0.0 | 163.0403 | -1.2 | 163.0404 | -1.8 | 163.0404 | -1.8 | 163.0400 | 0.6 |
| **P6** | 163.0403 | -1.2 | 163.0404 | -1.8 | 163.0402 | -0.6 | 163.0403 | -1.2 | 163.0407 | -3.7 | 163.0404 | -1.8 |
| **P7** | 163.0404 | -1.8 | 163.0401 | 0.0 | 163.0404 | -1.8 | 163.0404 | -1.8 | 163.0404 | -1.8 | 163.0404 | -1.8 |
| ***o*-Coumaric acid**  **(Predicted *m/z* 163.0401)** | **8.37 ± 0.05** | **-0.05** | **P1** | 163.0410 | -5.5 | 163.0393 | 4.9 | 163.0405 | -2.5 | 163.0406 | -3.1 | 163.0400 | 0.6 | 163.0396 | 3.1 |
| **P2** | 163.0408 | -4.3 | 163.0396 | 3.1 | 163.0398 | 1.8 | 163.0402 | -0.6 | 163.0399 | 1.2 | 163.0401 | 0.0 |
| **P3** | 163.0400 | 0.6 | 163.0400 | 0.6 | 163.0410 | -5.5 | 163.0397 | 2.5 | 163.0395 | 3.7 | 163.0405 | -2.5 |
| **P4** | 163.0397 | 2.5 | 163.0404 | -1.8 | 163.0400 | 0.6 | 163.0389 | 7.4 | 163.0406 | -3.1 | 163.0401 | 0.0 |
| **P5** | 163.0404 | -1.8 | 163.0398 | 1.8 | 163.0407 | -3.7 | 163.0403 | -1.2 | 163.0404 | -1.8 | 163.0401 | 0.0 |
| **P6** | 163.0409 | -4.9 | 163.0405 | -2.5 | 163.0401 | 0.0 | 163.0409 | -4.9 | 163.0402 | -0.6 | 163.0403 | -1.2 |
| **P7** | 163.0383 | 11.0 | 163.0399 | 1.2 | 163.0402 | -0.6 | 163.0393 | 4.9 | 163.0400 | 0.6 | 163.0404 | -1.8 |
| **Flavonols** | **Kaempferol-3-*O*-glucuronide**  **(Predicted *m/z* 461.0725)** | **8.40 ± 0.04** | **0.00** | **P1** | 461.0729 | -0.9 | 461.0746 | -4.6 | 461.0730 | -1.1 | 461.0724 | 0.2 | 461.0727 | -0.4 | 461.0721 | 0.9 |
| **P2** | 461.1010 | -61.8 | 461.0720 | 1.1 | 461.0722 | 0.7 | 461.0714 | 2.4 | 461.0713 | 2.6 | 461.0710 | 3.3 |
| **P3** | 461.0802 | -16.7 | 461.0721 | 0.9 | 461.0716 | 2.0 | 461.0717 | 1.7 | 461.0721 | 0.9 | 461.0716 | 2.0 |
| **P4** | 461.0697 | 6.1 | 461.0729 | -0.9 | 461.0724 | 0.2 | 461.0722 | 0.7 | 461.0723 | 0.4 | 461.0740 | -3.3 |
| **P5** | 461.0742 | -3.7 | 461.0727 | -0.4 | 461.0725 | 0.0 | 461.0722 | 0.7 | 461.0722 | 0.7 | 461.0727 | -0.4 |
| **P6** | 461.0756 | -6.7 | 461.0732 | -1.5 | 461.0735 | -2.2 | 461.0732 | -1.5 | 461.0733 | -1.7 | 461.0727 | -0.4 |
| **P7** | 461.0727 | -0.4 | 461.0740 | -3.3 | 461.0737 | -2.6 | 461.0737 | -2.6 | 461.0734 | -2.0 | 461.0728 | -0.7 |
| **Quercetin**  **(Predicted *m/z* 301.0354)** | **9.06 ± 0.01** | **-0.01** | **P1** | 301.0343 | 3.7 | 301.0373 | -6.3 | 301.0333 | 7.0 | 301.0364 | -3.3 | 301.0366 | -4.0 | 301.0358 | -1.3 |
| **P2** | 301.0346 | 2.7 | 301.0340 | 4.7 | 301.0295 | 19.6 | 301.0337 | 5.6 | 301.0339 | 5.0 | 301.0327 | 9.0 |
| **P3** | 301.0360 | -2.0 | 301.0310 | 14.6 | 301.0333 | 7.0 | 301.0349 | 1.7 | 301.0343 | 3.7 | 301.0367 | -4.3 |
| **P4** | 301.0337 | 5.6 | 301.0359 | -1.7 | 301.0365 | -3.7 | 301.0286 | 22.6 | 301.0350 | 1.3 | 301.0360 | -2.0 |
| **P5** | 301.0336 | 6.0 | 301.0351 | 1.0 | 301.0363 | -3.0 | 301.0361 | -2.3 | 301.0352 | 0.7 | 301.0343 | 3.7 |
| **P6** | 301.0367 | -4.3 | 301.0358 | -1.3 | 301.0372 | -6.0 | 301.0364 | -3.3 | 301.0362 | -2.7 | 301.0366 | -4.0 |
| **P7** | 301.0338 | 5.3 | 301.0339 | 5.0 | 301.0354 | 0.0 | 301.0350 | 1.3 | 301.0362 | -2.7 | 301.0364 | -3.3 |
| **Kaempferol**  **(Predicted *m/z* 285.0405)** | **9.08 ± 0.03** | **0.09** | **P1** | 285.0415 | -3.5 | 285.0418 | -4.6 | 285.0411 | -2.1 | 285.0411 | -2.1 | 285.0414 | -3.2 | 285.0415 | -3.5 |
| **P2** | 285.0406 | -0.4 | 285.0407 | -0.7 | 285.0407 | -0.7 | 285.0406 | -0.4 | 285.0405 | 0.0 | 285.0404 | 0.4 |
| **P3** | 285.0407 | -0.7 | 285.0408 | -1.1 | 285.0410 | -1.8 | 285.0408 | -1.1 | 285.0408 | -1.1 | 285.0411 | -2.1 |
| **P4** | 285.0414 | -3.2 | 285.0409 | -1.4 | 285.0410 | -1.8 | 285.0411 | -2.1 | 285.0411 | -2.1 | 285.0414 | -3.2 |
| **P5** | 285.0417 | -4.2 | 285.0411 | -2.1 | 285.0414 | -3.2 | 285.0411 | -2.1 | 285.0414 | -3.2 | 285.0410 | -1.8 |
| **P6** | 285.0417 | -4.2 | 285.0414 | -3.2 | 285.0415 | -3.5 | 285.0415 | -3.5 | 285.0414 | -3.2 | 285.0412 | -2.5 |
| **P7** | 285.0409 | -1.4 | 285.0409 | -1.4 | 285.0403 | 0.7 | 285.0421 | -5.6 | 285.0545 | -49.1 | 285.0447 | -14.7 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S4.** Concentration (nM) of phenolic compounds and their metabolites in **plasma**, before (0 h) and after (1, 2, 4, 6, 8 h) cooked common beans’ consumption. Results for n=7, P1-P7

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **Compounds** | **Volunteers** | **Concentration nM** | | | | | | **AUCt nM \* h** |
| **0 h** | **1 h** | **2 h** | **4 h** | **6 h** | **8 h** |
| **Pyrogallol s** | **1-Methylpyrogallol-*O*-sulfate** | **P1** | 22.8 | 23.1 | 22.3 | 23.1 | 22.7 | 22.8 | 182.5 |
| **P2** | 22.2 | 22.8 | 23.3 | 22.8 | 24.6 | 24.1 | 187.7 |
| **P3** | 21.9 | 22.1 | 22.2 | 22.3 | 23.0 | 22.3 | 179.4 |
| **P4** | 22.6 | 23.2 | 22.3 | 23.0 | 22.4 | 22.5 | 181.1 |
| **P5** | 23.5 | 24.7 | 23.3 | 23.3 | 25.1 | 24.5 | 192.6 |
| **P6** | 24.2 | 23.9 | 23.0 | 22.5 | 22.4 | 22.8 | 183.3 |
| **P7** | 31.5 | 25.4 | 25.9 | 23.8 | 23.8 | 24.8 | 199.7 |
| **Benzoic acids** | **Vanillic acid-4-*O*-sulfate** | **P1** | 23.8 | 56.7 | 38.8 | 33.6 | 23.2 | 21.7 | 262.1 |
| **P2** | 20.5 | 33.0 | 30.7 | 21.8 | 23.8 | 21.1 | 201.5 |
| **P3** | 21.9 | 30.9 | 25.1 | 24.3 | 27.0 | 21.2 | 203.2 |
| **P4** | 21.4 | 54.4 | 28.3 | 23.5 | 23.1 | 21.5 | 222.3 |
| **P5** | 22.4 | 33.1 | 26.2 | 22.0 | 21.7 | 20.0 | 191.0 |
| **P6** | 20.9 | 26.4 | 23.6 | 21.5 | 20.7 | 20.4 | 176.9 |
| **P7** | 24.0 | 30.5 | 30.3 | 21.7 | 22.3 | 21.8 | 197.6 |
| ***o*-hydroxybenzoic acid** | **P1** | 226.1 | 479.5 | 501.2 | 385.9 | 401.6 | 278.4 | 3197.8 |
| **P2** | 138.1 | 192.6 | 165.7 | 138.0 | 112.5 | 89.1 | 1100.0 |
| **P3** | 44.5 | 98.0 | 79.0 | 74.6 | 59.6 | 51.6 | 558.7 |
| **P4** | 286.3 | 315.6 | 292.3 | 255.0 | 212.5 | 183.0 | 2015.1 |
| **P5** | 80.1 | 107.1 | 108.2 | 81.6 | 64.4 | 54.6 | 655.8 |
| **P6** | 69.5 | 128.8 | 120.6 | 114.0 | 102.3 | 90.6 | 867.5 |
| **P7** | 65.9 | 113.9 | 117.8 | 100.7 | 65.1 | 60.9 | 716.0 |
| **Benzaldehydes** | ***p*-hydroxybenzaldehyde** | **P1** | 23.7 | 32.7 | 26.2 | 21.8 | 33.4 | 34.8 | 228 |
| **P2** | 21.2 | 31.9 | 38.0 | 66.7 | 36.3 | 58.0 | 363.7 |
| **P3** | 12.9 | 27.7 | 30.0 | 26.4 | 29.0 | 45.3 | 235.2 |
| **P4** | 15.9 | 26.1 | 26.8 | 23.7 | 31.4 | 36.4 | 220.7 |
| **P5** | 29.0 | 42.4 | 41.6 | 40.2 | 62.8 | 47.3 | 372.6 |
| **P6** | 16.6 | 25.3 | 27.1 | 23.0 | 23.9 | 39.2 | 207.2 |
| **P7** | 27.0 | 39.1 | 46.4 | 43.8 | 22.2 | 22.1 | 276.2 |
| **Catechols** | **Catechol-*O*-sulfate** | **P1** | 87.4 | 89.0 | 40.8 | 71.0 | 114.7 | 184.8 | 750.1 |
| **P2** | 26.3 | 32.2 | 40.6 | 29.1 | 73.2 | 85.3 | 396.1 |
| **P3** | 24.9 | 33.9 | 28.5 | 35.6 | 116.5 | 68.0 | 461.3 |
| **P4** | 35.8 | 55.8 | 28.7 | 40.4 | 58.6 | 103.1 | 417.9 |
| **P5** | 24.4 | 32.9 | 27.5 | 36.9 | 70.4 | 70.2 | 371.2 |
| **P6** | 50.0 | 59.8 | 46.4 | 51.0 | 69.9 | 93.6 | 489.8 |
| **P7** | 93.5 | 50.8 | 60.0 | 37.6 | 40.1 | 59.8 | 402.6 |
| **4-Methylcatechol-*O*-sulfate** | **P1** | 92.7 | 192.2 | 129.7 | 283.6 | 191.8 | 446.0 | 1829.9 |
| **P2** | 52.7 | 67.3 | 86.4 | 57.6 | 215.6 | 287.8 | 1057.5 |
| **P3** | 191.9 | 270.5 | 241.0 | 613.6 | 1544.4 | 829.4 | 5873.3 |
| **P4** | 56.5 | 76.6 | 44.1 | 63.6 | 58.5 | 59.2 | 474.3 |
| **P5** | 399.0 | 404.8 | 238.7 | 79.1 | 48.3 | 37.2 | 1254.3 |
| **P6** | 145.4 | 166.2 | 100.6 | 98.7 | 107.0 | 118.8 | 920.0 |
| **P7** | 584.2 | 244.1 | 284.4 | 161.1 | 177.4 | 172.2 | 1812.1 |

**Table S4.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **Compounds** | **Volunteers** | **Concentration nM** | | | | | | **AUCt nM \* h** |
| **0 h** | **1 h** | **2 h** | **4 h** | **6 h** | **8 h** |
| **Hippuric acids** | **4-Hydroxyhippuric acid** | **P1** | 42.4 | 114.5 | 81.7 | 59.4 | 43.7 | 52.6 | 517.0 |
| **P2** | 73.4 | 118.8 | 87.3 | 68.1 | 72.1 | 68.4 | 635.3 |
| **P3** | 43.3 | 122.8 | 95.4 | 74.5 | 64.9 | 42.8 | 609.1 |
| **P4** | 42.6 | 142.7 | 93.1 | 58.5 | 54.3 | 53.9 | 583.0 |
| **P5** | 34.4 | 75.1 | 66.6 | 53.3 | 49.3 | 37.7 | 435.0 |
| **P6** | 82.5 | 164.7 | 124.7 | 115.4 | 124.1 | 98.2 | 970.4 |
| **P7** | 99.9 | 165.7 | 139.9 | 77.6 | 76.3 | 100.4 | 833.6 |
| **3-Hydroxyhippuric acid** | **P1** | 7.8 | 5.7 | 10.0 | 11.1 | 72.2 | 62.9 | 254.0 |
| **P2** | 104.7 | 96.3 | 72.9 | 131.4 | 102.9 | 100.6 | 827.1 |
| **P3** | 88.2 | 125.9 | 90.5 | 108.4 | 100.2 | 156.9 | 879.9 |
| **P4** | 130.8 | 160.8 | 113.6 | 144.2 | 254.1 | 150.2 | 1343.5 |
| **P5** | 115.6 | 107.8 | 122.5 | 119.2 | 186.7 | 152.6 | 1113.8 |
| **P6** | 276.0 | 181.6 | 148.1 | 201.8 | 292.5 | 300.1 | 1830.4 |
| **P7** | 141.3 | 157.1 | 166.6 | 135.7 | 117.2 | 156.5 | 1139.9 |
| **Hippuric acid** | **P1** | 1127.7 | 1187.2 | 651.8 | 1342.5 | 1607.2 | 1494.9 | 10123.1 |
| **P2** | 1302.6 | 1403.3 | 1192.7 | 2122.1 | 1793.1 | 1982.3 | 13656.3 |
| **P3** | 2274.0 | 2181.5 | 1572.5 | 2177.8 | 2212.8 | 2021.9 | 16480.4 |
| **P4** | 1906.7 | 1702.2 | 1290.1 | 2136.7 | 2143.0 | 1922.7 | 15072.7 |
| **P5** | 1569.7 | 1166.4 | 1240.8 | 1678.9 | 2044.2 | 1416.2 | 12675.0 |
| **P6** | 3045.3 | 2079.5 | 2039.7 | 2673.2 | 2705.3 | 2779.4 | 20198.1 |
| **P7** | 1359.0 | 830.3 | 794.4 | 595.7 | 508.7 | 573.9 | 5484.3 |
| **Cinnamic acid** | **Ferulic acid-4-*O*-glucuronide** | **P1** | 15.4 | 59.5 | 43.5 | 25.4 | 29.3 | 26.2 | 268.1 |
| **P2** | 17.4 | 58.5 | 49.7 | 31.8 | 25.4 | 22.3 | 278.4 |
| **P3** | 15.9 | 56.0 | 38.7 | 27.2 | 23.8 | 20.7 | 244.7 |
| **P4** | 14.8 | 53.1 | 41.8 | 25.4 | 21.4 | 19.3 | 236.1 |
| **P5** | 15.4 | 43.3 | 42.1 | 23.7 | 19.3 | 19.6 | 219.8 |
| **P6** | 20.3 | 88.4 | 68.1 | 43.8 | 31.7 | 28.4 | 380.1 |
| **P7** | 15.6 | 54.0 | 48.5 | 26.8 | 23.0 | 22.1 | 256.2 |
| **Caffeic acid** | **P1** | 1.8 | 2.0 | 1.9 | 2.0 | 1.9 | 2.0 | 15.5 |
| **P2** | 1.9 | 2.0 | 1.9 | 1.9 | 2.1 | 1.9 | 15.6 |
| **P3** | 2.0 | 1.9 | 1.8 | 1.9 | 2.0 | 2.1 | 15.7 |
| **P4** | 1.9 | 2.0 | 1.9 | 2.0 | 1.9 | 2.0 | 15.6 |
| **P5** | 1.9 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 14.9 |
| **P6** | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 1.8 | 15.6 |
| **P7** | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 14.9 |
| **Dihydroferulic acid-4-*O*-*β*-D-glucuronide** | **P1** | 36.8 | 37.8 | 37.6 | 52.2 | 59.6 | 44.1 | 380.2 |
| **P2** | 53.2 | 52.2 | 48.7 | 52.2 | 47.6 | 44.6 | 396.1 |
| **P3** | 37.5 | 37.2 | 36.4 | 40.1 | 44.5 | 42.2 | 321.8 |
| **P4** | 36.9 | 37.4 | 37.5 | 38.9 | 40.4 | 38.0 | 308.6 |
| **P5** | 39.1 | 37.7 | 36.9 | 41.5 | 39.5 | 35.8 | 310.3 |
| **P6** | 70.9 | 62.9 | 53.0 | 58.1 | 68.0 | 52.1 | 482.2 |
| **P7** | 38.5 | 37.2 | 36.9 | 35.5 | 37.0 | 47.1 | 303.8 |

**Table S4.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **Compounds** | **Volunteers** | **Concentration nM** | | | | | | **AUCt nM \* h** |
| **0 h** | **1 h** | **2 h** | **4 h** | **6 h** | **8 h** |
| **Cinnamic acids** | **Ferulic acid-4-*O*-sulfate** | **P1** | 10.6 | 168.5 | 72.2 | 33.4 | 23.3 | 26.2 | 421.7 |
| **P2** | 13.0 | 55.2 | 45.8 | 18.2 | 22.2 | 19.3 | 230.5 |
| **P3** | 10.5 | 58.1 | 26.7 | 21.6 | 25.3 | 13.6 | 210.8 |
| **P4** | 10.7 | 167.4 | 38.5 | 23.7 | 19.4 | 16.5 | 333.3 |
| **P5** | 11.1 | 79.9 | 37.2 | 14.7 | 14.9 | 14.5 | 214.9 |
| **P6** | 12.0 | 52.5 | 26.0 | 16.7 | 14.5 | 14.2 | 174.0 |
| **P7** | 15.1 | 66.5 | 41.1 | 15.3 | 19.8 | 16.5 | 222.4 |
| **Dihydroisoferulic acid-3-*O*-*β*-D-glucuronide** | **P1** | 4.5 | 4.2 | 3.8 | 3.7 | 3.5 | 3.5 | 30.1 |
| **P2** | 4.6 | 4.4 | 4.6 | 4.0 | 4.1 | 4.3 | 34.2 |
| **P3** | 3.5 | 3.5 | 3.4 | 3.7 | 4.2 | 4.4 | 30.7 |
| **P4** | 3.6 | 3.5 | 3.5 | 5.2 | 3.5 | 3.4 | 31.3 |
| **P5** | 4.0 | 4.0 | 4.0 | 4.3 | 5.6 | 5.1 | 37.0 |
| **P6** | 4.3 | 3.9 | 3.9 | 4.2 | 4.0 | 3.9 | 32.0 |
| **P7** | 3.6 | 3.5 | 3.4 | 3.4 | 3.4 | 3.4 | 27.3 |
| ***m*-Coumaric acid** | **P1** | 21.2 | 20.7 | 19.1 | 15.4 | 24.4 | 25.2 | 164.8 |
| **P2** | 23.6 | 19.6 | 22.5 | 23.8 | 22.3 | 24.1 | 181.5 |
| **P3** | 22.9 | 18.2 | 20.2 | 20.7 | 23.0 | 25.3 | 172.7 |
| **P4** | 22.0 | 17.6 | 19.5 | 22.3 | 21.3 | 21.9 | 167.0 |
| **P5** | 23.8 | 18.9 | 20.7 | 23.8 | 21.1 | 23.2 | 174.9 |
| **P6** | 23.2 | 20.9 | 18.3 | 19.9 | 24.0 | 23.8 | 171.6 |
| **P7** | 18.8 | 15.9 | 18.3 | 15.5 | 15.7 | 14.2 | 129.4 |
| **Flavonols** | **Kaempferol-3-*O*-glucuronide** | **P1** | 3.9 | 179.2 | 149.1 | 66.6 | 61.7 | 27.7 | 689.1 |
| **P2** | 3.9 | 356.4 | 241.8 | 82.8 | 59.2 | 27.8 | 1032.9 |
| **P3** | 3.9 | 105.2 | 86.0 | 52.0 | 29.9 | 17.7 | 417.4 |
| **P4** | 4.1 | 176.3 | 119.5 | 53.9 | 26.1 | 15.1 | 532.7 |
| **P5** | 3.9 | 80.2 | 72.5 | 23.9 | 15.7 | 7.2 | 277.3 |
| **P6** | 3.7 | 189.5 | 129.0 | 82.0 | 43.1 | 20.1 | 655.2 |
| **P7** | 3.8 | 304.2 | 293.9 | 109.6 | 69.7 | 40.0 | 1145.6 |
| **Quercetin** | **P1** | 2.5 | 2.7 | 2.5 | 2.5 | 2.6 | 2.6 | 20.5 |
| **P2** | 2.7 | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 | 21.9 |
| **P3** | 2.6 | 2.7 | 2.6 | 2.7 | 2.7 | 2.7 | 21.4 |
| **P4** | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.8 | 21.7 |
| **P5** | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 20.8 |
| **P6** | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.6 | 21.4 |
| **P7** | 2.6 | 2.6 | 2.6 | 2.5 | 2.6 | 2.6 | 20.6 |

**Table S5.** Identification of phenolic compounds and their metabolites in **urine**, before (0 h) and after (0-2, 2-4, 4-6, 6-8, 8-24 h) cooked common beans’ consumption. Results for n=7 (U1 – U7), with exception of time points 0-2 h and 6-8 h, only registered for n=6

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | | **8-24 h** | |
| **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | | **Error ppm** |
| **Pyrogallols** | **Pyrogallol-1-*O*-sulfate**  **(Predicted *m/z* 204.9812)** | **1.31 ± 0.08** | **0.29** | **U1** | 204.9810 | 1.0 | - | - | 204.9810 | 1.0 | 204.9812 | 0.0 | - | - | 204.9812 | | 0.0 |
| **U2** | 204.9812 | 0.0 | 204.9814 | -1.0 | 204.9813 | -0.5 | 204.9813 | -0.5 | 204.9813 | -0.5 | 204.9814 | | -1.0 |
| **U3** | 204.9813 | -0.5 | 204.9813 | -0.5 | 204.9814 | -1.0 | 204.9815 | -1.5 | 204.9815 | -1.5 | 204.9814 | | -1.0 |
| **U4** | 204.9814 | -1.0 | 204.9815 | -1.5 | 204.9814 | -1.0 | 204.9814 | -1.0 | 204.9813 | -0.5 | 204.9813 | | -0.5 |
| **U5** | 204.9813 | -0.5 | 204.9814 | -1.0 | 204.9814 | -1.0 | 204.9814 | -1.0 | 204.9813 | -0.5 | 204.9815 | | -1.5 |
| **U6** | 204.9813 | -0.5 | 204.9815 | -1.5 | 204.9815 | -1.5 | 204.9815 | -1.5 | 204.9816 | -2.0 | 204.9818 | | -2.9 |
| **U7** | 204.9817 | -2.4 | 204.9818 | -2.9 | 204.9816 | -2.0 | 204.9816 | -2.0 | 204.9815 | -1.5 | 204.9818 | | -2.9 |
| **Pyrogallol-2-*O*-sulfate**  **(Predicted *m/z* 204.9812)** | **2.38 ± 0.01** | **0.03** | **U1** | 204.9815 | -1.5 | - | - | 204.9812 | 0.0 | 204.9811 | 0.5 | - | - | 204.9816 | | -2.0 |
| **U2** | 204.9814 | -1.0 | 204.9814 | -1.0 | 204.9816 | -2.0 | 204.9815 | -1.5 | 204.9815 | -1.5 | 204.9819 | | -3.4 |
| **U3** | 204.9813 | -0.5 | 204.9813 | -0.5 | 204.9815 | -1.5 | 204.9812 | 0.0 | 204.9813 | -0.5 | 204.9814 | | -1.0 |
| **U4** | 204.9816 | -2.0 | 204.9816 | -2.0 | 204.9814 | -1.0 | 204.9813 | -0.5 | 204.9814 | -1.0 | 204.9814 | | -1.0 |
| **U5** | 204.9813 | -0.5 | 204.9814 | -1.0 | 204.9817 | -2.4 | 204.9815 | -1.5 | 204.9816 | -2.0 | 204.9819 | | -3.4 |
| **U6** | 204.9814 | -1.0 | 204.9818 | -2.9 | 204.9815 | -1.5 | 204.9815 | -1.5 | 204.9817 | -2.4 | 204.9818 | | -2.9 |
| **U7** | 204.9823 | -5.4 | 204.9823 | -5.4 | 204.9822 | -4.9 | 204.9820 | -3.9 | 204.9825 | -6.3 | 204.9823 | | -5.4 |
| **1-Methylpyrogallol-*O*-sulfate**  **(Predicted *m/z* 218.9969)** | **4.08 ± 0.06** | **-0.02** | **U1** | 218.9972 | 0.0 | - | - | 218.9968 | 1.8 | 218.9969 | 1.4 | - | - | 218.9972 | | 0.0 |
| **U2** | 218.9972 | 0.0 | 218.9972 | 0.0 | 218.9972 | 0.0 | 218.9973 | -0.5 | 218.9974 | -0.9 | 218.9976 | | -1.8 |
| **U3** | 218.9974 | -0.9 | 218.9980 | -3.7 | 218.9972 | 0.0 | 218.9972 | 0.0 | 218.9971 | 0.5 | 218.9973 | | -0.5 |
| **U4** | 218.9976 | -1.8 | 218.9974 | -0.9 | 218.9972 | 0.0 | 218.9972 | 0.0 | 218.9973 | -0.5 | 218.9973 | | -0.5 |
| **U5** | 218.9976 | -1.8 | 218.9975 | -1.4 | 218.9975 | -1.4 | 218.9974 | -0.9 | 218.9977 | -2.3 | 218.9978 | | -2.7 |
| **U6** | 218.9977 | -2.3 | 218.9976 | -1.8 | 218.9975 | -1.4 | 218.9974 | -0.9 | 218.9977 | -2.3 | 218.9977 | | -2.3 |
| **U7** | 218.9975 | -1.4 | 218.9977 | -2.3 | 218.9976 | -1.8 | 218.9976 | -1.8 | 218.9980 | -3.7 | 218.9977 | | -2.3 |
| **Benzoic acids** | **Gallic acid**  **(Predicted *m/z* 169.0142)** | **1.59 ± 0.03** | **0.06** | **U1** | 169.0138 | 2.4 | - | - | 169.0138 | 2.4 | 169.0139 | 1.8 | - | - | 169.0140 | | 1.2 |
| **U2** | 169.0139 | 1.8 | 169.0142 | 0.0 | 169.0142 | 0.0 | 169.0140 | 1.2 | 169.0141 | 0.6 | 169.0142 | | 0.0 |
| **U3** | 169.0142 | 0.0 | 169.0143 | -0.6 | 169.0144 | -1.2 | 169.0136 | 3.5 | 169.0141 | 0.6 | 169.0141 | | 0.6 |
| **U4** | 169.0141 | 0.6 | 169.0140 | 1.2 | 169.0144 | -1.2 | 169.0140 | 1.2 | 169.0140 | 1.2 | 169.0144 | | -1.2 |
| **U5** | 169.0139 | 1.8 | 169.0209 | -39.6 | 169.0142 | 0.0 | 169.0142 | 0.0 | 169.0138 | 2.4 | 169.0143 | | -0.6 |
| **U6** | 169.0141 | 0.6 | 169.0141 | 0.6 | 169.0141 | 0.6 | 169.0144 | -1.2 | 169.0142 | 0.0 | 169.0146 | | -2.4 |
| **U7** | 169.0144 | -1.2 | 169.0144 | -1.2 | 169.0143 | -0.6 | 169.0145 | -1.8 | 169.0144 | -1.2 | 169.0147 | | -3.0 |
| **Protocatechuic acid**  **(Predicted *m/z* 153.0193)** | **2.89 ± 0.03** | **-0.03** | **U1** | 153.0196 | -2.0 | - | - | 153.0193 | 0.0 | 153.0194 | -0.7 | - | - | 153.0194 | | -0.7 |
| **U2** | 153.0197 | -2.6 | 153.0196 | -2.0 | 153.0195 | -1.3 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0196 | | -2.0 |
| **U3** | 153.0195 | -1.3 | 153.0196 | -2.0 | 153.0196 | -2.0 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0196 | | -2.0 |
| **U4** | 153.0195 | -1.3 | 153.0197 | -2.6 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0194 | -0.7 | 153.0194 | | -0.7 |
| **U5** | 153.0197 | -2.6 | 153.0196 | -2.0 | 153.0195 | -1.3 | 153.0193 | 0.0 | 153.0195 | -1.3 | 153.0197 | | -2.6 |
| **U6** | 153.0197 | -2.6 | 153.0197 | -2.6 | 153.0194 | -0.7 | 153.0196 | -2.0 | 153.0197 | -2.6 | 153.0199 | | -3.9 |
| **U7** | 153.0198 | -3.3 | 153.0198 | -3.3 | 153.0197 | -2.6 | 153.0196 | -2.0 | 153.0195 | -1.3 | 153.0197 | | -2.6 |
| **4-Methylgallic acid-3-*O*-sulfate**  **(Predicted *m/z* 262.9867)** | **3.75 ± 0.01** | **-0.10** | **U1** | 262.9864 | 1.1 | **-** | **-** | 262.9865 | 0.8 | 262.9866 | 0.4 | **-** | **-** | 262.9866 | | 0.4 |
| **U2** | 262.9872 | -1.9 | 262.9873 | -2.3 | 262.9876 | -3.4 | 262.9870 | -1.1 | 262.9875 | -3.0 | 262.9876 | | -3.4 |
| **U3** | 262.9877 | -3.8 | 262.9871 | -1.5 | 262.9872 | -1.9 | 262.9876 | -3.4 | 262.9870 | -1.1 | 262.9875 | | -3.0 |
| **U4** | 262.9876 | -3.4 | 262.9874 | -2.7 | 262.9878 | -4.2 | 262.9885 | -6.8 | 262.9874 | -2.7 | 262.9888 | | -8.0 |
| **U5** | 262.9869 | -0.8 | 262.9873 | -2.3 | 262.9875 | -3.0 | 262.9875 | -3.0 | 262.9867 | 0.0 | 262.9875 | | -3.0 |
| **U6** | 262.9875 | -3.0 | 262.9873 | -2.3 | 262.9876 | -3.4 | 262.9869 | -0.8 | 262.9872 | -1.9 | 262.9873 | | -2.3 |
| **U7** | 262.9874 | -2.7 | 262.9874 | -2.7 | 262.9875 | -3.0 | 262.9872 | -1.9 | 262.9872 | -1.9 | 262.9872 | | -1.9 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S5.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | | | **8-24 h** | |
| **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | | **Observed *m/z*** | | **Error ppm** |
| **Benzoic acids** | **Vanillic acid-4-*O*-sulfate**  **(Predicted *m/z* 246.9918)** | **3.81 ± 0.02** | **0.04** | **U1** | 246.9918 | 0.0 | - | - | 246.9927 | -3.6 | 246.9926 | -3.2 | - | - | 246.9922 | | | -1.6 |
| **U2** | 246.9922 | -1.6 | 246.9929 | -4.5 | 246.9926 | -3.2 | 246.9924 | -2.4 | 246.9924 | -2.4 | 246.9925 | | | -2.8 |
| **U3** | 246.9922 | -1.6 | 246.9926 | -3.2 | 246.9930 | -4.9 | 246.9927 | -3.6 | 246.9923 | -2.0 | 246.9923 | | | -2.0 |
| **U4** | 246.9921 | -1.2 | 246.9929 | -4.5 | 246.9932 | -5.7 | 246.9927 | -3.6 | 246.9927 | -3.6 | 246.9927 | | | -3.6 |
| **U5** | 246.9926 | -3.2 | 246.9931 | -5.3 | 246.9930 | -4.9 | 246.9924 | -2.4 | 246.9927 | -3.6 | 246.9924 | | | -2.4 |
| **U6** | 246.9927 | -3.6 | 246.9926 | -3.2 | 246.9928 | -4.0 | 246.9925 | -2.8 | 246.9928 | -4.0 | 246.9927 | | | -3.6 |
| **U7** | 246.9928 | -4.0 | 246.9931 | -5.3 | 246.9931 | -5.3 | 246.9929 | -4.5 | 246.9932 | -5.7 | 246.9923 | | | -2.0 |
| ***p*-hydroxybenzoic acid**  **(Predicted *m/z* 137.0244)** | **4.11 ± 0.01** | **-0.21** | **U1** | 137.0244 | 0.0 | - | - | 137.0244 | 0.0 | 137.0247 | -2.2 | - | - | 137.0245 | | | -0.7 |
| **U2** | 137.0248 | -2.9 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0248 | | | -2.9 |
| **U3** | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0246 | | | -1.5 |
| **U4** | 137.0248 | -2.9 | 137.0248 | -2.9 | 137.0246 | -1.5 | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0246 | | | -1.5 |
| **U5** | 137.0245 | -0.7 | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0246 | | | -1.5 |
| **U6** | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0246 | -1.5 | 137.0244 | 0.0 | 137.0247 | -2.2 | 137.0247 | | | -2.2 |
| **U7** | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0247 | | | -2.2 |
| ***m*-Hydroxybenzoic acid**  **(Predicted m/z 137.0244)** | **5.35 ± 0.01** | **0.02** | **U1** | 137.0242 | 1.5 | - | - | 137.0244 | 0.0 | 137.0244 | 0.0 | - | - | 137.0243 | | | 0.7 |
| **U2** | 137.0244 | 0.0 | 137.0253 | -6.6 | 137.0258 | -10.2 | 137.0245 | -0.7 | 137.0249 | -3.6 | 137.0244 | | | 0.0 |
| **U3** | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0250 | -4.4 | 137.0249 | -3.6 | 137.0244 | 0.0 | 137.0244 | | | 0.0 |
| **U4** | 137.0243 | 0.7 | 137.0249 | -3.6 | 137.0248 | -2.9 | 137.0246 | -1.5 | 137.0246 | -1.5 | 137.0243 | | | 0.7 |
| **U5** | 137.0246 | -1.5 | 137.0255 | -8.0 | 137.0255 | -8.0 | 137.0251 | -5.1 | 137.0249 | -3.6 | 137.0246 | | | -1.5 |
| **U6** | 137.0249 | -3.6 | 137.0254 | -7.3 | 137.0249 | -3.6 | 137.0252 | -5.8 | 137.0250 | -4.4 | 137.0247 | | | -2.2 |
| **U7** | 137.0243 | 0.7 | 137.0254 | -7.3 | 137.0255 | -8.0 | 137.0248 | -2.9 | 137.0245 | -0.7 | 137.0246 | | | -1.5 |
| ***o*-Hydroxybenzoic acid**  **(Predicted m/z 137.0244)** | **8.14 ± 0.01** | **0.00** | **U1** | 137.0243 | 0.7 | - | - | 137.0244 | 0.0 | 137.0244 | 0.0 | - | - | 137.0243 | | | 0.7 |
| **U2** | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0245 | -0.7 | 137.0244 | 0.0 | 137.0243 | | | 0.7 |
| **U3** | 137.0244 | 0.0 | 137.0243 | 0.7 | 137.0244 | 0.0 | 137.0243 | 0.7 | 137.0243 | 0.7 | 137.0242 | | | 1.5 |
| **U4** | 137.0246 | -1.5 | 137.0247 | -2.2 | 137.0247 | -2.2 | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0244 | | | 0.0 |
| **U5** | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0243 | 0.7 | 137.0244 | 0.0 | 137.0244 | | | 0.0 |
| **U6** | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0245 | -0.7 | 137.0246 | -1.5 | 137.0245 | -0.7 | 137.0244 | | | 0.0 |
| **U7** | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0244 | 0.0 | 137.0247 | -2.2 | 137.0244 | | | 0.0 |
| **Benzaldehyde** | ***p*-Hydroxybenzaldehyde**  **(Predicted m/z 121.0295)** | **5.27 ± 0.01** | **-0.05** | **U1** | 121.0293 | 1.7 | - | - | 121.0294 | 0.8 | 121.0294 | 0.8 | - | - | 121.0294 | | | 0.8 |
| **U2** | 121.0294 | 0.8 | 121.0294 | 0.8 | 121.0292 | 2.5 | 121.0294 | 0.8 | 121.0293 | 1.7 | 121.0293 | | | 1.7 |
| **U3** | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0296 | -0.8 | 121.0296 | -0.8 | 121.0296 | -0.8 | 121.0295 | | | 0.0 |
| **U4** | 121.0295 | 0.0 | 121.0295 | 0.0 | 121.0294 | 0.8 | 121.0296 | -0.8 | 121.0296 | -0.8 | 121.0295 | | | 0.0 |
| **U5** | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0294 | 0.8 | 121.0296 | | | -0.8 |
| **U6** | 121.0295 | 0.0 | 121.0295 | 0.0 | 121.0293 | 1.7 | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0296 | | | -0.8 |
| **U7** | 121.0295 | 0.0 | 121.0296 | -0.8 | 121.0294 | 0.8 | 121.0295 | 0.0 | 121.0295 | 0.0 | 121.0296 | | | -0.8 |
| **Catechols** | **Catechol-*O*-sulfate**  **(Predicted *m/z* 188.9863)** | **2.92 ± 0.01** | **0.04** | **U1** | 188.9870 | -3.7 | - | - | 188.9868 | -2.6 | 188.9869 | -3.2 | - | - | 188.9870 | | | -3.7 |
| **U2** | 188.9871 | -4.2 | 188.9870 | -3.7 | 188.9869 | -3.2 | 188.9871 | -4.2 | 188.9872 | -4.8 | 188.9874 | | | -5.8 |
| **U3** | 188.9870 | -3.7 | 188.9870 | -3.7 | 188.9868 | -2.6 | 188.9868 | -2.6 | 188.9870 | -3.7 | 188.9873 | | | -5.3 |
| **U4** | 188.9869 | -3.2 | 188.9870 | -3.7 | 188.9872 | -4.8 | 188.9868 | -2.6 | 188.9870 | -3.7 | 188.9872 | | | -4.8 |
| **U5** | 188.9871 | -4.2 | 188.9871 | -4.2 | 188.9870 | -3.7 | 188.9870 | -3.7 | 188.9871 | -4.2 | 188.9874 | | | -5.8 |
| **U6** | 188.9873 | -5.3 | 188.9872 | -4.8 | 188.9871 | -4.2 | 188.9873 | -5.3 | 188.9874 | -5.8 | 188.9875 | | | -6.3 |
| **U7** | 188.9873 | -5.3 | 188.9874 | -5.8 | 188.9872 | -4.8 | 188.9871 | -4.2 | 188.9872 | -4.8 | 188.9874 | | | -5.8 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S5.** *Cont*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | **8-24 h** | |
| **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** |
| **Catechols** | **4-Methylcatechol-*O*-sulfate**  **(Predicted *m/z* 203.0020)** | **5.92 ± 0.05** | **0.11** | **U1** | 203.0025 | -2.5 | - | - | 203.0026 | -3.0 | 203.0027 | -3.4 | - | - | 203.0026 | -3.0 |
| **U2** | 203.0028 | -3.9 | 203.0029 | -4.4 | 203.0028 | -3.9 | 203.0029 | -4.4 | 203.0029 | -4.4 | 203.0029 | -4.4 |
| **U3** | 203.0030 | -4.9 | 203.0030 | -4.9 | 203.0030 | -4.9 | 203.0029 | -4.4 | 203.0029 | -4.4 | 203.0031 | -5.4 |
| **U4** | 203.0028 | -3.9 | 203.0028 | -3.9 | 203.0029 | -4.4 | 203.0031 | -5.4 | 203.0031 | -5.4 | 203.0029 | -4.4 |
| **U5** | 203.0031 | -5.4 | 203.0029 | -4.4 | 203.0030 | -4.9 | 203.0029 | -4.4 | 203.0030 | -4.9 | 203.0032 | -5.9 |
| **U6** | 203.0030 | -4.9 | 203.0030 | -4.9 | 203.0033 | -6.4 | 203.0031 | -5.4 | 203.0031 | -5.4 | 203.0032 | -5.9 |
| **U7** | 203.0033 | -6.4 | 203.0037 | -8.4 | 203.0035 | -7.4 | 203.0037 | -8.4 | 203.0032 | -5.9 | 203.0036 | -7.9 |
| **Hippuric acids** | **4-Hydroxyhippuric acid**  **(Predicted *m/z* 194.0459)** | **3.16 ± 0.01** | **0.03** | **U1** | 194.0460 | -0.5 | - | - | 194.0462 | -1.5 | 194.0462 | -1.5 | - | - | 194.0463 | -2.1 |
| **U2** | 194.0465 | -3.1 | 194.0466 | -3.6 | 194.0465 | -3.1 | 194.0466 | -3.6 | 194.0467 | -4.1 | 194.0467 | -4.1 |
| **U3** | 194.0464 | -2.6 | 194.0467 | -4.1 | 194.0468 | -4.6 | 194.0464 | -2.6 | 194.0464 | -2.6 | 194.0464 | -2.6 |
| **U4** | 194.0463 | -2.1 | 194.0465 | -3.1 | 194.0467 | -4.1 | 194.0465 | -3.1 | 194.0464 | -2.6 | 194.0465 | -3.1 |
| **U5** | 194.0462 | -1.5 | 194.0464 | -2.6 | 194.0466 | -3.6 | 194.0465 | -3.1 | 194.0465 | -3.1 | 194.0465 | -3.1 |
| **U6** | 194.0464 | -2.6 | 194.0467 | -4.1 | 194.0467 | -4.1 | 194.0467 | -4.1 | 194.0467 | -4.1 | 194.0468 | -4.6 |
| **U7** | 194.0462 | -1.5 | 194.0466 | -3.6 | 194.0464 | -2.6 | 194.0464 | -2.6 | 194.0467 | -4.1 | 194.0464 | -2.6 |
| **3-Hydroxyhippuric acid**  **(Predicted *m/z* 194.0459)** | **3.57 ± 0.01** | **0.04** | **U1** | 194.0464 | -2.6 | - | - | 194.0459 | 0.0 | 194.0462 | -1.5 | - | - | 194.0462 | -1.5 |
| **U2** | 194.0462 | -1.5 | 194.0462 | -1.5 | 194.0462 | -1.5 | 194.0462 | -1.5 | 194.0463 | -2.1 | 194.0464 | -2.6 |
| **U3** | 194.0464 | -2.6 | 194.0465 | -3.1 | 194.0463 | -2.1 | 194.0462 | -1.5 | 194.0464 | -2.6 | 194.0465 | -3.1 |
| **U4** | 194.0462 | -1.5 | 194.0461 | -1.0 | 194.0463 | -2.1 | 194.0461 | -1.0 | 194.0462 | -1.5 | 194.0464 | -2.6 |
| **U5** | 194.0463 | -2.1 | 194.0463 | -2.1 | 194.0464 | -2.6 | 194.0465 | -3.1 | 194.0466 | -3.6 | 194.0466 | -3.6 |
| **U6** | 194.0463 | -2.1 | 194.0465 | -3.1 | 194.0464 | -2.6 | 194.0467 | -4.1 | 194.0467 | -4.1 | 194.0467 | -4.1 |
| **U7** | 194.0467 | -4.1 | 194.0468 | -4.6 | 194.0468 | -4.6 | 194.0467 | -4.1 | 194.0467 | -4.1 | 194.0467 | -4.1 |
| **Hippuric acid**  **(Predicted m/z 178.0510)** | **4.70 ± 0.02** | **0.03** | **U1** | 178.0527 | -9.5 | - | - | 178.0531 | -11.8 | 178.0525 | -8.4 | - | - | 178.0528 | -10.1 |
| **U2** | 178.0527 | -9.5 | 178.0527 | -9.5 | 178.0518 | -4.5 | 178.0527 | -9.5 | 178.0522 | -6.7 | 178.0524 | -7.9 |
| **U3** | 178.0525 | -8.4 | 178.0524 | -7.9 | 178.0522 | -6.7 | 178.0520 | -5.6 | 178.0518 | -4.5 | 178.0518 | -4.5 |
| **U4** | 178.0525 | -8.4 | 178.0526 | -9.0 | 178.0526 | -9.0 | 178.0529 | -10.7 | 178.0530 | -11.2 | 178.0531 | -11.8 |
| **U5** | 178.0525 | -8.4 | 178.0526 | -9.0 | 178.0530 | -11.2 | 178.0519 | -5.1 | 178.0529 | -10.7 | 178.0526 | -9.0 |
| **U6** | 178.0531 | -11.8 | 178.0529 | -10.7 | 178.0524 | -7.9 | 178.0528 | -10.1 | 178.0527 | -9.5 | 178.0523 | -7.3 |
| **U7** | 178.0529 | -10.7 | 178.0530 | -11.2 | 178.0529 | -10.7 | 178.0530 | -11.2 | 178.0530 | -11.2 | 178.0528 | -10.1 |
| **Cinnamic acids** | **Caffeic acid-4-*O*-*β*-D-glucuronide**  **(Predicted *m/z* 355.0671)** | **3.89 ± 0.05** | **0.10** | **U1** | 355.0640 | 8.7 | - | - | 355.0659 | 3.4 | 355.0665 | 1.7 | - | - | 355.0658 | 3.7 |
| **U2** | 355.0688 | -4.8 | 355.0661 | 2.8 | 355.0670 | 0.3 | 355.0649 | 6.2 | 355.0640 | 8.7 | 355.0641 | 8.4 |
| **U3** | 355.0692 | -5.9 | 355.0705 | -9.6 | 355.0703 | -9.0 | 355.0703 | -9.0 | 355.0691 | -5.6 | 355.0702 | -8.7 |
| **U4** | 355.0673 | -0.6 | 355.0686 | -4.2 | 355.0671 | 0.0 | 355.0671 | 0.0 | 355.0666 | 1.4 | 355.0671 | 0.0 |
| **U5** | 355.0673 | -0.6 | 355.0658 | 3.7 | 355.0671 | 0.0 | 355.0671 | 0.0 | 355.0666 | 1.4 | 355.0663 | 2.3 |
| **U6** | 355.0634 | 10.4 | 355.0657 | 3.9 | 355.0656 | 4.2 | 355.0656 | 4.2 | 355.0650 | 5.9 | 355.0648 | 6.5 |
| **U7** | 355.0667 | 1.1 | 355.0673 | -0.6 | 355.0670 | 0.3 | 355.0674 | -0.8 | 355.0669 | 0.6 | 355.0669 | 0.6 |
| **Ferulic acid-4-*O*-glucuronide**  **(Predicted *m/z* 369.0827)** | **4.79 ± 0.01** | **0.02** | **U1** | 369.0824 | 0.8 | - | - | 369.0826 | 0.3 | 369.0831 | -1.1 | - | - | 369.0837 | -2.7 |
| **U2** | 369.0831 | -1.1 | 369.0837 | -2.7 | 369.0829 | -0.5 | 369.0832 | -1.4 | 369.0829 | -0.5 | 369.0836 | -2.4 |
| **U3** | 369.0854 | -7.3 | 369.0831 | -1.1 | 369.0832 | -1.4 | 369.0838 | -3.0 | 369.0844 | -4.6 | 369.0858 | -8.4 |
| **U4** | 369.0828 | -0.3 | 369.0840 | -3.5 | 369.0839 | -3.3 | 369.0839 | -3.3 | 369.0839 | -3.3 | 369.0841 | -3.8 |
| **U5** | 369.0836 | -2.4 | 369.0841 | -3.8 | 369.0839 | -3.3 | 369.0835 | -2.2 | 369.0844 | -4.6 | 369.0843 | -4.3 |
| **U6** | 369.0843 | -4.3 | 369.0846 | -5.1 | 369.0837 | -2.7 | 369.0847 | -5.4 | 369.0845 | -4.9 | 369.0842 | -4.1 |
| **U7** | 369.0839 | -3.3 | 369.0849 | -6.0 | 369.0848 | -5.7 | 369.0847 | -5.4 | 369.0842 | -4.1 | 369.0835 | -2.2 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S5.** *Cont*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers** | **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | **8-24 h** | |
| **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** |
| **Cinnamic acids** | **Dihydrocaffeic acid-3-*O*-sulfate**  **(Predicted *m/z* 261.0074)** | **5.03 ± 0.02** | **0.10** | **U1** | 261.0094 | -7.7 | - | - | 261.0074 | 0.0 | 261.0087 | -5.0 | - | - | 261.0107 | -12.6 |
| **U2** | 261.0086 | -4.6 | 261.0086 | -4.6 | 261.0086 | -4.6 | 261.0085 | -4.2 | 261.0085 | -4.2 | 261.0091 | -6.5 |
| **U3** | 261.0089 | -5.7 | 261.0080 | -2.3 | 261.0082 | -3.1 | 261.0078 | -1.5 | 261.0081 | -2.7 | 261.0091 | -6.5 |
| **U4** | 261.0084 | -3.8 | 261.0083 | -3.4 | 261.0082 | -3.1 | 261.0082 | -3.1 | 261.0088 | -5.4 | 261.0089 | -5.7 |
| **U5** | 261.0090 | -6.1 | 261.0116 | -16.1 | 261.0081 | -2.7 | 261.0085 | -4.2 | 261.0087 | -5.0 | 261.0097 | -8.8 |
| **U6** | 261.0094 | -7.7 | 261.0090 | -6.1 | 261.0084 | -3.8 | 261.0088 | -5.4 | 261.0094 | -7.7 | 261.0093 | -7.3 |
| **U7** | 261.0092 | -6.9 | 261.0092 | -6.9 | 261.0090 | -6.1 | 261.0091 | -6.5 | 261.0092 | -6.9 | 261.0094 | -7.7 |
| **Caffeic acid-3-*O*-*β*-D-glucuronide**  **(Predicted *m/z* 355.0671)** | **5.25 ± 0.02** | **-0.02** | **U1** | 355.0773 | -28.7 | - | - | 355.0666 | 1.4 | 355.0667 | 1.1 | - | - | 355.0675 | -1.1 |
| **U2** | 355.0697 | -7.3 | 355.0669 | 0.6 | 355.0628 | 12.1 | 355.0660 | 3.1 | 355.0666 | 1.4 | 355.0676 | -1.4 |
| **U3** | 355.0693 | -6.2 | 355.0675 | -1.1 | 355.0675 | -1.1 | 355.0671 | 0.0 | 355.0672 | -0.3 | 355.0680 | -2.5 |
| **U4** | 355.0675 | -1.1 | 355.0675 | -1.1 | 355.0667 | 1.1 | 355.0672 | -0.3 | 355.0678 | -2.0 | 355.0674 | -0.8 |
| **U5** | 355.0697 | -7.3 | 355.0677 | -1.7 | 355.0651 | 5.6 | 355.0662 | 2.5 | 355.0681 | -2.8 | 355.0682 | -3.1 |
| **U6** | 355.0686 | -4.2 | 355.0688 | -4.8 | 355.0661 | 2.8 | 355.0676 | -1.4 | 355.0678 | -2.0 | 355.0691 | -5.6 |
| **U7** | 355.0693 | -6.2 | 355.0687 | -4.5 | 355.0679 | -2.3 | 355.0681 | -2.8 | 355.0681 | -2.8 | 355.0689 | -5.1 |
| **Dihydroferulic acid-4-*O*-*β*-D-glucuronide (Predicted *m/z* 371.0984)** | **5.63 ± 0.01** | **0.02** | **U1** | 371.0984 | 0.0 | - | - | 371.0972 | 3.2 | 371.0984 | 0.0 | - | - | 371.0983 | 0.3 |
| **U2** | 371.0991 | -1.9 | 371.0993 | -2.4 | 371.0983 | 0.3 | 371.0988 | -1.1 | 371.0989 | -1.3 | 371.0991 | -1.9 |
| **U3** | 371.0986 | -0.5 | 371.0985 | -0.3 | 371.0984 | 0.0 | 371.0988 | -1.1 | 371.0988 | -1.1 | 371.0991 | -1.9 |
| **U4** | 371.0990 | -1.6 | 371.0985 | -0.3 | 371.0986 | -0.5 | 371.0987 | -0.8 | 371.0982 | 0.5 | 371.0994 | -2.7 |
| **U5** | 371.0982 | 0.5 | 371.0984 | 0.0 | 371.0988 | -1.1 | 371.0985 | -0.3 | 371.0996 | -3.2 | 371.0987 | -0.8 |
| **U6** | 371.0993 | -2.4 | 371.0996 | -3.2 | 371.0989 | -1.3 | 371.0997 | -3.5 | 371.1002 | -4.9 | 371.0993 | -2.4 |
| **U7** | 371.0991 | -1.9 | 371.0992 | -2.2 | 371.0996 | -3.2 | 371.0989 | -1.3 | 371.0999 | -4.0 | 371.0988 | -1.1 |
| **Caffeic acid**  **(Predicted *m/z* 179.0350)** | **5.64 ± 0.01** | **0.01** | **U1** | 179.0352 | -1.1 | - | - | 179.0355 | -2.8 | 179.0352 | -1.1 | - | - | 179.0353 | -1.7 |
| **U2** | 179.0354 | -2.2 | 179.0357 | -3.9 | 179.0423 | -40.8 | 179.0358 | -4.5 | 179.0352 | -1.1 | 179.0353 | -1.7 |
| **U3** | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0363 | -7.3 | 179.0363 | -7.3 | 179.0349 | 0.6 | 179.0358 | -4.5 |
| **U4** | 179.0358 | -4.5 | 179.0358 | -4.5 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 |
| **U5** | 179.0344 | 3.4 | 179.0358 | -4.5 | 179.0358 | -4.5 | 179.0349 | 0.6 | 179.0349 | 0.6 | 179.0363 | -7.3 |
| **U6** | 179.0353 | -1.7 | 179.0334 | 8.9 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 |
| **U7** | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 | 179.0353 | -1.7 |
| **Dihydroferulic acid-4-*O*-sulfate**  **(Predicted *m/z* 275.0231)** | **5.79 ± 0.06** | **0.65** | **U1** | 275.0234 | -1.1 | - | - | 275.0228 | 1.1 | 275.0232 | -0.4 | - | - | 275.0230 | 0.4 |
| **U2** | 275.0239 | -2.9 | 275.0238 | -2.5 | 275.0237 | -2.2 | 275.0239 | -2.9 | 275.0238 | -2.5 | 275.0235 | -1.5 |
| **U3** | 275.0236 | -1.8 | 275.0236 | -1.8 | 275.0235 | -1.5 | 275.0235 | -1.5 | 275.0235 | -1.5 | 275.0238 | -2.5 |
| **U4** | 275.0238 | -2.5 | 275.0234 | -1.1 | 275.0238 | -2.5 | 275.0238 | -2.5 | 275.0238 | -2.5 | 275.0234 | -1.1 |
| **U5** | 275.0234 | -1.1 | 275.0237 | -2.2 | 275.0236 | -1.8 | 275.0236 | -1.8 | 275.0237 | -2.2 | 275.0238 | -2.5 |
| **U6** | 275.0239 | -2.9 | 275.0241 | -3.6 | 275.0237 | -2.2 | 275.0244 | -4.7 | 275.0240 | -3.3 | 275.0237 | -2.2 |
| **U7** | 275.0239 | -2.9 | 275.0237 | -2.2 | 275.0238 | -2.5 | 275.0236 | -1.8 | 275.0241 | -3.6 | 275.0238 | -2.5 |
| **Ferulic acid-4-*O*-sulfate**  **(Predicted *m/z* 273.0074)** | **6.18 ± 0.04** | **0.08** | **U1** | 273.0078 | -1.5 | - | - | 273.0078 | -1.5 | 273.0081 | -2.6 | - | - | 273.0080 | -2.2 |
| **U2** | 273.0086 | -4.4 | 273.0087 | -4.8 | 273.0087 | -4.8 | 273.0085 | -4.0 | 273.0089 | -5.5 | 273.0086 | -4.4 |
| **U3** | 273.0074 | 0.0 | 273.0092 | -6.6 | 273.0087 | -4.8 | 273.0087 | -4.8 | 273.0086 | -4.4 | 273.0084 | -3.7 |
| **U4** | 273.0084 | -3.7 | 273.0085 | -4.0 | 273.0088 | -5.1 | 273.0088 | -5.1 | 273.0091 | -6.2 | 273.0088 | -5.1 |
| **U5** | 273.0090 | -5.9 | 273.0085 | -4.0 | 273.0089 | -5.5 | 273.0087 | -4.8 | 273.0100 | -9.5 | 273.0085 | -4.0 |
| **U6** | 273.0089 | -5.5 | 273.0090 | -5.9 | 273.0092 | -6.6 | 273.0092 | -6.6 | 273.0090 | -5.9 | 273.0090 | -5.9 |
| **U7** | 273.0089 | -5.5 | 273.0092 | -6.6 | 273.0088 | -5.1 | 273.0088 | -5.1 | 273.0093 | -7.0 | 273.0088 | -5.1 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S5.** *Cont*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Collection time points** | | | | | | | | | | | | |
| **Class** | **Compounds** | **RT (min)**  **Average ± SD** | **Δ RT (min)** | **Volunteers (V)** | **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | | **8-24 h** | |
| **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | **Error ppm** | **Observed *m/z*** | | **Error ppm** |
| **Cinnamic acids** | **Dihydroisoferulic acid-3-*O*-*β*-D-glucuronide (Predicted *m/z* 371.0984)** | **6.24 ± 0.01** | **0.25** | **U1** | 371.0983 | 0.3 | - | - | 371.0976 | 2.2 | 371.0983 | 0.3 | - | - | 371.0980 | | 1.1 |
| **U2** | 371.0989 | -1.3 | 371.0989 | -1.3 | 371.0987 | -0.8 | 371.0989 | -1.3 | 371.0989 | -1.3 | 371.0990 | | -1.6 |
| **U3** | 371.1012 | -7.5 | 371.0992 | -2.2 | 371.0986 | -0.5 | 371.0982 | 0.5 | 371.1010 | -7.0 | 371.1012 | | -7.5 |
| **U4** | 371.0982 | 0.5 | 371.0983 | 0.3 | 371.0984 | 0.0 | 371.0985 | -0.3 | 371.1017 | -8.9 | 371.0990 | | -1.6 |
| **U5** | 371.0998 | -3.8 | 371.0980 | 1.1 | 371.0983 | 0.3 | 371.0982 | 0.5 | 371.1017 | -8.9 | 371.0980 | | 1.1 |
| **U6** | 371.0990 | -1.6 | 371.0996 | -3.2 | 371.0993 | -2.4 | 371.0995 | -3.0 | 371.0993 | -2.4 | 371.0990 | | -1.6 |
| **U7** | 371.0991 | -1.9 | 371.0990 | -1.6 | 371.0984 | 0.0 | 371.0986 | -0.5 | 371.1013 | -7.8 | 371.1006 | | -5.9 |
| **Sinapic acid**  **(Predicted *m/z* 223.0612)** | **7.54 ± 0.01** | **0.07** | **U1** | 223.0604 | 3.6 | - | - | 223.0610 | 0.9 | 223.0613 | -0.4 | - | - | 223.0607 | | 2.2 |
| **U2** | 223.0604 | 3.6 | 223.0614 | -0.9 | 223.0613 | -0.4 | 223.0612 | 0.0 | 223.0605 | 3.1 | 223.0614 | | -0.9 |
| **U3** | 223.0600 | 5.4 | 223.0612 | 0.0 | 223.0616 | -1.8 | 223.0612 | 0.0 | 223.0613 | -0.4 | 223.0614 | | -0.9 |
| **U4** | 223.0578 | 15.2 | 223.0611 | 0.4 | 223.0613 | -0.4 | 223.0609 | 1.3 | 223.0608 | 1.8 | 223.0585 | | 12.1 |
| **U5** | 223.0603 | 4.0 | 223.0613 | -0.4 | 223.0615 | -1.3 | 223.0608 | 1.8 | 223.0615 | -1.3 | 223.0605 | | 3.1 |
| **U6** | 223.0612 | 0.0 | 223.0613 | -0.4 | 223.0617 | -2.2 | 223.0617 | -2.2 | 223.0618 | -2.7 | 223.0609 | | 1.3 |
| **U7** | 223.0607 | 2.2 | 223.0619 | -3.1 | 223.0621 | -4.0 | 223.0614 | -0.9 | 223.0613 | -0.4 | 223.0610 | | 0.9 |
| **Flavonols** | **Kaempferol-3-*O*-glucuronide**  **(Predicted *m/z* 461.0725)** | **8.40 ± 0.04** | **-0.02** | **U1** | 461.0884 | -34.5 | - | - | 461.0708 | 3.7 | 461.0715 | 2.2 | - | - | 461.0712 | | 2.8 |
| **U2** | 461.0756 | -6.7 | 461.0730 | -1.1 | 461.0728 | -0.7 | 461.0724 | 0.2 | 461.0718 | 1.5 | 461.0729 | | -0.9 |
| **U3** | 461.0743 | -3.9 | 461.0717 | 1.7 | 461.0726 | -0.2 | 461.0725 | 0.0 | 461.0723 | 0.4 | 461.0727 | | -0.4 |
| **U4** | 461.0787 | -13.4 | 461.0689 | 7.8 | 461.0735 | -2.2 | 461.0725 | 0.0 | 461.0651 | 16.0 | 461.0732 | | -1.5 |
| **U5** | 461.0741 | -3.5 | 461.0725 | 0.0 | 461.0728 | -0.7 | 461.0726 | -0.2 | 461.0726 | -0.2 | 461.0738 | | -2.8 |
| **U6** | 461.0775 | -10.8 | 461.0724 | 0.2 | 461.0729 | -0.9 | 461.0729 | -0.9 | 461.0726 | -0.2 | 461.0739 | | -3.0 |
| **U7** | 461.0748 | -5.0 | 461.0729 | -0.9 | 461.0733 | -1.7 | 461.0732 | -1.5 | 461.0735 | -2.2 | 461.0723 | | 0.4 |
| **Kaempferol**  **(Predicted m/z 285.0405)** | **9.09 ± 0.03** | **0.08** | **U1** | 285.0438 | -11.6 | - | - | 285.0468 | -22.1 | 285.0473 | -23.9 | - | - | 285.0463 | | -20.3 |
| **U2** | 285.0451 | -16.1 | 285.0445 | -14.0 | 285.0408 | -1.1 | 285.0439 | -11.9 | 285.0435 | -10.5 | 285.0434 | | -10.2 |
| **U3** | 285.0440 | -12.3 | 285.0449 | -15.4 | 285.0434 | -10.2 | 285.0429 | -8.4 | 285.0434 | -10.2 | 285.0441 | | -12.6 |
| **U4** | 285.0466 | -21.4 | 285.0465 | -21.0 | 285.0438 | -11.6 | 285.0441 | -12.6 | 285.0457 | -18.2 | 285.0455 | | -17.5 |
| **U5** | 285.0464 | -20.7 | 285.0444 | -13.7 | 285.0421 | -5.6 | 285.0429 | -8.4 | 285.0450 | -15.8 | 285.0444 | | -13.7 |
| **U6** | 285.0436 | -10.9 | 285.0462 | -20.0 | 285.0432 | -9.5 | 285.0440 | -12.3 | 285.0441 | -12.6 | 285.0441 | | -12.6 |
| **U7** | 285.0465 | -21.0 | 285.0465 | -21.0 | 285.0467 | -21.8 | 285.0467 | -21.8 | 285.0463 | -20.3 | 285.0464 | | -20.7 |

\*ΔRT = Standards’ Average RT – Samples’ Average RT

**Table S6.** Urinary excretion (amount in µg) of phenolic compounds’ metabolites determined at different time points for the different volunteers, U1 – U7

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **Compounds** | **Volunteers** | **Excreted amount (μg)** | | | | | | |
| **0 h** | **0-2 h** | **2-4 h** | **4-6 h** | **6-8 h** | **8-24 h** | **Total excreted μg (24 h)** |
| **Pyrogallols** | **Pyrogallol-1-*O*-sulfate** | **U1** | 0.6 | - | 0.3 | 0.2 | - | 0.3 | 1.5 |
| **U2** | 0.3 | 1.2 | 1.8 | 0.6 | 0.1 | 0.9 | 5.0 |
| **U3** | 0.3 | 0.7 | 0.5 | 0.3 | 0.1 | 1.6 | 3.6 |
| **U4** | 0.2 | 1.0 | 1.5 | 0.2 | 0.1 | 0.8 | 3.8 |
| **U5** | 0.2 | 0.6 | 0.9 | 0.2 | 0.1 | 1.8 | 3.8 |
| **U6** | 0.4 | 0.5 | 1.4 | 0.3 | 0.1 | 1.0 | 3.7 |
| **U7** | 0.2 | 0.7 | 0.3 | 0.2 | 0.3 | 0.7 | 2.5 |
| **Pyrogallol-2-*O*-sulfate** | **U1** | 8.3 | - | 1.1 | 0.3 | - | 9.0 | 18.7 |
| **U2** | 2.9 | 1.9 | 3.9 | 5.6 | 2.1 | 13.6 | 29.9 |
| **U3** | 1.0 | 0.2 | 1.2 | 0.6 | 0.7 | 5.4 | 9.1 |
| **U4** | 0.8 | 0.3 | 2.3 | 0.6 | 0.2 | 1.8 | 6.1 |
| **U5** | 0.8 | 0.6 | 1.7 | 0.9 | 1.4 | 18.1 | 23.4 |
| **U6** | 2.8 | 1.5 | 1.8 | 1.4 | 0.7 | 6.1 | 14.3 |
| **U7** | 4.2 | 2.0 | 1.5 | 1.2 | 3.8 | 10.5 | 23.2 |
| **1-Methylpyrogallol-*O*-**  **sulfate** | **U1** | 11.8 | - | 2.2 | 0.7 | - | 13.5 | 28.2 |
| **U2** | 6.1 | 3.4 | 6.3 | 9.1 | 5.8 | 15.8 | 46.6 |
| **U3** | 3.3 | 0.7 | 1.9 | 2.0 | 2.1 | 10.3 | 20.3 |
| **U4** | 2.6 | 1.0 | 5.7 | 4.1 | 0.9 | 7.2 | 21.5 |
| **U5** | 7.3 | 4.7 | 9.3 | 8.2 | 6.8 | 45.0 | 81.3 |
| **U6** | 11.3 | 6.8 | 7.5 | 3.0 | 1.3 | 11.5 | 41.4 |
| **U7** | 5.9 | 3.0 | 1.5 | 1.1 | 4.9 | 12.5 | 28.9 |
| **Benzoic acids** | **Protocatechuic acid** | **U1** | 12.7 | - | 12.9 | 4.1 | - | 26.1 | 55.8 |
| **U2** | 38.4 | 30.5 | 9.3 | 12.9 | 8.4 | 25.7 | 125.3 |
| **U3** | 14.8 | 7.9 | 7.3 | 3.4 | 6.3 | 56.8 | 96.5 |
| **U4** | 9.5 | 10.8 | 9.6 | 2.6 | 1.1 | 11.2 | 44.8 |
| **U5** | 22.2 | 7.4 | 8.7 | 2.3 | 7.4 | 74.0 | 122.0 |
| **U6** | 26.5 | 31.7 | 10.7 | 8.5 | 6.3 | 73.7 | 157.5 |
| **U7** | 24.8 | 15.5 | 6.9 | 5.5 | 4.8 | 23.0 | 80.5 |
| **Vanillic acid-4-*O*-sulfate** | **U1** | 20.8 | - | 47.1 | 16.5 | - | 37.5 | 121.9 |
| **U2** | 13.6 | 38.3 | 47.4 | 32.0 | 10.1 | 15.0 | 156.4 |
| **U3** | 5.8 | 7.7 | 29.2 | 11.1 | 12.1 | 22.2 | 88.2 |
| **U4** | 4.2 | 17.7 | 127.8 | 33.1 | 7.1 | 16.6 | 206.6 |
| **U5** | 6.5 | 26.1 | 72.9 | 18.5 | 7.0 | 33.9 | 165.0 |
| **U6** | 13.0 | 12.8 | 26.6 | 14.7 | 6.9 | 22.3 | 96.4 |
| **U7** | 3.4 | 11.0 | 7.3 | 2.5 | 14.2 | 9.0 | 47.5 |
| ***p*-Hydroxybenzoic acid** | **U1** | 2.74 | - | 2.77 | 1.76 | - | 9.64 | 16.9 |
| **U2** | 18.3 | 7.6 | 4.5 | 4.9 | 3.8 | 9.6 | 48.8 |
| **U3** | 4.2 | 2.2 | 4.5 | 2.9 | 4.1 | 11.7 | 29.7 |
| **U4** | 3.3 | 3.0 | 5.8 | 3.3 | 1.0 | 5.4 | 21.6 |
| **U5** | 1.9 | 2.5 | 4.2 | 2.5 | 2.4 | 11.8 | 25.3 |
| **U6** | 1.8 | 2.5 | 2.8 | 1.7 | 1.1 | 5.7 | 15.6 |
| **U7** | 3.6 | 2.2 | 1.0 | 0.9 | 1.2 | 5.4 | 14.4 |

**Table S6.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | | **Compounds** | | **Volunteers** | | **Excreted amount (μg)** | | | | | | | | | | | | | |
| **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | **8-24 h** | | **Total excreted μg (24 h)** | |
| **Benzoic acids** | | ***m*-Hydroxybenzoic acid** | | **U1** | | 9.5 | | - | | 1.2 | | 0.4 | | - | | 20.0 | | 31.1 | |
| **U2** | | 2.1 | | 1.0 | | 0.9 | | 0.9 | | 0.7 | | 1.4 | | 7.0 | |
| **U3** | | 1.7 | | 0.7 | | 0.8 | | 0.6 | | 0.9 | | 3.8 | | 8.6 | |
| **U4** | | 1.1 | | 0.6 | | 1.4 | | 0.5 | | 0.3 | | 3.6 | | 7.5 | |
| **U5** | | 0.5 | | 0.5 | | 1.1 | | 0.6 | | 0.5 | | 3.5 | | 6.7 | |
| **U6** | | 0.4 | | 0.5 | | 0.5 | | 0.3 | | 0.2 | | 1.6 | | 3.5 | |
| **U7** | | 0.6 | | 0.3 | | 0.3 | | 0.3 | | 0.4 | | 1.3 | | 3.1 | |
| ***o*-Hydroxybenzoic acid** | | **U1** | | 0.4 | | - | | 1.0 | | 0.4 | | - | | 2.2 | | 3.9 | |
| **U2** | | 1.3 | | 3.5 | | 4.2 | | 0.6 | | 0.5 | | 0.3 | | 10.4 | |
| **U3** | | 0.2 | | 0.0 | | 0.3 | | 0.3 | | 0.1 | | 0.4 | | 1.3 | |
| **U4** | | 0.1 | | 1.8 | | 11.5 | | 2.8 | | 0.5 | | 4.4 | | 21.1 | |
| **U5** | | 0.1 | | 1.1 | | 3.6 | | 0.6 | | 0.4 | | 1.0 | | 6.7 | |
| **U6** | | 0.2 | | 0.3 | | 2.1 | | 0.2 | | 0.1 | | 0.5 | | 3.4 | |
| **U7** | | 0.1 | | 0.1 | | 0.0 | | 0.0 | | 0.0 | | 0.2 | | 0.5 | |
| **Catechols** | | **Catechol-*O*-sulfate** | | **U1** | | 56.0 | | - | | 17.5 | | 4.7 | | - | | 132.6 | | 210.9 | |
| **U2** | | 25.2 | | 10.4 | | 17.1 | | 29.3 | | 24.9 | | 56.6 | | 163.6 | |
| **U3** | | 17.6 | | 2.9 | | 5.6 | | 6.7 | | 13.2 | | 91.4 | | 137.4 | |
| **U4** | | 8.4 | | 3.6 | | 23.7 | | 16.8 | | 5.3 | | 58.7 | | 116.5 | |
| **U5** | | 13.1 | | 5.3 | | 21.6 | | 18.7 | | 16.5 | | 119.5 | | 194.6 | |
| **U6** | | 30.9 | | 19.7 | | 31.6 | | 23.5 | | 14.0 | | 152.9 | | 272.6 | |
| **U7** | | 11.4 | | 7.3 | | 3.4 | | 3.4 | | 10.9 | | 42.5 | | 78.9 | |
| **4-Methylcatechol-*O*-sulfate** | | **U1** | | 66.2 | | - | | 94.0 | | 48.1 | | - | | 642.8 | | 851.1 | |
| **U2** | | 107.9 | | 83.1 | | 51.8 | | 152.0 | | 171.3 | | 359.8 | | 926.0 | |
| **U3** | | 203.8 | | 54.2 | | 113.2 | | 155.5 | | 316.9 | | 1409.6 | | 2253.3 | |
| **U4** | | 50.6 | | 22.0 | | 95.0 | | 67.6 | | 23.9 | | 175.8 | | 434.9 | |
| **U5** | | 37.1 | | 35.1 | | 55.8 | | 104.6 | | 114.1 | | 603.5 | | 950.3 | |
| **U6** | | 216.2 | | 160.9 | | 138.4 | | 119.9 | | 67.5 | | 537.9 | | 1240.9 | |
| **U7** | | 205.0 | | 75.3 | | 52.3 | | 49.4 | | 97.0 | | 375.4 | | 854.3 | |
| **Hippuric acids** | | **4-Hydroxyhippuric acid** | | **U1** | | 76.4 | | - | | 129.3 | | 56.8 | | - | | 372.8 | | 635.3 | |
| **U2** | | 375.3 | | 287.0 | | 259.3 | | 321.9 | | 265.0 | | 434.7 | | 1943.1 | |
| **U3** | | 188.8 | | 60.2 | | 162.9 | | 123.8 | | 138.2 | | 421.7 | | 1095.5 | |
| **U4** | | 51.0 | | 56.4 | | 297.7 | | 150.9 | | 29.4 | | 160.9 | | 746.2 | |
| **U5** | | 63.0 | | 83.3 | | 291.0 | | 107.3 | | 70.0 | | 422.2 | | 1036.7 | |
| **U6** | | 135.0 | | 176.5 | | 265.4 | | 207.4 | | 106.6 | | 594.9 | | 1485.8 | |
| **U7** | | 104.1 | | 73.4 | | 43.8 | | 28.1 | | 111.7 | | 247.1 | | 608.2 | |
| **3-Hydroxyhippuric acid** | | **U1** | | 234.8 | | - | | 35.1 | | 19.9 | | - | | 335.7 | | 625.4 | |
| **U2** | | 49.8 | | 35.1 | | 23.7 | | 68.4 | | 64.1 | | 135.7 | | 376.7 | |
| **U3** | | 58.7 | | 18.2 | | 19.5 | | 33.0 | | 60.8 | | 223.0 | | 413.2 | |
| **U4** | | 18.3 | | 11.0 | | 29.4 | | 37.6 | | 16.2 | | 108.2 | | 220.7 | |
| **U5** | | 24.0 | | 22.2 | | 83.8 | | 57.5 | | 69.9 | | 297.9 | | 555.3 | |
| **U6** | | 61.3 | | 56.9 | | 67.6 | | 77.7 | | 58.6 | | 386.8 | | 708.8 | |
| **U7** | | 98.4 | | 41.6 | | 27.3 | | 26.6 | | 58.1 | | 168.5 | | 420.5 | |

**Table S6.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | | **Compounds** | | **Volunteers** | | **Excreted amount (μg)** | | | | | | | | | | | | | |
| **0 h** | | **0-2 h** | | **2-4 h** | | **4-6 h** | | **6-8 h** | | **8-24 h** | | **Total excreted μg (24 h)** | |
| **Hippuric acids** | | **Hippuric acid** | | **U1** | | 920.1 | | - | | 382.9 | | 199.2 | | - | | 2068.4 | | 3570.6 | |
| **U2** | | 830.9 | | 550.3 | | 2417.1 | | 869.1 | | 1086.1 | | 1034.6 | | 6788.2 | |
| **U3** | | 877.6 | | 248.4 | | 537.1 | | 1179.6 | | 981.7 | | 3906.3 | | 7730.6 | |
| **U4** | | 420.1 | | 253.5 | | 1369.0 | | 1221.7 | | 162.7 | | 1437.8 | | 4864.7 | |
| **U5** | | 459.2 | | 328.0 | | 1496.4 | | 1218.0 | | 296.7 | | 2325.8 | | 6124.0 | |
| **U6** | | 435.4 | | 471.2 | | 1282.9 | | 424.2 | | 239.2 | | 2109.7 | | 4962.6 | |
| **U7** | | 238.4 | | 114.3 | | 72.5 | | 67.3 | | 139.3 | | 447.3 | | 1079.1 | |
| **Cinnamic acids** | | **Caffeic acid-4-*O*-*β*-D-glucuronide** | | **U1** | | 3.6 | | - | | 3.2 | | 2.9 | | - | | 9.2 | | 18.8 | |
| **U2** | | 0.4 | | 1.6 | | 1.2 | | 2.7 | | 2.3 | | 3.5 | | 11.7 | |
| **U3** | | 1.9 | | 0.5 | | 0.8 | | 0.7 | | 1.7 | | 4.3 | | 10.0 | |
| **U4** | | 0.5 | | 1.0 | | 1.9 | | 1.6 | | 0.6 | | 2.1 | | 7.6 | |
| **U5** | | 0.9 | | 0.5 | | 1.1 | | 1.0 | | 1.5 | | 6.5 | | 11.6 | |
| **U6** | | 4.4 | | 2.5 | | 1.1 | | 1.6 | | 1.5 | | 8.8 | | 19.8 | |
| **U7** | | 1.6 | | 1.4 | | 1.6 | | 1.4 | | 2.0 | | 2.6 | | 10.5 | |
| **Ferulic acid-4-*O*-glucuronide** | | **U1** | | 19.6 | | - | | 30.5 | | 16.5 | | - | | 62.9 | | 129.5 | |
| **U2** | | 16.8 | | 32.9 | | 37.9 | | 14.8 | | 6.6 | | 21.3 | | 130.2 | |
| **U3** | | 11.1 | | 14.4 | | 16.1 | | 8.8 | | 11.1 | | 33.4 | | 95.0 | |
| **U4** | | 7.4 | | 26.9 | | 21.2 | | 9.4 | | 3.7 | | 16.2 | | 84.7 | |
| **U5** | | 12.5 | | 20.4 | | 12.2 | | 4.6 | | 6.4 | | 40.7 | | 96.9 | |
| **U6** | | 21.6 | | 34.2 | | 19.7 | | 18.1 | | 10.1 | | 58.5 | | 162.1 | |
| **U7** | | 5.8 | | 12.1 | | 9.3 | | 5.2 | | 6.3 | | 8.4 | | 47.0 | |
| **Dihydrocaffeic acid-3-*O*-sulfate** | | **U1** | | 73.5 | | - | | 3.6 | | 5.0 | | - | | 66.3 | | 148.3 | |
| **U2** | | 90.3 | | 70.7 | | 50.9 | | 176.7 | | 238.3 | | 682.1 | | 1309.0 | |
| **U3** | | 26.7 | | 3.4 | | 7.3 | | 7.7 | | 24.7 | | 146.8 | | 216.5 | |
| **U4** | | 27.5 | | 17.2 | | 35.8 | | 32.1 | | 30.4 | | 279.9 | | 422.9 | |
| **U5** | | 19.2 | | 17.0 | | 26.8 | | 23.6 | | 33.0 | | 190.0 | | 309.5 | |
| **U6** | | 26.1 | | 30.1 | | 16.0 | | 37.4 | | 30.7 | | 270.6 | | 411.1 | |
| **U7** | | 71.8 | | 32.8 | | 21.9 | | 10.7 | | 53.7 | | 217.8 | | 408.7 | |
| **Caffeic acid-3-*O*-*β*-D-glucuronide** | | **U1** | | 2.0 | | - | | 2.8 | | 3.7 | | - | | 7.6 | | 16.1 | |
| **U2** | | 1.2 | | 2.5 | | 3.0 | | 4.4 | | 2.3 | | 2.7 | | 16.2 | |
| **U3** | | 0.5 | | 0.9 | | 3.1 | | 1.9 | | 3.7 | | 3.4 | | 13.5 | |
| **U4** | | 0.4 | | 2.0 | | 2.8 | | 2.3 | | 1.2 | | 2.6 | | 11.4 | |
| **U5** | | 0.5 | | 1.4 | | 2.5 | | 1.6 | | 1.4 | | 3.3 | | 10.7 | |
| **U6** | | 0.9 | | 1.3 | | 1.8 | | 2.7 | | 1.5 | | 3.1 | | 11.3 | |
| **U7** | | 0.4 | | 0.9 | | 1.6 | | 2.1 | | 2.5 | | 1.8 | | 9.3 | |
| **Dihydroferulic acid-4-*O*-*β*-D-glucuronide** | | **U1** | | 236.6 | | - | | 12.6 | | 22.1 | | - | | 129.5 | | 400.7 | |
| **U2** | | 158.9 | | 90.5 | | 56.2 | | 91.4 | | 54.6 | | 33.9 | | 485.5 | |
| **U3** | | 35.8 | | 7.4 | | 8.5 | | 19.5 | | 44.7 | | 76.7 | | 192.4 | |
| **U4** | | 20.7 | | 5.2 | | 19.1 | | 31.3 | | 8.5 | | 24.8 | | 109.6 | |
| **U5** | | 7.6 | | 8.6 | | 27.3 | | 25.5 | | 8.9 | | 45.5 | | 123.5 | |
| **U6** | | 121.3 | | 107.3 | | 57.5 | | 76.2 | | 43.2 | | 103.8 | | 509.3 | |
| **U7** | | 13.9 | | 4.2 | | 1.9 | | 1.6 | | 14.8 | | 29.9 | | 66.3 | |

**Table S6.** *Cont.*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **Compounds** | **Volunteers** | **Excreted amount (μg)** | | | | | | |
| **0 h** | **0-2 h** | **2-4 h** | **4-6 h** | **6-8 h** | **8-24 h** | **Total excreted μg (24 h)** |
| **Cinnamic acids** | **Caffeic acid** | **U1** | 0.1 | - | 0.1 | 0.1 | - | 0.6 | 0.9 |
| **U2** | 0.2 | 0.2 | 0.4 | 0.4 | 0.7 | 0.6 | 2.5 |
| **U3** | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 1.1 |
| **U4** | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.4 | 1.2 |
| **U5** | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.5 | 1.2 |
| **U6** | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.6 | 1.3 |
| **U7** | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 |
| **Dihydroferulic acid-4-*O*-sulfate** | **U1** | 82.0 | - | 0.7 | 6.4 | - | 49.3 | 138.5 |
| **U2** | 56.3 | 39.9 | 41.9 | 68.1 | 29.7 | 6.1 | 242.0 |
| **U3** | 9.4 | 1.0 | 3.7 | 10.7 | 5.1 | 50.7 | 80.6 |
| **U4** | 12.7 | 4.3 | 33.4 | 41.1 | 10.3 | 9.0 | 110.8 |
| **U5** | 11.2 | 7.0 | 19.1 | 17.5 | 2.0 | 48.1 | 104.8 |
| **U6** | 46.9 | 26.3 | 28.2 | 36.2 | 15.5 | 9.1 | 162.2 |
| **U7** | 8.3 | 1.3 | 0.4 | 0.3 | 12.1 | 16.6 | 39.0 |
| **Ferulic acid-4-*O*-sulfate** | **U1** | 510.6 | - | 600.9 | 197.4 | - | 1096.8 | 2413.8 |
| **U2** | 409.0 | 578.7 | 358.4 | 295.2 | 130.3 | 266.4 | 2037.9 |
| **U3** | 24.3 | 61.6 | 68.3 | 55.7 | 46.2 | 94.8 | 350.8 |
| **U4** | 152.2 | 337.6 | 658.7 | 215.6 | 52.1 | 299.9 | 1716.1 |
| **U5** | 99.9 | 400.8 | 377.7 | 134.7 | 68.9 | 1061.5 | 2143.4 |
| **U6** | 177.1 | 253.9 | 327.5 | 146.6 | 57.6 | 319.8 | 1282.4 |
| **U7** | 203.6 | 247.4 | 142.1 | 103.0 | 120.5 | 204.4 | 1021.0 |
| **Dihydroisoferulic acid-3-*O*-*β*-D-glucuronide** | **U1** | 57.0 | - | 3.2 | 8.7 | - | 13.6 | 82.4 |
| **U2** | 71.3 | 28.7 | 20.0 | 35.9 | 15.5 | 3.5 | 175.0 |
| **U3** | 1.1 | 0.8 | 0.7 | 4.7 | 2.1 | 2.3 | 11.7 |
| **U4** | 4.0 | 1.3 | 6.5 | 8.4 | 0.5 | 1.5 | 22.3 |
| **U5** | 0.7 | 2.1 | 5.5 | 7.6 | 0.4 | 11.3 | 27.5 |
| **U6** | 29.0 | 33.8 | 24.5 | 23.0 | 4.5 | 11.3 | 126.1 |
| **U7** | 4.8 | 1.4 | 0.3 | 0.5 | 1.1 | 0.9 | 9.1 |
| **Sinapic acid** | **U1** | 3.6 | - | 29.0 | 27.7 | - | 23.6 | 83.9 |
| **U2** | 5.9 | 57.1 | 31.5 | 21.0 | 5.4 | 8.7 | 129.7 |
| **U3** | 4.4 | 14.5 | 42.1 | 15.6 | 19.5 | 46.0 | 142.1 |
| **U4** | 2.0 | 12.7 | 48.3 | 17.8 | 2.9 | 10.2 | 93.8 |
| **U5** | 6.7 | 35.9 | 32.8 | 9.0 | 11.4 | 23.0 | 118.8 |
| **U6** | 9.7 | 24.2 | 36.2 | 25.1 | 11.3 | 23.3 | 129.8 |
| **U7** | 2.9 | 32.0 | 38.1 | 13.6 | 6.7 | 10.6 | 103.9 |
| **Flavonols** | **Kaempferol-3-*O*-glucuronide** | **U1** | 0.8 | - | 9.4 | 6.0 | - | 13.0 | 29.2 |
| **U2** | 0.9 | 24.7 | 146.9 | 25.1 | 9.6 | 2.8 | 210.0 |
| **U3** | 0.8 | 3.3 | 27.9 | 25.6 | 4.2 | 3.9 | 65.9 |
| **U4** | 1.4 | 12.0 | 147.1 | 19.6 | 1.0 | 3.7 | 184.8 |
| **U5** | 0.5 | 18.1 | 47.6 | 32.4 | 1.0 | 3.0 | 102.7 |
| **U6** | 1.3 | 6.5 | 54.9 | 11.5 | 2.0 | 4.2 | 80.4 |
| **U7** | 0.4 | 5.0 | 8.2 | 5.3 | 2.8 | 2.4 | 24.2 |