

Table S1. Results of regression analyses on children's mental health according to types of grain dishes among Japanese school children ($n = 281$)

| Food category | Behavior problems (SDQ score) | Prosocial behavior (SDQ score) |
|--------------------------------------|----------------------------------|-----------------------------------|
| | coefficient (95%CI) | coefficient (95%CI) |
| Model 1 | | |
| Rice | -7.71 (-15.3 to -0.08) | -0.18 (-12.3 to 11.90) |
| Bread | -7.12 (-14.70 to 0.46) | 1.99 (-10.0 to 14.00) |
| Model 2 | | |
| Rice | -10.9 (-19.9 to -1.8) | 0.34 (-14.2 to 14.84) |
| Bread | -7.6 (-16.3 to 1.0) | 0.48 (-13.3 to 14.31) |
| Vegetable dishes | 0.91 (-4.52 to 6.34) | 1.00 (-7.7 to 9.70) |
| Meat, fish, egg, and soy-bean dishes | 0.01 (-6.25 to 6.27) | -5.69 (-15.7 to 4.35) |
| Milk and Milk products | -3.07 (-8.74 to 2.59) | -1.33 (-10.4 to 7.75) |
| Fruits | -7.07 (-13.8 to -0.37) | 7.28 (-3.4 to 18.02) |
| Confectionaries | -2.00 (-11.4 to 7.45) | -4.95 (-20.1 to 10.19) |

CI, confidence interval; SD, standard deviation; SDQ, Strength and Difficulties Questionnaire.

All variables ranged from 0 to 100.

Model 1: Inclusion of rice and bread dishes with adjustment for child's sex, physical activity, and bedtime, household income and cohabitation status, caregiver's K6, and mother's age and employment.

Model 2: Model 1 with further adjustment for vegetable dishes, fish and meat dishes, milk and milk products, fruits, and confectionaries.