**Supplemental Table 3.** Age- and sex-adjusted change in body mass index (BMI), fat percentage and waist circumference over time by categories of urinary ketone status among participants who did not have hepatic steatosis at baseline and subsequent visit (n=99,869)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Ketonuria change status | Ketonuria status at 1st and 2nd visits | No of participants | **BMI** at baseline | **BMI** at visit 2 | **BMI** at last visit | **BMI** change (visit 2-visit 1) | **BMI** change (last visit-visit 1) |
|  | 1st visit | 2nd visit |  |  |  |  |  |  |
| None (G1) | negative | negative | 79,182 | 21.78 (21.76-21.79) | 22.03 (22.01-22.05) | 22.32 (22.30-22.34) | 0.25 (0.24-0.26) | 0.54 (0.53-0.55) |
| Regressed (G2) | Positive | negative | 11,068 | 21.41 (21.36-21.45) | 21.85 (21.81-21.90) | 22.16 (22.12-22.21) | 0.44 (0.42-0.46) | 0.75 (0.73-0.78) |
| Developed (G3) | negative | positive | 7,659 | 21.66 (21.60-21.71) | 21.67 (21.62-21.72) | 22.10 (22.04-22.15) | 0.01 (-0.02-0.03) | 0.44 (0.41-0.46) |
| Persistent (G4) | Positive | Positivie | 1,960 | 21.41 (21.31-21.52) | 21.60 (21.49-21.70) | 22.04 (21.93-22.15) | 0.18 (0.13-0.22) | 0.63 (0.57-0.68) |
|  |  |  | **Fat percent** at baseline | **Fat percent** at visit 2 | **Fat percent** at last visit | **Fat percent** change(visit 2-visit 1) | **Fat percent** change(last visit- visit 1) |
|  | 1st visit | 2nd visit |  |  |  |  |  |  |
| None (G1) | negative | negative | 79,182 | 24.74 (24.70-24.77) | 25.32 (25.29-25.36) | 25.99 (25.95-26.03) | 0.61 (0.59-0.63) | 1.27 (1.24-1.29) |
| Regressed (G2) | Positive | negative | 11,068 | 24.46 (24.36-24.55) | 25.17 (25.07-25.26) | 25.92 (25.82-26.02) | 0.73 (0.68-0.79) | 1.47 (1.41-1.54) |
| Developed (G3) | negative | positive | 7,659 | 24.63 (24.52-24.74) | 25.04 (24.93-25.15) | 25.81 (25.69-25.93) | 0.43 (0.37-0.50) | 1.19 (1.11-1.27) |
| Persistent (G4) | Positive | Positivie | 1,960 | 24.37 (24.15-24.59) | 24.78 (24.56-25.01) | 25.60 (25.36-25.83) | 0.44 (0.31-0.57) | 1.24 (1.09-1.40) |
|  |  |  | **waist circumference** at baseline a | **waist circumference** at visit 2 | **waist circumference** at last visit | **waist circumference** change(visit 2-visit 1) | **waist circumference** change(last visit- visit 1) |
|  | 1st visit | 2nd visit |  |  |  |  |  |  |
| None (G1) | negative | negative | 67,267 | 77.14 (77.09-77.19) | 77.65 (77.61-77.70) | 77.92 (77.87-77.96) | 0.32 (0.29-0.35) | 0.53 (0.49-0.56) |
| Regressed (G2) | Positive | negative | 9,652 | 76.06 (75.93-76.19) | 76.97 (76.85-77.09) | 77.31 (77.19-77.44) | 0.70 (0.62-0.78) | 1.00 (0.91-1.09) |
| Developed (G3) | negative | positive | 6,466 | 76.70 (76.54-76.86) | 76.55 (76.40-76.70) | 77.10 (76.95-77.25) | -0.32 (-0.42--0.22) | 0.18 (0.08-0.29) |
| Persistent (G4) | Positive | Positivie | 1,735 | 75.96 (75.66-76.27) | 75.98 (75.69-76.27) | 76.61 (76.31-76.91) | -0.16 (-0.35-0.03) | 0.44 (0.23-0.65) |

a Among 85,120 participants with available waist circumference

Abbreviations: BMI, body mass index; G1, no ketonuria at baseline and no ketouria at 2nd visit; G2, ketonuria at baseline and no ketonuria at 2nd visit;G3, no ketonuria at baseline and ketouria at 2nd visit; and G4, ketonuria at baseline and ketouria at 2nd visit.