

Supplemental Table S1. Significantly affected metabolites based on volcano plot between the groups (FDR-corrected $P < 0.05$, Log₂FC threshold is 1).

	log ₂ (FC)	P-value
3-Dehydroecdysone	-4.7808	$P < 0.001$
Homaline	-3.822	$P < 0.001$
20-Hydroxy-leukotriene B ₄	-3.4207	$P < 0.001$
Leucyl-Alanine	-1.0919	$P < 0.001$
His-Met-Trp-Ser	-1.0455	$P < 0.001$
Phenylalanyl-Serine	-1.1125	$P < 0.001$
Alanyl-Tryptophan	-1.0207	$P < 0.001$
Hexanal octane-1,3-diol acetal	-3.7221	$P < 0.001$
FA hydroxy.oxo.dimethyl20 prostadienoic acid	-3.4568	$P < 0.001$
Seriny-Hydroxyproline	-1.0087	$P < 0.001$
Sucrose	-3.1052	$P < 0.001$
.Glu-Ile-Pro-Thr	-3.469	$P < 0.01$
Hydroxymethylphosphonate	-1.3663	$P < 0.01$
Ethyl hexadecanoate	-3.3231	$P < 0.01$
Phosphocreatine	-2.9579	$P < 0.01$
Threoninyl-Glycine	-1.0555	$P < 0.01$
2',3'-Dihydro-phytomenadione	-6.5216	$P < 0.01$
Methyl-delta-ionone	-4.2539	$P < 0.01$
Alpha-Tocotrienol	-6.181	$P < 0.01$
Berberubine	-1.5769	$P < 0.01$
Vitamin K ₁ 2,3-epoxide	-7.835	$P < 0.01$
Fructose	-1.8442	$P < 0.01$
Norselic acid C	-5.8677	$P < 0.01$
Sorbitan palmitate	-7.0678	$P < 0.01$
ST dimethyl60/60/60/30 5Z,7E,22E,24E,24bE-1S,3R-26,27-dimethyl-24a,24b,24c-trihomo-9,10-seco-5,7,10,19,22,24,24b-cholestahexaene-1,3,25-triol	-3.8808	$P < 0.01$
Asp-Leu-Pro-Ser	-4.2175	$P < 0.01$
Delta 8,14 -Sterol	-4.5842	$P < 0.01$
PI403	-3.9259	$P < 0.01$
1-O-Caffeoyl-b-D-glucose 6-O-sulfate	-2.3037	$P < 0.01$
Quinic acid	-2.2392	$P < 0.01$
3-heptaprenyl-4-hydroxybenzoate	-5.3764	$P < 0.05$
Ala-Lys-Thr-Arg	-2.4415	$P < 0.05$
3-Hydroxy-2-methylpyridine-4,5-dicarboxylate	-2.6633	$P < 0.05$
Lysyl-Glycine	-1.4018	$P < 0.05$
Ergosterol	-5.016	$P < 0.05$
629.753811.1642	-5.1183	$P < 0.05$
Lys-Trp-Pro	1.7096	$P < 0.05$
Canrenone	-2.4051	$P < 0.05$
N-Undecylbenzenesulfonic acid	-3.2378	$P < 0.05$
Theonellasterol B	-3.9968	$P < 0.05$

Guanosine triphosphate adenosine	3.4386	P<0.05
3-Methylbutyl dodecanoate	-3.7432	P<0.05
Ala-Asn-Pro-Pro	-4.1391	P<0.05
3-Methylthiopropionic acid	-2.1384	P<0.05
PI426	-4.843	P<0.05
N-Acetylhistamine	1.6269	P<0.05
Asp-Asp-Cys-Cys	-1.3811	P<0.05
Arginyl-Hydroxyproline	-1.1013	P<0.05
S-8-Gingerol	-2.6262	P<0.05
17-Beta-Estradiol-3.17-beta-sulfate	-1.0791	P<0.05
1-Phospho-alpha-D-galacturonate	1.3592	P<0.05
3-Methylbutyl decanoate	-3.3277	P<0.05
Berteroin	1.0577	P<0.05
Cys-Lys-Gln-Pro	-2.422	P<0.05
Sinapinic acid-O-sulphate	-1.5291	P<0.05
Homo-L-arginine	1.2495	P<0.05
2.3-bisAcetyloxypropyl icosanoate	-4.6272	P<0.05
PR Coenzyme Q8	-4.6828	P<0.05
3-octaprenyl-4-hydroxy-5-methoxybenzoate	-4.9768	P<0.05
16-Hydroxy hexadecanoic acid	-1.4103	P<0.05
Bisnorcholic acid	-1.7036	P<0.05
2-Dodecylbenzenesulfonic acid	-2.0799	P<0.05
PR 5-D-ribonylhopane	-3.5771	P<0.05
Sulforhodamine B	2.7691	P<0.05
Cyclic AMP	-2.4736	P<0.05