Table S1. Characteristics of participants by quartile categories of three dietary patterns in this study\*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Western pattern |  | Vegetarian pattern |  | Modern pattern |
|  | Q1 (n=139) | Q4 (n=139) | *P* |  | Q1 (n=139) | Q4 (n=139) | *P* |  | Q1 (n=139) | Q4 (n=139) | *P* |
|  | Mean or *n* | SD or % | Mean or *n* | SD or % |  | Mean or *n* | SD or % | Mean or *n* | SD or % |  | Mean or *n* | SD or % | Mean or *n* | SD or % |
| Age (years) | 70.4 | 5.8 | 68.0 | 6.2 | <0.01 |  | 70.3 | 6.7 | 68.4 | 5.5 | 0.067 |  | 70.0 | 7.0 | 70.2 | 6.2 | 0.055 |
| BMI (kg/m2) | 25.5 | 4.2 | 25.2 | 3.5 | 0.245 |  | 25.6 | 4.2 | 25.6 | 3.9 | 0.829 |  | 25.8 | 4.0 | 25.5 | 3.7 | 0.479 |
| Physical activity (METs-h/w) | 63.5 | 53.2 | 85.7 | 75.4 | <0.05 |  | 64.6 | 59.7 | 71.8 | 63.5 | 0.168 |  | 69.6 | 66.0 | 58.1 | 52.0 | <0.01 |
| Energy intake (KJ) | 5075.6 | 2005.4 | 8677.6 | 2200.4 | <0.001 |  | 5036.3 | 1736.8 | 8463.4 | 2435.9 | <0.001 |  | 5933.3 | 2180.3 | 7348.4 | 2557.7 | <0.001 |
| Total number of diseases | 2.6 | 2.0 | 2.0 | 1.6 | <0.01 |  | 2.3 | 1.7 | 2.0 | 1.6 | 0.285 |  | 2.2 | 1.7 | 2.3 | 1.8 | 0.588 |
| Sex (%) MaleFemale | 18121 | 12.987.1 | 9544 | 68.331.7 | <0.001 |  | 4099 | 28.871.2 | 5188 | 36.763.3 | 0.193 |  | 5980 | 42.457.6 | 4990 | 35.364.7 | 0.188 |
| Residential area (%)Urban areaRural area | 4297 | 30.269.8 | 39100 | 28.123.9 | 0.446 |  | 36103 | 25.974.1 | 4891 | 34.565.5 | 0.412 |  | 34105 | 24.575.5 | 5584 | 39.660.4 | <0.05 |
| Occupation (%)Vigorous intensityLow or moderate intensity | 12910 | 92.87.2 | 12514 | 89.910.1 | 0.364 |  | 12415 | 89.210.8 | 12415 | 89.210.8 | 0.764 |  | 1318 | 94.25.8 | 11326 | 81.318.7 | <0.01 |
| Marital status (%)UncoupledCoupled | 4594 | 32.467.6 | 2014.4 | 11985.6 | <0.01 |  | 5188 | 36.763.3 | 27112 | 19.480.6 | <0.01 |  | 4198 | 29.570.5 | 33106 | 23.776.3 | 0.671 |
| Education level (%)UneducatedPrimary or secondaryHigh school or college | 67666 | 48.247.54.3 | 47839 | 33.859.76.5 | 0.218 |  | 59737 | 42.452.55.0 | 487912 | 34.556.88.6 | 0.402 |  | 68665 | 48.947.53.6 | 447520 | 31.754.014.4 | <0.01 |
| Income (%)<1000 RMB/month≥1000 RMB/month | 11029 | 79.120.9 | 9841 | 70.529.5 | 0.400 |  | 11227 | 80.619.4 | 9643 | 69.130.9 | 0.165 |  | 11821 | 84.915.1 | 8554 | 61.238.8 | <0.001 |
| 30-s Chair Stand (no. of stands) | 13.3 | 3.7 | 14.1 | 3.7 | 0.099 |  | 13.0 | 3.0 | 14.0 | 3.9 | 0.091 |  | 13.2 | 3.4 | 14.1 | 4.1 | 0.151 |
| 30-s Arm Curl (no. of bicep curls) | 14.7 | 3.7 | 14.7 | 3.6 | 0.683 |  | 14.0 | 3.4 | 15.1 | 3.4 | <0.01 |  | 14.1 | 3.0 | 15.1 | 3.7 | <0.01 |
| 8-foot Time Up-and-Go (s) | 7.0 | 1.8 | 6.5 | 1.4 | <0.05 |  | 6.9 | 1.9 | 6.5 | 1.5 | 0.122 |  | 7.0 | 1.9 | 6.7 | 1.7 | 0.280 |
| 6-min Walking test (m) | 412.1 | 96.3 | 459.9 | 85.6 | <0.001 |  | 417.3 | 95.6 | 449.7 | 84.5 | <0.05 |  | 423.7 | 94.8 | 438.4 | 96.4 | 0.519 |

BMI, body mass index; MET, metabolic equivalents.

\*Continuous variables are presented as mean and standard deviation, categorical variables are presented as sum and percentages.

†ANOVA for continuous variables and chi-square test for categorical variables.

Table S2. Association between three dietary patterns (according to quartiles of dietary pattern score) and physical fitness by sex groups

|  |  |  |  |
| --- | --- | --- | --- |
|  | Male |  | Female |
|  | Q1 | Q2 | Q3 | Q4 |  | Q1 | Q2 | Q3 | Q4 |
|  | OR | 95%CI | OR | 95%CI | OR | 95%CI | OR | 95%CI |  | OR | 95%CI | OR | 95%CI | OR | 95%CI | OR | 95%CI |
| WP | n=18 | n=30 | n=53 | n=95 |  | n=121 | n=109 | n=86 | n=44 |
| 30-s Chair Stand (no. of stands) |
| Model 1†Model 2‡ | 1.001.00 | Ref.Ref. | 1.831.62 | 0.34,9.770.29,9.10 | 2.531.91 | 0.60,10.560.44,8.29 | 1.251.06 | 0.29,5.300.23,4.84 |  | 1.001.00 | Ref.Ref. | 0.810.80 | 0.45,1.460.44,1.46 | 0.810.95 | 0.42,1.560.48,1.86 | 0.910.97 | 0.38,2.190.40,2.38 |
| 30-s Arm Curl (no. of bicep curls) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.240.20 | 0.05,1.070.04,0.94\* | 0.570.54 | 0.17,1.910.16,1.86 | 0.210.22 | 0.06,0.74\*0.06,0.82\* |  | 1.001.00 | Ref.Ref. | 0.910.91 | 0.49,1.670.49,1.70 | 0.580.66 | 0.29,1.170.32,1.35 | 0.780.78 | 0.31,1.940.31,1.99 |
| 8-foot Time Up-and-Go (s) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.490.41 | 0.10,2.310.08,1.95 | 0.690.58 | 0.20,2.370.16,2.03 | 0.610.58 | 0.18,2.130.16,2.09 |  | 1.001.00 | Ref.Ref. | 0.950.89 | 0.50,1.810.45,1.73 | 0.740.82 | 0.36,1.510.38,1.75 | 0.650.74 | 0.25,1.710.28,1.97 |
| 6-min Walking (m) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.520.51 | 0.09,3.120.08,3.13 | 1.391.27 | 0.35,5.520.31,5.15 | 0.550.50 | 0.14,2.210.12,2.06 |  | 1.001.00 | Ref.Ref. | 0.700.63 | 0.37,1.350.32,1.23 | 0.730.77 | 0.36,1.490.37,1.62 | 0.750.82 | 0.29,1.920.32,2.14 |
| VP | n=40 | n=48 | n=57 | n=51 |  | n=99 | n=91 | n=82 | n=88 |
| 30-s Chair Stand (no. of stands) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 3.863.19 | 1.20,12.40\*0.95,10.73 | 2.602.36 | 0.81,8.400.71,7.92 | 2.362.21 | 0.67,8.400.61,8.05 |  | 1.001.00 | Ref.Ref. | 1.141.16 | 0.60,2.190.60,2.23 | 0.910.89 | 0.45,1.840.43,1.84 | 0.840.86 | 0.38,1.890.38,1.95 |
| 30-s Arm Curl (no. of bicep curls) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 3.053.30 | 0.93,9.040.98,10.12 | 2.082.36 | 0.70,6.200.77,7.29 | 3.534.30 | 1.10,11.19\*1.28,14.42\* |  | 1.001.00 | Ref.Ref. | 0.670.66 | 0.34,1.340.32,1.33 | 0.780.78 | 0.39,1.590.37,1.62 | 0.600.63 | 0.26,1.360.27,1.46 |
| 8-foot Time Up-and-Go (s) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.531.46 | 0.55,4.270.51,4.19 | 0.101.12 | 0.40,3.090.40,3.18 | 0.500.51 | 0.15,1.640.15,1.74 |  | 1.001.00 | Ref.Ref. | 1.071.17 | 0.53,2.170.55,2.45 | 0.700.76 | 0.32,1.530.33,1.74 | 1.171.39 | 0.49,2.780.56,3.41 |
| 6-min Walking (m) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.080.94 | 0.34,3.430.28,3.08 | 1.531.56 | 0.52,4.500.52,4.69 | 1.271.36 | 0.40,4.100.41,4.52 |  | 1.001.00 | Ref.Ref. | 0.770.83 | 0.37,1.600.39,1.76 | 1.251.36 | 0.60,2.620.63,2.94 | 0.550.56 | 0.23,1.360.22,1.43 |
| MP | n=59 | n=45 | n=43 | n=49 |  | n=80 | n=94 | n=96 | n=90 |
| 30-s Chair Stand (no. of stands) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.670.63 | 0.24,1.900.21,1.84 | 1.091.00 | 0.43,2.760.38,2.63 | 0.940.76 | 0.37,2.420.28,2.12 |  | 1.001.00 | Ref.Ref. | 1.221.17 | 0.62,2.400.59,2.32 | 1.050.92 | 0.53,2.080.46,1.86 | 1.250.95 | 0.61,2.540.45,2.03 |
| 30-s Arm Curl (no. of bicep curls) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.101.10 | 0.42,2.850.41,2.94 | 2.152.35 | 0.88,5.270.92,5.98 | 1.181.03 | 0.48,2.950.40,2.67 |  | 1.001.00 | Ref.Ref. | 0.920.87 | 0.43,1.970.40,1.88 | 1.681.49 | 0.81,3.470.71,2.13 | 2.331.76 | 1.10,4.93\*0.81,3.84 |
| 8-foot Time Up-and-Go (s) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.381.37 | 0.50,3.820.48,3.91 | 2.512.58 | 0.97,6.450.99,6.77 | 1.221.04 | 0.45,3.330.37,2.95 |  | 1.001.00 | Ref.Ref. | 0.950.89 | 0.45,2.010.41,1.93 | 1.070.92 | 0.51,2.270.42,2.02 | 1.991.40 | 0.91,4.340.60,3.28 |
| 6-min Walking (m) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 2.562.93 | 0.87,7.560.96,8.88 | 1.421.51 | 0.48,4.180.50,4.57 | 3.023.17 | 1.09,8.37\*1.10,9.13\* |  | 1.001.00 | Ref.Ref. | 1.761.83 | 0.84,3.660.86,3.90 | 1.141.11 | 0.53,2.430.50,2.45 | 1.141.06 | 0.51,2.550.45,2.53 |

OR, odds ratio; CI, confidence interval; WP, western pattern; VP, vegetarian pattern; MP, modern pattern.

\* Statistically significant difference, *P*<0.05

†Model 1 was adjusted for age, BMI, physical activity, energy intake and total number of diseases.

‡Model 2 was adjusted for age, BMI, physical activity, energy intake, total number of diseases, residential area, occupation, marital status, education level and income.

Table S3. Association between three dietary patterns (according to quartiles of dietary pattern score) and physical fitness by age groups.

|  |  |  |  |
| --- | --- | --- | --- |
|  | age<70 |  | Age≥70 |
|  | Q1 | Q2 | Q3 | Q4 |  | Q1 | Q2 | Q3 | Q4 |
|  | OR | 95%CI | OR | 95%CI | OR | 95%CI | OR | 95%CI |  | OR | 95%CI | OR | 95%CI | OR | (95%CI) | OR | (95%CI) |
| WP | n=63 | n=77 | n=84 | n=91 |  | n=76 | n=62 | n=55 | n=48 |
| 30-s Chair Stand (no. of stands) |
| Model 1†Model 2‡ | 1.001.00 | Ref.Ref. | 0.610.54 | 0.28,1.320.24,1.21 | 0.830.81 | 0.39,1.770.37,1.75 | 0.580.54 | 0.24,1.390.22,1.34 |  | 1.001.00 | Ref.Ref. | 0.920.93 | 0.39,2.150.39,2.22 | 0.750.78 | 0.31,1.850.31,1.99 | 0.690.74 | 0.23,2.090.23,2.35 |
| 30-s Arm Curl (no. of bicep curls) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.660.63 | 0.32,1.390.29,1.35 | 0.540.52 | 0.26,1.150.24,1.13 | 0.410.42 | 0.17,0.99\*0.17,1.04 |  | 1.001.00 | Ref.Ref. | 0.910.93 | 0.41,2.020.42,2.10 | 0.841.00 | 0.36,1.940.42,2.39 | 0.620.78 | 0.21,1.800.26,2.37 |
| 8-foot Time Up-and-Go (s) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.311.07 | 0.57,3.010.45,2.55 | 1.121.00 | 0.49,2.600.42,2.39 | 1.091.15 | 0.43,2.770.43,3.05 |  | 1.001.00 | Ref.Ref. | 0.750.77 | 0.32,1.780.32,1.86 | 0.610.66 | 0.25,1.500.26,1.69 | 0.290.36 | 0.09,0.93\*0.11,1.20 |
| 6-min Walking (m) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.171.00 | 0.47,2.920.39,2.56 | 1.231.12 | 0.51,2.960.45,2.79 | 1.171.18 | 0.45,3.030.44,3.16 |  | 1.001.00 | Ref.Ref. | 0.460.48 | 0.18,1.190.18.1.25 | 0.550.57 | 0.22,1.410.21,1.52 | 0.340.38 | 0.10,1.110.11,1.36 |
| VP | n=75 | n=74 | n=81 | n=85 |  | n=64 | n=65 | n=58 | n=54 |
| 30-s Chair Stand (no. of stands) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.371.33 | 0.64,2.970.61,2.92 | 1.611.56 | 0.75,3.470.72,3.42 | 1.021.06 | 0.43,2.440.44,2.60 |  | 1.001.00 | Ref.Ref. | 1.391.40 | 0.59,3.280.58,3.39 | 0.930.91 | 0.36,2.380.35,2.37 | 1.041.04 | 0.36,2.950.35,3.05 |
| 30-s Arm Curl (no. of bicep curls) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.700.65 | 0.33,1.480.30,1.40 | 0.960.94 | 0.47,1.970.45,1.97 | 0.580.56 | 0.25,1.330.24,1.33 |  | 1.001.00 | Ref.Ref. | 0.830.91 | 0.36,1.910.38,2.14 | 1.171.29 | 0.49,2.780.53,3.16 | 1.431.50 | 0.53,3.860.54,4.13 |
| 8-foot Time Up-and-Go (s) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.690.69 | 0.32,1.500.32,1.54 | 0.660.66 | 0.30,1.440.30,1.48 | 0.450.48 | 0.18,1.110.19,1.21 |  | 1.001.00 | Ref.Ref. | 1.321.48 | 0.54,3.220.59,3.71 | 1.181.25 | 0.45,3.070.47,3.34 | 1.992.21 | 0.69,5.720.75,6.53 |
| 6-min Walking (m) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.420.40 | 0.17,1.020.16,1.01 | 1.000.97 | 0.45,2.210.43,2.19 | 0.450.45 | 0.18,1.130.17,1.20 |  | 1.001.00 | Ref.Ref. | 1.071.20 | 0.44,2.630.47,3.04 | 0.650.75 | 0.24,1.780.27,2.10 | 1.511.78 | 0.51,4.430.58,5.44 |
| MP | n=74 | n=93 | n=83 | n=65 |  | n=65 | n=46 | n=56 | n=74 |
| 30-s Chair Stand (no. of stands) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.091.12 | 0.54,2.220.54,2.32 | 0.850.84 | 0.41,1.760.39,1.79 | 0.970.86 | 0.45,2.120.38,1.98 |  | 1.001.00 | Ref.Ref. | 1.321.39 | 0.51,3.440.53,3.67 | 1.731.67 | 0.71,4.220.66,4.20 | 1.601.49 | 0.68,3.790.61,3.68 |
| 30-s Arm Curl (no. of bicep curls) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.111.02 | 0.52,2.380.47,2.23 | 2.332.10 | 1.12,4.84\*1.00,4.44\* | 2.021.46 | 0.91,4.460.63,3.38 |  | 1.001.00 | Ref.Ref. | 0.840.81 | 0.33,2.160.31,2.10 | 1.591.43 | 0.69,3.640.61,3.37 | 1.521.32 | 0.68,3.410.57,3.06 |
| 8-foot Time Up-and-Go (s) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 0.920.86 | 0.43,1.970.39,1.89 | 1.000.95 | 0.47,2.140.43,2.11 | 1.240.89 | 0.56,2.780.37,2.13 |  | 1.001.00 | Ref.Ref. | 0.620.63 | 0.23,1.630.24,1.67 | 0.990.93 | 0.41,2.380.37,2.32 | 1.491.32 | 0.65,3.410.55,3.14 |
| 6-min Walking (m) |
| Model 1Model 2 | 1.001.00 | Ref.Ref. | 1.041.16 | 0.46,2.340.50,2.69 | 1.131.28 | 0.50,2.530.55,2.97 | 1.711.75 | 0.75,3.910.72,4.26 |  | 1.001.00 | Ref.Ref. | 0.930.98 | 0.37,2.320.38,2.50 | 0.770.81 | 0.30,1.930.31,2.15 | 0.910.89 | 0.38,2.170.35,2.24 |

OR, odds ratio; CI, confidence interval; WP, western pattern; VP, vegetarian pattern; MP, modern pattern.

\* Statistically significant difference, *P*<0.05

†Model 1 was adjusted for age, sex, BMI, physical activity, energy intake and total number of diseases.

‡Model 2 was adjusted for age, sex, BMI, physical activity, energy intake, total number of diseases, residential area, occupation, marital status, education level and income.