

Oral Diseases Associated with Nonalcoholic Fatty Liver Disease in the United States

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Appendix: Tables 1-5, Figure 1

Appendix Table 1. Assessments of Non-Alcoholic Fatty Liver Disease (NAFLD)

1. USON = NAFLD determined using Ultrasonography Image
2. $FS = -1.675 + 0.037 * Age + 0.094 * BMI + 1.13 * Diabetes + 0.99 * \frac{AST}{ALT} - 0.013 * Platelet - 0.66 * Albumin$
3. $FLI = \frac{e^{(0.953 * \ln(Trg) + 0.139 * BMI + 0.718 * \ln(GGT) + 0.053 * WC - 15.745)}}{(1 + e^{(0.953 * \ln(Trg) + 0.139 * BMI + 0.718 * \ln(GGT) + 0.053 * WC - 15.745)})} * 100$
4. $US - FLI = \frac{e^{(-0.8073 * NHB + 0.345 * MxA + 0.0093 * Age + 0.6151 * \ln(GGT) + 0.0249 * WC + 1.1792 * \ln(Ins) + 0.8242 * \ln(Glu) - 14.7812)}}{(1 + e^{(-0.8073 * NHB + 0.345 * MxA + 0.0093 * Age + 0.6151 * \ln(GGT) + 0.0249 * WC + 1.1792 * \ln(Ins) + 0.8242 * \ln(Glu) - 14.7812)})} * 100$

ALT: alanine aminotransferase; AST: aspartate aminotransferase; BMI: Body Mass Index; FLI: Fatty Liver Index; FS: Fibrosis Score; GGT: Gamma-Glutamyl Transferase; Glu: Glucose; Ins: Insulin; MxA: Mexican American; NHB: Non-Hispanic Black; Trg: triglycerides; US-FLI: US Fatty Liver Index; USON = ultrasonography to determine NAFLD; WC: Waist Circumference

Notes for Tables 2-5: The gray shaded cells indicate statistically significant Odds Ratios ($p < 0.05$). Crude model is unadjusted; Full model is adjusted; NAFLD = Non-alcoholic fatty liver disease; NHANES = National Health and Nutrition Examination Survey; Demo = Demographic; NHW = Non-Hispanic White; NHB = Non-Hispanic Black; HS = High School; FPG = Federal Poverty Guideline; OR = Odds Ratio; LCI and UCI = Lower and Upper 95% Confidence Interval

Appendix Table 2a: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the Ultrasonography (USON) Assessment of NAFLD, NHANES 1988-1994

		Model 1: Demographic Variables									Model 2: Demo. and Num. of Permanent Teeth Variables								
Variable		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Age 40-59 years vs. 21-39 years	1.98	1.49	2.62	1.83	1.38	2.44	1.92	1.46	2.54	1.98	1.49	2.62	1.73	1.28	2.34	1.78	1.33	2.39
	Age 60-74 years vs. 21-39 years	2.20	1.61	3.02	2.05	1.48	2.83	2.18	1.61	2.97	2.20	1.61	3.02	1.84	1.28	2.64	1.96	1.38	2.79
	Male vs. Female	1.68	1.31	2.16	1.67	1.30	2.16	1.72	1.35	2.20	1.68	1.31	2.16	1.68	1.30	2.16	1.68	1.31	2.17
	NHB vs. NHW	0.70	0.54	0.93	0.80	0.61	1.06	0.81	0.61	1.07	0.70	0.54	0.93	0.78	0.59	1.03	0.82	0.61	1.09
	Mex. American vs. NHW	1.66	1.28	2.16	1.63	1.23	2.16	1.69	1.29	2.22	1.66	1.28	2.16	1.68	1.27	2.21	1.98	1.56	2.52
	Other Races vs. NHW	1.34	0.80	2.23	1.44	0.82	2.53	1.41	0.83	2.40	1.34	0.80	2.23	1.42	0.80	2.52	1.43	0.84	2.44
	HS* Grad vs. Less than HS	0.79	0.60	1.03	0.95	0.72	1.27	0.92	0.71	1.19	0.79	0.60	1.03	0.98	0.73	1.31	.	.	.
	More than HS vs. Less than HS	0.61	0.43	0.85	0.68	0.48	0.98	0.65	0.47	0.91	0.61	0.43	0.85	0.72	0.50	1.05	.	.	.
	Not Married vs. Married	0.60	0.47	0.75	0.68	0.52	0.88	0.69	0.54	0.89	0.60	0.47	0.75	0.68	0.52	0.88	0.70	0.55	0.89
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.10	0.76	1.58	1.05	0.71	1.56	.	.	.	1.10	0.76	1.58	1.04	0.69	1.54	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	1.03	0.77	1.37	0.91	0.68	1.20	.	.	.	1.03	0.77	1.37	0.91	0.69	1.21	.	.	.
	Former Smoker vs. Current Smoker	1.53	1.13	2.08	1.28	0.93	1.77	.	.	.	1.53	1.13	2.08	1.29	0.93	1.79	.	.	.
	Never Smoked vs. Current Smoker	0.97	0.74	1.28	1.09	0.82	1.45	.	.	.	0.97	0.74	1.28	1.11	0.84	1.48	.	.	.
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	1.93	1.48	2.52	1.35	1.00	1.81	1.50	1.11	2.02
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 2b: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the Ultrasonography (USON) Assessment of NAFLD, NHANES 1988-1994

		Model 3: Demo. and Periodontitis Variables									Model 4: Demo. and Caries Experience Variables								
Variable		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Age 40-59 years vs. 21-39 years	1.98	1.49	2.62	1.82	1.38	2.40	1.84	1.40	2.42	1.98	1.49	2.62	1.83	1.38	2.43	1.92	1.46	2.54
	Age 60-74 years vs. 21-39 years	2.20	1.61	3.02	2.01	1.45	2.78	2.09	1.50	2.90	2.20	1.61	3.02	2.04	1.47	2.82	2.18	1.61	2.97
	Male vs. Female	1.68	1.31	2.16	1.66	1.29	2.14	1.64	1.28	2.10	1.68	1.31	2.16	1.68	1.30	2.16	1.72	1.35	2.20
	NHB vs. NHW	0.70	0.54	0.93	0.76	0.56	1.03	0.81	0.60	1.10	0.70	0.54	0.93	0.81	0.61	1.07	0.81	0.61	1.07
	Mex. American vs. NHW	1.66	1.28	2.16	1.68	1.26	2.24	1.93	1.51	2.47	1.66	1.28	2.16	1.65	1.26	2.17	1.69	1.29	2.22
	Other Races vs. NHW	1.34	0.80	2.23	1.40	0.80	2.44	1.43	0.85	2.41	1.34	0.80	2.23	1.45	0.83	2.55	1.41	0.83	2.40
	HS Grad vs. Less than HS	0.79	0.60	1.03	0.99	0.74	1.33	.	.	.	0.79	0.60	1.03	0.95	0.71	1.27	0.92	0.71	1.19
	More than HS vs. Less than HS	0.61	0.43	0.85	0.74	0.50	1.09	.	.	.	0.61	0.43	0.85	0.68	0.47	0.97	0.65	0.47	0.91
	Not Married vs. Married	0.60	0.47	0.75	0.68	0.52	0.88	0.70	0.54	0.89	0.60	0.47	0.75	0.68	0.52	0.88	0.69	0.54	0.89
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.10	0.76	1.58	1.07	0.71	1.61	.	.	.	1.10	0.76	1.58	1.04	0.70	1.54	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	1.03	0.77	1.37	0.94	0.71	1.26	.	.	.	1.03	0.77	1.37	0.90	0.68	1.19	.	.	.
	Former Smoker vs. Current Smoker	.	.	.	.	.	.	.	.	.	1.53	1.13	2.08	1.28	0.93	1.77	.	.	.
Never Smoked vs. Current Smoker	.	.	.	.	.	.	.	.	.	0.97	0.74	1.28	1.09	0.82	1.45	.	.	.	
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	2.01	1.35	2.99	1.45	0.95	2.21	1.54	1.06	2.24	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	1.13	0.70	1.81	1.15	0.70	1.90	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 2c: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the Ultrasonography (USON) Assessment of NAFLD, NHANES 1988-1994

		Model 5: Demo. and Untreated Caries Variables								
		Crude Model			Full Model			Final Model		
Variable		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Age 40-59 years vs. 21-39 years	1.98	1.49	2.62	1.84	1.38	2.45	1.96	1.48	2.60
	Age 60-74 years vs. 21-39 years	2.20	1.61	3.02	2.07	1.50	2.86	2.31	1.69	3.17
	Male vs. Female	1.68	1.31	2.16	1.64	1.27	2.13	1.65	1.27	2.13
	NHB vs. NHW	0.70	0.54	0.93	0.76	0.58	1.00	0.78	0.59	1.04
	Mex. American vs. NHW	1.66	1.28	2.16	1.65	1.25	2.17	1.86	1.46	2.37
	Other Races vs. NHW	1.34	0.80	2.23	1.45	0.82	2.58	1.47	0.86	2.52
	HS Grad vs. Less than HS	0.79	0.60	1.03	0.99	0.74	1.32	.	.	.
	More than HS vs. Less than HS	0.61	0.43	0.85	0.74	0.51	1.08	.	.	.
	Not Married vs. Married	0.60	0.47	0.75	0.68	0.52	0.88	0.68	0.53	0.88
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.10	0.76	1.58	1.04	0.70	1.54	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	1.03	0.77	1.37	0.95	0.71	1.27	.	.	.
	Former Smoker vs. Current Smoker	1.53	1.13	2.08	1.33	0.95	1.86	.	.	.
	Never Smoked vs. Current Smoker	0.97	0.74	1.28	1.13	0.84	1.51	.	.	.
	Dental Variables	Less than 20 Permanent teeth Yes vs. No
Prevalence of moderate or severe Periodontitis Yes vs. No		.	.	.	.	.	.	.	.	.
Prevalence of Caries Experience Yes vs. No		.	.	.	.	.	.	.	.	.
Prevalence of Untreated Caries Yes vs. No		1.41	1.13	1.76	1.41	1.07	1.86	1.51	1.20	1.90

Appendix Table 3a: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the Fibrosis Score (FS), NHANES 1988-1994

		Model 1: Demographic Variables									Model 2: Demo. and Num. of Permanent Teeth Variables								
Variable		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	0.84	0.68	1.03	0.79	0.63	0.99	0.79	0.63	1.00	0.84	0.68	1.03	0.79	0.62	1.01	.	.	.
	NHB vs. NHW	1.10	0.90	1.34	1.22	0.95	1.56	1.17	0.94	1.45	1.10	0.90	1.34	1.08	0.84	1.38	0.99	0.80	1.23
	Mex. American vs. NHW	0.53	0.43	0.65	0.40	0.31	0.51	0.38	0.30	0.48	0.53	0.43	0.65	0.49	0.39	0.62	0.48	0.38	0.60
	Other Races vs. NHW	0.66	0.40	1.09	0.67	0.36	1.26	0.61	0.35	1.05	0.66	0.40	1.09	0.62	0.34	1.13	0.55	0.32	0.92
	HS Grad vs. Less than HS	0.80	0.60	1.06	0.64	0.48	0.86	0.63	0.47	0.85	0.80	0.60	1.06	0.77	0.57	1.04	0.78	0.58	1.06
	More than HS vs. Less than HS	0.55	0.43	0.71	0.41	0.30	0.58	0.40	0.30	0.54	0.55	0.43	0.71	0.58	0.42	0.81	0.57	0.43	0.75
	Not Married vs. Married	0.75	0.61	0.93	0.74	0.59	0.94	0.76	0.61	0.95	0.75	0.61	0.93	0.78	0.61	0.98	.	.	.
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.10	0.73	1.66	1.05	0.68	1.61	.	.	.	1.10	0.73	1.66	0.99	0.62	1.57	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	1.07	0.80	1.43	1.05	0.76	1.46	.	.	.	1.07	0.80	1.43	1.01	0.72	1.43	.	.	.
	Former Smoker vs. Current Smoker	2.30	1.75	3.03	2.76	2.07	3.67	2.78	2.09	3.70	2.30	1.75	3.03	2.69	2.02	3.58	2.71	2.00	3.67
Never Smoked vs. Current Smoker	1.24	0.88	1.75	1.48	1.04	2.13	1.52	1.07	2.18	1.24	0.88	1.75	1.62	1.12	2.34	1.72	1.18	2.49	
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	4.88	3.86	6.17	4.49	3.46	5.82	4.36	3.47	5.49
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

**Appendix Table 3b: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the
Fibrosis Score (FS), NHANES 1988-1994**

		Model 3: Demo. and Periodontitis Variables									Model 4: Demo. and Caries Experience Variables								
Variable		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	0.84	0.68	1.03	0.75	0.59	0.94	0.75	0.59	0.96	0.84	0.68	1.03	0.79	0.63	0.99	0.79	0.63	1.00
	NHB vs. NHW	1.10	0.90	1.34	1.11	0.87	1.41	1.05	0.84	1.30	1.10	0.90	1.34	1.23	0.97	1.57	1.17	0.94	1.45
	Mex. American vs. NHW	0.53	0.43	0.65	0.41	0.33	0.52	0.39	0.31	0.49	0.53	0.43	0.65	0.41	0.32	0.52	0.38	0.30	0.48
	Other Races vs. NHW	0.66	0.40	1.09	0.64	0.33	1.23	0.58	0.33	1.02	0.66	0.40	1.09	0.68	0.36	1.26	0.61	0.35	1.05
	HS Grad vs. Less than HS	0.80	0.60	1.06	0.71	0.53	0.95	0.70	0.53	0.94	0.80	0.60	1.06	0.64	0.48	0.85	0.63	0.47	0.85
	More than HS vs. Less than HS	0.55	0.43	0.71	0.48	0.34	0.67	0.46	0.34	0.62	0.55	0.43	0.71	0.41	0.29	0.57	0.40	0.30	0.54
	Not Married vs. Married	0.75	0.61	0.93	0.76	0.61	0.96	0.78	0.63	0.96	0.75	0.61	0.93	0.74	0.59	0.94	0.76	0.61	0.95
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.10	0.73	1.66	1.10	0.71	1.71	.	.	.	1.10	0.73	1.66	1.03	0.67	1.58	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	1.07	0.80	1.43	1.11	0.80	1.54	.	.	.	1.07	0.80	1.43	1.04	0.76	1.43	.	.	.
	Former Smoker vs. Current Smoker	2.30	1.75	3.03	3.01	2.24	4.04	3.06	2.29	4.09	2.30	1.75	3.03	2.76	2.07	3.67	2.78	2.09	3.70
	Never Smoked vs. Current Smoker	1.24	0.88	1.75	1.69	1.16	2.47	1.75	1.20	2.55	1.24	0.88	1.75	1.49	1.03	2.13	1.52	1.07	2.18
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	3.00	2.32	3.89	3.03	2.24	4.11	3.10	2.31	4.17	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	1.40	0.91	2.15	1.29	0.83	2.02	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 3c: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the Fibrosis Score (FS), NHANES 1988-1994

		Model 5: Demo. and Untreated Caries Variables								
		Crude Model			Full Model			Final Model		
Variable		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	0.84	0.68	1.03	0.78	0.62	0.97	0.79	0.63	1.00
	NHB vs. NHW	1.10	0.90	1.34	1.18	0.91	1.53	1.17	0.94	1.45
	Mex. American vs. NHW	0.53	0.43	0.65	0.40	0.31	0.51	0.38	0.30	0.48
	Other Races vs. NHW	0.66	0.40	1.09	0.67	0.36	1.26	0.61	0.35	1.05
	HS Grad vs. Less than HS	0.80	0.60	1.06	0.66	0.49	0.88	0.63	0.47	0.85
	More than HS vs. Less than HS	0.55	0.43	0.71	0.43	0.31	0.60	0.40	0.30	0.54
	Not Married vs. Married	0.75	0.61	0.93	0.74	0.58	0.95	0.76	0.61	0.95
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.10	0.73	1.66	1.04	0.68	1.60	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	1.07	0.80	1.43	1.09	0.77	1.54	.	.	.
	Former Smoker vs. Current Smoker	2.30	1.75	3.03	2.82	2.12	3.75	2.78	2.09	3.70
	Never Smoked vs. Current Smoker	1.24	0.88	1.75	1.52	1.06	2.17	1.52	1.07	2.18
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	1.27	1.00	1.62	1.21	0.92	1.59	.	.	.

Appendix Table 4a: Unadjusted, Adjusted and Final Logistic Regression Analysis respect to the Fatty Liver Index (FLI) Assessment of NAFLD, NHANES 1988-1994

	Variable	Model 1: Demographic Variables									Model 2: Demo. and Num. of Permanent Teeth Variables								
		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	1.88	1.49	2.39	1.93	1.50	2.48	1.83	1.43	2.34	1.88	1.49	2.39	1.93	1.49	2.50	1.81	1.42	2.31
	NHB vs. NHW	1.17	0.94	1.46	1.26	1.01	1.57	1.38	1.12	1.70	1.17	0.94	1.46	1.18	0.94	1.48	.	.	.
	Mex. American vs. NHW	1.27	0.98	1.66	1.00	0.73	1.38	1.06	0.79	1.41	1.27	0.98	1.66	1.10	0.81	1.49	.	.	.
	Other Races vs. NHW	0.73	0.46	1.15	0.81	0.49	1.32	0.74	0.45	1.21	0.73	0.46	1.15	0.79	0.47	1.33	.	.	.
	HS Grad vs. Less than HS	0.74	0.59	0.91	0.76	0.60	0.97	0.71	0.56	0.90	0.74	0.59	0.91	0.82	0.64	1.06	0.77	0.61	0.98
	More than HS vs. Less than HS	0.53	0.41	0.70	0.54	0.41	0.72	0.49	0.37	0.64	0.53	0.41	0.70	0.63	0.47	0.84	0.55	0.42	0.73
	Not Married vs. Married	0.67	0.51	0.87	0.65	0.49	0.86	0.69	0.53	0.90	0.67	0.51	0.87	0.67	0.51	0.89	0.73	0.56	0.96
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.01	0.68	1.49	0.96	0.62	1.48	.	.	.	1.01	0.68	1.49	0.93	0.60	1.45	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	0.80	0.59	1.09	0.74	0.51	1.08	.	.	.	0.80	0.59	1.09	0.72	0.49	1.06	.	.	.
	Former Smoker vs. Current Smoker	1.56	1.04	2.33	1.80	1.17	2.78	1.67	1.09	2.55	1.56	1.04	2.33	1.75	1.14	2.70	1.61	1.05	2.46
	Never Smoked vs. Current Smoker	0.78	0.60	1.02	1.06	0.78	1.44	0.98	0.74	1.30	0.78	0.60	1.02	1.09	0.81	1.47	0.99	0.76	1.30
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	2.43	1.88	3.14	2.04	1.51	2.77	1.99	1.52	2.59
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 4b: Unadjusted, Adjusted and Final Logistic Regression Analysis respect to the Fatty Liver Index (FLI) Assessment of NAFLD, NHANES 1988-1994

		Model 3: Demo. and Periodontitis Variables									Model 4: Demo. and Caries Experience Variables								
		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
Variable		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	1.88	1.49	2.39	1.90	1.48	2.44	1.78	1.41	2.25	1.88	1.49	2.39	1.93	1.50	2.48	1.83	1.43	2.34
	NHB vs. NHW	1.17	0.94	1.46	1.22	0.97	1.54	.	.	.	1.17	0.94	1.46	1.25	1.01	1.55	1.38	1.12	1.70
	Mex. American vs. NHW	1.27	0.98	1.66	1.02	0.75	1.40	.	.	.	1.27	0.98	1.66	0.99	0.71	1.37	1.06	0.79	1.41
	Other Races vs. NHW	0.73	0.46	1.15	0.79	0.48	1.28	.	.	.	0.73	0.46	1.15	0.80	0.49	1.32	0.74	0.45	1.21
	HS Grad vs. Less than HS	0.74	0.59	0.91	0.79	0.61	1.02	0.75	0.59	0.96	0.74	0.59	0.91	0.77	0.60	0.98	0.71	0.56	0.90
	More than HS vs. Less than HS	0.53	0.41	0.70	0.57	0.43	0.76	0.51	0.39	0.68	0.53	0.41	0.70	0.54	0.41	0.72	0.49	0.37	0.64
	Not Married vs. Married	0.67	0.51	0.87	0.66	0.50	0.88	0.72	0.55	0.95	0.67	0.51	0.87	0.65	0.49	0.86	0.69	0.53	0.90
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.01	0.68	1.49	0.97	0.63	1.49	.	.	.	1.01	0.68	1.49	0.97	0.62	1.51	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	0.80	0.59	1.09	0.75	0.52	1.09	.	.	.	0.80	0.59	1.09	0.75	0.51	1.09	.	.	.
	Former Smoker vs. Current Smoker	1.56	1.04	2.33	1.83	1.18	2.84	1.70	1.10	2.62	1.56	1.04	2.33	1.81	1.17	2.78	1.67	1.09	2.55
Never Smoked vs. Current Smoker	0.78	0.60	1.02	1.09	0.81	1.48	1.00	0.76	1.33	0.78	0.60	1.02	1.06	0.78	1.45	0.98	0.74	1.30	
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	1.99	1.41	2.81	1.45	0.97	2.17	1.61	1.13	2.28	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	0.83	0.56	1.23	0.90	0.59	1.37	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 4c: Unadjusted, Adjusted and Final Logistic Regression Analysis respect to the Fatty Liver Index (FLI) Assessment of NAFLD, NHANES 1988-1994

		Model 5: Demo. and Untreated Caries Variables								
		Crude Model			Full Model			Final Model		
Variable		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	1.88	1.49	2.39	1.88	1.45	2.44	1.77	1.38	2.26
	NHB vs. NHW	1.17	0.94	1.46	1.15	0.90	1.48	.	.	.
	Mex. American vs. NHW	1.27	0.98	1.66	1.03	0.74	1.42	.	.	.
	Other Races vs. NHW	0.73	0.46	1.15	0.82	0.50	1.35	.	.	.
	HS Grad vs. Less than HS	0.74	0.59	0.91	0.81	0.64	1.03	0.79	0.63	0.99
	More than HS vs. Less than HS	0.53	0.41	0.70	0.62	0.46	0.82	0.58	0.45	0.76
	Not Married vs. Married	0.67	0.51	0.87	0.65	0.49	0.85	0.68	0.53	0.88
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.01	0.68	1.49	0.93	0.60	1.44	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	0.80	0.59	1.09	0.80	0.56	1.15	.	.	.
	Former Smoker vs. Current Smoker	1.56	1.04	2.33	1.92	1.22	3.01	1.79	1.14	2.79
	Never Smoked vs. Current Smoker	0.78	0.60	1.02	1.13	0.82	1.55	1.04	0.78	1.38
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	1.95	1.47	2.58	1.70	1.23	2.35	1.80	1.33	2.44

Appendix Table 5a: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the U.S. Fatty Liver Index (US-FLI) Assessment of NAFLD, NHANES 1988-1994

		Model 1: Demographic Variables									Model 2: Demo. and Num. of Permanent Teeth Variables								
Variable		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	2.00	1.59	2.52	1.99	1.54	2.57	1.89	1.50	2.38	2.00	1.59	2.52	1.98	1.54	2.55	1.89	1.51	2.36
	HS Grad vs. Less than HS	0.81	0.60	1.11	0.96	0.66	1.38	0.81	0.57	1.16	0.81	0.60	1.11	0.99	0.68	1.45	0.85	0.59	1.22
	More than HS vs. Less than HS	0.44	0.31	0.63	0.46	0.29	0.75	0.38	0.24	0.59	0.44	0.31	0.63	0.53	0.32	0.87	0.43	0.27	0.69
	Not Married vs. Married	0.62	0.49	0.80	0.64	0.48	0.85	0.67	0.52	0.87	0.62	0.49	0.80	0.65	0.49	0.86	0.69	0.53	0.90
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.19	0.79	1.79	1.10	0.68	1.79	.	.	.	1.19	0.79	1.79	1.08	0.67	1.75	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	0.83	0.55	1.26	0.79	0.47	1.33	.	.	.	0.83	0.55	1.26	0.77	0.46	1.30	.	.	.
	Former Smoker vs. Current Smoker	2.46	1.67	3.63	3.15	2.00	4.98	2.84	1.90	4.27	2.46	1.67	3.63	3.12	1.96	4.99	2.79	1.85	4.21
	Never Smoked vs. Current Smoker	0.92	0.63	1.34	1.44	0.94	2.20	1.26	0.85	1.88	0.92	0.63	1.34	1.52	1.00	2.31	1.33	0.91	1.96
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	2.95	2.28	3.82	2.24	1.74	2.88	2.32	1.79	3.01
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

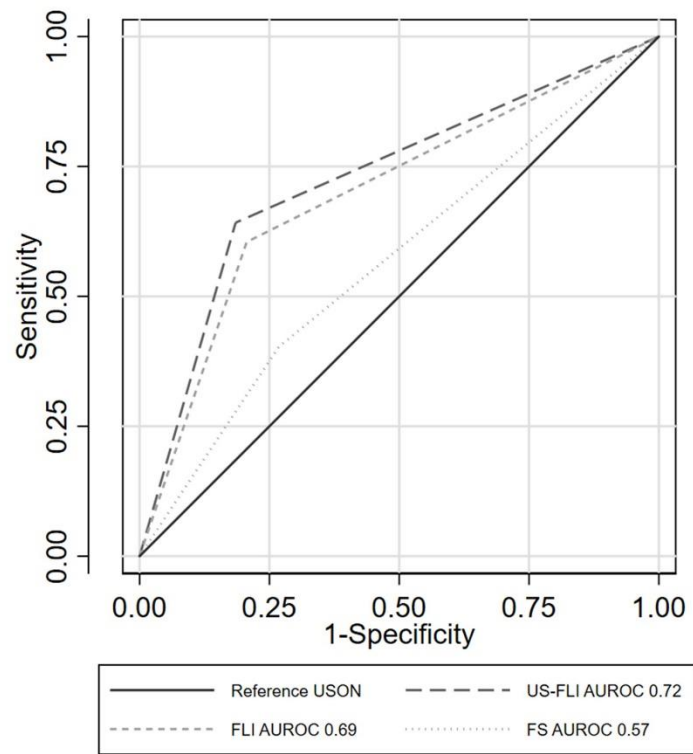
Appendix Table 5b: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the U.S. Fatty Liver Index (US-FLI) Assessment of NAFLD, NHANES 1988-1994

		Model 3: Demo. and Periodontitis Variables									Model 4: Demo. and Caries Exp. Variables								
		Crude Model			Full Model			Final Model			Crude Model			Full Model			Final Model		
Variable		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	2.00	1.59	2.52	1.92	1.47	2.50	1.83	1.44	2.31	2.00	1.59	2.52	1.99	1.55	2.57	1.89	1.50	2.38
	HS Grad vs. Less than HS	0.81	0.60	1.11	1.04	0.71	1.52	0.89	0.61	1.28	0.81	0.60	1.11	0.95	0.66	1.37	0.81	0.57	1.16
	More than HS vs. Less than Hs	0.44	0.31	0.63	0.52	0.32	0.84	0.42	0.27	0.66	0.44	0.31	0.63	0.46	0.29	0.75	0.38	0.24	0.59
	Not Married vs. Married	0.62	0.49	0.80	0.65	0.48	0.88	0.68	0.52	0.89	0.62	0.49	0.80	0.64	0.48	0.85	0.67	0.52	0.87
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.19	0.79	1.79	1.14	0.69	1.87	.	.	.	1.19	0.79	1.79	1.09	0.67	1.79	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	0.83	0.55	1.26	0.82	0.48	1.42	.	.	.	0.83	0.55	1.26	0.78	0.46	1.32	.	.	.
	Former Smoker vs. Current Smoker	2.46	1.67	3.63	3.33	2.07	5.35	3.05	2.00	4.65	2.46	1.67	3.63	3.15	1.99	4.98	2.84	1.90	4.27
	Never Smoked vs. Current Smoker	0.92	0.63	1.34	1.56	1.04	2.33	1.39	0.94	2.04	0.92	0.63	1.34	1.44	0.94	2.20	1.26	0.85	1.88
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	2.61	1.99	3.43	2.16	1.51	3.08	2.21	1.64	2.98	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.	1.08	0.71	1.63	1.08	0.70	1.67	.	.	.
	Prevalence of Untreated Caries Yes vs. No	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 5c: Unadjusted, Adjusted and Final Logistic Regression Analysis with respect to the U.S. Fatty Liver Index (US-FLI) Assessment of NAFLD, NHANES 1988-1994

		Model 5: Demo. and Untreated Caries Variables								
		Crude Model			Full Model			Final Model		
Variable		OR	LCI	UCI	OR	LCI	UCI	OR	LCI	UCI
Demo Variables	Male vs. Female	2.00	1.59	2.52	1.94	1.50	2.52	1.89	1.50	2.38
	HS Grad vs. Less than HS	0.81	0.60	1.11	0.99	0.68	1.43	0.81	0.57	1.16
	More than HS vs. Less than HS	0.44	0.31	0.63	0.50	0.30	0.82	0.38	0.24	0.59
	Not Married vs. Married	0.62	0.49	0.80	0.63	0.48	0.84	0.67	0.52	0.87
	Poverty 100%-199% FPG vs. Less than 100% FPG	1.19	0.79	1.79	1.08	0.66	1.76	.	.	.
	Poverty ≥200% FPG vs. Less than 100% FPG	0.83	0.55	1.26	0.82	0.49	1.36	.	.	.
	Former Smoker vs. Current Smoker	2.46	1.67	3.63	3.27	2.03	5.27	2.84	1.90	4.27
	Never Smoked vs. Current Smoker	0.92	0.63	1.34	1.49	0.96	2.32	1.26	0.85	1.88
Dental Variables	Less than 20 Permanent teeth Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of moderate or severe Periodontitis Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of Caries Experience Yes vs. No	.	.	.	.	.	.	.	.	.
	Prevalence of Untreated Caries Yes vs. No	1.61	1.18	2.20	1.35	0.93	1.94	.	.	.

Appendix Figure 1: ROC Curves for Ultrasonography Assessment for Reference and other NAFLD Assessments



AUROC = Area Under Receiver Operating Characteristic (ROC) Curve; USON= ultrasonography assessment to determine NAFLD,
FLI=Fatty Liver Index; US-FLI = US Fatty Liver Index; FS=Fibrosis Score