

Supplementary Materials

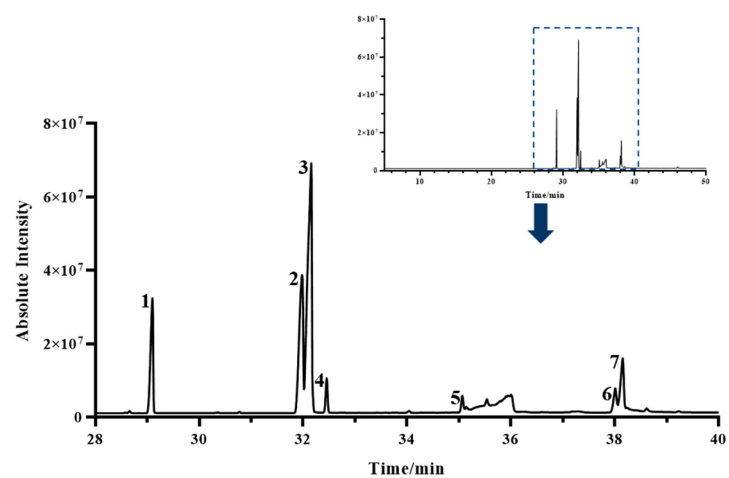


Figure S1 GC-MS total ions chromatogram of methyl esterification of YRO

Table S1 Antibody information for Western blotting, IHC, and IF

Antibody	Abbreviations	Manufacture	Dilution
Urate Transporter 1	URAT1	Proteintech	1: 1000
Glucose Transporter 9	GLUT9	Proteintech	1:500
Organic Anion Transporter 1	OAT1	Proteintech	1:800
ATP-Binding Cassette Subfamily G Member 2	ABCG2	Cell Signaling Technology	1:1000
Glyceraldehyde 3-Phosphate Dehydrogenase	GAPDH	Cell Signaling Technology	1:1000
Beta-Actin	β -ACTIN	ZSGB-Bio	1:1500
8-Hydroxy-2'-deoxyguanosine	8-OHdG	Bioss	1:100
PTEN-Induced Kinase 1	PINK1	Proteintech	1:1000
Parkinson Protein	Parkin	Proteintech	1:100
Mitofusin 2	Mfn2	Bioss	1:100
Fission 1	FIS1	Proteintech	1:200
Kelch-Like ECH-Associated Protein 1	Keap1	Cell Signaling Technology	1:1000
Nuclear Factor Erythroid 2-Related Factor 2	Nrf2	Cell Signaling Technology	1:1000
Heme Oxygenase 1	HO-1	Cell Signaling Technology	1:1000
NAD(P)H Quinone Dehydrogenase 1	NQO-1	Cell Signaling Technology	1:1000

Table S2 Component and distribution of fatty acids on YRO

No.	Retention time (min)	Fatty Acid Methyl Esters	Relative content (%)	Fatty acid	Fatty acid molecular formula
1	29.10	Hexadecanoic acid methyl ester	12.16%	Palmitic acid	C ₁₆ H ₃₂ O ₂
2	31.98	9,12-Octadecadienoic acid (Z, Z) methyl ester	22.36%	Linoleic acid	C ₁₈ H ₃₂ O ₂
3	32.16	9-Octadecenoic acid methyl ester	42.63%	Oleic acid	C ₁₈ H ₃₄ O ₂
4	32.46	Methyl stearate methyl ester	2.66%	Stearic acid	C ₁₈ H ₃₆ O ₂
5	35.07	Glycidyl palmitate methyl ester	1.56%	Palmitic acid	C ₁₆ H ₃₂ O ₂
6	38.02	9,11-Octadecadienoic acid (E,E) methyl ester	3.08%	Conjugated linoleic acid	C ₁₈ H ₃₂ O ₂
7	38.16	Glycidyl palmitoleate methyl ester	9.04%	Palmitoleic acid	C ₁₆ H ₃₀ O ₂

Table S3. Altered profiles of key lipid metabolites following YROH treatment in HUA

No.	Metabolite	Molecular formula	VIP score	Trend change	
				MOD vs. CON	YRO-H vs. MOD
1	LPC(20:1/0:0)	C ₂₈ H ₅₆ NO ₇ P	1.133	↑ [#]	↓ ^{**}
2	LPC(20:3/0:0)	C ₂₈ H ₅₂ NO ₇ P	1.539	↑ ^{##}	↓ ^{**}
3	LPI(20:3/0:0)	C ₂₉ H ₅₁ O ₁₂ P	1.564	↑ ^{##}	↓ ^{**}
4	PC(18:0_20:4)	C ₄₆ H ₈₄ NO ₈ P	1.528	↑ ^{##}	↓ ^{**}
5	PC(18:2_20:5)	C ₄₆ H ₇₈ NO ₈ P	1.474	↑ ^{##}	↓ ^{**}
6	PE(18:1_24:1)	C ₄₇ H ₉₀ NO ₈ P	1.900	↑ ^{##}	↓ ^{**}
7	PE(O-18:0_22:5)	C ₄₅ H ₈₂ NO ₇ P	1.657	↑ ^{##}	↓ ^{**}
8	PE(O-18:1_22:1)	C ₄₅ H ₈₈ NO ₇ P	1.743	↑ ^{##}	↓ ^{**}
9	PE(O-20:0_18:1)	C ₄₃ H ₈₆ NO ₇ P	1.903	↑ ^{##}	↓ ^{**}
10	PE(O-20:1_18:1)	C ₄₃ H ₈₄ NO ₇ P	1.881	↑ ^{##}	↓ ^{**}
11	PE(O-24:2_18:1)	C ₄₇ H ₉₀ NO ₇ P	1.895	↑ ^{##}	↓ [*]
12	PE(P-20:0_18:1)	C ₄₃ H ₈₄ NO ₇ P	1.778	↑ ^{##}	↓ [*]
13	PI(15:0_21:1)	C ₄₅ H ₈₅ O ₁₃ P	1.953	↑ ^{##}	↓ ^{**}
14	PI(16:0_20:3)	C ₄₅ H ₈₁ O ₁₃ P	1.725	↑ ^{##}	↓ ^{**}
15	PI(18:0_18:1)	C ₄₅ H ₈₅ O ₁₃ P	1.930	↑ ^{##}	↓ ^{**}
16	PI(18:1_18:1)	C ₄₅ H ₈₃ O ₁₃ P	1.905	↑ ^{##}	↓ ^{**}
17	PI(18:1_20:3)	C ₄₇ H ₈₃ O ₁₃ P	1.837	↑ ^{##}	↓ ^{**}
18	PI(18:1_20:5)	C ₄₇ H ₇₉ O ₁₃ P	1.661	↑ ^{##}	↓ ^{**}
19	PI(20:3_18:1)	C ₄₇ H ₈₃ O ₁₃ P	1.800	↑ ^{##}	↓ ^{**}
20	PI(20:4_16:1)	C ₄₅ H ₇₇ O ₁₃ P	1.058	↑ ^{##}	↓ ^{**}
21	PS(21:0_20:1)	C ₄₇ H ₉₀ NO ₁₀ P	1.710	↑ ^{##}	↓ ^{**}
22	TG(16:0_18:0_20:0)	C ₅₇ H ₁₁₀ O ₆	1.697	↓ ^{##}	--
23	LPC(14:0/0:0)	C ₂₂ H ₄₆ NO ₇ P	1.533	↓ ^{##}	--
24	PE(P-16:0_24:5)	C ₄₅ H ₈₀ NO ₇ P	1.460	↓ ^{##}	--
25	PE(P-18:0_22:6)	C ₄₅ H ₇₈ NO ₇ P	0.416	--	↑ ^{**}

[#] $p < 0.05$ vs CON group; ^{##} $p < 0.01$ vs CON group; ^{*} $p < 0.05$ vs MOD group; ^{**} $p < 0.01$ vs MOD group. (↑): up-regulated and (↓): down-regulated.