**Supplementary Table 1. Participant characteristics, NHANES 2005–2018**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristic1** | **Total**  **(n = 3961)** | **Non-MASLD**  **(n = 2591)** | **MASLD (n = 1370)** | ***P*-Valuea** |
| **Sex (male,%)** | 1903 (48.76%) | 1162 (45.13%) | 741 (56.26%) | **<0.001** |
| **Age** | 47 (33, 61) | 44 (31, 58) | 52 (39, 65) | **<0.001** |
| **Race (n,%)** |  |  |  | **<0.001** |
| Mexican or other Hispanic | 968 (12.49%) | 500(10.01%) | 468(17.63%) |  |
| Non-Hispanic White | 1806 (69.49%) | 1171 (69.19%) | 635 (70.09%) |  |
| Non-Hispanic Black | 807 (10.48%) | 639(12.34%) | 168 (6.64%) |  |
| Other | 380 (7.54%) | 281 (8.46%) | 99 (5.64%) |  |
| **BMI (kg/m2)** | 27.80 (24.10, 32.60) | 25.74 (22.90, 28.90) | 33.68 (30.20, 38.30) | **<0.001** |
| **Smoking status (n,%)** |  |  |  | **0.002** |
| Never | 2225 (55.87%) | 1482 (57.49%) | 743 (52.52%) |  |
| Former | 991 (25.00%) | 574 (22.29%) | 417 (30.60%) |  |
| Current | 745 (19.13%) | 535 (20.22%) | 210 (16.89%) |  |
| **Education level (n,%)** |  |  |  | **<0.001** |
| Less than high school | 899 (14.54%) | 487 (12.01%) | 412 (19.79%) |  |
| High school graduate | 917 (23.28%) | 607 (23.17%) | 310 (23.49%) |  |
| College or above | 2145 (62.18%) | 1497 (64.82%) | 648 (56.72%) |  |
| **Poverty-income ratio (n,%)** |  |  |  | **0.5** |
| <1.3 | 1031 (18.63%) | 639 (18.01%) | 392 (19.92%) |  |
| 1.3~3.5 | 1368 (31.94%) | 914 (32.11%) | 454 (31.59%) |  |
| >=3.5 | 1242 (43.02%) | 846 (43.85%) | 396 (41.32%) |  |
| Missing | 320 (6.40%) | 192 (6.03%) | 128 (7.17%) |  |
|  |  |  |  |  |
| **Drinking status (n,%)** |  |  |  | **<0.001** |
| Drinker | 2,400.00 (65.85%) | 1,636.00 (69.00%) | 764.00 (59.34%) |  |
| Non-drinker | 1,561.00 (34.15%) | 955.00 (31.00%) | 606.00 (40.66%) |  |

1 Characteristics of participants were presented as median (Q1, Q4) or as numbers and proportions. The numbers were unweighted, while the percentages were weighted according to the analytic guidance of the National Health and Nutrition Examination Survey. 2 Statistical analysis was performed using the Wilcoxon rank-sum test for complex survey samples or the Chi-squared test with Rao & Scott's second-order correction. BMI, body mass index; MASLD, Metabolic dysfunction-associated steatotic liver disease.