

**Supplementary Table 1.** Comparison of prevalence of smell impairment between the UPSIT study and the current study in NHANES population

Age(years)	Prevalence of Smell Impairment		
	Total	Men	Women
<b>Current Study</b> (defined as <6 out of 8 odors)			
40-49	6.9%	7.7%	6.0%
50-59	9.0%	10.9%	7.2%
60-69	13.8%	17.1%	10.8%
70+	30.4%	37.2%	25.2%
<b>UPSIT Study</b> (defined as <29 out of 40 odors)			
40-49	3.0%	6.0%	0%
50-59	10.3%	15.9%	4.9%
60-69	17.1%	22.4%	13.1%
70+	33.5%	37.5%	30.1%

**Supplementary Table 2.** Comparisons of the prevalence of smell impairment and participants' characteristics across studies

<b>Studies</b>	<b>Sample size</b>	<b>Prevalence (%)</b>	<b>Definition</b>	<b>Age (years)*</b>	<b>Men (%)</b>
Murphy C et al. (2002) <sup>6</sup>	2491	24.5%	<6 (8 odors)	68.7 (53-97)	42%
Mullol J et al. (2012) <sup>7</sup>	9348	19.4%	<4 (4 odors)	43.4 (5-91)	34.3%
Boesveldt S et al. (2011) <sup>8</sup>	2778	2.7%	<2 (5 odors)	69.3 (57-85)	48.4%
Bramerson A et al. (2004) <sup>9</sup>	1387	19.1%	<13 (16 odors)	20-80+	48.4%
Vennemann M et al. (2008) <sup>12</sup>	1312	18%	<10 (12 odors)	52.1 (25-75)	47.1%
Schubert CR et al. (2012) <sup>14</sup>	2838	3.8%	<6 (8 odors)	49 (21-84)	45.6%
Current study	3519	13.5%	<6 (8 odors)	57.8 (40+)	47.7%

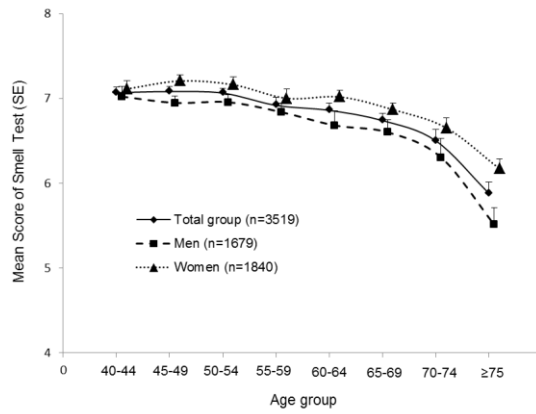
\* Mean (range)

**Supplementary Figure 1.** Mean (SE) NHANES Pocket Smell Test<sup>TM</sup> scores according to age and gender.

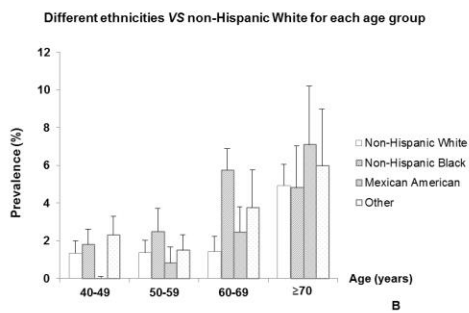
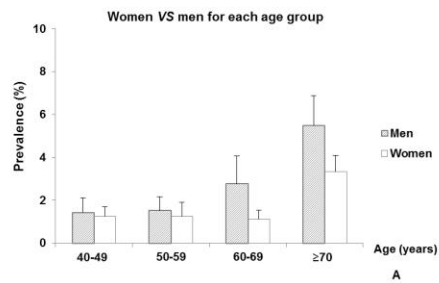
**Supplementary Figure 2.** Prevalence of Both Taste and Smell Impairment by Age, Sex, and Ethnicity. A is the prevalence of both smell and taste impairment in men and women according to each age group. B is the prevalence of both smell and taste impairment in different ethnicities according to each age group.

**Supplementary Figure 3.** Prevalence of Smell Impairment for Specific Odor

Supplementary Figure 1



Supplementary Figure 2



### Supplementary Figure 3

