**Supplemental Table 6. Evaluation of changes in odds ratios produced by serial addition of potential confounders to logistic models examing the relationship between CDC/AAP defined periodontitis and impaired glucose tolerance**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Iteration 1** |  | **Iteration 2** |  | **Iteration 3** |  | **Iteration 4** |  | **Iteration 5** |  |
| **Potential confounders** | **Crude OR** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 1 vs. crude** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 2 vs. 1** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 3 vs. 2** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 4 vs. 3** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 5 vs. 4** |
|  | 2.57 |  |  |  |  |  |  |  |  |  |  |
| **Smoking** |  | 2.9 | -11% | 2.04 | -13% | **1.8** | **-17%** | NA | NA | NA | NA |
| **Sex** |  | 2.87 | -10% | 2.02 | -12% | 1.76 | -14% | 1.94 | -11% | 2 | -4% |
| **Race** |  | 2.71 | -5% | 1.78 | 8% | 1.61 | 3% | 1.8 | 0% | 1.96 | -2% |
| **Activity Level** |  | 2.67 | -4% | 1.96 | -8% | 1.77 | -14% | **1.94** | **-11%** | NA | NA |
| **Energy intake** |  | 2.53 | 2% | 1.85 | 1% | 1.63 | 0 | 1.79 | 1% | 1.92 | 2% |
| **Alcohol** |  | 2.46 | 5% | 1.8 | 6% | 1.62 | 1% | 1.77 | 3% | 1.9 | 3% |
| **Age** |  | **1.86** | **52%** | NA | NA | NA | NA | NA | NA | NA | NA |
| **BMI** |  | 2.57 | 0% | 1.84 | 2% | 1.67 | -5% | 1.8 | 0% | 1.95 | -1% |
| **Education** |  | 2.29 | 14% | **1.63** | **27%** | NA | NA | NA | NA | NA | NA |
|  |  |  |  |  |  |  |  |  |  |  |  |

**Supplemental Table 6 Continued**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Iteration 6** |  | **Iteration 7** |  | **Iteration 8** |  | **Iteration 9** |  |  |  |
| **Potential Confounders** |  | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 6 vs. 5** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 7 vs. 6** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 8 vs. 7** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 9 vs. 8** |  |  |
| **Smoking** |  | NA | NA | NA | NA | NA | NA | NA | NA |  |  |
| **Sex** |  | NA | NA | NA | NA | NA | NA | NA | NA |  |  |
| **Race** |  | 2.03 | -2% | **1.97** | **-3%** | NA | NA | NA | NA |  |  |
| **Activity Level** |  | NA | NA | NA | NA | NA | NA | NA | NA |  |  |
| **Energy intake** |  | 1.95 | 4% | 1.93 | 0% | 1.97 | 0% | 1.91 | 1% |  |  |
| **Alcohol** |  | **1.93** | **5%** | NA | NA | NA | NA | NA | NA |  |  |
| **Age** |  | NA | NA | NA | NA | NA | NA | NA | NA |  |  |
| **BMI** |  | 2 | 0% | 1.92 | 1% | **1.92** | **4%** | NA | NA |  |  |
| **Education** |  | NA | NA | NA | NA | NA | NA | NA | NA |  |  |

**Supplemental Table 6 Continued**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Iteration 10** |  | **Iteration 11** |  | **Iteration 12** |  | **Iteration 13** |  |  |  |
| **Potential mediators** |  | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 10 vs. 4** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 11 vs. 10** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 12 vs. 11** | **Intermediate adjusted infection OR** | **Change in estimate: Iteration 13 vs. 12** |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Systolic blood pressure** |  | 1.84 | 9% | **1.75** | **7%** | NA | NA | NA | NA |  |  |
| **Total cholesterol/HDL ratio** |  | **1.82** | **11%** | NA | NA | NA | NA | NA | NA |  |  |
| **CRP** |  | 1.97 | -2% | 1.86 | -4% | 1.78 | -3% | **1.81** | **-1%** |  |  |
| **WBC** |  | 1.99 | -4% | 1.88 | -5% | **1.8** | **-5%** | NA | NA |  |  |

**OR**=Odds Ratio; All ORs correspond to the observed OR for periodontal infection predicting prediabetes. In these models, the main infection exposure variable is CDC/AAP defined severe periodontitis

**NA**=not applicable because the infection OR is already adjusted for the corresponding covariable in column A

**Iteration 1:** each intermediate adjusted OR corresponds to the OR observed for periodontal infection after adjustment for the corresponding covariable in row A (i.e., each model in iteration 1 includes periodontal infection + one additional variable)

**Iterations 2-9**: each intermediate adjusted OR corresponds to the OR observed for periodontal infection after adjustment for the corresponding covariable in row A + the covariable from the previous iteration that produced the greatest change in estimate (i.e., each model in iteration 2 includes periodontal infection + age + corresponding covariable in row A; the number of covariables in iteration 2=2; accordingly, iteration 3 ORs are adjusted for age+education+corresponding covariable in column A and the number of covariables = 3 ).

**Iterations 10-13:** Consider the possible mediators systolic blood pressure, total cholesterol-to-HDL ratio, C-reactive protein and white blood cell count which are not allowed to enter the modeling iterations until all possible confounders have been entered; all mediator models are also adjusted for age, education, smoking and activity level based on results from iterations 1-4 in which confounding was >10%