

Supplementary Table 2. *m/z* of statistically significantly differing metabolites detected in negative ionisation mode.

ESI mode	Detected <i>m/z</i>	Rt.min	Theoretical MW	Candidate compounds	Log FC [RSV+Q vs HFS]	Log FC [Q vs HFS]	Log FC [RSV vs HFS]	<i>p</i> (Corr)
-	179.0641	3.4485	179.0616	- Cyclohexylsulfamate - (R)C(R)S-S-Propylcysteine sulfoxide	20.4	19.8	0.0	<i>p</i> < 0.001
			179.0695	- Acetylisoniazid				
			179.0582	- p-Acetaminobenzoic acid - 4-Oxo-4-(3-pyridyl)-butanoic acid - 5,8-Dihydroxy-3,4-dihydrocarbostyryl - Hippuric acid - N-Acetylanthranilate - 2,5,6-Trihydroxy-5,6-dihydroquinoline - Methyl n-formylanthranilate - 1-(4-Methoxyphenyl)-2-nitroethylene - Adrenochrome				
-	326.1971	6.7775	326.1994	- Ajmaline - (-)-Tortuosamine - Hydroquinidine - Hydroquinine	16.0	-3.2	6.5	<i>p</i> = 0.010
			326.1916	- 2-Dodecylbenzenesulfonic acid				
			326.1882	- Pregna-4,16-diene-3,11,20-trione - Isoacitretin - AA861 - Moxestrol - 2-Methoxy-17a-ethynylestradiol - 2-Hydroxymestranol - Acitretin				
			326.2093	- 9K,12,13-diHODE - (3b,6b,8a,12a)-8,12-Epoxy-7(11)-eremophilene-6,8,12-trimethoxy-3-ol - 2R-hydroperoxy-9Z,12Z,15Z-octadecatrienoic acid - 2,3-Dinor-11b-PGF2a - 2,3-dinor-8-iso-PGF2a - 2,3-dinor-PGE1 - 2,3-dinor Prostaglandin E1				

Supplementary Table 2. Continued

ESI mode	Detected m/z	Rt.min	Theoretical MW	Candidate compounds	Log FC [RSV+Q vs HFS]	Log FC [Q vs HFS]	Log FC [RSV vs HFS]	p (Corr)								
-	276.0868	5.7192	276.0845	- Ranunculin	14.5	0.0	14.3	p< 0.001								
			276.0939	- Benzo[ghi]perylene - Anthanthrene - Indeno[1,2,3-cd]pyrene												
			276.0798	- 3',4'-dihydroxyflurbiprofen - Clenbuterol												
			276.078	- Biotin sulfone												
			276.0958	- Glu Glu - thymidine glycol - Gamma Glutamylglutamic acid - Glutamyl-glutamic acid												
			276.0962	- 4,4-Bis(p-fluorophenyl)butyric acid												
			276.097	- Triphenylsilanol												
-	124.0548	5.0447	124.0524	- 2-Acetyl-5-methylfuran - Orcinol - 4,6-Heptadiyne-1,3-diol - 1-(2-Furanyl)-1-propanone - Guaiacol - p-Methylolphenol - 1-(2-Furanyl)-2-propanone - 2-Acetyl-3-methylfuran - Mequinol - trans,trans-hepta-2,4,6-trienoic acid - Salicyl alcohol - cis,trans-hepta-2,4,6-trienoic acid - 4-Methylcatechol - 3-Hydroxybenzyl alcohol - 2,3-Dihydroxytoluene	12.1	0.0	15.2	p< 0.001								
				- N-acetyl-S-geranylgeranyl-L-Cysteine												
				-					435.2889	7.0480	435.2807	- N-acetyl-S-geranylgeranyl-L-Cysteine	8.8	11.4	-0.1	p= 0.011

Supplementary Table 2. Continued

ESI mode	Detected m/z	Rt.min	Theoretical MW	Candidate compounds	Log FC [RSV+Q vs HFS]	Log FC [Q vs HFS]	Log FC [RSV vs HFS]	p (Corr)
-	230.0978	5.1591	230.0977	- S-methylcaptopril	6.3	2.4	6.6	p= 0.029
			230.0943	- Demethylsuberosin				
				- Osthenol				
				- Kawain				
230.1031	- Pindone							
	- DL-Kavain							
	- (S)-Naproxen							
230.0903	- Pondaplin							
	- Aucuparin							
	- NOPM							
230.1055	- 6-O-Methyleuparin							
	- Dihydroresveratrol							
	- Demethylbatatasin IV							
-	318.1633	4.3943	230.1031	- N- (3-TRIFLUOROMETHYLPHENYL)PIPERAZINE (TFMPP)	-0.9	-1.1	-0.6	p= 0.039
			318.1652	- Prolyl-Aspartate				
				- Aspartyl-Proline				
			318.1692	- 1-(gamma-Glutamylamino)cyclopropanecarboxylic acid				
				- (2S,3'S)-alpha-Amino-2-carboxy-5-oxo-1-pyrrolidinebutanoic acid				
318.1558	- 2-Acetyl-5-tetrahydroxybutyl Imidazole							
318.1555	- Asp Pro							
318.1539	- Pro Asp							
	- 1,2-Dihydroxytacrine							
	- 1,4-Dihydroxytacrine							
318.1539	- (1xi,3xi)-1,2,3,4-Tetrahydro-1-methyl-beta-carboline-3-carboxylic acid							
	- 1,7-Dihydroxytacrine							
- 2,4-Dihydroxytacrine								
318.1652	- Ser Gly Arg							
	- More peptides							
318.1692	- Eseramine							
	- LY171883							
318.1558	- 2-bromopalmitaldehyde							
318.1555	- Fluvoxamine							
318.1539	- Ser Val Asn							
	- Other peptides							

Supplementary Table 2. Continued

ESI mode	Detected m/z	Rt.min	Theoretical MW	Candidate compounds	Log FC [RSV+Q vs HFS]	Log FC [Q vs HFS]	Log FC [RSV vs HFS]	p (Corr)
-	332.2617	5.3027	332.2563	<ul style="list-style-type: none"> <li>- Phloionolic acid</li> <li>- 9R,10S,18-trihydroxy-stearic acid</li> <li>- 9,10,13-Trihydroxystearic acid</li> <li>- 18-hydroxy-9S,10R-dihydroxy-stearic acid</li> </ul>	-6.7	6.8	-6.7	p < 0.001
			332.2715	<ul style="list-style-type: none"> <li>- 8, 12, 16, 19 (20)-docosatetraenoic acid; C22:4n-3,6,10,14</li> <li>- C22:4n-9,12,15,18</li> <li>- 22:4(7Z,13Z,16Z,19Z)</li> <li>- 3-Hydroxy-1-phenyl-1-hexadecanone</li> <li>- 2-Methyl-5-(8-pentadecenyl)-1,3-benzenediol</li> <li>- 5alpha-Androstan-17beta-ol propionate</li> <li>- 1-Hydroxy-1-phenyl-3-hexadecanone</li> <li>- 22:4(4Z,7Z,10Z,13E)</li> <li>- (±)-CP 47,497-C8-homolog</li> <li>- 8,12,16,19-docosatetraenoic acid</li> <li>- Adrenic Acid</li> <li>- 4,7,10,13-docosatetraenoic acid</li> <li>- Arachidonic acid ethyl ester</li> <li>- cis-4,10,13,16-Docosatetraenoic Acid</li> <li>- 10-[3]-ladderane-decanoic acid</li> <li>- ω-3 Arachidonic Acid ethyl ester</li> <li>- 3,7,11,15-Tetramethyl-2E,6E,10E,14-hexadecatetraenyl acetate</li> </ul>				
-	638.3921	5.0435	638.3948	<ul style="list-style-type: none"> <li>- PA(20:5(5Z,8Z,11Z,14Z,17Z)/12:0)</li> <li>- PA(18:4(6Z,9Z,12Z,15Z)/14:1(9Z))</li> <li>- PA(14:1(9Z)/18:4(6Z,9Z,12Z,15Z))</li> <li>- PA(12:0/20:5(5Z,8Z,11Z,14Z,17Z))</li> </ul>	14.9	0.0	7.3	p < 0.001
			638.4159	<ul style="list-style-type: none"> <li>- PG(12:0/14:0)</li> <li>- PG(13:0/13:0)</li> <li>- PG(14:0/12:0)</li> </ul>				
			638.3666	<ul style="list-style-type: none"> <li>- 26-Glucosyl-1,3,11,22-tetrahydroxyergosta-5,24-dien-26-oate</li> </ul>				

Supplementary Table 2. Continued

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-	316.1365	4.1682	316.1383	- Pro Gly Gly Ser - Other peptides	8.5	0.0	12.6	p<0.0001
			316.1311	- 4,2',6'-Trihydroxy-4'-methoxy-3',5'-dimethyldihydrochalcone - Flavokawin A - 2'-Hydroxy-3',4',6'-trimethoxydihydrochalcone - Kuhlmanniquinol - (2S)-4'-Hydroxy-5,7,3'-trimethoxyflavan - Combrestatin A4 - 4-Hydroxy-5,7,4'-trimethoxyflavan - 2-(3,5-Dimethoxyphenyl)-3,4-dihydro-7-methoxy-2H-1-benzopyran-5-ol - 5'-Hydroxy-3',4',7-trimethoxyflavan - O-Methylodoratol - 7-Hydroxy-2',4',5'-trimethoxyisoflavan - 7-Hydroxy-2',3',4'-trimethoxyisoflavan - EPIAFZELECHIN TRIMETHYL ETHER - Loureirin B - Verimol A - 2-Hydroxy-3,4,6-trimethoxydihydrochalcone - Verimol B - 2-Hydroxy-4,5,6-trimethoxydihydrochalcone - Sorgolactone				
			316.1462	- 11,11,11,12,12-Pentafluoro-9Z-dodecenyl acetate				
			316.1463	- 4,7,10,13,16,19-Docosahexynoic acid				
			316.1246	- Promazine N-oxide sulfoxide - 2-Hydroxypromazine sulfoxide - 3-Hydroxypromazine sulfoxide				

Statistical analyses were performed using One-Way ANOVA followed by Tukey range test and *p* values were corrected by Benjamini-Hochberg procedure. ESI, electrospray ionization mode; Rt, retention time; MW, molecular weight; HFS, high fat sucrose diet-fed control rats; RSV, supplemented with 15 mg/kg BW/day of *trans*-resveratrol; Q, supplemented with 30 mg/kg BW/day of quercetin; RSV + Q, supplemented with a combination of *trans*-resveratrol and quercetin at the same doses; Log FC, log<sub>2</sub> value of fold change.