

**Supplementary Table 3.** Association of individual characteristics of snoring with prediabetes and type 2 diabetes mellitus by obesity ( $n = 3,948$ )

Snoring characteristic	Prediabetes			Type 2 diabetes mellitus		
	No. of case (%)	OR (95% CI)	<i>P</i> value	No. of case (%)	OR (95% CI)	<i>P</i> value
<b>Intensity</b>						
BMI < 25 kg/m <sup>2</sup>						
Does not snore	261 (36.2)	1.00 (Ref)		48 (32.4)	1.00 (Ref)	
Slightly louder than breathing	224 (31.0)	1.41 (1.05–1.74)	0.008	42 (28.4)	1.56 (1.04–1.78)	0.046
As loud as talking	134 (18.6)	1.45 (1.00–1.99)	0.029	35 (23.7)	1.67 (1.17–2.48)	0.007
Louder than talking	67 (9.3)	1.53 (1.05–2.08)	0.038	16 (10.8)	1.77 (1.17–2.38)	0.004
Very loud	36 (5.0)	1.54 (0.97–2.66)	0.048	7 (4.7)	1.83 (1.24–2.43)	0.009
BMI ≥ 25 kg/m <sup>2</sup>						
Does not snore	110 (22.0)	1.00 (Ref)		38 (18.6)	1.00 (Ref)	
Slightly louder than breathing	137 (27.5)	1.34 (0.88–2.00)	0.221	50 (24.5)	1.69 (1.21–2.36)	0.019
As loud as talking	135 (27.1)	1.69 (1.10–2.48)	0.022	63 (30.9)	1.74 (1.21–2.70)	0.020
Louder than talking	73 (14.6)	1.72 (1.03–2.46)	0.036	26 (12.8)	1.90 (1.31–2.20)	0.004
Very loud	44 (8.8)	1.91 (1.31–2.40)	0.004	27 (13.2)	2.04 (1.21–3.80)	0.008
<b>Frequency</b>						
BMI < 25 kg/m <sup>2</sup>						
Never or nearly never	283 (39.3)	1.00 (Ref)		49 (33.1)	1.00 (Ref)	
1–2 times a month	101 (14.0)	1.31 (0.95–1.94)	0.058	23 (15.5)	1.39 (1.01–2.04)	0.046
1–2 times a week	150 (20.8)	1.40 (1.15–1.97)	0.009	29 (19.6)	1.49 (1.00–2.21)	0.037
3–4 times a week	105 (14.6)	1.50 (1.00–2.13)	0.037	21 (14.2)	1.58 (0.98–2.67)	0.048
Nearly every day	82 (11.4)	1.75 (1.16–2.28)	0.001	26 (17.6)	2.01 (1.02–2.88)	0.019
BMI ≥ 25 kg/m <sup>2</sup>						
Never or nearly never	127 (25.5)	1.00 (Ref)		41 (20.1)	1.00 (Ref)	
1–2 times a month	71 (14.2)	1.36 (0.82–2.20)	0.258	23 (11.3)	1.29 (0.74–2.34)	0.328
1–2 times a week	101 (20.2)	1.44 (0.91–2.10)	0.109	49 (24.0)	1.65 (1.03–2.70)	0.027
3–4 times a week	80 (16.0)	1.68 (1.05–1.92)	0.022	34 (16.7)	1.35 (0.82–2.35)	0.191
Nearly every day	120 (24.1)	1.87 (1.30–2.31)	0.008	57 (27.9)	2.01 (1.25–3.13)	<0.001
<b>Bothersome</b>						
BMI < 25 kg/m <sup>2</sup>						
Does not snore	261 (36.2)	1.00 (Ref)		48 (32.4)	1.00 (Ref)	
Not disruptive	362 (50.1)	1.42 (1.12–1.84)	0.030	73 (49.3)	1.34 (0.92–1.70)	0.131
Disruptive	99 (13.7)	1.32 (0.90–1.52)	0.068	27 (18.2)	1.43 (0.82–2.35)	0.233
BMI ≥ 25 kg/m <sup>2</sup>						
Does not snore	110 (22.0)	1.00 (Ref)		38 (18.6)	1.00 (Ref)	
Not disruptive	262 (52.5)	1.40 (0.92–2.12)	0.122	112 (54.9)	1.56 (1.00–2.42)	0.047
Disruptive	127 (25.5)	1.43 (0.89–2.30)	0.139	54 (26.5)	1.60 (0.96–2.70)	0.048
BMI < 25 kg/m <sup>2</sup>						
Never or nearly never	667 (92.1)	1.00 (Ref)		130 (86.7)	1.00 (Ref)	
1–2 times a month	15 (2.1)	0.75 (0.36–1.67)	0.383	7 (4.7)	1.61 (0.68–3.76)	0.280
1–2 times a week	19 (2.6)	1.15 (0.55–2.43)	0.729	5 (3.3)	1.72 (0.80–3.14)	0.291
3–4 times a week	10 (1.4)	1.36 (0.61–3.42)	0.568	5 (3.3)	2.22 (0.73–6.69)	0.227
Nearly every day	13 (1.8)	2.13 (0.75–4.22)	0.187	3 (2.0)	2.31 (0.65–8.04)	0.248

(Continued to the next page)

Supplementary Table 3. Continued

Snoring characteristic	Prediabetes			Type 2 diabetes mellitus		
	No. of case (%)	OR (95% CI)	<i>P</i> value	No. of case (%)	OR (95% CI)	<i>P</i> value
BMI $\geq$ 25 kg/m <sup>2</sup>						
Never or nearly never	438 (87.6)	1.00 (Ref)		158 (77.1)	1.00 (Ref)	
1–2 times a month	14 (2.8)	0.77 (0.34–1.84)	0.658	11 (5.4)	1.57 (0.75–3.38)	0.309
1–2 times a week	20 (4.0)	1.64 (0.86–2.99)	0.138	18 (8.8)	1.78 (0.95–3.37)	0.056
3–4 times a week	14 (2.8)	0.43 (0.11–1.04)	0.055	9 (4.4)	1.51 (0.67–3.40)	0.509
Nearly every day	14 (2.8)	0.98 (0.29–2.46)	0.952	9 (4.4)	2.04 (0.89–4.70)	0.108

The estimates are derived from the multivariable multinomial logistic regression. The estimates are in reference to the normal glycemic group (participants without prediabetes and type 2 diabetes mellitus). The ORs are adjusted for age, sex, waist circumference, hypertension prevalence, education level, household income, occupation, cigarette smoking, alcohol consumption, and physical activity. OR, odds ratio; CI, confidence interval; BMI, body mass index.