

MR results of two metabolic traits with NSCLC

Omega_3_pct SNP

SNP	effect_alo	other_alle	effect_alo	other_all	beta.	expobeta.	outceaf.	exposeaf.	outcc
rs1292809A	C	A	C		0.089249	-0.0011	0.2883	0.281411	
rs174546 T	C	T	C		-0.38996	-0.07082	0.3469	0.4141	
rs2229738T	C	T	C		-0.14857	-0.01232	0.0865	0.155919	
rs270615 C	G	C	G		0.02805	-0.02136	0.6769	0.584042	
rs4310508G	A	G	A		0.036655	0.018226	0.4871	0.472888	
rs600518 T	A	T	A		-0.06066	-0.00986	0.171	0.230482	
rs8107974T	A	T	A		-0.12936	-0.01062	0.0686	0.0636	
rs964184 C	G	C	G		-0.03792	-0.02785	0.838	0.855372	

Omega_3_pct results

exposure	outcome	method	nsnp	b	se	pval	lo_ci	up_ci
Omega_3_pNSCLC		MR Egger	8	0.189744	0.062752	0.023285	0.066751	0.312738
Omega_3_pNSCLC		Weighted	8	0.178701	0.04855	0.000233	0.083544	0.273859
Omega_3_pNSCLC		Inverse v	8	0.166186	0.045776	0.000283	0.076465	0.255907
Omega_3_pNSCLC		Simple mc	8	0.110355	0.119386	0.386059	-0.12364	0.344353
Omega_3_pNSCLC		Weighted	8	0.173242	0.047847	0.008501	0.079462	0.267021

Omega_3_pct heterogeneity

exposure	outcome	method	Q	Q_df	Q_pval
Omega_3_pNSCLC		MR Egger	3.470295	6	0.747918
Omega_3_pNSCLC		Inverse v	3.771542	7	0.805683

Omega_3_pct pleiotropy

exposure	outcome	egger_intse	pval
Omega_3_pNSCLC		-0.00603	0.010983

Omega_3_pct MR-PRESSO

RSSobs	Pvalue
1 7.785915	0.731

DHA_pct SNP

SNP	effect_alo	other_alle	effect_alo	other_all	beta.	expobeta.	outceaf.	exposeaf.	outcc
rs1046801T	C	T	C		0.061109	0.003126	0.2833	0.331083	
rs1082216G	T	G	T		0.044815	0.018716	0.4861	0.472735	
rs1292809A	C	A	C		0.070977	-0.0011	0.2883	0.281411	
rs174546 T	C	T	C		-0.27403	-0.07082	0.3469	0.4141	
rs2229738T	C	T	C		-0.12909	-0.01232	0.0865	0.155919	
rs600626 G	A	G	A		-0.03552	-0.01002	0.171	0.230569	

DHA_pct MRresults

exposure	outcome	method	nsnp	b	se	pval	lo_ci	up_ci
DHA_pct	NSCLC	MR Egger	6	0.266491	0.098484	0.053762	0.073464	0.459519
DHA_pct	NSCLC	Weighted	6	0.232508	0.068746	0.000719	0.097765	0.36725
DHA_pct	NSCLC	Inverse v	6	0.227516	0.063214	0.000319	0.103617	0.351414
DHA_pct	NSCLC	Simple mc	6	0.078388	0.144634	0.611104	-0.20509	0.36187
DHA_pct	NSCLC	Weighted	6	0.251538	0.0728	0.018136	0.108849	0.394227

DHA_pct heterogeneity

exposure	outcome	method	Q	Q_df	Q_pval
DHA_pct	NSCLC	MR Egger	1.469323	4	0.832061
DHA_pct	NSCLC	Inverse v	1.735692	5	0.884373

DHA_pct pleiotropy

exposure	outcome	egger_intse	pval
DHA_pct	NSCLC	-0.00696	0.013489 0.632997

DHA_pct MR-PRESSO

RSSobs	Pvalue
1	6.297764 0.713

Reverse MR results of two metabolic traits with NSCLC

NSCLC and Omega3_pct MR result

SNP	effect_alother_alleffect_alother_allbeta.	expobeta.	outceaf.	exposeaf.	outcc
rs1291438T	C	T	C	0.250651	-0.00315 0.356526 0.382525
rs359005CA	C	A	C	0.119163	0.002285 0.25565 0.2924
rs37003	C	A	C	-0.13644	0.00309 0.439149 0.440911
rs6011779T	C	T	C	-0.12542	0.003899 0.755965 0.808887
rs8066706C	T	C	T	0.419587	-0.00219 0.017157 0.020112

NSCLC and DHA_pct MR result

SNP	effect_alother_alleffect_alother_allbeta.	expobeta.	outceaf.	exposeaf.	outcc
rs1291438T	C	T	C	0.250651	-0.00685 0.356526 0.382525
rs359005CA	C	A	C	0.119163	0.005629 0.25565 0.2924
rs37003	C	A	C	-0.13644	-0.00132 0.439149 0.440911
rs6011779T	C	T	C	-0.12542	0.003532 0.755965 0.808887
rs8066706C	T	C	T	0.419587	0.008486 0.017157 0.020112

NSCLC-Omega_3_pct heterogeneity

exposure	outcome	method	Q	Q_df	Q_pval
NSCLC	Omega3_pc	MR Egger	4.008363	3	0.260563
NSCLC	Omega3_pc	Inverse v	4.827535	4	0.305456

NSCLC-DHA_pct heterogeneity

exposure	outcome	method	Q	Q_df	Q_pval
NSCLC	DHA_pct	MR Egger	1.061459	3	0.786385
NSCLC	DHA_pct	Inverse v	1.061498	4	0.900332

NSCLC-Omega3_pct pleiotropy

exposure	outcome	egger_intse	pval
NSCLC	Omega3_pc	0.005312	0.006784 0.490748

NSCLC-DHA_pct pleiotropy

exposure	outcome	egger_intse	pval
NSCLC	DHA_pct	3.71E-05	0.005924 0.995394

remove	pval.outc	se.outc	outcome	exposure	se.exposu	pval.exposu	mr_keep
FALSE	0.958596	0.021254	NSCLC	Omega_3_p	0.004458	8.20E-90	TRUE
FALSE	0.000265	0.019415	NSCLC	Omega_3_p	0.004242	1.00E-200	TRUE
FALSE	0.647979	0.026974	NSCLC	Omega_3_p	0.008099	1.10E-76	TRUE
FALSE	0.272402	0.019463	NSCLC	Omega_3_p	0.004473	4.30E-11	TRUE
FALSE	0.341165	0.019148	NSCLC	Omega_3_p	0.004058	7.10E-21	TRUE
FALSE	0.663419	0.022665	NSCLC	Omega_3_p	0.005555	7.10E-29	TRUE
FALSE	0.785684	0.039058	NSCLC	Omega_3_p	0.007693	8.60E-67	TRUE
FALSE	0.302641	0.027023	NSCLC	Omega_3_p	0.005947	1.20E-10	TRUE

or or_lci95 or_nci95
 1.208941 1.069029 1.367163
 1.195664 1.087133 1.31503
 1.180793 1.079464 1.291633
 1.116674 0.883696 1.411076
 1.189154 1.082705 1.306068

remove	pval.outc	se.outc	outcome	exposure	se.exposu	pval.exposu	mr_keep
FALSE	0.877674	0.020312	NSCLC	DHA_pct	0.004409	6.40E-45	TRUE
FALSE	0.328325	0.019146	NSCLC	DHA_pct	0.00402	5.50E-30	TRUE
FALSE	0.958596	0.021254	NSCLC	DHA_pct	0.004417	2.60E-59	TRUE
FALSE	0.000265	0.019415	NSCLC	DHA_pct	0.004214	1.00E-200	TRUE
FALSE	0.647979	0.026974	NSCLC	DHA_pct	0.008046	9.70E-58	TRUE
FALSE	0.658312	0.022666	NSCLC	DHA_pct	0.005518	6.20E-11	TRUE

or or_lci95 or_nci95
 1.305376 1.076229 1.583313
 1.26176 1.102704 1.443759
 1.255477 1.109176 1.421076
 1.081543 0.814571 1.436012
 1.286002 1.114994 1.483237

```
se.outcpval.outcpval.expcse.exposumr_keep  
0.004171 0.450001 3.24E-38 0.019392 TRUE  
0.004488 0.59 3.06E-08 0.021518 TRUE  
0.004119 0.56 1.91E-12 0.019377 TRUE  
0.005174 0.28 7.27E-09 0.021681 TRUE  
0.014591 0.95 4.27E-10 0.067199 TRUE
```

```
se.outcpval.outcpval.expcse.exposumr_keep  
0.004132 0.11 3.24E-38 0.019392 TRUE  
0.004446 0.21 3.06E-08 0.021518 TRUE  
0.00408 0.649999 1.91E-12 0.019377 TRUE  
0.005125 0.42 7.27E-09 0.021681 TRUE  
0.014453 0.42 4.27E-10 0.067199 TRUE
```