**sTable1. Logistic Analysis of Protein Supply Ratio and Obesity in Children and Adolescents in the United States,NHANES 2011-2020 Quartile of estimated energy supply ratio of dietary protein**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Q1** | **Q2** | | **Q3** | | **Q4** | |
|  |  | **OR(95%CI)e** | ***P*** | **OR(95%CI)e** | ***P*** | **OR(95%CI)e** | ***P*** |
| **Aged 6-11 years** | 901 | 853 |  | 746 |  | 427 |  |
| Unadjusted | Ref | 1.30(0.93,1.82) | 0.120 | 1.30(0.90,1.88) | 0.200 | 1.54(0.94,2.55) | 0.087 |
| Model1a | Ref | 1.21(0.88,1.67) | 0.200 | 1.19(0.82,1.72) | 0.300 | 1.37(0.82,2.27) | 0.200 |
| Model2b | Ref | 1.19(0.86,1.65) | 0.300 | 1.17(0.81,1.70) | 0.400 | 1.34(0.80,2.24) | 0.300 |
| Model3c | Ref | 1.34(0.94,1.92) | 0.100 | 1.32(0.86,2.03) | 0.200 | 1.35(0.76,2.42) | 0.300 |
| Model4d | Ref | 1.35(0.94,1.93) | 0.100 | 1.33(0.86,2.04) | 0.200 | 1.38(0.76,2.51) | 0.300 |
| **Aged 12-19 years** | 374 | 358 |  | 341 |  | 327 |  |
| Unadjusted | Ref | 1.59(0.92,2.74) | 0.095 | 1.03(0.60,1.76) | >0.99 | 0.95(0.56,1.62) | 0.900 |
| Model1a | Ref | 1.63(0.90,2.95) | 0.100 | 1.05(0.61,1.81) | 0.900 | 0.94(0.56,1.58) | 0.800 |
| Model2b | Ref | 1.64(0.90,2.98) | 0.110 | 1.06(0.61,1.83) | 0.800 | 0.95(0.56,1.62) | 0.800 |
| Model3c | Ref | 1.75(0.90,3.40) | 0.100 | 0.98(0.56,1.70) | >0.99 | 1.05(0.57,1.93) | 0.900 |
| Model4d | Ref | 1.78(0.90,3.52) | 0.100 | 0.98(0.54,1.79) | 0.900 | 1.01(0.55,1.85) | 0.900 |

aModel 1, adjusted for age, gender, ethnicity;

bModel 2, adjusted for model 1 plus household income-to-poverty ratio;

cModel 3, according to model 2 plus the concentration of serum total cholesterol and high-density lipoprotein, for adolescents, the concentration of triglycerides, low-density lipoprotein, glycosylated hemoglobin and fasting blood glucose was adjusted on this basis;

dModel 4, adjusted for Model 3 plus total energy intake and physical activity.

eOR, odds ratio.CI = Confidence Interval.