

Figure S1. HPLC-MS total ion flow chromatogram of black bean husk

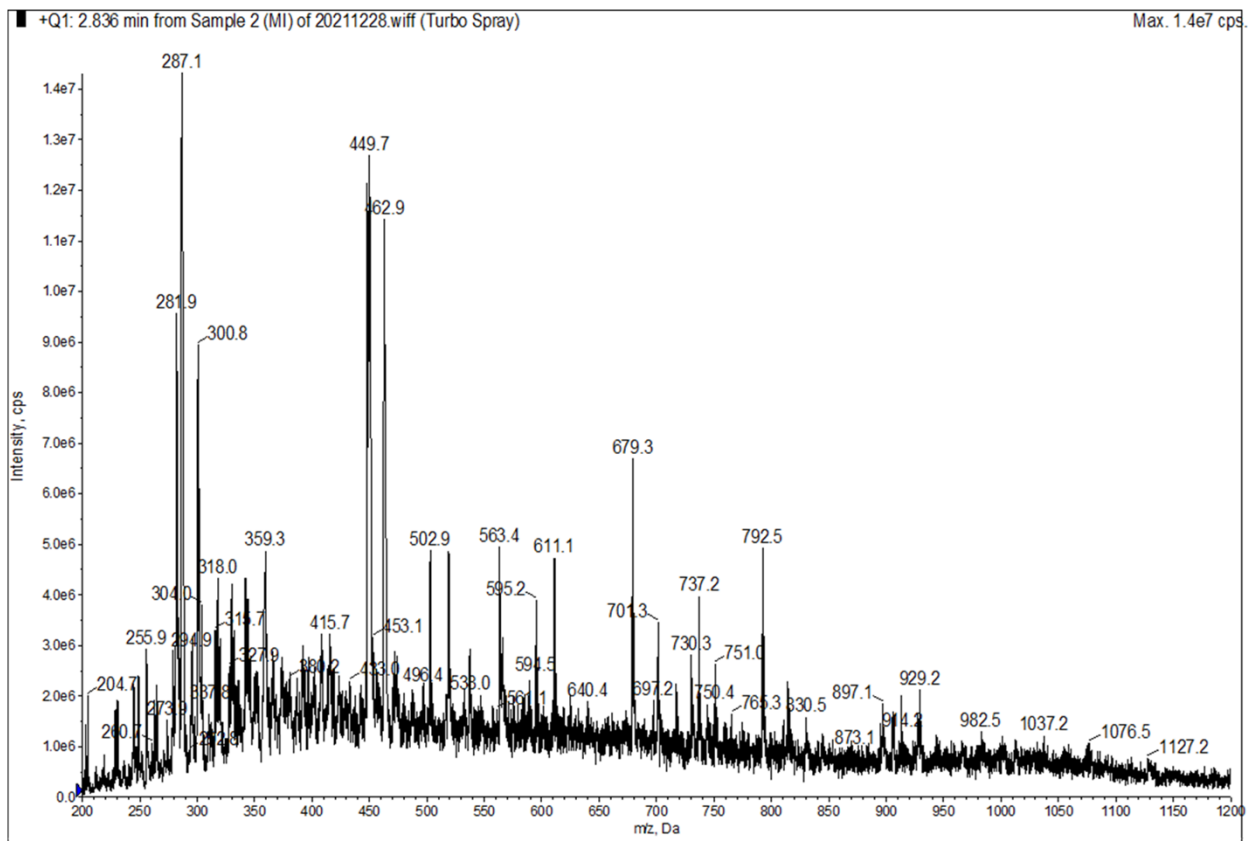


Figure S2. HPLC-MS total ion flow chromatogram of black rice.

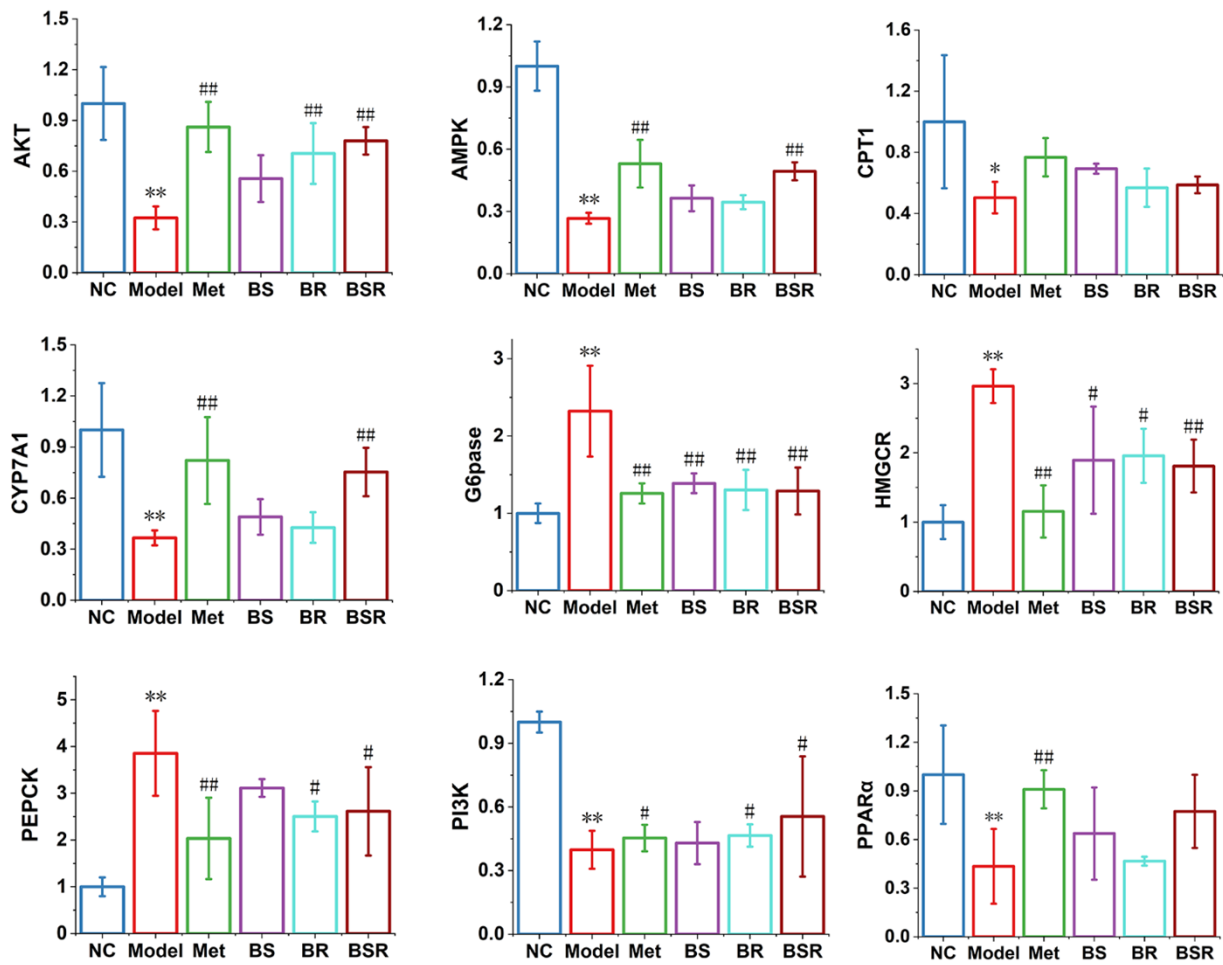


Figure S3. Effect of black bean husk and black rice anthocyanin extracts on mRNA related to blood glucose regulation. The expression of relative mRNA, followed by AKT, AMPK, CPT1, CYP7A1, G6pase, HMGCR, PEPCK, PI3K, PPAR α . Data expressed as mean \pm SD. * p < 0.05 and ** p < 0.01 vs NC group. # p < 0.05 and ## p < 0.01 vs Model group.

TableS1 Differences of serum metabolites in rats.

No.	Metabolites	m/z	rt(s)	VIP (Model vs NC)	p-value (Model vs NC)	VIP (BSR vs Model)	p-value (BSR vs Model)
1	NG, NG-dimethyl-L-arginine (ADMA)	203.15	300.94	2.96	↑***	1.38	↓*
2	3-methylcytidine	258.11	234.50	1.39	↓***	1.20	↑**
3	(3-Carboxypropyl) trimethylammonium cation	146.12	382.15	2.17	↓***	2.11	↑**
4	Deoxycytidine	228.10	213.86	4.34	↓***	3.28	↑*
5	Urea	61.04	105.90	2.20	↑***	1.78	↓***
6	1-Palmitoyllysophosphatidylcholine	538.38	191.48	3.09	↓***	1.15	↓*
7	L-Citrulline	176.10	409.34	1.92	↑***	1.57	↓***
8	Pantothenate	220.12	283.78	1.33	↑***	1.05	↓**
9	Stearyl carnitine	428.37	172.76	3.67	↑***	3.02	↓**
10	Bilirubin	585.27	66.93	2.34	↓***	3.79	↑***
11	(R)- (+)-Citronellic acid	231.16	58.31	1.02	↑***	2.33	↑***
12	1-Stearoyl-2-hydroxy-sn-glycero-3-phosphoethanolamine	482.33	200.03	4.82	↑***	5.02	↓**
13	Arachidonic Acid (peroxide free)	327.23	55.72	1.51	↓***	1.17	↓**
14	Cholic acid	373.27	230.54	6.46	↑**	5.76	↓*
15	Corticosterone	347.22	47.86	1.01	↓**	1.90	↑***
16	1-Palmitoyl-2-hydroxy-sn-glycero-3-phosphoethanolamine	454.29	204.18	2.07	↑**	2.66	↓*
17	Thioetheramide-PC	758.57	60.68	8.48	↑*	2.05	↓*
18	Trigonelline	138.05	296.57	1.80	↑*	2.40	↓**
19	Trimethylamine N-oxide	76.08	335.56	1.79	↑*	2.05	↓*
20	2-Hydroxy-3-methylbutyric acid	117.06	166.90	1.76	↑***	1.71	↓***
21	Pentobarbital	225.12	40.32	11.11	↑***	16.14	↑*
22	D-Allose	179.06	286.44	1.93	↑***	1.80	↓**
23	Hydroxyisocaproic acid	131.07	150.55	2.33	↑***	3.10	↓**
24	D (-)-beta-hydroxy butyric acid	103.04	244.87	3.87	↑**	4.32	↓*
25	3-Hydroxycaproic acid	187.13	106.99	2.26	↓**	2.56	↑*
26	Pseudouridine	243.06	250.84	1.38	↑**	1.91	↓**
27	Deoxycholic acid	391.29	136.78	3.15	↑**	3.36	↓*
28	Bisindolylmaleimide I	411.19	33.36	1.25	↑*	1.69	↓*

*: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$; ↑: up-regulated; ↓: down-regulated.