**Supplementary material**

**Self-reported dietary management behaviors and dietary intake among Chinese adults with diabetes: a population-based study**

**Yixu Liu [1,†], Dongmei Yu [2,†], Jiayou Luo [1], Shuya Cai [2], Ping Ye [3], Zhenzhen Yao [1], Miyang Luo [1,*] and Liyun Zhao [2,*]**

[1] Xiangya School of Public Health, Central South University, Changsha 410008, China
[2] Key Laboratory of Trace Element Nutrition of National Health Commission, Chinese Center for Disease Control and Prevention, National Institute for Nutrition and Health, Beijing 100050, China
[3] Yuxi Center for Disease Control and Prevention, Yuxi 653100, China
[*] Correspondence: miyangluo@csu.edu.cn; zhaoly@ninh.chinacdc.cn

[†] These authors contributed equally to this work.

**Contents**
Table S1. CHDI components and criteria for scoring.
Table S2. Characteristics of adults with diabetes across the three rounds of China National Nutrition Surveys.
Table S3. CHDI score of adults with diabetes in the three rounds of China National Nutrition Surveys.

**Table S1.** CHDI components and criteria for scoring [1].

| CHDI Component | Score Range | Standard for Maximum Score | Standard for Minimum Score of Zero |
|---|---|---|---|
| Food variety | 0–10 | ≥12 kind | ≤5 kind |
| Refined grains | 0–5 | ≥100 g/1000kcal | 0 |
| Whole grain, dry bean, and tuber | 0–5 | ≥40 g/1000kcal | 0 |
| Total vegetables | 0–5 | ≥180 g/1000kcal | 0 |
| Dark green and orange vegetables | 0–5 | ≥90 g/1000kcal | 0 |
| Fruit | 0–10 | ≥110 g/1000kcal | 0 |
| Dairy | 0–10 | ≥100 g/1000kcal | 0 |
| Soybean | 0–10 | ≥10 g/1000kcal | 0 |
| Meat and egg | 0–5 | ≥50 g/1000kcal | 0 |
| Fish, shellfish and mollusk | 0–5 | ≥30 g/1000kcal | 0 |
| Calories from SFAs | 0–10 | <10% | ≥15% |
| Sodium | 0–10 | ≤1 g/1000kcal | ≥4 g/1000kcal |
| Empty calories | 0–10 | ≤20% | ≥40% |

Abbreviations: CHDI, China Healthy Diet Index; SFAs, saturated fatty acids.

**Table S2.** Characteristics of adults with diabetes across the three rounds of China National Nutrition Surveys.

| Variable | 2002 (*n*=663) | 2012 (*n*=2420) | 2015 (*n*=3146) |
|---|---|---|---|
| Gender | | | |
| Male | 297 (48.5) | 1093 (49.7) | 1411 (47.8) |
| Female | 366 (51.5) | 1327 (50.3) | 1735 (52.2) |
| Age group (years) | | | |
| 18-39 | 33 (6.3) | 66 (7.2) | 51 (5.4) |
| 40-64 | 424 (66.6) | 1407 (60.7) | 1850 (60.2) |
| ≥65 | 206 (27.1) | 947 (32.1) | 1245 (34.4) |
| Area | | | |
| Urban | 467 (77.6) | 1775 (68.5) | 1891 (65.9) |
| Rural | 196 (22.4) | 645 (31.5) | 1255 (34.1) |
| Annual income per capita | | | |
| Very low | 60 (9.4) | 429 (20.2) | 600 (18.4) |
| Low | 103 (14.7) | 399 (18.8) | 648 (19.8) |
| Middle | 169 (25.9) | 473 (20.0) | 615 (19.6) |
| High | 189 (30.2) | 328 (13.5) | 644 (21.5) |
| Very high | 122 (19.8) | 637 (27.5) | 639 (20.7) |
| Education level | | | |
| Under primary | 68 (9.3) | 324 (12.6) | 520 (14.5) |
| Primary school | 210 (28.1) | 699 (26.9) | 420 (11.6) |
| Junior high school | 197 (30.9) | 749 (30.9) | 628 (18.7) |
| Senior high school | 131 (21.7) | 435 (19.6) | 897 (29.4) |
| Junior college and above | 57 (10.0) | 213 (10.0) | 681 (25.8) |
| Marital status | | | |
| Single | 9 (2.2) | 12 (1.1) | 15 (1.1) |
| Married/Cohabiting | 584 (87.9) | 2087 (86.7) | 2900 (91.4) |
| Widowed/Divorced/Separated | 69 (9.9) | 321 (12.2) | 231 (7.5) |
| Body mass index (kg/m²) | | | |
| <18.5 | 14 (1.9) | 41 (2.2) | 40 (1.3) |
| 18.5-23.9 | 225 (34.6) | 767 (34.3) | 933 (29.1) |
| 24-27.9 | 273 (41.9) | 970 (43.3) | 1364 (43.1) |
| ≥28 | 148 (21.6) | 440 (20.2) | 809 (26.5) |
| Dietary management behavior | | | |
| Yes | 536 (80.9) | 1915 (78.0) | 2406 (76.3) |
| No | 127 (19.1) | 505 (22.0) | 740 (23.7) |

Data are *n* (weighted%). Number missing: Body mass index (*n*=205), Marital status (*n*=1), Annual income per capita (*n*=174).

**Table S3**. CHDI score of adults with diabetes in the three rounds of China National Nutrition Surveys.

| Variable | weighted mean ± SD | | *p* |
| :---: | :---: | :---: | :---: |
| | Dietary management: yes | Dietary management: no | |
| All | 56.3 ± 12.7 | 54.1 ± 12.3 | <0.001 |
| Year | | | |
| 2002 | 57.5 ± 12.1 | 53.9 ± 11.0 | 0.001 |
| 2012 | 56.1 ± 12.5 | 53.7 ± 12.0 | 0.004 |
| 2015 | 56.0 ± 13.1 | 54.6 ± 13.1 | 0.104 |
| Gender | | | |
| Male | 57.0 ± 12.3 * | 54.8 ± 12.1 | 0.001 |
| Female | 55.7 ± 13.0 * | 53.4 ± 12.6 | 0.003 |
| Age group, years | | | |
| 18-39 | 55.9 ± 11.5 ** | 53.0 ± 13.0 * | 0.128 |
| 40-64 | 55.5 ± 12.5 ** | 53.4 ± 11.6 * | 0.001 |
| ≥65 | 58.0 ± 13.1 ** | 55.9 ± 13.6 * | 0.038 |
| Area | | | |
| Urban | 58.5 ± 12.8 ** | 57.0 ± 12.1 ** | 0.023 |
| Rural | 51.0 ± 10.6 ** | 49.4 ± 11.2 ** | 0.034 |

Data were adjusted for China National Nutrition Surveys weights to be nationally representative. Comparison of CHDI scores within each subgroup was conducted using the *t*-test or ANOVA, * *p*<0.05, ** *p*<0.001. Comparison of the score between diabetic patients with and without dietary management was conducted using the *t*-test. Abbreviations: CHDI, China Healthy Diet Index; SD, standard deviation.

**References**

1. He, Y.; Fang, Y.; Yang, X. Establishment and application of China healthy diet index. *Acta Nutrimenta Sinica* **2017**, *39*, 436-441. https://doi.org/10.13325/j.cnki.acta.nutr.sin.2017.05.011.