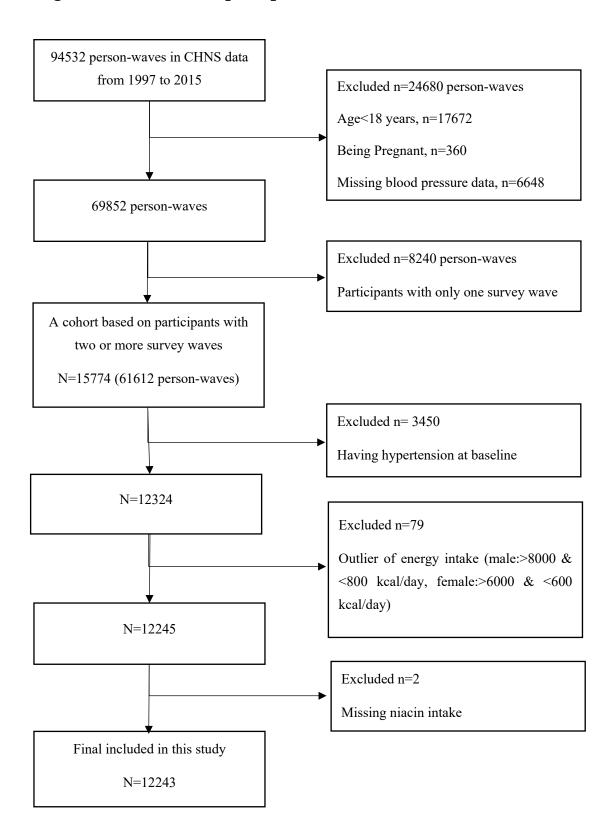
Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

eFigure 1. Flow chart of the participants



eFigure 2. Stratified analyses by potential effect modifiers for the association between dietary niacin intake and new-onset hypertension

| Subgroup | Categories | Events (rate*) | | Adjusted HR (95%CI) | | Categories | Events (rate*) | | Adjusted HR (95%CI) | P-interaction |
|--------------------------------|------------|----------------|-----------|---------------------|------------------------|------------|----------------|---------------|---------------------|---------------|
| BMI, kg/m^2 | | | | | | | | | | .47 |
| <25 | Q1-2 | 1754(43.8) | - | 1.19(1.09,1.30) | ≥25 | Q1-2 | 582(75.8) | | 1.13(0.96,1.33) | |
| | Q3 | 736(32.3) | + | Ref | | Q3 | 209(62.3) | + | Ref | |
| | Q4 | 712(39.8) | | 1.29(1.16,1.44) | | Q4 | 283(88.0) | | 1.37(1.14,1.64) | |
| Smoking status | | | | | | | | | | .07 |
| No | Q1-2 | 1572(46.0) | | 1.23(1.11,1.36) | Yes | Q1-2 | 767(56.7) | ├ ■─ | 1.10(0.97,1.25) | |
| | Q3 | 588(32.0) | + | Ref | | Q3 | 358(45.7) | • | Ref | |
| | Q4 | 627(46.1) | | 1.43(1.27,1.60) | | Q4 | 367(48.5) | - | 1.14(0.99,1.33) | |
| Sodium to potassium intake rat | tio | | | | | | | | | .23 |
| <2.8 | Q1-2 | 967(50.4) | - | 1.26(1.13,1.41) | ≥2.8 | Q1-2 | 1387(48.1) | - | 1.12(1.00,1.25) | |
| | Q3 | 494(35.7) | + | Ref | | Q3 | 458(36.6) | • | Ref | |
| | Q4 | 644(47.5) | - | 1.33(1.18,1.50) | | Q4 | 354(46.2) | _ | 1.30(1.13,1.50) | |
| Potassium intake, g/day | | | | | | | | | | .17 |
| <1.4 | Q1-2 | 971(58.1) | | 1.24(1.08,1.42) | ≥1.4 | Q1-2 | 1383(44.2) | - | 1.07(0.97,1.18) | |
| | Q3 | 296(38.9) | + | Ref | | Q3 | 656(35.0) | + | Ref | |
| | Q4 | 202(54.3) | | 1.38(1.15,1.66) | | Q4 | 796(45.5) | - | 1.32(1.18,1.46) | |
| Energy intake, Kcal/day | | | | | | | | | | .62 |
| <2162.0 | Q1-2 | 1062(49.7) | - | 1.15(1.02,1.28) | ≥2162.0 | Q1-2 | 1292(48.5) | - | 1.24(1.11,1.38) | |
| | Q3 | 483(36.9) | + | Ref | | Q3 | 469(35.4) | + | Ref | |
| | Q4 | 431(47.3) | - | 1.29(1.13,1.47) | | Q4 | 567(46.9) | | 1.36(1.20,1.55) | |
| Fruits intake, g/day | | | | | | | | | | .50 |
| No | Q1-2 | 1675(67.9) | - | 1.14(1.03,1.26) | Yes | Q1-2 | 679(29.1) | - | 1.10(0.96,1.25) | |
| | Q3 | 606(50.9) | + | Ref | | Q3 | 346(24.0) | + | Ref | |
| | Q4 | 626(66.5) | - | 1.29(1.15,1.44) | | Q4 | 372(31.5) | | 1.36(1.17,1.58) | |
| Vegetables intake, g/day | | | | | | | | | | .02 |
| <356.4 | Q1-2 | 1202(45.5) | | 1.37(1.20,1.56) | ≥356.4 | Q1-2 | 1152(53.3) | | 1.14(1.03,1.26) | |
| | Q3 | 313(29.1) | + | Ref | | Q3 | 639(41.1) | • | Ref | |
| | Q4 | 274(36.6) | | 1.29(1.10,1.53) | | Q4 | 724(52.7) | | 1.30(1.16,1.45) | |
| Residence | | | | | | | | | | .33 |
| Rural | Q1-2 | 1722(48.0) | - | 1.22(1.11,1.34) | Urban | Q1-2 | 632(52.1) | +- | 1.09(0.95,1.26) | |
| | Q3 | 617(33.8) | + | Ref | | Q3 | 335(41.6) | + | Ref | |
| | Q4 | 597(44.9) | - | 1.31(1.17,1.47) | | Q4 | 401(50.6) | _ | 1.30(1.12,1.51) | |
| Education level | | | | | | | | | | .89 |
| Primary school or below | Q1-2 | 1295(60.6) | | 1.20(1.08,1.34) | Middle school or above | Q1-2 | 1002(39.5) | - | 1.16(1.04,1.30) | |
| | Q3 | 460(43.6) | + | Ref | | Q3 | 472(30.9) | + | Ref | |
| | Q4 | 384(59.9) | | 1.34(1.17,1.54) | | Q4 | 600(41.4) | | 1.29(1.14,1.46) | |
| | | 0.8 | 1 1.2 1.4 | | | | | 0.8 1 1.2 1.4 | | |

eTable 1. Characteristics of the included and excluded participants

| Variables | Excluded* | Included |
|------------------------------------|------------------|------------------|
| N, person-wave | 14888 | 61612 |
| Male, No. (%) | 7528 (50.6) | 29320 (47.6) |
| Age, years | 42.0 ± 17.8 | 50.2 ± 15.0 |
| Systolic blood pressure, mmHg | 121.2 ± 18.1 | 123.7 ± 18.7 |
| Diastolic blood pressure, mmHg | 78.0 ± 10.9 | 79.4 ± 11.1 |
| Body mass index, kg/m ² | 23.2 ± 3.9 | 23.3 ± 3.4 |
| Smoking status, No. (%) | 4028 (29.2) | 19191 (31.2) |
| Drinking status, No. (%) | 4407 (32.2) | 20242 (33.1) |
| Urban residence, No. (%) | 6512 (43.7) | 20058 (32.6) |
| Region, No. (%) | | |
| East and central | 8194 (55.0) | 33599 (54.5) |
| Northeast and north | 2798 (18.8) | 12807 (20.8) |
| Southwest and south | 3896 (26.2) | 15206 (24.7) |
| Occupation, No. (%) | | |
| Farmer | 2455 (16.7) | 17969 (29.5) |
| Worker | 2044 (13.9) | 5758 (9.4) |
| Unemployed | 5659 (38.5) | 23639 (38.8) |
| Other | 4552 (30.9) | 13600 (22.3) |
| Education, No. (%) | | |
| Illiteracy | 1435 (10.2) | 12851 (21.6) |
| Primary school | 1991 (14.1) | 12448 (20.9) |
| Middle school | 4991 (35.4) | 18859 (31.7) |
| High school or above | 5672 (40.3) | 15329 (25.8) |
| Self-report diabetes, No. (%) | 385 (2.6) | 1638 (2.7) |

Variables are presented as Mean \pm SD or person-wave (%). © 2021 Zhang Z et al. *JAMA Network Open.*

| Excluded from the analysis due to missing blood pressure data (6648 person-waves) and those with only of | one |
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| urvey wave (8240 person-waves) | |
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eTable 2. The association between dietary niacin intake and the risk of new-onset hypertension with further adjustment for waist/hip ratio, drinking status, sodium, fruits and vegetables intake

| Niacin intake, | N | Events | Crude model | | Adjusted model | † |
|----------------------|------|------------|-----------------|---------|-----------------|---------|
| mg/day | | (rate*) | HR (95% CI) | P value | HR (95% CI) | P value |
| Quartiles | | | | | | |
| Q1 (<12.4) | 3061 | 1188(51.7) | Ref | | Ref | |
| Q2 (12.4-<14.3) | 3060 | 1166(46.6) | 0.90(0.83,0.97) | .009 | 0.92(0.84,1.01) | .07 |
| Q3 (14.3-<16.7) 3061 | | 952(36.2) | 0.70(0.64,0.76) | <.001 | 0.81(0.74,0.89) | <.001 |
| Q4 (≥16.7) 3061 | | 998(47.0) | 0.92(0.85,1.00) | .05 | 1.05(0.95,1.16) | .37 |
| Categories | | | | | | |
| Q1-2 (<14.3) | 6121 | 2354(49.0) | 1.36(1.26,1.47) | <.001 | 1.17(1.08,1.27) | <.001 |
| Q3 (14.3-<16.7) 3061 | | 952(36.2) | Ref | | Ref | |
| Q4 (≥16.7) | 3061 | 998(47.0) | 1.32(1.21,1.44) | <.001 | 1.29(1.17,1.42) | <.001 |

^{*}Incident rate is presented per 1000 person-years of follow-up.

†Adjusted for age, sex, body mass index, waist/hip ratio, smoking status, drinking status, systolic blood pressure, diastolic blood pressure, region, education, occupation, as well as energy, sodium, fruits and vegetables intake and sodium to potassium intake ratio.

eTable 3. The association between dietary niacin intake and the risk of new-onset hypertension with exclusion of participants from the three autonomous cities

| Niacin intake, | N | Events | Crude model | | Adjusted model [†] | |
|-----------------|------|------------|-----------------|---------|-----------------------------|---------|
| mg/day | | (rate*) | HR (95% CI) | P value | HR (95% CI) | P value |
| Quartiles | | | | | | |
| Q1 (<12.3) | 2725 | 1100(51.6) | Ref | | Ref | |
| Q2 (12.3-<14.2) | 2724 | 1067(45.9) | 0.88(0.81,0.96) | .004 | 0.94(0.86,1.02) | .150 |
| Q3 (14.2-<16.4) | 2725 | 910(36.3) | 0.70(0.64,0.76) | <.001 | 0.84(0.77,0.93) | <.001 |
| Q4 (≥16.4) | 2725 | 945(44.8) | 0.87(0.80,0.95) | .002 | 1.07(0.97,1.18) | .16 |
| Categories | | | | | | |
| Q1-2 (<14.2) | 5449 | 2167(48.6) | 1.34(1.24,1.45) | <.001 | 1.14(1.05,1.24) | .001 |
| Q3 (14.2-<16.4) | 2725 | 910(36.3) | Ref | | Ref | |
| Q4 (≥16.4) | 2725 | 945(44.8) | 1.25(1.14,1.37) | <.001 | 1.27(1.16,1.39) | <.001 |

^{*}Incident rate is presented per 1000 person-years of follow-up.

†Adjusted for age, sex, body mass index, smoking status, systolic blood pressure, diastolic blood pressure, region, education, occupation, as well as energy intake and sodium to potassium intake ratio.

eTable 4. The association between dietary niacin intake and different components of new-onset hypertension

| Niacin intake, | N | Events | Crude model | | Adjusted model [†] | |
|---------------------|-----------|------------|----------------------|---------|-----------------------------|---------|
| mg/day | | (rate*) | HR (95% CI) | P value | HR (95% CI) | P value |
| Physician-diagnose | d hyper | tension | | | | |
| Categories | | | | | | |
| Q1-2 (<14.3) | 6084 | 427(8.9) | 1.19(1.01,1.42) | .04 | 1.02(0.85,1.21) | .86 |
| Q3 (14.3-<16.7) | 3041 | 195(7.4) | Ref | | Ref | |
| Q4 (≥16.7) | 3037 | 212(10.0) | 1.34(1.11,1.63) .003 | | 1.33(1.09,1.63) | .005 |
| Use of antihyperter | nsive tre | atment | | | | |
| Categories | | | | | | |
| Q1-2 (<14.3) | 6088 | 271(5.6) | 1.24(1.00,1.54) | .05 | 1.08(0.86,1.36) | .49 |
| Q3 (14.3-<16.7) | 3042 | 119(4.5) | Ref | | Ref | |
| Q4 (≥16.7) | 3038 | 143(6.7) | 1.47(1.15,1.88) | .002 | 1.46(1.13,1.88) | .004 |
| SBP ≥140 and/or D | BP ≥90 | mmHg | | | | |
| Categories | | | | | | |
| Q1-2 (<14.3) | 6121 | 2175(45.3) | 1.38(1.27,1.49) | <.001 | 1.20(1.11,1.30) | <.001 |
| Q3 (14.3-<16.7) 306 | | 868(33.0) | Ref | | Ref | |
| Q4 (≥16.7) 3061 | | 912(43.0) | 1.33(1.21,1.46) | <.001 | 1.32(1.20,1.45) | <.001 |

^{*}Incident rate is presented per 1000 person-years of follow-up.

[†]Adjusted for age, sex, body mass index, smoking status, systolic blood pressure, diastolic blood pressure, region, education, occupation, as well as energy intake and sodium to potassium intake ratio.