

Table 2 Biomarker/risk factor changes in overweight/obese with hyperglycemia patients who completed modified fasting therapy

	NFG/NGT				Pre-DM				T2DM			
	Pre-fasting	Post-fasting	Difference	<i>P</i> value	Pre-fasting	Post-fasting	Difference	<i>P</i> value	Pre-fasting	Post-fasting	Difference	<i>P</i> value
Weight (kg)	-80.54 ± 19.24	-76.55 ± 18.18	-3.99 ± 2.35	<0.001	-81.90 ± 16.76	-77.86 ± 16.15	-4.04 ± 1.51	<0.001	-82.76 ± 18.54	-78.26 ± 17.6	-4.50 ± 7.05	<0.001
BMI (kg/m ²)	-29.85 ± 5.34	-28.37 ± 5.03	-1.48 ± 0.80	<0.001	-30.24 ± 4.43	-28.74 ± 4.24	-1.50 ± 0.53	<0.001	-30.20 ± 5.13	-28.56 ± 4.88	-1.64 ± 2.55	<0.001
Abdominal circumference (cm)	-96.99 ± 14.10	-94.02 ± 13.15	-2.97 ± 6.33	<0.001	-99.23 ± 11.85	-96.27 ± 11.58	-2.96 ± 4.85	<0.001	-99.42 ± 12.60	-96.46 ± 12.43	-2.96 ± 3.91	<0.001
SBP (mmHg)	-122.70 ± 16.65	-117.80 ± 12.99	-4.85 ± 14.05	<0.001	-126.70 ± 17.78	-119.60 ± 12.32	-7.05 ± 14.94*	<0.001	-130.00 ± 17.62	-121.10 ± 12.53	-8.86 ± 15.90^	<0.001
DBP (mmHg)	-81.13 ± 11.27	-77.4 ± 8.47	-3.73 ± 9.89	<0.001	-83.74 ± 12.23	-79.35 ± 9.14	-4.39 ± 11.24	<0.001	-86.00 ± 11.34	-79.48 ± 8.44	-6.52 ± 10.37#^	<0.001
FPG (mmol/L)	-4.20 ± 0.78	-3.74 ± 0.80	-0.46 ± 0.86	<0.001	-4.62 ± 1.17	-4.13 ± 0.91	-0.49 ± 0.95	<0.001	-6.63 ± 3.69	-4.61 ± 1.29	-2.02 ± 3.31#^	<0.001
INS (μU/mL)	-8.84 ± 12.24	-6.04 ± 6.66	-2.80 ± 11.31	0.001	-6.53 ± 4.07	-5.92 ± 4.94	-0.61 ± 4.14	0.31	-9.10 ± 7.45	-6.39 ± 6.48	-2.71 ± 5.47	<0.001
FCP (pmol/L)	-555.0 ± 491.3	-432.3 ± 376.6	-122.7 ± 445.3	<0.001	-489.7 ± 292.2	-412.7 ± 252.4	-77.0 ± 217.9	0.02	-668.4 ± 357.2	-501.4 ± 366.7	-167.1 ± 320.3	<0.001
HOMA-IR	-1.39 ± 1.68	-1.13 ± 2.13	-0.26 ± 2.40	0.2	-1.37 ± 1.08	-1.07 ± 0.84	-0.30 ± 0.95	0.05	-2.69 ± 2.49	-1.30 ± 1.33	-1.39 ± 2.36^	<0.001

HbA1c (%)	-6.30 ± 0.71	-6.30 ± 0.85	-0.00 ± 0.14	>0.99	-7.8 ± 0	-7.4 ± 0	-0.4 ± 0	-	-7.13 ± 1.07	-6.93 ± 1.09	-0.20 ± 0.21	0.07
TC (mmol/L)	-5.05 ± 1.09	-5.36 ± 1.27	0.32 ± 0.70	<0.001	-5.19 ± 1.08	-5.37 ± 1.11	0.19 ± 0.78	0.005	-5.36 ± 1.28	-5.55 ± 1.23	0.20 ± 0.94	0.009
LDL-C (mmol/L)	-3.00 ± 0.87	-3.64 ± 1.10	0.64 ± 0.72	<0.001	-3.09 ± 0.88	-3.63 ± 0.99	0.54 ± 0.68	<0.001	-2.96 ± 0.90	-3.77 ± 1.03	0.81 ± 0.81 ^{#^}	<0.001
HDL-C (mmol/L)	-1.08 ± 0.26	-0.93 ± 0.22	-0.15 ± 0.16	<0.001	-1.10 ± 0.25	-0.94 ± 0.22	-0.16 ± 0.16	<0.001	-1.02 ± 0.23	-0.88 ± 0.18	-0.13 ± 0.16	<0.001
TG (mmol/L)	-2.11 ± 2.58	-1.23 ± 0.57	-0.88 ± 2.38	<0.001	-2.18 ± 2.05	-1.28 ± 0.50	-0.90 ± 1.85	<0.001	-3.42 ± 4.49	-1.45 ± 0.72	-1.97 ± 4.33 ^{#^}	<0.001
β-HB (mmol/L)	-0.56 ± 0.82	-2.14 ± 1.22	1.58 ± 1.22	<0.001	-0.45 ± 0.69	-2.06 ± 1.21	1.61 ± 1.27	<0.001	-0.32 ± 0.44	-2.00 ± 1.18	1.68 ± 1.17	<0.001
ALB (g/L)	-42.58 ± 3.15	-43.02 ± 2.88	0.44 ± 3.06	<0.001	-42.61 ± 3.08	-43.15 ± 3.02	0.54 ± 3.10	0.004	-42.96 ± 3.23	-43.45 ± 3.20	0.49 ± 2.98	0.005
TBA (μmol/L)	-3.09 ± 4.29	-3.23 ± 5.24	0.14 ± 4.92	0.4	-3.23 ± 3.52	-3.42 ± 4.23	0.19 ± 4.58	0.51	-3.69 ± 3.76	-3.29 ± 4.02	-0.39 ± 4.02	0.12
TP (g/L)	-71.65 ± 5.05	-71.83 ± 4.94	0.18 ± 5.53	0.28	-71.54 ± 5.23	-71.78 ± 5.34	0.24 ± 5.72	0.49	-72.68 ± 5.62	-72.29 ± 5.26	-0.38 ± 5.92	0.27
CHE (U/L)	-10778 ± 2035	-10719 ± 2032	-59.4 ± 961.6	0.04	-11339 ± 1939	-11196 ± 2012	-143.3 ± 1038	0.02	-11699 ± 2035	-11518 ± 2011	-181.7 ± 1084	0.004
TBIL (μmol/L)	-13.90 ± 6.84	-19.36 ± 8.92	5.46 ± 6.96	<0.001	-13.99 ± 6.77	-19.09 ± 9.30	5.10 ± 6.70	<0.001	-13.85 ± 6.58	-20.89 ± 9.77	7.05 ± 7.24 ^{#^}	<0.001
DBIL (μmol/L)	-5.30 ± 2.11	-7.373 ± 2.77	2.08 ± 2.13	<0.001	-5.26 ± 2.22	-7.25 ± 2.87	2.00 ± 2.02	<0.001	-5.17 ± 2.15	-7.72 ± 2.87	2.54 ± 2.14 ^{#^}	<0.001
IBIL (μmol/L)	-8.64 ± 4.84	-11.97 ± 6.48	3.34 ± 5.01	<0.001	-8.80 ± 4.66	-11.88 ± 6.65	3.08 ± 4.85	<0.001	-8.83 ± 4.84	-13.15 ± 7.15	4.36 ± 5.03 ^{#^}	<0.001
AST (U/L)	-21.66 ± 12.07	-25.59 ± 14.47	3.93 ± 10.57	<0.001	-23.50 ± 15.32	-28.74 ± 14.95	5.24 ± 12.37	<0.001	-25.61 ± 15.52	-31.85 ± 16.71	6.25 ± 13.15 [^]	<0.001
ALT (U/L)	-30.82 ± 28.42	-31.28 ± 27.39	0.46 ± 15.94	0.35	-33.95 ± 30.37	-36.58 ± 28.34	2.63 ± 16.09	0.007	-36.92 ± 25.38	-40.13 ± 27.79	3.21 ± 17.07 [^]	0.001

GGT (U/L)	-34.09 ± 32.25	-28.02 ± 22.36	-6.07 ± 12.85	<0.001	-40.44 ± 39.07	-33.3 ± 31.05	-7.14 ± 11.22	<0.001	-48.57 ± 44.72	-37.94 ± 28.33	-10.63 ± 20.65 ^{#^}	<0.001
ALP (U/L)	-62.71 ± 18.79	-61.69 ± 17.86	-1.02 ± 7.31	<0.001	-65.42 ± 20.88	-64.09 ± 20.01	-1.33 ± 7.43	0.003	-68.79 ± 20.91	-65.87 ± 19.37	-2.92 ± 9.05 ^{#^}	<0.001
CRP (mg/L)	-7.47 ± 5.89	-17.07 ± 21.77	9.60 ± 20.41	0.15	-	-	-	-	-9.48 ± 0	-10.21 ± 0	0.73 ± 0	-
ESR (mm/h)	-32.14 ± 13.72	-34.29 ± 18.26	2.14 ± 8.90	0.55	-28.00 ± 1.41	-22.00 ± 4.24	-6.00 ± 5.66	0.37	-	-	-	-
UA (μmol/L)	-407.4 ± 111.8	-464.9 ± 131.6	57.5 ± 149.9	<0.001	-418.5 ± 102.1	-457.8 ± 134.7	39.3 ± 154.6	<0.001	-416.9 ± 105.2	-466.5 ± 148.4	49.6 ± 157.9	<0.001
Urea (mmol/L)	-4.093± 1.12	-3.34 ± 1.04	-0.75 ± 1.13	<0.001	-4.24 ± 1.04	-3.38 ± 0.96	-0.86 ± 1.08	<0.001	-4.58 ± 1.31	-3.73 ± 1.25	-0.85 ± 1.13	<0.001
Crea (μmol/L)	-65.83 ± 14.44	-66.79 ± 15.21	0.96 ± 6.30	<0.001	-65.29 ± 15.17	-67.35 ± 15.94	2.06 ± 6.14 [*]	<0.001	-66.98 ± 19.66	-70.42 ± 20.00	3.44 ± 7.10 ^{#^}	<0.001
Cys-C (mg/L)	-0.87 ± 0.17	-0.76 ± 0.17	-0.11 ± 0.09	<0.001	-0.91 ± 0.18	-0.81 ± 0.18	-0.09 ± 0.09	<0.001	-0.92 ± 0.22	-0.84 ± 0.21	-0.08 ± 0.10 [^]	<0.001
IGF-1 (ng/mL)	193.70±72.10	149.50±69.71	-44.17±50.30	<0.001	186.90±64.66	151.10±71.26	-35.82±43.56	<0.001	168.60±58.51	149.40±68.41	-19.21±37.08 [^]	<0.001

“*”, “#”, “^” means *P*<0.05 between NFG group and Pre-DM group, Pre-DM group and T2DM group, NFG group and T2DM group, respectively.