

Table.1 Characteristics of the experimental groups in rats fed the CSAA-or CDAA diet

	CSAA (G1)	CDAA (G2)	CDAA+OCA (G3)	CDAA+sitagliptin (G4)	CDAA+OCA+sitagliptin (G5)
Number of rats	10	10	10	10	10
Body weight, g	319.8±15.7	258.2±10.6 [‡]	234.4±7.9 ^{‡¶}	249.3±14.0 [‡]	229.0±4.8 ^{‡¶}
Liver/ BW ratio, g/100gBW	3.2±0.2	4.7±0.4 [‡]	4.5±0.5 [‡]	5.1±0.7 [‡]	4.5±0.4 [‡]
ALT, IU/L	84.5±12.2	272.6±43.7 [‡]	179.6±30.4 ^{‡¶}	254.0±38.0 [‡]	174.8±37.4 ^{‡¶}
ALB, g/dL	4.3±0.2	4.2±0.2	4.3±0.2	4.0±0.5	4.1±0.2
T-Bil, mg/dL	0.12±0.06	0.18±0.06	0.16±0.04	0.17±0.05	0.17±0.04
BUN, mg/dl	7.9±1.7	9.4±2.5	8.3±1.4	9.1±3.2	7.8±2.5
CRE, mg/dl	0.62±0.26	0.57±0.16	0.70±0.21	0.65±0.14	0.58±0.13
Glucose, mg/dL	108.3±19.4	96.3±18.7	103.5±18.6	101.3±19.5	98.9±12.6
Insulin, µU/mL	0.58±0.25	0.51±0.20	0.59±0.17	0.41±0.21	0.45±0.15
Glucagon, pg/ml	51.6±8.8	50.4±10.8	50.9±10.8	49.9±11.5	51.9±14.3
QUICKI	0.18±0.06	0.14±0.08	0.19±0.05	0.15±0.08	0.16±0.07
TG, mg/dL	148.7±17.7	158.2±28.0	139.5±25.2	150.3±18.3	144.6±20.3
NEFA, µg/L	308±24.1	321±33.6	298±25.4	305±30.7	304±27.2
Portal endotoxin	0.07±0.02	0.81±0.28 [‡]	0.48±0.26 ^{‡§}	0.77±0.19 [‡]	0.52±0.20 ^{‡§}

Treatment groups; G1, fed choline-sufficient L-amino acid-defined (CSAA) diet; G2, fed choline-deficient L-amino acid-defined (CDAA) diet; G3, CDAA and OCA (30mg/kg/day); G4, CDAA and sitagliptin (150mg/kg/day); G5, CDAA and OCA (30mg/kg/day)+sitagliptin

(150mg/kg/day). Data are represented as mean \pm SD. Statistically significant as compared to G1 ([†]P<0.05, [#]P<0.01) and G2 ([§]P<0.05, [¶]P<0.01). Abbreviations: ALT, alanine aminotransferase; ALB, albumin; BW, body weight; NEFA, nonesterified fatty acids; OCA, Obeticholic acid; QUICKI, quantitative insulin sensitivity check index; T-Bil, total bilirubin; TG, triglyceride.

Table. 2 Non-alcoholic fatty liver disease activity score of the experimental groups in rats fed the CSAA-or CDAA diet

	CSAA (G1)	CDAA (G2)	CDAA+OCA (G3)	CDAA+sitagliptin (G4)	CDAA+OCA+sitagliptin (G5)
Steatosis	0	2.9±0.3	2.4±0.5 [†]	2.5±0.7	2.2±0.4 [‡]
Hepatocellular Ballooning	0	1.8±0.4	1.5±0.2 [†]	1.6±0.5	1.2±0.6 [†]
Lobular Inflammation	0	2.7±0.5	2.1±0.6 [†]	2.2±0.7	1.9±0.6 [‡]

Treatment groups; G1, fed choline-sufficient L-amino acid-defined (CSAA) diet; G2, fed choline-deficient L-amino acid-defined (CDAA) diet; G3, CDAA and OCA (30mg/kg/day); G4, CDAA and sitagliptin (150mg/kg/day); G5, CDAA and OCA (30mg/kg/day)+sitagliptin (150mg/kg/day). Data are mean ± standard deviation. Statistically significant as compared to G2 ([†]P<0.05, [‡]P<0.01).