**Table S1: Prevalence of Fruits and Vegetables and its correlation to biophysical and biochemical risk factors of NCDs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Fruits and vegetables intake % (95% CI) | | | | P value |
|
| Column % | | Row % | |  |
| ≥5 | <5 | ≥5 | <5 |  |
| Age group |  |  |  |  | <0.001 |
| 18-29 | 29(25.5-32.6) | 37.4(34-40.7) | 38.1(33.7-42.6) | 61.9(57.4-66.3) |  |
| 30-39 | 25.3(22.2-28.4) | 26.1(23.5-28.6) | 43.5(39.2-47.7) | 56.5(52.3-60.8) |  |
| 40-49 | 21.6(18.2-24.9) | 16.9(14.5-19.3) | 50.3(44.4-56.2) | 49.7(43.8-55.6) |  |
| 50-59 | 12.8(9.71-15.8) | 9.07(7.49-10.7) | 52.7(44.8-60.6) | 47.3(39.4-55.2) |  |
| 60+ | 11.3(8.79-13.9) | 10.6(8.79-12.4) | 45.8(38.4-53.2) | 54.2(46.8-61.6) |  |
| Sex |  |  |  |  | 0.399 |
| Men | 43.68(39.72 -47.72) | 44.02(40.83-47.25) | 44(40-48.1) | 56(51.9-60) |  |
| Women | 56.32(52.28 -60.28) | 55.98(52.75- 59.17) | 44.4(41.2-47.5) | 55.6(52.5-58.8) |  |
| Education level |  |  |  |  | <0.001 |
| No formal education | 20.4(17.6-23.3) | 23(20.6-25.4) | 41.4(36.8-45.9) | 58.6(54.1-63.2) |  |
| Preparatory or less | 10.2(8.07-12.4) | 9.31(7.64-11) | 46.5(39.4-53.6) | 53.5(46.4-60.6) |  |
| Secondary completed | 42.9(38.9-46.9) | 42.6(39.3-45.8) | 44.4(40.2-48.5) | 55.6(51.5-59.8) |  |
| University+ | 26.5(23-29.9) | 25.2(22.2-28.1) | 45.5(40.4-50.6) | 54.5(49.4-59.6) |  |
| Marital Status |  |  |  |  | <0.001 |
| Never married | 22.2(18.6-25.8) | 33(29.7-36.4) | 34.8(29.5-40.1) | 65.2(59.9-70.5) |  |
| Currently married | 71.7(67.9-75.4) | 57.9(54.5-61.2) | 49.5(46.6-52.4) | 50.5(47.6-53.4) |  |
| Divorced/Separated | 1.63(0.74-2.51) | 3.56(2.09-5.04) | 26.6(13-40.1) | 73.4(59.9-87) |  |
| Widowed | 4.48(2.95-6) | 5.53(4.03-7.04) | 39.1(28.4-49.7) | 60.9(50.3-71.6) |  |
| Work status |  |  |  |  | 0.805 |
| Working in public sector | 24.5(21.1-27.8) | 23.4(20.8-25.9) | 45.3(40.4-50.2) | 54.7(49.8-59.6) |  |
| Working in private sector | 12.9(9.79-16) | 13.8(11.3-16.4) | 42.5(34.4-50.6) | 57.5(49.4-65.6) |  |
| Not working | 62.6(58.7-66.5) | 62.8(59.6-65.9) | 44.2(41-47.3) | 55.8(52.7-59) |  |
| Blood pressure |  |  |  |  | 0.974 |
| SBP<140 and DBP<90 | 67.3(63.4-71.2) | 69(65.9-72) | 43.6(40.7-46.5) | 56.4(53.5-59.3) |  |
| SBP≥140 and/or DBP≥90 OR currently on meds | 32.7(28.8-36.6) | 31(28-34.1) | 45.5(40.7-50.3) | 54.5(49.7-59.3) |  |
| BMI |  |  |  |  | 0.565 |
| 1) BMI<30 | 65.6(61.8-69.4) | 67.5(64.5-70.4) | 43.5(40.4-46.6) | 56.5(53.4-59.6) |  |
| 2) Obese BMI≥30 | 34.4(30.6-38.2) | 32.5(29.6-35.5) | 45.6(41.3-49.9) | 54.4(50.1-58.7) |  |
| Waist to Hip Ratio |  |  |  |  | 0.089 |
| Normal | 33.9(30.1-37.7) | 39.6(36.3-43) | 40.7(36.4-45) | 59.3(55-63.6) |  |
| Abnormal | 66.1(62.3-69.9) | 60.4(57-63.7) | 46.8(43.6-49.9) | 53.2(50.1-56.4) |  |
| Triglycerides |  |  |  |  | 0.015 |
| Triglycerides < 1.7 | 78.3(75.1-81.4) | 80(77.4-82.7) | 43.7(40.8-46.5) | 56.3(53.5-59.2) |  |
| Triglycerides ≥ 1.7 | 21.7(18.6-24.9) | 20(17.3-22.6) | 46.3(40.8-51.8) | 53.7(48.2-59.2) |  |
| Total cholesterol |  |  |  |  | <0.001 |
| Total Cholesterol ≥ 5.3 | 28.8(25.2-32.4) | 29.9(26.8-32.9) | 43.3(38.6-48.1) | 56.7(51.9-61.4) |  |
| Total Cholesterol < 5.3 | 71.2(67.6-74.8) | 70.1(67.1-73.2) | 44.6(41.6-47.5) | 55.4(52.5-58.4) |  |
| HDL |  |  |  |  | 0.235 |
| HDL ≥ 1.53 | 19.5(16.7-22.4) | 22.6(19.9-25.3) | 40.6(35.6-45.7) | 59.4(54.3-64.4) |  |
| HDL < 1.53 | 80.5(77.6-83.3) | 77.4(74.7-80.1) | 45.2(42.3-48.1) | 54.8(51.9-57.7) |  |
| Blood glucose |  |  |  |  | 0.533 |
| Blood glucose <6.1 | 72.3(68.8-75.8) | 73.7(71-76.3) | 43.7(40.7-46.7) | 56.3(53.3-59.3) |  |
| Blood glucose ≥6.1 and <7.0 | 11.4(9.52-13.3) | 12.5(10.6-14.4) | 42(36.4-47.7) | 58(52.3-63.6) |  |
| Blood glucose ≥7.0 or on diabetes medications | 16.3(13-19.5) | 13.8(11.7-15.9) | 48.3(41.5-55.1) | 51.7(44.9-58.5) |  |
| Smoking |  |  |  |  | 0.218 |
| Currently not smoking | 94.5(92.7-96.4) | 93(91.4-94.5) | 44.6(42-47.2) | 55.4(52.8-58) |  |
| Currently smoking | 5.46(3.62-7.29) | 7.02(5.46-8.58) | 38.1(28.3-47.9) | 61.9(52.1-71.7) |  |
| Sedentary lifestyle |  |  |  |  | 0.019 |
| <2 hrs | 22.6(19.1-26.1) | 22.4(19.9-24.9) | 44.4(39-49.7) | 55.6(50.3-61) |  |
| 2-3 hrs | 36.7(32.9-40.6) | 36.2(33.1-39.4) | 44.5(40.3-48.7) | 55.5(51.3-59.7) |  |
| >3 hrs | 40.7(36.8-44.5) | 41.4(38.2-44.6) | 43.7(39.8-47.6) | 56.3(52.4-60.2) |  |
| \* Chi square test was performed |  |  |  |  |  |

**Table S2: Prevalence of Fast food and its correlation to biophysical and biochemical risk factors of NCDs**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Meal out % (95% CI) | | | | | | | | P value | |
|
| Column % | | | Row % | | | | |
| 0 times | 1 to 3 times | > 4 times | 0 times | 1 to 3 times | | > 4 times | |  | |
| Age group |  |  |  |  |  | |  | | <0.001 | |
| 18-29 | 23(20.2-25.9) | 35.4(31.4-39.4) | 56.4(49.5-63.3) | 26.1(22.6-29.7) | 47.1(42.4-51.8) | | 26.8(22.4-31.2) | |  | |
| 30-39 | 20.9(18.6-23.2) | 29.8(26.3-33.2) | 26.3(20.7-32) | 31.3(27.8-34.7) | 52.3(48-56.5) | | 16.5(13-19.9) | |  | |
| 40-49 | 21.7(19-24.4) | 20.6(17-24.2) | 8.74(5.33-12.2) | 43.8(38.1-49.4) | 48.9(42.8-54.9) | | 7.38(4.51-10.3) | |  | |
| 50-59 | 14.3(11.7-16.8) | 8.88(6.48-11.3) | 6.15(1.56-10.7) | 52.4(43.9-60.8) | 38.2(29.9-46.4) | | 9.44(2.6-16.3) | |  | |
| 60+ | 20.1(17.1-23.1) | 5.35(3.59-7.1) | 2.4(1.16-3.65) | 73.4(66.7-80.1) | 22.9(16.3-29.5) | | 3.67(1.78-5.56) | |  | |
| Sex |  |  |  |  |  | |  | | <0.001 | |
| Men | 33.5(30.2-36.7) | 46(41.9-50.2) | 64.9(57.8-72.1) | 29.2(25.8-32.5) | 47.1(43.1-51.2) | | 23.7(20.3-27.1) | |  | |
| Women | 66.5(63.3-69.8) | 54(49.8-58.1) | 35.1(27.9-42.2) | 46(42.9-49.2) | 43.8(40.5-47.1) | | 10.2(7.63-12.7) | |  | |
| Education level |  |  |  |  |  | |  | | <0.001 | |
| No formal education | 38.8(35.6-42.1) | 12.5(10.2-14.8) | 5(2.81-7.19) | 69.9(65.6-74.2) | 26.4(22.2-30.5) | | 3.77(2.15-5.39) | |  | |
| Preparatory or less | 11.8(9.82-13.7) | 9.18(6.92-11.4) | 5.58(3.07-8.08) | 47.3(40.2-54.5) | 43.3(35.8-50.7) | | 9.38(5.32-13.4) | |  | |
| Secondary completed | 33.3(30.2-36.4) | 49.1(45-53.2) | 48.8(41.7-55.9) | 29.9(26.6-33.2) | 51.8(47.6-55.9) | | 18.3(14.9-21.8) | |  | |
| University+ | 16.1(13.4-18.8) | 29.3(25.6-32.9) | 40.6(33.7-47.6) | 23.9(19.9-27.9) | 50.9(45.8-56) | | 25.2(20.5-29.9) | |  | |
| Marital Status |  |  |  |  |  | |  | | <0.001 | |
| Never married | 17.3(14.3-20.3) | 29.2(25.3-33.1) | 53(46.1-60) | 23.5(19.2-27.7) | 46.5(41-52) | | 30.1(24.8-35.4) | |  | |
| Currently married | 71.5(68.2-74.9) | 64.9(60.9-69) | 44.6(37.7-51.4) | 43(40.2-45.7) | 45.8(42.9-48.7) | | 11.2(9.3-13.1) | |  | |
| Divorced/Separated | 2.25(1.32-3.17) | 3.21(1.42-5.01) | 1.74(0.453-3.02) | 33.3(18.9-47.6) | 55.9(39.3-72.6) | | 10.8(2.75-18.8) | |  | |
| Widowed | 8.89(6.89-10.9) | 2.6(1.24-3.95) | 0.626(0.053-1.2) | 72.9(62.1-83.7) | 25(14.2-35.8) | | 2.15(0.179-4.11) | |  | |
| Work status |  |  |  |  |  | |  | | <0.001 | |
| Working in public sector | 15.8(13.5-18.1) | 27.6(24.2-31) | 34.2(27.8-40.7) | 25.3(21.5-29) | 51.8(47-56.7) | | 22.9(18.6-27.3) | |  | |
| Working in private sector | 10.2(7.92-12.4) | 14.9(11.4-18.3) | 18.4(13-23.7) | 28.8(22.4-35.3) | 49.4(41.3-57.5) | | 21.8(15.4-28.1) | |  | |
| Not working | 74(71.1-77) | 57.5(53.5-61.6) | 47.4(40.3-54.5) | 45.9(42.8-48.9) | 41.8(38.6-45) | | 12.3(9.84-14.8) | |  | |
| Blood pressure |  |  |  |  |  | |  | | 0.003 | |
| SBP<140 and DBP<90 | 63.3(59.9-66.7) | 70.1(66.1-74.1) | 76.3(70.7-81.9) | 35.7(33.1-38.2) | 46.4(43.4-49.3) | | 18(15.4-20.6) | |  | |
| SBP≥140 and/or DBP≥90 OR currently on meds | 36.7(33.3-40.1) | 29.9(25.9-33.9) | 23.7(18.1-29.3) | 44.9(40.3-49.6) | 42.9(38-47.9) | | 12.1(9.16-15.1) | |  | |
| BMI |  |  |  |  |  | |  | | 0.003 | |
| 1) BMI<30 | 61.8(58.5-65.2) | 67.9(64.2-71.6) | 67.9(64.2-71.6) | 35.7(33-38.4) | 46(42.9-49.2) | | 18.2(15.6-20.9) | |  | |
| 2) Obese BMI≥30 | 38.2(34.8-41.5) | 32.1(28.4-35.8) | 32.1(28.4-35.8) | 44.3(40.1-48.5) | 43.8(39.4-48.1) | | 11.9(8.74-15.1) | |  | |
| Waist to Hip Ratio |  |  |  |  |  | |  | | 0.001 | |
| Normal | 30.9(27.8-34) | 40.3(36.2-44.5) | 45.6(38.4-52.8) | 31.6(28-35.1) | 48.3(43.8-52.7) | | 20.2(16.2-24.1) | |  | |
| Abnormal | 69.1(66-72.2) | 59.7(55.5-63.8) | 54.4(47.2-61.6) | 42.5(39.5-45.6) | 43(39.8-46.2) | | 14.5(12.1-16.9) | |  | |
| Triglycerides |  |  |  |  |  | |  | | 0.041 | |
| Triglycerides < 1.7 | 76.3(73.2-79.3) | 82.5(79.5-85.5) | 77.5(71.5-83.5) | 37.1(34.6-39.6) | 47.1(44.2-50) | | 15.8(13.5-18.1) | |  | |
| Triglycerides ≥ 1.7 | 23.7(20.7-26.8) | 17.5(14.5-20.5) | 22.5(16.5-28.5) | 44.2(38.8-49.6) | 38.2(32.8-43.7) | | 17.6(12.9-22.3) | |  | |
| Total cholesterol |  |  |  |  |  | |  | | <0.001 | |
| Total cholesterol ≥ 5.3 | 36.8(33.6-40.1) | 25.3(21.7-29) | 22.1(15.6-28.6) | 48.6(43.8-53.3) | 39.2(34.4-44) | | 12.2(8.36-16) | |  | |
| Total cholesterol < 5.3 | 63.2(59.9-66.4) | 74.7(71-78.3) | 77.9(71.4-84.4) | 34.4(31.9-37) | 47.8(44.8-50.8) | | 17.8(15.3-20.2) | |  | |
| HDL |  |  |  |  |  | |  | | <0.001 | |
| HDL ≥ 1.53 | 24.7(21.9-27.5) | 21.2(17.9-24.4) | 12.4(8.31-16.6) | 45.1(40.1-50.1) | 45.4(40.1-50.7) | | 9.51(6.38-12.6) | |  | |
| HDL < 1.53 | 75.3(72.5-78.1) | 78.8(75.6-82.1) | 87.6(83.4-91.7) | 36.8(34.2-39.4) | 45.2(42.3-48.2) | | 17.9(15.5-20.4) | |  | |
| Blood glucose |  |  |  |  |  | |  | | <0.001 | |
| Blood glucose <6.1 | 66.6(63.5-69.7) | 75.2(71.7-78.8) | 83.5(79.3-87.8) | 35.1(32.4-37.7) | 46.5(43.5-49.6) | | 18.4(15.8-21) | |  | |
| Blood glucose≥6.1 AND <7.0 | 13.3(11.4-15.1) | 11.9(9.63-14.2) | 10.1(6.55-13.6) | 42.2(36.7-47.7) | 44.4(38.5-50.4) | | 13.4(9-17.7) | |  | |
| Blood glucose ≥7.0 or on diabetes medications | 20.1(17.3-23) | 12.8(9.78-15.9) | 6.43(4.01-8.84) | 53.1(46.2-60.1) | 39.8(32.6-46.9) | | 7.09(4.46-9.73) | |  | |
| Smoking |  |  |  |  |  | |  | | <0.001 | |
| Currently not smoking | 96.1(94.6-97.6) | 93.8(91.9-95.6) | 87.3(83.2-91.4) | 39.6(37.2-42) | 45.4(42.7-48) | | 15.1(13-17.2) | |  | |
| Currently smoking | 3.91(2.45-5.38) | 6.22(4.38-8.05) | 12.7(8.55-16.8) | 23.7(15.6-31.8) | 44.1(34.4-53.9) | | 32.2(23.1-41.2) | |  | |
| Sedentary lifestyle |  |  |  |  |  | |  | | <0.001 | |
| <2 hrs | 22.6(19.6-25.6) | 24.6(21.1-28.1) | 13.8(9.52-18) | 39.4(34.4-44.5) | 50.5(45.2-55.9) | | 10(6.97-13.1) | |  | |
| 2-3 hrs | 34.3(31.2-37.4) | 37.7(33.8-41.7) | 38.6(31.5-45.8) | 36.2(32.5-39.9) | 46.8(42.5-51) | | 17(13.3-20.7) | |  | |
| >3 hrs | 43.1(39.8-46.4) | 37.7(33.6-41.7) | 47.6(40.5-54.7) | 40.2(36.6-43.8) | 41.3(37.2-45.3) | | 18.5(15.3-21.8) | |  | |
| \* Chi square test was performed | |  |  |  | |  | |  | |  | |

**Table S3: Prevalence of Type of oil used of cooking and its correlation to biophysical and biochemical risk factors of NCDs**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Type of cooking oil % (95% CI) | | | | | | P value |
|
| Column % | | | Row % | | |
| Veg | Butter | Others | Veg | Butter | Others |  |
| Age group |  |  |  |  |  |  | 0.084 |
| 18-29 | 33.6(30.9-36.2) | 40.6(26.9-54.3) | 31.6(24.9-38.3) | 86.9(83.9-90) | 5.23(2.73-7.72) | 7.82(5.86-9.79) |  |
| 30-39 | 25.9(23.8-28) | 16.7(9.52-24) | 28.2(20.7-35.7) | 88(84.9-91.1) | 2.83(1.64-4.01) | 9.18(6.27-12.1) |  |
| 40-49 | 19.1(16.9-21.3) | 24(13.1-34.9) | 15.1(10.9-19.4) | 87.9(84.6-91.2) | 5.47(2.72-8.22) | 6.65(4.7-8.61) |  |
| 50-59 | 10.8(8.99-12.6) | 9.31(2.64-16) | 10.6(6.6-14.6) | 88(83.8-92.2) | 3.77(1.02-6.51) | 8.27(5.02-11.5) |  |
| 60+ | 10.6(8.96-12.3) | 9.33(4.39-14.3) | 14.5(9.87-19.1) | 85.2(81-89.3) | 3.71(1.81-5.62) | 11.1(7.45-14.8) |  |
| Sex |  |  |  |  |  |  | <0.001 |
| Men | 43.8(41.1-46.5) | 38.9(26.5-51.3) | 46.2(39-53.4) | 87.3(85.1-89.5) | 3.85(2.37-5.33) | 8.82(7.16-10.5) |  |
| Women | 56.2(53.5-58.9) | 61.1(48.7-73.5) | 53.8(46.6-61) | 87.3(85.1-89.5) | 4.71(3.13-6.29) | 7.99(6.3-9.68) |  |
| Education level |  |  |  |  |  |  | <0.001 |
| No formal education | 21.6(19.6-23.6) | 20.6(12.9-28.4) | 24.9(19.1-30.8) | 86.3(83.6-89.1) | 4.1(2.66-5.54) | 9.56(7.18-11.9) |  |
| Preparatory or less | 9.72(8.3-11.1) | 14.4(4.95-23.8) | 7.32(4.3-10.3) | 87.3(82.4-92.2) | 6.42(2.05-10.8) | 6.29(3.67-8.91) |  |
| Secondary completed | 42.3(39.6-45.1) | 35.9(22.7-49) | 50.1(42.7-57.4) | 86.6(84.1-89) | 3.64(1.91-5.38) | 9.8(7.98-11.6) |  |
| University+ | 26.4(24-28.8) | 29.1(17-41.2) | 17.7(10.1-25.2) | 89.4(85.9-92.9) | 4.9(2.51-7.28) | 5.72(2.97-8.47) |  |
| Marital Status |  |  |  |  |  |  | 0.162 |
| Never married | 27.9(25.2-30.6) | 36(22.4-49.7) | 27.9(21.3-34.6) | 86.2(82.7-89.7) | 5.53(2.76-8.3) | 8.25(5.94-10.6) |  |
| Currently married | 64(61.2-66.8) | 58.5(45.1-71.8) | 66.6(59.7-73.5) | 87.3(85.5-89.2) | 3.96(2.78-5.14) | 8.7(7.19-10.2) |  |
| Divorced/Separated | 2.76(1.74-3.78) | 1.77(-0.277-3.81) | 2.72(0.449-4.98) | 88.8(81-96.7) | 2.82(0.87-8.80) | 8.37(1.3-15.4) |  |
| Widowed | 5.32(4.1-6.53) | 3.74(0.66-6.83) | 2.74(1.06-4.42) | 92.2(88.3-96.1) | 3.23(0.593-5.86) | 4.55(1.71-7.38) |  |
| Work status |  |  |  |  |  |  | <0.001 |
| Working in public sector | 23.8(21.6-26) | 20.3(9.67-30.9) | 25.5(20-30.9) | 87.4(84.5-90.2) | 3.7(1.57-5.82) | 8.94(6.95-10.9) |  |
| Working in private sector | 14.3(12.1-16.5) | 10.7(2.54-18.9) | 6.37(3.29-9.45) | 92.6(89.2-96) | 3.46(0.699-6.21) | 3.95(1.98-5.93) |  |
| Not working | 61.9(59.3-64.6) | 69(56.8-81.2) | 68.1(62.1-74.2) | 86.2(84-88.3) | 4.77(3.33-6.21) | 9.06(7.38-10.7) |  |
| Blood pressure |  |  |  |  |  |  | 0.048 |
| SBP<140 and DBP<90 | 67.9(65.2-70.5) | 74.4(63.8-85) | 68.3(62.2-74.5) | 86.9(84.9-88.9) | 4.73(3.3-6.16) | 8.37(6.83-9.92) |  |
| SBP≥140 and/or DBP≥90 OR currently on meds or diagnosed by a physician | 32.1(29.5-34.8) | 25.6(15-36.2) | 31.7(25.5-37.8) | 88.2(85.8-90.5) | 3.49(1.91-5.07) | 8.32(6.55-10.1) |  |
| BMI |  |  |  |  |  |  | 0.019 |
| 1) BMI<30 | 67.3(64.7-69.8) | 69.4(57.9-80.8) | 57.7(50.6-64.8) | 88.2(86.3-90.2) | 4.52(3.09-5.94) | 7.24(5.79-8.69) |  |
| 2) Obese BMI≥30 | 32.7(30.2-35.3) | 30.6(19.2-42.1) | 42.3(35.2-49.4) | 85.5(82.8-88.1) | 3.97(2.3-5.64) | 10.6(8.47-12.7) |  |
| Waist to Hip Ratio |  |  |  |  |  |  | <0.001 |
| Normal | 38.1(35.4-40.8) | 40.1(26.5-53.7) | 23.7(15.5-32) | 90.1(87.2-93.1) | 4.68(2.58-6.77) | 5.18(3.01-7.35) |  |
| Abnormal | 61.9(59.2-64.6) | 59.9(46.3-73.5) | 76.3(68-84.5) | 86.1(84.2-88) | 4.1(2.79-5.42) | 9.77(8.3-11.2) |  |
| Triglycerides |  |  |  |  |  |  | 0.161 |
| Triglycerides < 1.7 | 78.7(76.5-81) | 85.4(76.1-94.8) | 81.4(76.2-86.6) | 86.7(84.9-88.6) | 4.67(3.4-5.95) | 8.58(7.19-9.97) |  |
| Triglycerides ≥ 1.7 | 21.3(19-23.5) | 14.6(5.2-23.9) | 18.6(13.4-23.8) | 89.5(86.5-92.4) | 3.04(0.957-5.13) | 7.49(5.28-9.7) |  |
| Total cholesterol |  |  |  |  |  |  | 0.066 |
| Total Cholesterol ≥ 5.3 | 29.9(27.4-32.4) | 26.3(15.6-36.9) | 26.6(19-34.2) | 88.6(85.6-91.6) | 3.87(2.15-5.58) | 7.55(4.97-10.1) |  |
| Total Cholesterol < 5.3 | 70.1(67.6-72.6) | 73.7(63.1-84.4) | 73.4(65.8-81) | 86.8(84.9-88.6) | 4.53(3.15-5.92) | 8.69(7.38-10) |  |
| HDL |  |  |  |  |  |  | 0.696 |
| HDL ≥ 1.53 | 21.1(19-23.2) | 17.3(9.49-25.1) | 25.1(17.5-32.7) | 86.6(82.9-90.3) | 3.53(1.93-5.13) | 9.85(6.41-13.3) |  |
| HDL < 1.53 | 78.9(76.8-81) | 82.7(74.9-90.5) | 74.9(67.3-82.5) | 87.5(85.8-89.2) | 4.55(3.22-5.88) | 7.95(6.76-9.14) |  |
| Blood glucose |  |  |  |  |  |  | 0.007 |
| Blood glucose <6.1 | 73(70.6-75.3) | 75.7(66.6-84.8) | 72.4(66.5-78.3) | 87.2(85.3-89.2) | 4.49(3.09-5.9) | 8.28(6.82-9.74) |  |
| Blood glucose ≥6.1 AND <7.0 | 11.7(10.2-13.2) | 15.9(9.06-22.8) | 13.4(9.13-17.7) | 85(81.2-88.7) | 5.73(3.39-8.07) | 9.32(6.32-12.3) |  |
| Blood glucose ≥7.0 or on diabetes medications | 15.3(13.3-17.3) | 8.37(2.24-14.5) | 14.1(9.68-18.6) | 89.6(86.5-92.8) | 2.44(0.622-4.25) | 7.93(5.31-10.6) |  |
| Smoking |  |  |  |  |  |  | <0.001 |
| Currently not smoking | 94.4(93.2-95.6) | 90.7(82.8-98.6) | 88.7(84.4-93) | 87.9(86.3-89.5) | 4.19(3.08-5.31) | 7.91(6.69-9.12) |  |
| Currently smoking | 5.61(4.39-6.84) | 9.3(1.4-17.2) | 11.3(6.96-15.6) | 78.5(70.9-86) | 6.45(0.911-12) | 15.1(9.23-21) |  |
| Sedentary lifestyle |  |  |  |  |  |  | 0.003 |
| <2 hrs | 22.4(20.1-24.6) | 24.2(14-34.4) | 22.8(16.8-28.7) | 86.9(83.8-90) | 4.64(2.55-6.74) | 8.47(6.05-10.9) |  |
| 2-3 hrs | 35.9(33.3-38.5) | 33.3(21.2-45.5) | 44.5(37.1-51.9) | 85.9(83-88.7) | 3.94(2.25-5.63) | 10.2(7.86-12.6) |  |
| >3 hrs | 41.7(39.1-44.4) | 42.5(29.2-55.8) | 32.7(26.2-39.3) | 88.9(86.5-91.2) | 4.46(2.55-6.37) | 6.68(5.16-8.2) |  |
| \* Chi square test was performed | | |  |  |  |  |  |

**Table S4: Model selection,** **Akaike's information criterion and Bayesian information criterion**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | N | df | AIC | BIC |
| One class | 4,320 | 6 | 23290.87 | 23329.1 |
| Two class | 4,320 | 13 | 23224.59 | 23307.42 |

**Table S5:** **Latent class marginal probabilities of dietary habits as indicators for waist-to-hip ratio (x10-2)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | | |
| Class | **Marginal probability** | [**95% Conf. Interval]** | | | |
| 1 | 13.95 4.87 | 6.82 – 26.44 | | |
| 2 | 86.05 4.87 | 73.56 – 93.18 | | |
| Table S6: Latent Class marginal means of dietary habits as indicators for waist-to-hip ratio (x10-2) | | | | | | |
|  | **Marginal mean** | **[95% Conf. Interval]** | | |
| Class 1 | | | | | | |
| Waist-to-hip ratio |  |  | |  |
| Normal | 21.67 8.17 | 9.72 – 41.53 | | |
| Abnormal | 78.33 8.17 | 58.47 – 90.28 | | |
| Class 2 | | | | | | |
| Waist-to-hip ratio |  |  | |  |
| Normal | 35.85 2.06 | 31.93 – 39.98 | | |
| Abnormal | 64.15 2.06 | 60.02 – 68.07 | | |

**Table S7: Latent class marginal probabilities of dietary habits extended to sociodemographic factors (x10-2)**

|  |  |  |
| --- | --- | --- |
| **Class** | **Margin** | **[95% Conf. Interval]** |
| **1** | 67.30 | 65.51 – 69.03 |
| **2** | 32.70 | 30.97 – 34.49 |

**Table** **S8: Latent class marginal means of dietary habits extended to sociodemographic factors (x10-2)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Margin** | | **95% CI** | | **Margin** | | | | **95% CI** | | |
| **Class** | **Class 1** | | | | **Class 2** | | | | | | | | |
| **Eating Outside the home** | | | | | | | |  | | | | |
| 0 | 39.96 | 38.10 - 41.85 | | | 78.75 | | 76.32 - 80.99 | | | | | |
| 1-3 times | 45.28 | 43.42 - 47.16 | | | 18.91 | | 16.78 - 21.25 | | | | | |
| 4 or more times | 14.76 | 13.49 - 16.12 | | | 2.34 | | 1.62 - 3.37 | | | | | |
| **Fruit/Vegetable Intake** | | | | | | | | | |  | | |
| >5 servings of fruit/veg on average/day | 39.75 | 37.95 - 41.59 | | | 32.44 | | 29.93 - 35.05 | | | | | |
| <5 servings of fruit/veg on average/day | 60.25 | 58.41 - 62.05 | | | 67.56 | | 64.95 - 70.07 | | | | | |
| **Fat Used for Cooking** | | | | | |  | | | |  | | |
| Vegetable oil | 87.84 | 86.58 - 89.00 | | | 87.73 | | 85.83 - 89.40 | | | | | |
| Butter | 3.08 | 2.50 - 3.80 | | | 4.81 | | 3.78 - 6.12 | | | | | |
| Other | 9.07 | 8.07 - 10.19 | | | 7.46 | | 6.16 - 9.01 | | | | | |
| **Sedentary Lifestyle** |  |  | |  |  | |  | | | |  | |
| 1 | 61.82 | 59.99 - 63.61 | | | 58.89 | | 56.17 - 61.55 | | | | | |
| 2 | 38.18 | 36.39 - 40.01 | | | 41.11 | | 38.45 - 43.83 | | | | | |
| **Marital Status** |  |  | |  |  | |  | | | |  | |
| Not Married | 24.18 | 22.63 - 25.80 | | | 2.76 | | 1.89 - 4.02 | | | | | |
| Married | 73.62 | 71.95 - 75.22 | | | 72.25 | | 69.75 - 74.61 | | | | | |
| Separated / Divorced | 1.88 | 1.43 - 2.46 | | | 4.20 | | 3.25 - 5.42 | | | | | |
| Widowed | 0.32 | 0.15 - 0.68 | | | 20.79 | | 18.66 - 23.10 | | | | | |
| **Age groups** |  |  | |  |  | |  | | | |  | |
| 18-29 | 36.19 | 34.41 - 38.01 | | | 3.52 | | 2.49 - 4.95 | | | | | |
| 30-39 | 40.96 | 39.15 - 42.81 | | | 10.34 | | 8.55 - 12.45 | | | | | |
| 40-49 | 19.04 | 17.58 - 20.60 | | | 21.40 | | 19.15 - 23.83 | | | | | |
| 50-59 | 3.24 | 2.61 - 4.02 | | | 27.59 | | 25.20 - 30.11 | | | | | |
| 60+ | 0.55 | 0.31 - 0.98 | | | 37.15 | | 34.43 - 39.97 | | | | | |
| **Education level** |  |  | |  |  | |  | | | |  | |
| No formal education | 1.89 | 1.10 - 3.22 | | | 86.47 | | 83.69 - 88.83 | | | | | |
| Preparatory or less | 11.15 | 9.85 - 12.59 | | | 11.55 | | 9.47 - 14.03 | | | | | |
| Secondary completed | 55.73 | 53.75 - 57.69 | | | 1.98 | | 1.08 - 3.61 | | | | | |
| University+ | 31.23 | 29.50 - 33.01 | | | 0.00 | | 0.00 - 100.00 | | | | | |
| **Work status** |  |  | |  |  | |  | | | |  | |
| Working in public sector | 34.65 | 32.89 - 36.46 | | | 2.47 | | 1.63 - 3.73 | | | | | |
| Working in private sector | 12.40 | 11.22 - 13.69 | | | 7.41 | | 6.02 - 9.09 | | | | | |
| Not working | 52.94 | 51.07 - 54.81 | | | 90.12 | | 88.11 - 91.82 | | | | | |

**Table S9: Latent class marginal probabilities of sociodemographic factors with blood glucose (x10-2)**

|  |  |  |
| --- | --- | --- |
| **Class** | **Margin** | **[95% Conf. Interval]** |
| **1** | 63.10 | 48.85 - 75.38 |
| **2** | 36.90 | 24.62 - 51.15 |

**Table S10: Latent class marginal means of sociodemographic factors with blood glucose (x10-2)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | |  | |  | |  | |
|  | **Margin** | **95% CI** | | | | **Margin** | | **95% CI** | | | |
| **Class** | **Class 1** | | | | | **Class 2** | | | | | |
| **Blood Glucose** |  |  | |  | |  | |  | |  | |
| **1) Blood glucose <6.1** | 72.06 | 66.39 - 77.10 | | | | 62.29 | | 53.57 - 70.28 | | | |
| **2) Blood glucose ≥ 6.1 and <7.0** | 21.26 | 17.58 - 25.46 | | | | 5.32 | | 1.46 - 17.62 | | | |
| **3) Blood glucose ≥ 7.0** | 6.68 | 3.43 - 12.62 | | | | 32.39 | | 25.61 - 40.00 | | | |

**Table S11: Goodness of Fit**

|  |  |
| --- | --- |
| Goodness of fit statistics | Value |
| Root mean squared error of approximation | 0.024 |
| PCLOSE | 1 |
| Comparative fit index | 0.974 |
| Tucker Lewis index | 0.947 |
| Standardized root mean squared residual | 0.015 |
| Coefficient of determination | 0.297 |