**Table S8 Moderating effect of Vit C intake on the relationship between *Ruminococcus* and IL-8 level**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | | **Controlling effect** | | | | | **Main effect** | | **Interaction effect** |
| **Age** | **BMI** | **FBG** | **MS** | **UGLU** | ***Ruminococcus*** | **Vit C** | ***Ruminococcus* × Vit C** |
| Step 1 | β | 0.28 | 0.05 | -0.17 | -0.09 | 0.09 |  |  |  |
| t | 2.18 | 0.43 | -1.28 | -0.69 | 0.70 |  |  |  |
| p | 0.03 | 0.67 | 0.21 | 0.49 | 0.49 |  |  |  |
| ΔF |  |  | 1.94 |  |  |  |  |  |
| ΔR2 |  |  | 0.13 |  |  |  |  |  |
|  | p |  |  | 0.10 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Step 2 | β | 0.25 | 0.04 | -0.14 | -0.04 | -0.09 | 0.06 | -0.22 |  |
| t | 2.01 | 0.38 | -1.09 | -0.36 | -0.73 | 0.44 | -1.86 |  |
| p | 0.04 | 0.70 | 0.28 | 0.72 | 0.47 | 0.67 |  |  |
| ΔF |  |  |  |  |  | 4.54 |  |  |
| ΔR2 |  |  |  |  |  | 0.17 |  |  |
|  | p |  |  |  |  |  | 0.01 |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Step 3 | β | 0.24 | 0.04 | -0.12 | -0.09 | 0.06 | 0.36 | -0.22 | -0.09 |
| t | 1.91 | 0.38 | -0.84 | -0.74 | 0.46 | 2.24 | -1.84 | 0.51 |
| p | 0.06 | 0.71 | 0.40 | 0.46 | 0.65 | 0.03 | 0.07 | 0.61 |
| ΔF |  |  |  |  |  |  |  | 0.26 |
| ΔR2 |  |  |  |  |  |  |  | 0.00 |
|  | p |  |  |  |  |  |  |  | 0.61 |

Abbreviations: FBG: fasting blood glucose; UGLU: urine glucose level; MS: menstrual status; BMI: body mass index