

CLINICS-D-25-02012_Supplementary Material

Supplementary Table S1 The 23 dietary components used to calculate the Dietary Inflammatory Index (DII).

Dataset variable	Standard name
b_carotene	Beta-carotene
carbohydrates	Carbohydrate
cholesterol	Cholesterol
energy	Energy
fibre	Dietary fiber
folic_acid	Folic acid
Fe	Iron
Mg	Magnesium
MUFA	Monounsaturated fatty acids
niacin	Niacin
n-3_fatty_acids	Omega-3 fatty acids
n-6_fatty_acids	Omega-6 fatty acids
protein	Protein
PUFA	Polyunsaturated fatty acids
riboflavin	Riboflavin (Vitamin B2)
saturated_fat	Saturated fatty acids
tfat	Total fat
thiamin	Thiamin (Vitamin B1)
vitamin_A	Vitamin A
vitamin_C	Vitamin C
vitamin_D	Vitamin D
vitamin_E	Vitamin E
zinc	Zinc

Supplementary Table S2 Detailed sex-stratified subgroup analyses of associations between DII and Peripheral Vertigo (PV), overall hearing loss, and moderate-to-severe hearing loss (full covariate-level estimates).

Sex group / Co variate	Peripheral vertigo		Moderate-to-severe hearing loss		Overall hearing loss	
	Men	Women	Men	Women	Men	Women
DII [G2 vs. G1]	0.93 (0.74–1.17)	1.06 (0.86–1.30)	0.96 (0.76–1.22)	1.13 (0.84–1.51)	0.97 (0.81–1.17)	0.95 (0.78–1.17)
DII [G3 vs. G1]	0.93 (0.73–1.19)	1.08 (0.88–1.32)	1.18 (0.92–1.52)	1.04 (0.79–1.38)	1.10 (0.91–1.33)	0.96 (0.79–1.16)
DII [G4 vs. G1]	1.02 (0.79–1.33)	1.29 (1.03–1.43)	1.08 (0.82–1.42)	1.45 (1.11–1.89)	1.01 (0.81–1.25)	1.21 (1.00–1.45)
Residential area [G2 vs. G1]	0.99 (0.81–1.22)	1.21 (1.03–1.43)	0.88 (0.72–1.09)	1.18 (0.96–1.45)	1.27 (1.07–1.50)	1.33 (1.14–1.55)
Household income	0.91 (0.84–0.99)	0.95 (0.89–1.01)	0.94 (0.86–1.02)	0.89 (0.81–0.97)	1.05 (0.98–1.12)	1.05 (0.99–1.12)
Education [G2 vs. G1]	1.02 (0.83–1.25)	1.12 (0.94–1.33)	0.63 (0.50–0.81)	0.59 (0.42–0.83)	0.30 (0.26–0.35)	0.24 (0.20–0.28)
Occupation [G2 vs. G1]	0.96 (0.79–1.17)	0.92 (0.77–1.10)	0.98 (0.80–1.18)	0.98 (0.80–1.21)	0.82 (0.70–0.96)	1.14 (0.98–1.34)
BMI [G1 vs. G2]	0.85 (0.49–1.45)	0.90 (0.62–1.30)	0.99 (0.58–1.68)	1.12 (0.69–1.83)	1.52 (0.91–2.54)	1.11 (0.76–1.62)
BMI [G3 vs. G2]	1.02 (0.84–1.24)	0.92 (0.79–1.06)	0.98 (0.81–1.19)	0.96 (0.79–1.17)	0.68 (0.59–0.79)	0.97 (0.84–1.12)
Drinking status [G2 vs. G1]	1.08 (0.68–1.71)	0.97 (0.80–1.16)	0.86 (0.56–1.30)	0.99 (0.81–1.22)	0.41 (0.29–0.59)	0.48 (0.41–0.56)
Marital [G2 vs. G1]	1.12 (0.80–1.58)	1.01 (0.70–1.45)	1.15 (0.71–1.87)	1.37 (0.71–2.65)	0.40 (0.30–0.53)	0.87 (0.55–1.37)
Walking training [G2 vs. G1]	1.06 (0.82–1.37)	0.96 (0.81–1.23)	0.75 (0.58–0.97)	0.93 (0.72–1.20)	0.82 (0.67–1.00)	0.85 (0.70–1.02)
Walking training [G3 vs. G1]	1.22 (0.95–1.57)	1.10 (0.90–1.34)	0.85 (0.66–1.10)	0.86 (0.67–1.10)	1.07 (0.87–1.30)	0.84 (0.70–1.01)
Weight training [G2 vs. G1]	1.11 (0.88–1.40)	0.97 (0.78–1.18)	0.89 (0.69–1.14)	0.97 (0.68–1.38)	0.84 (0.69–1.01)	0.93 (0.74–1.16)
Weight training [G3 vs. G1]	0.80 (0.60–1.08)	0.95 (0.73–1.25)	0.79 (0.61–1.01)	1.01 (0.72–1.42)	1.09 (0.89–1.34)	1.24 (0.96–1.60)
Smoking status [G2 vs. G1]	0.90 (0.69–1.19)	1.19 (0.84–1.69)	1.28 (0.96–1.69)	0.80 (0.42–1.51)	1.51 (1.19–1.93)	1.03 (0.70–1.52)
Smoking status [G3 vs. G1]	0.87 (0.68–1.18)	1.10 (0.83–1.69)	1.16 (0.92–1.48)	1.22 (0.78–1.91)	1.20 (0.97–1.50)	0.96 (0.68–1.34)
Psychological stress [G1 vs. G4]	3.64 (2.27–5.84)	2.30 (1.63–3.27)	0.97 (0.57–1.64)	0.76 (0.46–1.27)	0.87 (0.52–1.46)	1.05 (0.70–1.57)
Psychological stress [G2 vs. G4]	2.54 (1.87–3.45)	1.91 (1.53–2.39)	1.01 (0.75–1.37)	0.99 (0.74–1.31)	0.86 (0.65–1.13)	0.96 (0.76–1.23)
Psychological stress [G3 vs. G4]	1.54 (1.19–1.99)	1.36 (1.13–1.65)	0.95 (0.78–1.17)	1.11 (0.89–1.39)	0.96 (0.78–1.19)	1.04 (0.86–1.26)
Hypertension [G2 vs. G1]	1.23 (1.00–1.50)	1.10 (0.94–1.30)	1.06 (0.88–1.28)	1.11 (0.91–1.35)	1.86 (1.60–2.16)	2.27 (1.98–2.61)
Diabetes [G2 vs. G1]	1.19 (0.94–1.51)	0.97 (0.78–1.21)	0.93 (0.76–1.14)	1.18 (0.94–1.49)	1.36 (1.13–1.64)	1.78 (1.47–2.15)

Supplementary Table S3 Detailed age-stratified subgroup analyses of associations between DII and Peripheral Vertigo (PV), overall hearing loss, and moderate-to-severe hearing loss (full covariate-level estimates).

Age group / Co variate	Peripheral vertigo		Moderate-to-severe hearing loss		Overall hearing loss	
	Low Age (≤60)	High Age (>60)	Low Age (≤60)	High Age (>60)	Low Age (≤60)	High Age (>60)
DII [G2 vs. G1]	1.03 (0.83–1.28)	0.93 (0.75–1.15)	0.96 (0.63–1.46)	1.12 (0.92–1.35)	0.95 (0.76–1.18)	1.12 (0.93–1.34)
DII [G3 vs. G1]	1.03 (0.83–1.28)	0.97 (0.78–1.20)	1.11 (0.73–1.68)	1.22 (1.01–1.48)	1.01 (0.81–1.27)	1.21 (1.01–1.44)
DII [G4 vs. G1]	1.11 (0.90–1.38)	1.28 (1.04–1.58)	1.12 (0.75–1.67)	1.52 (1.25–1.85)	1.02 (0.81–1.28)	1.49 (1.23–1.81)
Residential area [G2 vs. G1]	1.14 (0.93–1.39)	1.08 (0.92–1.28)	1.01 (0.70–1.44)	1.09 (0.94–1.27)	1.13 (0.93–1.38)	1.18 (1.02–1.38)
Household income	0.99 (0.81–1.21)	0.93 (0.87–1.00)	0.94 (0.83–1.07)	0.96 (0.90–1.02)	1.03 (0.96–1.11)	0.98 (0.93–1.05)
Education [G2 vs. G1]	0.83 (0.53–1.29)	0.93 (0.74–1.16)	0.35 (0.25–0.49)	0.59 (0.48–0.73)	0.43 (0.36–0.51)	0.55 (0.45–0.66)
Occupation [G2 vs. G1]	0.97 (0.82–1.15)	0.89 (0.75–1.05)	1.25 (0.92–1.70)	0.78 (0.67–0.91)	1.09 (0.91–1.32)	0.90 (0.77–1.04)
BMI [G1 vs. G2]	0.89 (0.53–1.49)	0.99 (0.66–1.48)	0.62 (0.23–1.66)	1.23 (0.85–1.77)	0.95 (0.54–1.66)	1.16 (0.75–1.78)
BMI [G3 vs. G2]	0.88 (0.69–1.11)	0.90 (0.77–1.06)	0.85 (0.62–1.17)	0.85 (0.74–0.98)	0.94 (0.79–1.11)	0.94 (0.82–1.07)
Drinking status [G2 vs. G1]	0.86 (0.62–1.19)	1.00 (0.83–1.21)	0.47 (0.27–0.83)	0.77 (0.65–0.92)	0.53 (0.39–0.73)	0.79 (0.67–0.94)
Marital [G2 vs. G1]	1.08 (0.83–1.41)	0.87 (0.48–1.57)	0.72 (0.44–1.19)	1.07 (0.60–1.91)	0.70 (0.53–0.93)	0.88 (0.49–1.56)
Walking training [G2 vs. G1]	1.12 (0.89–1.42)	0.92 (0.74–1.14)	0.84 (0.56–1.25)	0.76 (0.63–0.93)	0.89 (0.71–1.11)	0.85 (0.69–1.04)
Walking training [G3 vs. G1]	1.33 (1.05–1.68)	0.95 (0.78–1.16)	1.02 (0.68–1.52)	0.78 (0.65–0.94)	0.90 (0.72–1.23)	0.85 (0.70–1.03)
Weight training [G2 vs. G1]	1.08 (0.88–1.32)	0.97 (0.77–1.22)	1.09 (0.74–1.61)	0.72 (0.57–0.89)	0.96 (0.78–1.20)	0.78 (0.64–0.96)
Weight training [G3 vs. G1]	1.10 (0.81–1.50)	0.75 (0.59–0.96)	0.89 (0.52–1.51)	0.93 (0.76–1.14)	0.99 (0.74–1.32)	0.98 (0.80–1.20)
Smoking status [G2 vs. G1]	0.97 (0.74–1.27)	1.04 (0.77–1.40)	1.44 (0.89–2.32)	0.79 (0.62–1.02)	1.40 (1.09–1.81)	0.98 (0.74–1.30)
Smoking status [G3 vs. G1]	0.92 (0.72–1.17)	1.09 (0.84–1.42)	1.60 (1.04–2.48)	1.00 (0.81–1.23)	1.27 (1.01–1.59)	0.97 (0.77–1.21)
Psychological stress [G1 vs. G4]	3.02 (2.05–4.45)	1.95 (1.30–2.93)	0.60 (0.23–1.61)	0.79 (0.52–1.18)	0.81 (0.52–1.24)	0.70 (0.46–1.05)
Psychological stress [G2 vs. G4]	2.02 (1.54–2.65)	2.07 (1.63–2.64)	0.98 (0.58–1.64)	0.81 (0.65–1.01)	0.66 (0.50–0.86)	0.77 (0.62–0.96)
Psychological stress [G3 vs. G4]	1.28 (1.00–1.65)	1.53 (1.27–1.84)	1.39 (0.88–2.20)	0.77 (0.66–0.89)	0.86 (0.68–1.08)	0.83 (0.71–0.96)

Hypertension [G2 vs. G1]	1.13 (0.91–1.39)	1.29 (1.11–1.50)	1.22 (0.86–1.72)	1.45 (1.26–1.66)	1.34 (1.10–1.63)	1.39 (1.21–1.59)
Diabetes [G2 vs. G1]	1.61 (1.22–2.12)	0.84 (0.70–1.01)	0.72 (0.44–1.19)	1.14 (0.98–1.34)	1.13 (0.87–1.46)	1.35 (1.14–1.59)