Supplementary Table 1. Comparison of demographic, anthropometric, laboratory, and magnetic resonance imaging-measured fat fraction findings between non-obese NAFLD and obese NAFLD

Weight z-score 1.14 (-2.80-1.96) 2.60 (0.99-5.01) < 0.001		BMI < 95th percentile	BMI ≥ 95th percentile	P-value
Age, yr 12.3 (9.2–18.2) 12.7 (5.6–19.3) 0.648 Height (cm) 148.9 (138.2–177.5) 157.6 (122.4–184.7) 0.146 Height z-score 0.36 (-3.40–1.68) 0.98 (-1.78–2.82) 0.033 Weight (kg) 49.6 (39.2–82.5) 72.8 (36.4–130.9) < 0.001 Weight (xg) 49.6 (39.2–82.5) 72.8 (36.4–130.9) < 0.001 WC (cm) 81.5 (67.0–90.0) 94.0 (75.0–120.0) < 0.001 WHRR 0.53 (0.46–0.60) 0.61 (0.52–0.69) < 0.001 BMI 22.6 (18.6–26.2) 28.9 (23.8–38.4) < 0.001 Fat mass (kg) 17.3 (8.2–26.1) 26.4 (12.6–54.0) < 0.001 FfM (kg) 31.9 (27.6–59.6) 42.9 (23.5–79.7) 0.019 FFM (kg) 31.9 (27.6–59.6) 42.9 ((n = 18)	(n = 45)	
Height (cm)	Sex (boys : girls)	13 (72.2%) : 5 (27.8%)	35 (77.8%) :10 (22.2%)	0.746*
Height (cm)	Age, yr	12.3 (9.2–18.2)	12.7 (5.6–19.3)	0.648
Weight (kg) 49.6 (39.2–82.5) 72.8 (36.4–130.9) < 0.001 Weight z-score 1.14 (-2.80–1.96) 2.60 (0.99–5.01) < 0.001			157.6 (122.4–184.7)	0.146
Weight (kg) 49.6 (39.2–82.5) 72.8 (36.4–130.9) < 0.001 Weight z-score 1.14 (-2.80–1.96) 2.60 (0.99–5.01) < 0.001				0.033
WC (cm) 81.5 (67.0–90.0) 94.0 (75.0–120.0) < 0.001 WHR 0.53 (0.46–0.60) 0.61 (0.52–0.69) < 0.001				< 0.001
WC (cm) 81.5 (67.0–90.0) 94.0 (75.0–120.0) < 0.001 WHR 0.53 (0.46–0.60) 0.61 (0.52–0.69) < 0.001	Weight z-score	1.14 (-2.80–1.96)	2.60 (0.99–5.01)	< 0.001
WHtR 0.53 (0.46-0.60) 0.61 (0.52-0.69) < 0.001 BMI 22.6 (18.6-26.2) 28.9 (23.8-38.4) < 0.001		81.5 (67.0–90.0)		< 0.001
BMI 22.6 (18.6–26.2) 28.9 (23.8–38.4) < 0.001 BMI z-score 1.39 (-1.10–1.66) 2.93 (1.62–5.10) < 0.001		0.53 (0.46–0.60)	0.61 (0.52–0.69)	< 0.001
BMI z-score 1.39 (-1.10-1.66) 2.93 (1.62-5.10) <0.001 Fat mass (kg) 17.3 (8.2-26.1) 26.4 (12.6-54.0) <0.001 Fat mass (%) 33.0 (22.3-45.1) 37.2 (24.1-67.2) 0.001 FFM (kg) 31.9 (27.6-59.6) 42.9 (23.5-79.7) 0.019 FFM (%) 67.1 (54.8-77.7) 62.7 (32.8-75.8) 0.001 FMI 7.2 (3.9-10.9) 10.7 (6.2-18.8) <0.001 FMI 7.2 (3.9-10.9) 10.7 (6.2-18.8) <0.001 FMI 8SBP (mmHg) 113.7 (100-128) 120.0 (106-159) 0.008 mDBP (mmHg) 62.8 (52-74) 63.7 (52-90) 0.115 AST (IU/L) 49.0 (21-226) 58.0 (17-216) 0.447 ALT (IU/L) 97.5 (20-331) 128.0 (22-366) 0.155 AST/ALT 0.53 (0.37-1.52) 0.47 (0.28-1.26) 0.086 GGT (IU/L) 35.5 (12-184) 38.0 (12-158) 0.732 Total cholesterol (mg/dL) 179.5 (120-277) 180.0 (105-275) 0.377 Triglyceride (mg/dL) 179.5 (120-277) 180.0 (105-275) 0.377 Triglyceride (mg/dL) 43.5 (37-67) 46.0 (28-68) 0.964 HDL-C (mg/dL) 101.0 (61-168) 112.0 (55-175) 0.198 FPG (mg/dL) 92.5 (76-153) 94.0 (71-270) 0.867 Insulin (mIU/L) 18.2 (4.6-46.3) 22.4 (6.4-75.6) 0.104 HbA1c (%) 5.3 (5.0-7.7) 5.4 (5.0-13.5) 0.711 HOMA-IR 4.2 (1.0-14.0) 5.9 (2.0-17.0) 0.121 MRI HFF (%) 3.0 (0.4-15.8) 4.3 (1.0-26.9) 0.359 Central obese (n, %) 11 (61.1%) 7 (38.9%) 29 (64.4%) /16 (35.6%) 0.004*	BMI		,	< 0.001
Fat mass (kg)	BMI z-score	` ,		< 0.001
Fat mass (%) 33.0 (22.3-45.1) 37.2 (24.1-67.2) 0.001 FFM (kg) 31.9 (27.6-59.6) 42.9 (23.5-79.7) 0.019 FFM (%) 67.1 (54.8-77.7) 62.7 (32.8-75.8) 0.001 FMI 7.2 (3.9-10.9) 10.7 (6.2-18.8) <0.001 mSBP (mmHg) 14.7 (13.2-19.0) 18.1 (9.2-23.4) 0.001 mSBP (mmHg) 113.7 (100-128) 120.0 (106-159) 0.008 mDBP (mmHg) 62.8 (52-74) 63.7 (52-90) 0.115 AST (IU/L) 49.0 (21-226) 58.0 (17-216) 0.447 ALT (IU/L) 97.5 (20-331) 128.0 (22-366) 0.155 AST/ALT 0.53 (0.37-1.52) 0.47 (0.28-1.26) 0.086 GGT (IU/L) 35.5 (12-184) 38.0 (12-158) 0.732 Total cholesterol (mg/dL) 179.5 (120-277) 180.0 (105-275) 0.377 Triglyceride (mg/dL) 105.0 (48-364) 124.0 (54-293) 0.681 MDL-C (mg/dL) 43.5 (37-67) 46.0 (28-68) 0.964 LDL-C (mg/dL) 101.0 (61-168) 112.0 (55-175) 0.198 FPG (mg/dL) 192.5 (76-153) 94.0 (71-270) 0.867 Insulin (mIU/L) 18.2 (4.6-46.3) 22.4 (6.4-75.6) 0.104 HbA1c (%) 5.3 (5.0-7.7) 5.4 (5.0-13.5) 0.711 HOMA-IR 4.2 (1.0-14.0) 5.9 (2.0-17.0) 0.121 QUICKI 0.31 (0.27-0.39) 0.30 (0.26-0.34) 0.121 MRI HFF (%) 3.0 (0.4-15.8) 4.3 (10-26.9) 0.359 Central obese (n, %) 11 (61.1%) 7 (38.9%) 29 (64.4%) / 16 (35.6%) 0.804* Normal PPEDM + DM (n, %) 11 (61.1%) / 7 (38.9%) 29 (64.4%) / 16 (35.6%) 0.804* Normal PPEDM + DM (n, %) 11 (61.1%) / 7 (38.9%) 29 (64.4%) / 16 (35.6%) 0.804*	Fat mass (kg)			< 0.001
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Insulin (mIU/L)	18.2 (4.6–46.3)	22.4 (6.4–75.6)	0.104
$\begin{array}{llllllllllllllllllllllllllllllllllll$	HbA1c (%)	5.3 (5.0–7.7)	5.4 (5.0–13.5)	0.711
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T(22.270) 21 (40.770) 0.075	MetS (n, %)	4 (22.2%)	21 (46.7%)	0.073^{\dagger}

 \overline{P} -value was calculated by Mann Whitney U test. *P-value was calculated by Fisher's exact test. †P-value was calculated by Chi-square test. Values are presented as median (range) or numbers (%).

WC, waist circumference; WHtR, waist circumference-to-height ratio; BMI, body mass index; FFM, fat-free mass; FMI, fat mass index = fat mass(kg)/height(m)²; FFMI, fat-free mass index = FFM(kg)/ height(m)²; mSBP, mean systolic blood pressure; mDBP, mean diastolic blood pressure; AST, aspartate aminotransferase; ALT, alanine aminotransferase; GGT, γ-glutamyl transferase; HDL-C, high density lipoprotein cholesterol; LDL-C, low density lipoprotein cholesterol; FPG, fasting plasma glucose; HbA1c, glycated hemoglobin; HOMA-IR, homeostatic model assessment of insulin resistance; QUICKI, Quantitative insulin sensitivity check index; MRI, magnetic resonance imaging; HFF, hepatic fat fraction; PFF, pancreatic fat fraction; BP, blood pressure; EBP, elevated BP; HTN, hypertension; DM, diabetes mellitus; PreDM, prediabetes; MetS, metabolic syndrome

Supplementary Table 2. Comparison of proportion of histologic steatosis, inflammation, ballooning and fibrosis between non-obese NAFLD and obese NAFLD

	Non-obese	Obese	Total	<i>P</i> -value
	NAFLD	NAFLD		
	(n = 18)	(n = 45)	(n = 63)	
Steatosis grade 1	6 (33.3%)	7 (15.6%)	13 (20.6%)	0.016*
Steatosis grade 2	8 (44.4%)	10 (22.2%)	18 (28.6%)	0.010
Steatosis grade 3	4 (22.2%)	28 (62.2%)	32 (50.8%)	
Lobular Inflammation grade 1	11 (61.1%)	21 (46.7%)	32 (50.8%)	0.529
Lobular Inflammation grade 2	7 (38.9%)	22 (48.9%)	29 (46.0%)	
Lobular Inflammation grade 3	0	2 (4.4%)	2 (3.2%)	
Portal Inflammation grade 0	5 (27.8%)	19 (42.2%)	24 (38.1%)	0.564
Portal Inflammation grade 1	13 (72.2%)	25 (55.6%)	38 (60.3%)	
Portal Inflammation grade 2	0	1 (2.2%)	1 (1.6%)	
Portal Inflammation grade 0	5 (27.8%)	19 (42.2%)	24 (38.1%)	0.286*
Portal Inflammation grade 1+2	13 (72.2%)	26 (57.8%)	39 (61.9%)	
Ballooning degeneration grade 1	10 (55.6%)	23 (51.1%)	33 (52.4%)	0.848
Ballooning degeneration grade 2	6 (33.3%)	18 (40.0%)	24 (38.1%)	
Ballooning degeneration grade 3	2 (11.1%)	4 (8.9%)	6 (9.5%)	
Fibrosis stage 0	2 (11.1%)	9 (20.0%)	11 (17.5%)	0.133
Fibrosis stage 1	10 (55.6%)	31 (68.9%)	41 (65.1%)	
Fibrosis stage 2	6 (33.3%)	5 (11.1%)	11 (17.5%)	

Non-obese means body mass index < 95th percentile and obese means body mass index \ge 95th percentile. P-value was calculated by Fisher's exact test. *P-value was calculated by Chi-square test.