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### **Search Strategy**

Search Strategy Free text search strategy: Initial search date: 25 May 2024

#### PubMed 1216

(tinnitus OR Ringing-Buzzing) AND (diet OR food OR water OR milk OR fish OR fruit OR vegetable OR fiber OR sugar OR meat OR margarine OR fat OR egg OR diversity OR caffeine OR carbohydrate).

#### EMBASE 1942

('Tinnitus':ab,ti,kw OR 'Ringing-Buzzing'/exp OR 'Ringing-Buzzing':ab,ti,kw OR 'ear buzzing':ab,ti,kw) AND (('Diet'/exp OR 'Diets':ab,ti,kw) OR ('Food'/exp OR 'Food':ab,ti,kw) OR ('Water'/exp OR 'Water':ab,ti,kw OR 'Hydrogen Oxide':ab,ti,kw) OR ('Milk'/exp OR 'Milk':ab,ti,kw OR 'Cow Milk':ab,ti,kw) OR ('fish'/exp OR 'fish':ab,ti,kw) OR ('Water'/exp OR 'Water':ab,ti,kw) OR ('Dietary Fiber'/exp OR 'alimentary fiber':ab,ti,kw) OR ('sugar'/exp OR 'sugar':ab,ti,kw) OR ('meat'/exp OR 'meat':ab,ti,kw) OR ('Integratine':ab,ti,kw) OR ('Dietary Fiber'/exp OR 'alimentary fiber':ab,ti,kw) OR ('sugar'/exp OR 'sugar':ab,ti,kw) OR ('meat'/exp OR 'meat':ab,ti,kw) OR ('meat'/exp OR 'meat':ab,ti,kw) OR ('meat'/exp OR 'meat':ab,ti,kw) OR ('asusage':ab,ti,kw) OR ('margarine':ab,ti,kw) OR ('loeomargarine':ab,ti,kw) OR ('fat'/exp OR 'fat':ab,ti,kw) OR ('egg'/exp OR 'egg':ab,ti,kw) OR ('varietas'/exp OR 'plant variety':ab,ti,kw) OR ('caffeine'/exp OR 'caffeine':ab,ti,kw) OR ('caffeine':ab,ti,kw) OR ('carbohydrate':ab,ti,kw) OR ('carbohydrate':ab,ti,kw))

#### Web of Science 29

("Tinnitus"(Topic) OR "Tinnitus"(Topic) OR "Ringing-Buzzing"(Topic) OR "Ringing-Buzzing"(Topic) OR "ear buzzing"(Topic)) AND (("Diet"(Topic) OR "Diets"(Topic)) OR ("Food"(Topic)) OR ("Water"(Topic) OR "Hydrogen Oxide"(Topic)) OR ("Milk"(Topic) OR "Cow Milk"(Topic)) OR ("fish"(Topic)) OR ("vegetable"(Topic)) OR ("Dietary Fiber"(Topic)) OR ("light"(Topic)) OR ("sugar"(Topic)) OR ("meat"(Topic)) OR "sausage"(Topic)) OR ("margarine"(Topic)) OR ("light"(Topic)) OR ("sugar"(Topic)) OR ("sugar"(Topic)) OR ("sugar"(Topic)) OR ("sugar"(Topic)) OR ("sugar"(Topic)) OR ("caffeine"(Topic)) OR ("caffeine"(Topic))) OR ("caffeine"(Topic)) OR ("caffeine"(Topic))) OR ("caffeine"(Topic)) OR ("caffeine"(Topic))) OR ("caffeine

#### Cochrane 297

((tinnitus OR Ringing-Buzzing) AND (diet OR food OR water OR milk OR fish OR fruit OR vegetable OR fiber OR sugar OR meat OR margarine OR fat OR egg OR diversity OR caffeine OR carbohydrate) in Title Abstract Keyword

### Stata analysis

We used mixed-effects models to pool maximally covariate-adjusted odds ratios (ORs) from each study. Due to the low incidence of events and short follow-up events, OR, RR, and HR were approximately equal, so our results were uniformly expressed in OR. If the P-value of the q test was <0.10 or the I2 statistic was  $\geq$ 50%, we assessed and considered the inter-study heterogeneity to be significant. For observational studies, we maximally support covariate-adjusted estimates. If a study uses an analytical method that is incompatible with synthesis for most other studies, we convert the effect estimate to the appropriate combined ratio or exclude the study from the meta-analysis.

## **Publication bias**

If the article heterogeneity is large in the analysis with statistical differences, we will use meta regression to investigate the source of heterogeneity. We assessed the asymmetry of the funnel plot with visual and Egger's bias, and estimated the possible missing studies with eMethods if publication bias is suspected.

### Analysis software

We conducted all analyses using stata (version 16) and Review Manager (version 5.3). Unless otherwise specified, we considered a two-sided P value of <0.05 as statistically significant.

## eFigure 1: Forest Plot Showing the Association Between carbohydrate and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis.

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Fixed, 95% Cl	Odds IV, Fixed	Ratio 1, 95% Cl	
Diana Tang 2021a Diana Tang 2021b Diana Tang 2021c Doh Young Lee 2018 Piers Dawes 2020a Piers Dawes 2020b Piers Dawes 2020c Piers Dawes 2020d	-0.3011051 -0.3024573 -0.597837 0.0009995 0.0295588 -0.0202027 -0.0100503 -0.0725707	0.2326598 0.2282614 0.2483288 0.0005102 0.0492101 0.059233 0.0719008 0.0876968	0.0% 0.0% 0.0% 100.0% 0.0% 0.0% 0.0%	0.74 [0.47, 1.17] 0.74 [0.47, 1.16] 0.55 [0.34, 0.89] 1.00 [1.00, 1.00] 1.03 [0.94, 1.13] 0.98 [0.87, 1.10] 0.99 [0.86, 1.14] 0.93 [0.78, 1.10]			7
Total (95% CI) Heterogeneity: Chi <sup>≈</sup> = 1 Test for overall effect: Z	0.46, df = 7 (P = 0.1 = 1.95 (P = 0.05)	6); I <sup>2</sup> = 33%	100.0%	1.00 [1.00, 1.00]	0.85 0.9 Favours [experimental]	1 1.1 Favours [control]	1.2

Carbohydrate: OR=1.00, [95%CI 1.00,1.00], I<sup>2</sup>=33%, p=0.05.

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ES	[95% Conf.	Interval]	% Weight	
0.740	0.469	1.168	0.00	
0.739	0.472	1.156	0.00	
0.550	0.338	0.895	0.00	
1.001	1.000	1.002	99.97	
1.030	0.935	1.134	0.01	
0.980	0.873	1.101	0.01	
0.990	0.860	1.140	0.01	
0.930	0.783	1.104	0.00	
1.001	1.000	1.002	100.00	
	ES 0.740 0.739 0.550 1.001 1.030 0.980 0.990 0.930 1.001	ES [95% Conf. 0.740 0.469 0.739 0.472 0.550 0.338 1.001 1.000 1.030 0.935 0.980 0.873 0.990 0.860 0.930 0.783 1.001 1.000	ES       [95% Conf. Interval]         0.740       0.469       1.168         0.739       0.472       1.156         0.550       0.338       0.895         1.001       1.000       1.002         1.030       0.935       1.134         0.980       0.873       1.101         0.990       0.860       1.140         1.001       1.000       1.002	ES       [95% Conf. Interval]       % Weight         0.740       0.469       1.168       0.00         0.739       0.472       1.156       0.00         0.550       0.338       0.895       0.00         1.001       1.000       1.002       99.97         1.030       0.935       1.134       0.01         0.980       0.873       1.101       0.01         0.990       0.860       1.140       0.01         1.091       1.000       1.002       100.00

Actually: Carbohydrate: OR=1.001, [95%CI 1.000,1.002]

### eFigure 2: Forest Plot Showing the Association Between caffeine and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Caffeine: OR=0.90, [95%CI 0.86,0.94],  $I^2=23\%$  p<0.000001.



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Study	ES	[95% Conf.	Interval]	% Weight	
Carlotta Micaela Jar	0.490	0.241	0.995	0.33	
Carlotta Micaela Jar	0.690	0.336	1.415	0.32	
Jordan T 2014a	0.940	0.882	1.002	40.76	
Jordan T 2014b	0.910	0.842	0.983	28.03	
Jordan T 2014c	0.850	0.760	0.950	13.38	
Jordan T 2014d	0.790	0.683	0.914	7.85	
Sang-Youp Lee 2018	0.800	0.635	1.008	3.12	
Sang-Youp Lee 2018	0.900	0.733	1.105	3.96	
Sang-Youp Lee 2018	0.950	0.724	1.247	2.25	
I-V pooled ES	0.898	0.862	0.935	100.00	

Actually: Caffeine: OR=0.898, [95%CI 0.862,0.935]

## eFigure 3: Forest Plot Showing the Association Between diversity and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Diversity: OR=0.65, [95%CI 0.41,1.04], I<sup>2</sup>=50% p=0.08.

				Odds Ratio			Odds Ratio		
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Random, 95% Cl		IV,	Random, 95	% CI	
Carlotta Micaela Jarach 2023a	-0.6348783	0.3247361	29.9%	0.53 [0.28, 1.00]		6 <del>5</del>			
Carlotta Micaela Jarach 2023b	-0.7550226	0.3371826	28.7%	0.47 [0.24, 0.91]		_	-		
Christopher Spankovich 2017	-0.0444	0.2295	41.4%	0.96 [0.61, 1.50]					
Total (95% CI)			100.0%	0.65 [0.41, 1.04]			•		
Heterogeneity: Tau <sup>2</sup> = 0.09; Chi <sup>2</sup> = 3.98, df = 2 (P = 0.14); I <sup>2</sup> = 50%					H	0.1	1	10	100
Test for overall effect: Z = 1.78 (P = 0.08)					Favo	ours (experim	nental] Favo	urs (control)	

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Study	ES	[95% Conf.	Interval]	% Weight	
Carlotta Micaela Jar Carlotta Micaela Jar Christopher Spankovi	0.530   0.470   0.950	0.280 0.243 0.606	1.002 0.910 1.490	29.86 28.60 41.54	
D+L pooled ES	0.653 +	0.410	1.038	100.00	
Actually: diversity: OR=0.653, [95	%CI 0.410, 1.038]				

## eFigure 4: Forest Plot Showing the Association Between egg and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta-analysis. Egg: OR=1.02, [95%CI 0.91,1.15], I<sup>2</sup>=55% p=0.75.

				Odds Ratio		Odds Ratio		
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Random, 95% Cl	ľ	V, Random, 95%	6 CI	
Abby McCormack 2014a	0.0304592	0.0274031	43.4%	1.03 [0.98, 1.09]				
Abby McCormack 2014b	0.1392621	0.0589045	32.9%	1.15 [1.02, 1.29]				
Abby McCormack 2014c	-0.10436	0.1166166	17.3%	0.90 [0.72, 1.13]				
Carlotta Micaela Jarach 2023a	-0.0100503	0.338181	3.0%	0.99 [0.51, 1.92]		<u> 19</u> - 28		
Carlotta Micaela Jarach 2023b	-0.6161861	0.3157843	3.4%	0.54 [0.29, 1.00]		8 <del>7 - 1</del> - 18		
Total (95% CI)			100.0%	1.02 [0.91, 1.15]		•		
Heterogeneity: Tau <sup>2</sup> = 0.01; Chi <sup>2</sup>		1	10	100				
Test for overall effect: Z = 0.32 (F	Favours [exper	imental] Favou	irs [control]	100				

Study	ES	[95% Conf.	Interval]	% Weight
Abby McCormack 2014 Abby McCormack 2014a Abby McCormack 2014b Carlotta Micaela Jar Carlotta Micaela Jar	1.031 1.149 0.901 0.990 0.540	0.926 1.024 0.717 0.510 0.291	1.148 1.290 1.133 1.921 1.003	36.13 35.00 20.41 3.97 4.50
O+∟ pooled ES	1.010	0.880	1.160	100.00

Actually: diversity: OR=1.010, [95%CI 0.880, 1.160].

## eFigure 5: Forest Plot Showing the Association Between fruit and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta-analysis. Fruit: OR=0.65, [95%CI 0.53,0.79], I<sup>2</sup>=0% p<0.0001.

Church or Cubaroun	la al Odda Datia I	er.	Moight	Odds Ratio	Odds F	latio
Study of Subgroup	logi Odds Ratio	3E	weight	IV, Fixed, 95% CI	IV, Fixed,	95% CI
Carlotta Micaela Jarach 2023a	-0.040822	0.3655756	7.7%	0.96 [0.47, 1.97]		12
Carlotta Micaela Jarach 2023b	-0.2484614	0.3083197	10.9%	0.78 [0.43, 1.43]		
Christopher Spankovich 2017	-0.4942963	0.2033897	25.0%	0.61 [0.41, 0.91]		
Diana Tang 2021a	-0.7550226	0.2457749	17.1%	0.47 [0.29, 0.76]		
Diana Tang 2021b	-0.3856625	0.230163	19.5%	0.68 [0.43, 1.07]		
Diana Tang 2021c	-0.3710637	0.2290667	19.7%	0.69 [0.44, 1.08]		
Total (95% CI)			100.0%	0.65 [0.53, 0.79]	•	
Heterogeneity: Chi <sup>2</sup> = 3.43, df = 3	5 (P = 0.63); I <sup>2</sup> = 0%					
Test for overall effect: Z = 4.24 (F	° < 0.0001)				Favours [experimental]	Favours [control]

Study	ES	[95% Conf.	Interval]	% Weight	
Carlotta Micaela Jar	0.960	0.469	1.965	7.74	
Christopher Spankovi	0.610	0.428	0.909	25.01	
Diana Tang 2021a	0.470	0.433	1.068	19.53	
Diana Tang 2021d	0.690	0.440	1.081	19.72	
I-V pooled ES	0.649	0.532	0.793 	100.00	

Actually: fruit: OR=0.649, [95%CI 0.532, 0.793].

## eFigure 6: Forest Plot Showing the Association Between fiber and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Fiber: OR=0.92, [95%CI 0.85, 0.99],  $I^2=63\%$  p=0.03.

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV. Random, 95% Cl	Odds Ratio IV. Random, 95% Cl
Diana Tang 2021a	-0.5108256	0.243222	2.3%	0.60 [0.37, 0.97]	-
Diana Tang 2021b	-0.1392621	0.2282217	2.6%	0.87 [0.56, 1.36]	A
Diana Tang 2021c	-0.2613648	0.2306047	2.5%	0.77 [0.49, 1.21]	
Doh Young Lee 2018	0.003992	0.0022879	27.8%	1.00 [1.00, 1.01]	•
Piers Dawes 2020a	-0.0304592	0.0527859	18.3%	0.97 [0.87, 1.08]	
Piers Dawes 2020b	-0.0943106	0.0588071	16.9%	0.91 [0.81, 1.02]	
Piers Dawes 2020c	-0.1508229	0.0622392	16.1%	0.86 [0.76, 0.97]	
Piers Dawes 2020d	-0.1392621	0.0759266	13.4%	0.87 [0.75, 1.01]	- Bank
Total (95% CI)			100.0%	0.92 [0.85, 0.99]	•
Heterogeneity: Tau <sup>2</sup> = 0	).01; Chi² = 19.09, o	f = 7 (P = 0.0)	)08); I <sup>2</sup> = I	63% -	
Test for overall effect: Z	.= 2.21 (P = 0.03)	88	<u>.</u>		0.5 0.7 1 1.5 2 Favours [experimental] Favours [control]

Study	ES ES	[95% Conf.	Interval]	% Weight	
Diana Tang 2021a	0.600	0.372	0.966	2.31	
Diana Tang 2021b	0.870	0.556	1.361	2.59	
Diana Tang 2021d	0.770	0.490	1.210	2.54	
Doh Young Lee 2018	1.004	1.000	1.009	27.81	
Piers Dawes 2020a	0.970	0.875	1.076	18.30	
Piers Dawes 2020b	0.910	0.811	1.021	16.90	
Piers Dawes 2020c	0.860	0.761	0.972	16.14	
Piers Dawes 2020d	0.870	0.750	1.010	13.40	
D+L pooled ES	0.918	0.851	0.990	100.00	
	•				

Actually: fruit: OR=0.918, [95%CI 0.851, 0.990].

### eFigure 7: Forest Plot Showing the Association Between fat and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Fat: OR=1.07, [95%CI 0.97,1.18],  $1^2$ =73% p=0.16.

				Odds Ratio	Odds Ratio
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Christopher Spankovich 2017	-0.3710637	0.1794132	5.9%	0.69 [0.49, 0.98]	· · · · · · · · · · · · · · · · · · ·
Doh Young Lee 2018	0.0029955	0.0010173	27.8%	1.00 [1.00, 1.01]	•
Piers Dawes 2020a	0.0582689	0.0574609	20.2%	1.06 [0.95, 1.19]	
Piers Dawes 2020b	0.0861777	0.0700094	17.8%	1.09 [0.95, 1.25]	
Piers Dawes 2020c	0.1739534	0.0832964	15.5%	1.19 [1.01, 1.40]	
Piers Dawes 2020d	0.285179	0.1010838	12.8%	1.33 [1.09, 1.62]	2
Total (95% CI)			100.0%	1.07 [0.97, 1.18]	•
Heterogeneity: Tau <sup>2</sup> = 0.01; Chi <sup>2</sup>	= 18.68, df = 5 (P =	= 0.002); l <sup>2</sup> =	73%	15 N 181	
Test for overall effect: Z = 1.41 (F	° = 0.16)	-			0.5 0.7 1 1.5 2 Favours [experimental] Favours [control]

Study	ES	[95% Conf.	Interval]	% Weight	
Christopher Spankovi	0.690	0.485	0.981	5.95	
Doh Young Lee 2018	1.003	1.001	1.005	27.75	
Piers Dawes 2020a	1.060	0.947	1.186	20.17	
Piers Dawes 2020b	1.090	0.950	1.250	17.81	
Piers Dawes 2020c	1.190	1.011	1.401	15.50	
Piers Dawes 2020d	1.330	1.091	1.621	12.82	
D+L pooled ES	1.072	0.973	1.181	100.00	

Actually: fat: OR=1.072, [95%CI 0.973, 1.181].

## eFigure 8: Forest Plot Showing the Association Between margarine and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Margarine: OR=1.21, [95%CI 0.90, 1.63],  $I^2=0\%$  p=0.20.

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Fixed, 95% Cl		N	Odds Ratio /, Fixed, 95%	CI	
Carlotta Micaela Jarach 2023a	0.3001046	0.8652602	3.0%	1.35 [0.25, 7.36]			10 1755		
Carlotta Micaela Jarach 2023b	0.3364722	0.9974543	2.3%	1.40 [0.20, 9.89]		<u> 20</u>			
Milena Tomanic 2020	0.1856494	0.154809	94.7%	1.20 [0.89, 1.63]			<b>.</b>		
Total (95% CI)			100.0%	1.21 [0.90, 1.63]			٠		
Heterogeneity: Chi² = 0.04, df = Test for overall effect: Z = 1.28 (F	2 (P = 0.98); I <sup>z</sup> = 0% <sup>P</sup> = 0.20)	0			L 0.01 Fav	0.1 ours (experim	1 nental] Favo	10 urs [control]	100

Study	ES	[95% Conf.	Interval]	% Weight	
Carlotta Micaela Jar Carlotta Micaela Jar Milena Tomanic 2020	1.350   1.400   1.200	0.248 0.198 0.887	7.359 9.889 1.624	3.01 2.27 94.72	
I-V pooled ES	1.208	0.900	1.622	100.00	

Actually: margarine: OR=1.208, [95%CI 0.900, 1.622].

## eFigure 9: Forest Plot Showing the Association Between meat and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Meat: OR=1.10, [95%CI 0.78, 1.54],  $I^2=0\%$  p=0.59.

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Fixed, 95% Cl			Odds Ratio	o % Cl	
Carlotta Micaela Jarach 2023a	0.3987761	0.3484928	24.6%	1.49 [0.75, 2.95]				-23	
Carlotta Micaela Jarach 2023b	-0.0304592	0.3287067	27.6%	0.97 [0.51, 1.85]			-		
Christopher Spankovich 2017	0.0099503	0.2496967	47.8%	1.01 [0.62, 1.65]					
Total (95% CI)			100.0%	1.10 [0.78, 1.54]			•		
Heterogeneity: Chi <sup>2</sup> = 1.02, df = 1 Test for overall effect: Z = 0.55 (F	2 (P = 0.60); I <sup>z</sup> = 0% <sup>2</sup> = 0.59)				0.01 Favo	0.1 Durs (exper	1 imental] Fav	10 Durs [control]	100

Study	ES	[95% Conf.	Interval]	% Weight	
Carlotta Micaela Jar Carlotta Micaela Jar Christopher Spankovi	1.490 0.970 1.010	0.753 0.509 0.619	2.950 1.847 1.648	24.56 27.60 47.84	
I-V pooled ES	1.099	0.783	1.542	100.00	

Actually: meat: OR=1.099, [95%CI 0.783, 1.542].

## eFigure 10: Forest Plot Showing the Association Between sugar and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Sugar: OR=1.00, [95%CI 0.97,1.03],  $I^2=0\%$  p=0.84.

				Odds Ratio	Odds Ratio
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Fixed, 95% Cl	IV, Fixed, 95% Cl
Abby McCormack 2014a	0	0.0230439	44.3%	1.00 [0.96, 1.05]	
Abby McCormack 2014b	0.0099503	0.0233327	43.2%	1.01 [0.96, 1.06]	
Abby McCormack 2014c	-0.0294288	0.0469906	10.7%	0.97 [0.89, 1.06]	
Carlotta Micaela Jarach 2023a	-0.0725707	0.3247361	0.2%	0.93 [0.49, 1.76]	•
Carlotta Micaela Jarach 2023b	-0.210721	0.3237852	0.2%	0.81 [0.43, 1.53]	•
Diana Tang 2021a	-0.4462871	0.236286	0.4%	0.64 [0.40, 1.02]	• · · · · · · · · · · · · · · · · · · ·
Diana Tang 2021b	-0.0618754	0.2243772	0.5%	0.94 [0.61, 1.46]	
Diana Tang 2021c	-0.356675	0.2383442	0.4%	0.70 [0.44, 1.12]	
Total (95% CI)			100.0%	1.00 [0.97, 1.03]	•
Heterogeneity: Chi <sup>2</sup> = 6.89, df = 7	' (P = 0.44); I <sup>2</sup> = 0%			W 36 38	
Test for overall effect: Z = 0.20 (P	= 0.84)				0.7 0.85 1 1.2 1.5 Favours [experimental] Favours [control]

Study	ES	[95% Conf.	Interval]	% Weight	
Abby McCormack 2014 Abby McCormack 2014a Abby McCormack 2014b Carlotta Micaela Jar Carlotta Micaela Jar Diana Tang 2021a Diana Tang 2021b	1.000 1.010 0.971 0.930 0.810 0.640 0.940	0.956 0.965 0.886 0.492 0.429 0.403 0.606	1.046 1.057 1.065 1.758 1.528 1.017 1.459	44.34 43.25 10.66 0.22 0.22 0.42 0.47	-
Diana Tang 2021c     I-V pooled ES	0.700 	0.439  0.967	1.117  1.027	0.41  100.00	

Actually: sugar: OR=0.997, [95%CI 0.967, 1.027].

### eFigure 11: Forest Plot Showing the Association Between protein and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta-analysis. Fish: OR=1.00, [95%CI 1.00,1.00],  $I^2=0\%$  p=0.009.

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				Odds Ratio			Odds Ratio		
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Fixed, 95% CI		I	/, Fixed, 95%	CI	
Doh Young Lee 2018	0.001998	0.0007634	99.9%	1.00 [1.00, 1.00]					
Piers Dawes 2020a	0.0198026	0.0546964	0.0%	1.02 [0.92, 1.14]			+		
Piers Dawes 2020b	0.0099503	0.060906	0.0%	1.01 [0.90, 1.14]			100		
Piers Dawes 2020c	-0.0304592	0.0680814	0.0%	0.97 [0.85, 1.11]			1		
Piers Dawes 2020d	0.0582689	0.0858348	0.0%	1.06 [0.90, 1.25]			1		
Total (95% CI)			100.0%	1.00 [1.00, 1.00]					
Heterogeneity: Chi <sup>2</sup> = 0	.78, df = 4 (P = 0.94	4); I² = 0%			L	0.1		10	100
Test for overall effect: Z	= 2.62 (P = 0.009)				Favo	urs (experin	nental] Favoi	urs [control]	100

Study	ES	[95% Conf.	Interval]	% Weight	
Doh Young Lee 2018 Piers Dawes 2020a Piers Dawes 2020b Piers Dawes 2020c Piers Dawes 2020d	1.002 1.020 1.010 0.970 1.060	1.001 0.916 0.896 0.849 0.896	1.004 1.135 1.138 1.108 1.254	99.94 0.02 0.02 0.01 0.01	
I-V pooled ES	1.002	1.001	1.004	100.00	

Actually: protein: OR=1.002, [95%CI 1.001, 1.004].

## eFigure 12: Forest Plot Showing the Association Between fish and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta-analysis. Fish: OR=0.98, [95%CI 0.91,1.05],  $1^2$ =72% p=0.57.

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio	Odds Ratio IV. Random, 95%	CI	
Abby McCormack 2014a	-0.0202027	0.0181367	34.4%	0.98 [0.95, 1.02]		01	
Abby McCormack 2014b	-0.0943106	0.0197415	33.9%	0.91 [0.88, 0.95]			
Abby McCormack 2014c	0.0769611	0.0404261	25.8%	1.08 [1.00, 1.17]			
Carlotta Micaela Jarach 2023a	0.1739534	0.3557993	1.0%	1.19 [0.59, 2.39]			
Carlotta Micaela Jarach 2023b	-0.2876821	0.3132832	1.3%	0.75 [0.41, 1.39]	•		
Milena Tomanic 2020	0.003992	0.1847285	3.6%	1.00 [0.70, 1.44]			
Total (95% CI)			100.0%	0.98 [0.91, 1.05]	•		
Heterogeneity: Tau <sup>2</sup> = 0.00; Chi <sup>2</sup>	= 18.17, df = 5 (P =	: 0.003); l <sup>2</sup> = 1	72%				<u> </u>
Test for overall effect: Z = 0.57 (F	P = 0.57)				Favours [experimental] Favour	s [control]	2

Study	ES	[95% Conf.	Interval]	% Weight	
Abby McCormack 2014 Abby McCormack 2014a Abby McCormack 2014b Carlotta Micaela Jar Carlotta Micaela Jar	0.980 0.910 1.080 1.190 0.750	0.946 0.875 0.998 0.593 0.406	1.015 0.946 1.169 2.390 1.386	35.43 34.93 27.04 1.14 1.46	
D+L pooled ES	0.979	0.907	1.056	100.00	

Actually: fish: OR=0.979, [95%CI 0.907, 1.056].

## eFigure 13: Forest Plot Showing the Association Between vegetable and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Vegetable: OR=1.10, [95%CI 0.91,1.34],  $I^2=0\%$  p=0.33..

				Odds Ratio	Odds	Ratio	
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Fixed, 95% Cl	IV, Fixed	I, 95% CI	
Carlotta Micaela Jarach 2023a	-0.2613648	0.3602729	7.6%	0.77 [0.38, 1.56]	10 <b>1</b>		
Carlotta Micaela Jarach 2023b	-0.2876821	0.321398	9.5%	0.75 [0.40, 1.41]	A3	1 mm	
Christopher Spankovich 2017	0.2231435	0.1754021	31.9%	1.25 [0.89, 1.76]	1990	-	
Diana Tang 2021a	0.2776318	0.2411069	16.9%	1.32 [0.82, 2.12]	20-0		
Diana Tang 2021b	-0.0304592	0.2437529	16.5%	0.97 [0.60, 1.56]			
Diana Tang 2021c	0.1739534	0.2357803	17.7%	1.19 [0.75, 1.89]			
Total (95% CI)			100.0%	1.10 [0.91, 1.34]		•	
Heterogeneity: Chi <sup>2</sup> = 3.88, df = 5	5 (P = 0.57); I <sup>2</sup> = 0%						<u> </u>
Test for overall effect: Z = 0.98 (F	9 = 0.33)				Favours [experimental]	Favours [control]	5

Study	ES	[95% Conf.	Interval]	% Weight	
Carlotta Micaela Jar	0.770	0.380	1.560	7.56	
Christopher Spankovi	1.250	0.886	1.408	31.89	
Diana Tang 2021a Diana Tang 2021b	1.320 0.970	0.823 0.602	2.117 1.564	16.88 16.52	
Diana Tang 2021c	1.190	0.750	1.889	17.65	
I-V pooled ES	1.101	0.907	1.337	100.00	

Actually: vegetable: OR=1.101, [95%CI 0.907, 1.337].

## eFigure 14: Forest Plot Showing the Association Between water and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Water: OR=1.00, [95%CI 0.99,1.01],  $I^2=20\%$  p=0.55.



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Study	ES	[95% Conf.	Interval]	% Weight		
Carlotta Micaela Jar Doh Young Lee 2018 Milena Tomanic 2020	0.840 1.003 1.210	0.429 0.992 0.950	1.645 1.014 1.541	0.03 99.77 0.21		
I-V pooled ES	1.003	0.992	1.014	100.00		

Actually: water: OR=1.003, [95%CI 0.992, 1.014].

### eFigure 15: Forest Plot Showing the Association Between dairy and tinnitus.

Black diamonds are the estimated pooled odd ratio (OR) for each random-effects meta-analysis; Red box sizes reflect the relative weight apportioned to studies in the meta- analysis. Dairy: OR=0.83, [95%CI 0.77, 0.89],  $I^2=0\%$  p<0.00001



Study	ES	[95% Conf. I	nterval]	% Weight	
Abby McCormack 2014 Abby McCormack 2014a Abby McCormack 2014b Christopher Spankovi	0.847 0.787 0.877 0.990	0.753 0.702 0.699 0.631	0.953 0.882 1.100 1.552	41.62 44.21 11.30 2.86	
I-V pooled ES	0.827	0.766	0.892	100.00	

Actually: dairy: OR=0.83, [95%CI 0.766, 0.892].

eFigure 16: Sensitivity analysis between caffeine and tinnitus.



After deleting one study at a time, conflicting results emerged and further identification of the source of heterogeneity was needed.

It has been confirmed that the main contradiction comes from Abby McCormack 2017, and the sensitivity analysis after removal the research did not show contradictory outcome, indicating the robustness of the results.

### eFigure 17:Sensitivity analysis between fruit and tinnitus.

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	Meta-analysis estima Lower CI Limit 0	ites, given named a Estimate	study is omitted Upper CI Limit
Carlotta Micaela Jarach 2023a			
Carlotta Micaela Jarach 2023b			
Christopher Spankovich 2017			
Diana Tang 2021a			
Diana Tang 2021b		õ	
Diana Tang 2021d		0	i i
0	50.53	0.65	0.79 0.86

After deleting one study one by one, there was no contradictory outcome, and the outcome was relatively stable.

eFigure 18:Sensitivity analysis between fiber and tinnitus.



After deleting one study one by one, there was no contradictory outcome, and the outcome was relatively stable.

eFigure 19:Sensitivity analysis between vegetable and tinnitus.





Lower CI Limit OEstimate

After deleting one study one by one, there was no contradictory outcome, and the outcome was relatively stable.

eFigure 20:Sensitivity analysis between sugar and tinnitus.





After deleting one study one by one, there was no contradictory outcome, and the outcome was relatively stable.

# eFigure 21:Publication bias and Egger test on caffeine





Cut and complement method tips, there was no significant publication bias.

# eFigure 22: Publication bias and Egger test on fruit



Egger test: Fruit p=0.205>0.05, there was no significant publication bias.

# eFigure 23:Publication bias and Egger test on fiber





Egger test: Fruit p=0.006<0.05. Cut and complement method tips, there was no significant publication bias.

# eFigure 24:Publication bias and Egger test on vegetable.





Egger test: Fruit p=0.041<0.05. Cut and complement method tips, there was no significant publication bias.

# eFigure 25:Publication bias and Egger test on sugar.







Egger test: Fruit p=0.035<0.05. Cut and complement method tips, there was no significant publication bias.

# eFigure 26:Publication bias and Egger test on fat.



Egger test: Fat p=0.306>0.05, there was no significant publication bias.

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## eTable 1. Meta-analysis of Observational Studies in Epidemiology (MOOSE) Checklist

Item No.	Recommendation	Reported on Page No				
Repo	Reporting of background should include					
1	Problem definition	3-5				
2	Hypothesis statement	3-5				
3	Description of study outcome(s)	3-5				
4	Type of exposure or intervention used	3-5				
5	Type of study designs used	-				
6	Study population	5				
Repo	rting of search strategy should include					
7	Qualifications of searchers (eg, librarians and investigators)	6				
8	Search strategy, including time period included in the synthesis and keywords	6				
9	Effort to include all available studies, including contact with authors	6, 7				
10	Databases and registries searched	5,6				
11	Search software used, name and version, including special features used (eg, explosion)	8				
12	Use of hand searching (eg, reference lists of obtained articles)	6				
13	List of citations located and those excluded, including justification	6, Fig 1				
14	Method of addressing articles published in languages other than English	7				
15	Method of handling abstracts and unpublished studies	6, 7				
16	Description of any contact with authors	-				
Repo	rting of methods should include					

Supplemental material

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17	Description of relevance or appropriateness of studies assembled for assessing the hypothesis to be tested	8
18	Rationale for the selection and coding of data (eg, sound clinical principles or convenience)	7-8
19	Documentation of how data were classified and coded (eg, multiple raters, blinding and interrater reliability)	7
20	Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)	7
21	Assessment of study quality, including blinding of quality assessors, stratification or regression on possible predictors of study results	7
22	Assessment of heterogeneity	8
23	Description of statistical methods (eg, complete description of fixed or random effects models, justification of whether the	8
	chosen models account for predictors of study results, dose-response models, or cumulative meta-analysis) in sufficient detail to be replicated	
24	Provision of appropriate tables and graphics	Table 1, Fig 1
Repo	rting of results should include	
25	Graphic summarizing individual study estimates and overall estimate	Fig 2, Table 1
26	Table giving descriptive information for each study included	eTable2
27	Results of sensitivity testing (eg, subgroup analysis)	eFig16-20
28	Indication of statistical uncertainty of findings	10,11
Repo	rting of discussion should include	
29	Quantitative assessment of bias (eg, publication bias)	eFig21-26
30	Justification for exclusion (eg, exclusion of non-English language citations)	Fig 1
31	Assessment of quality of included studies	eTable 5
Repo	rting of conclusions should include	
32	Consideration of alternative explanations for observed results	11-19
33	Generalization of the conclusions (ie, appropriate for the data presented and within the domain of the literature review)	11-19

34	Guidelines for future research	19-20
35	Disclosure of funding source	1

# eTable 2: Dietary risk ratio associated with tinnitus

Carlotta Micaela Jarach 2023a	scarce	butter	tinnitus	0.98	0.54	1.77
Carlotta Micaela Jarach 2023b	normal use or high use	butter	tinnitus	0.46	0.23	0.93
Diana Tang 2021a	2nd quartile (>188.4–231.7)	carbohydrate	tinnitus	0.74	0.47	1.17
Diana Tang 2021b	3rd quartile (231.8– 280.8)	carbohydrate	tinnitus	0.739	0.47	1.15
Diana Tang 2021c	4th quartile (>280.8– 577.7)	carbohydrate	tinnitus	0.55	0.34	0.9
Doh Young Lee 2018	direct	carbohydrate	tinnitus	1.001	0.999	1.001
Piers Dawes 2020a	quintile 2	Carbohydrate	tinnitus	1.03	0.94	1.14
Piers Dawes 2020b	quintile 3	Carbohydrate	tinnitus	0.98	0.88	1.11
Piers Dawes 2020c	quintile 4	Carbohydrate	tinnitus	0.99	0.86	1.14
Piers Dawes 2020d	quintile 5	Carbohydrate	tinnitus	0.93	0.78	1.1
Carlotta Micaela Jarach 2023a	50-100g/week	cheese	tinnitus	1.29	0.63	2.67
Carlotta Micaela Jarach 2023b	100+g/week	cheese	tinnitus	0.85	0.46	1.58
Abby McCormack 2014	direct	coffee	Transient tinnitus	1.020	1.010	1.031
Abby McCormack 2014a	direct	coffee	Persistent tinnitus	1.010	1.010	1.020
Abby McCormack 2014b	direct	coffee	Bothersome tinnitus	1.010	0.990	1.031
Carlotta Micaela Jarach 2023a	2nd quartile (850- 1749mg)	coffee	tinnitus	0.49	0.24	0.99
Carlotta Micaela Jarach 2023b	3rd quartile ( $\geq$ 1750mg)	coffee	tinnitus	0.69	0.34	1.43
Jordan T Glicksman 2014a	150-299 mg/day	coffee	tinnitus	0.94	0.88	1
Jordan T Glicksman 2014b	300-449 mg/day	coffee	tinnitus	0.91	0.84	0.98
Jordan T Glicksman 2014c	450-599 mg/day	coffee	tinnitus	0.85	0.76	0.95

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Jordan T Glicksman 2014d	600+ mg/day	coffee	tinnitus	0.79	0.68	0.91
Sang-Youp Lee 2018	Age 19–39 (Daily)	coffee	tinnitus	0.8	0.63	1
Sang-Youp Lee 2018	Age 40-64 (Daily)	coffee	tinnitus	0.9	0.73	1.1
Sang-Youp Lee 2018	Age >65 (Daily)	coffee	tinnitus	0.95	0.72	1.24
Abby McCormack 2014	direct	dairy	Transient tinnitus	0.847	0.952	0.752
Abby McCormack 2014a	direct	dairy	Persistent tinnitus	0.787	0.885	0.704
Abby McCormack 2014b	direct	dairy	Bothersome tinnitus	0.877	1.099	0.699
Christopher Spankovich 2017	direct	dairy	Persistent tinnitus	0.99	0.61	1.50
Carlotta Micaela Jarach 2023a	16-19	diversity	tinnitus	0.53	0.28	1
Carlotta Micaela Jarach 2023b	≥20	diversity	tinnitus	0.47	0.24	0.9
Abby McCormack 2014	direct	egg	Transient tinnitus	1.031	1.149	0.926
Abby McCormack 2014a	direct	egg	Persistent tinnitus	1.149	1.299	1.031
Abby McCormack 2014b	direct	egg	Bothersome tinnitus	0.901	1.136	0.719
Carlotta Micaela Jarach 2023a	1/week	eggs	tinnitus	0.99	0.51	1.92
Carlotta Micaela Jarach 2023b	2+/week	eggs	tinnitus	0.54	0.29	1
Christopher Spankovich 2017	direct	fat	Persistent tinnitus	0.69	0.49	0.99
Doh Young Lee 2018	direct	fat	tinnitus	1.003	1.001	1.005
Piers Dawes 2020a	quintile 2	fat	tinnitus	1.06	0.95	1.19
Piers Dawes 2020b	quintile 3	fat	tinnitus	1.09	0.95	1.25
Piers Dawes 2020c	quintile 4	fat	tinnitus	1.19	1.01	1.40
Piers Dawes 2020d	quintile 5	fat	tinnitus	1.33	1.09	1.62
Diana Tang 2021a	2nd quartile (>17.8– 23.8)	fiber	tinnitus	0.6	0.37	0.96
Diana Tang 2021b	3rd quartile (>23.8– 30.6)	fiber	tinnitus	0.87	0.56	1.37
Diana Tang 2021d	4th quartile (>30.6– 89.3)	fiber	tinnitus	0.77	0.49	1.21
Doh Young Lee 2018	direct	fiber	tinnitus	1.004	0.999	1.008
Piers Dawes 2020a	quintile 2	fiber	tinnitus	0.97	0.87	1.07
Piers Dawes 2020b	quintile 3	fiber	tinnitus	0.91	0.81	1.02
Piers Dawes 2020c	quintile 4	fiber	tinnitus	0.86	0.76	0.97
Piers Dawes 2020d	quintile 5	fiber	tinnitus	0.87	0.75	1.01

Abby McCormack 2014	direct	fish	Transient tinnitus	0.980	0.950	1.020
Abby McCormack 2014a	direct	fish	Persistent tinnitus	0.910	0.870	0.940
Abby McCormack 2014b	direct	fish	Bothersome tinnitus	1.080	0.990	1.160
Carlotta Micaela Jarach 2023a	300g/week	fish	tinnitus	1.19	0.59	2.38
Carlotta Micaela Jarach 2023b	≥450g/week	fish	tinnitus	0.75	0.41	1.4
Carlotta Micaela Jarach 2023a	900-1050g/week	fruit	tinnitus	0.96	0.47	1.97
Carlotta Micaela Jarach 2023b	≥1200g/week	fruit	tinnitus	0.78	0.43	1.44
Christopher Spankovich 2017	direct	fruit	Persistent tinnitus	0.61	0.41	0.91
Diana Tang 2021a	2nd quartile (>3.6– 6.2)	fruit	tinnitus	0.47	0.29	0.76
Diana Tang 2021b	3rd quartile (>6.2– 9.7)	fruit	tinnitus	0.68	0.43	1.06
Diana Tang 2021d	4th quartile (>9.7– 43.9)	fruit	tinnitus	0.69	0.44	1.08
Carlotta Micaela Jarach 2023a	scarce	margarine	tinnitus	1.35	0.25	7.43
Carlotta Micaela Jarach 2023b	normal use or high use	margarine	tinnitus	1.4	0.2	9.98
Carlotta Micaela Jarach 2023a	300g/week	meat	tinnitus	1.49	0.75	2.94
Carlotta Micaela Jarach 2023b	≥450g/week	meat	tinnitus	0.97	0.51	1.85
Christopher Spankovich 2017	direct	meat	Persistent tinnitus	1.01	0.62	1.65
Carlotta Micaela Jarach 2023a	2nt quartile (1-6 cops/week)	milk	tinnitus	0.68	0.3	1.52
Carlotta Micaela Jarach 2023b	3rt quartile (7+ cops/week)	milk	tinnitus	0.85	0.46	1.55
Doh Young Lee 2018	direct	protein	tinnitus	1.002	1.001	1.004
Piers Dawes 2020a	quintile 2	protein	tinnitus	1.02	0.92	1.14
Piers Dawes 2020b	quintile 3	protein	tinnitus	1.01	0.89	1.13
Piers Dawes 2020c	quintile 4	protein	tinnitus	0.97	0.85	1.11
Piers Dawes 2020d	quintile 5	protein	tinnitus	1.06	0.9	1.26
Abby McCormack 2014	direct	sugar	Transient tinnitus	1.000	0.952	1.042
Abby McCormack 2014a	direct	sugar	Persistent tinnitus	1.010	0.971	1.064
Abby McCormack 2014b	direct	sugar	Bothersome tinnitus	0.971	0.885	1.064

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Carlotta Micaela Iarach 2023a	2nt quartile (1-7	sugar	tinnitus	0.93	0.49	1 75
Carlotta Ivilcacia Jarach 2023a	spoon/week)	sugui	tillitus	0.75	0.47	1.75
Carlotta Micaela Jarach 2023b	3rt quartile (8+ spoon/week)	sugar	tinnitus	0.81	0.43	1.53
Diana Tang 2021a	2nd quartile (>91.0– 120.1)	sugar	tinnitus	0.64	0.4	1.01
Diana Tang 2021b	3rd quartile (>120.1– 154.0)	sugar	tinnitus	0.94	0.61	1.47
Diana Tang 2021c	4th quartile (>154.0– 350.8)	sugar	tinnitus	0.7	0.44	1.12
Piers Dawes 2020a	quintile 2	sugar	tinnitus	1.02	0.92	1.14
Piers Dawes 2020b	quintile 3	sugar	tinnitus	1.01	0.89	1.13
Piers Dawes 2020c	quintile 4	sugar	tinnitus	0.97	0.85	1.11
Piers Dawes 2020d	quintile 5	sugar	tinnitus	1.06	0.9	1.26
Christopher Spankovich 2017	direct	variety	Persistent tinnitus	0.95	0.61	1.5
Carlotta Micaela Jarach 2023a	900-1050g/week	vegetable	tinnitus	0.77	0.38	1.56
Carlotta Micaela Jarach 2023b	≥1200g/week	vegetable	tinnitus	0.75	0.4	1.41
Christopher Spankovich 2017	direct	vegetable	Persistent tinnitus	1.25	0.9	1.79
Diana Tang 2021a	2nd quartile (>7.2– 9.7)	vegetable	tinnitus	1.32	0.82	2.11
Diana Tang 2021b	3rd quartile (>9.7– 12.3)	vegetable	tinnitus	0.97	0.60	1.56
Diana Tang 2021c	4th quartile (>12.3– 54.5)	vegetable	tinnitus	1.19	0.75	1.89
Abby McCormack 2014	direct	vegetable and fruit	Transient tinnitus	1.000	1.000	1.010
Abby McCormack 2014a	direct	vegetable and fruit	Persistent tinnitus	1.010	1.000	1.010
Abby McCormack 2014b	direct	vegetable and fruit	Bothersome tinnitus	1.010	1.000	1.020
Carlotta Micaela Jarach 2023a	>1 liter/per day	water	tinnitus	0.84	0.43	1.65
Doh Young Lee 2018	direct	water	tinnitus	1.003	0.992	1.014

# eTable 3. Evaluation of Risk of Bias Using Newcastle-Ottawa Scale (NOS) for Observational Studies

Study	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Total
Carlotta Micaela Jarach 2023	*	*	*	*	*	*	*	*		8
Diana Tang 2021	*	*	*		*	*	*	*	*	8
Milena Tomanic 2020	*	*	*				*			4
Piers Dawes 2020	*	*	*		*	*	*			6
Sang-Yeon Lee 2019	*	*	*		*	*	*			6
Doh Young Lee 2018	*	*	*		*	*	*			6
Sang-Youp Lee 2018	*	*	*		*	*	*			6
Christopher Spankovich 2017	*	*	*		*	*	*			6
Abby McCormack 2014	*	*	*		*	*	*			6
Jordan T Glicksman 2014	*	*	*		*	*	*		*	7

# eTable 4. Literature screening process

Title	Author	Whether to include
The Role of Diet in Tinnitus Onset: A Hospital-Based Case-Control Study from Italy.	Carlotta Micaela Jarach 2023	YES
Associations between intake of dietary flavonoids and the 10-year incidence of tinnitus in older adults.	Diana Tang 2022	YES
Dietary Fibre Intake and the 10-Year Incidence of Tinnitus in Older Adults.	Diana Tang 2021	YES
Relationship Between Diet, Tinnitus, and Hearing Difficulties.	Piers Dawes 2020	YES
Association of Chocolate Consumption with Hearing Loss and Tinnitus in Middle-Aged People Based on the Korean National Health and Nutrition Examination Survey 2012-2013.	Sang-Yeon Lee 2019	YES
Relationship Between Diet and Tinnitus: Korea National Health and Nutrition Examination Survey.	Doh Young Lee 2018	YES
Association of Coffee Consumption with Hearing and Tinnitus Based on a National Population-Based Survey	Sang-Youp Lee 2018	YES
Relationship between dietary quality, tinnitus and hearing level: data from the national health and nutrition examination survey, 1999-2002.	Christopher Spankovich 2017	YES
Association of dietary factors with presence and severity of tinnitus in a middle-aged UK population.	Abby McCormack 2014	YES
A prospective study of caffeine intake and risk of incident tinnitus	Jordan T. Glicksman 2014	YES
The effect of MemoVigor 2 on recent-onset idiopathic tinnitus: a randomized double-blind placebo-controlled clinical trial.	Dimitrios G Balatsouras 2024	No
The effects of dietary and physical activity interventions on tinnitus symptoms: An RCT.	Ümüş Özbey-Yücel 2023	No

Effectiveness of Tinnitan Duo in Subjective Tinnitus with Emotional Affectation: A Prospective, Interventional Study.	Jennifer Knäpper 2023	No
Hyperlipidemia and its relation with tinnitus: Cross-sectional approach.	A Musleh 2022	No
Diet Quality and the Risk of Impaired Speech Reception Threshold in Noise: The UK Biobank cohort	Humberto Yévenes-Briones 2022	No
The effect of caffeine on tinnitus: Randomized triple-blind placebo- controlled clinical trial.	Alleluia Lima Losno Ledesma 2021	No
The effects of diet and physical activity induced weight loss on the severity of tinnitus and quality of life: A randomized controlled trial.	Ümüş Özbey-Yücel 2021	No
Dietary Factors and Tinnitus among Adolescents.	Milena Tomanic 2020	No
Restriction of salt, caffeine and alcohol intake for the treatment of Ménière's disease or syndrome.	Kiran Hussain 2018	No
The effect of supplemental dietary taurine on tinnitus and auditory discrimination in an animal model.	Thomas J Brozoski 2010	No
Low energy diet and intracranial pressure in women with idiopathic intracranial hypertension: prospective cohort study.	Alexandra J Sinclair 2010	No
Caffeine abstinence: an ineffective and potentially distressing tinnitus therapy.	Lindsay St Claire 2010	No
The role of endogenous Antisecretory Factor (AF) in the treatment of Meniere's Disease: A two-year follow-up study. Preliminary results.	Pasquale Viola 2020	No
Caffeine intake and Meniere's disease: Is there relationship?	Inés Sánchez-Seller 2018	No
Tinnitus features according to caffeine consumption.	Ricardo Rodrigues Figueiredo 2021	No
The Influence of Diet on Tinnitus Severity: Results of a Large-Scale, Online Survey	Steven C. Marcrum 2022	No