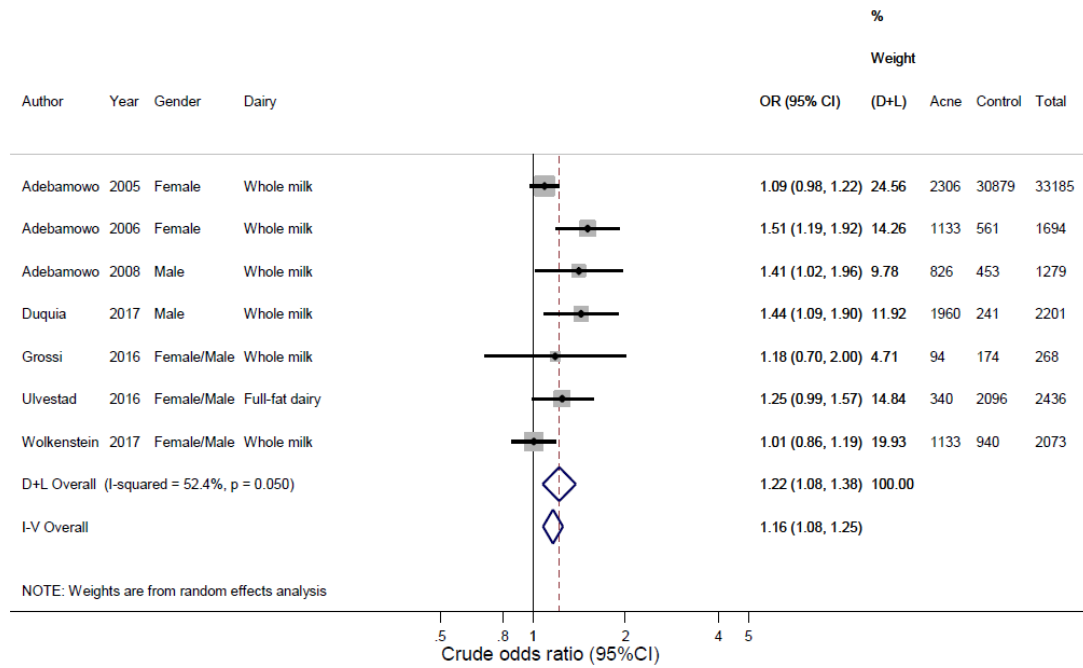
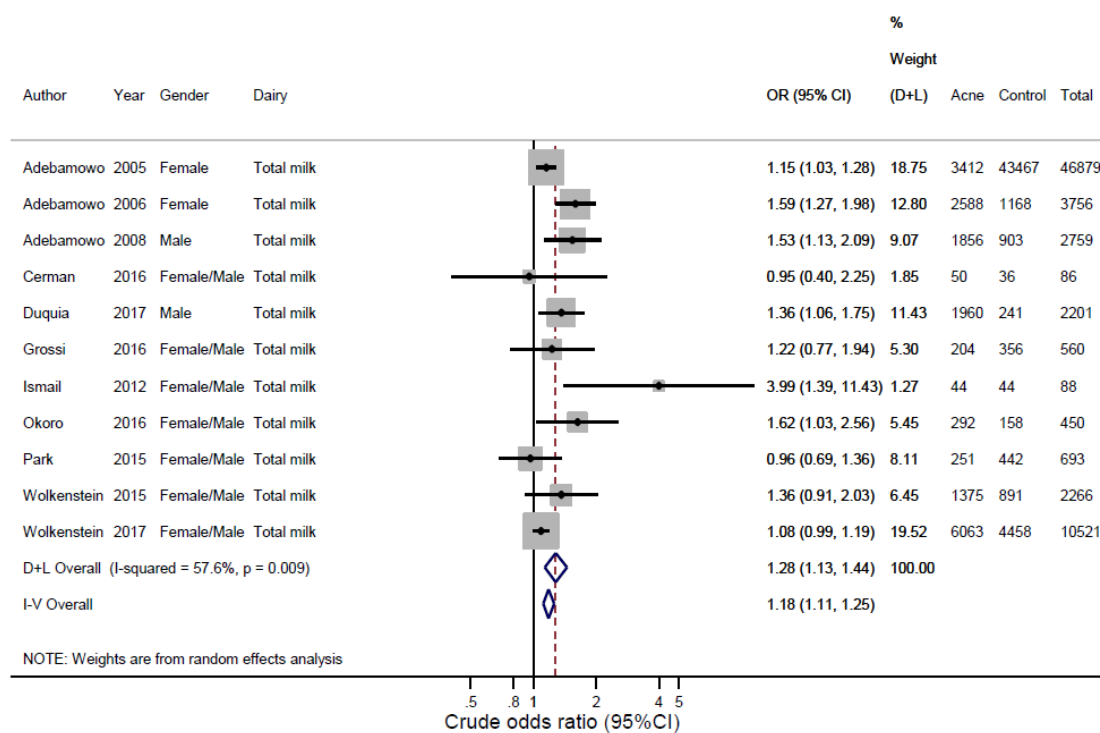


Supplementary Figure 1 Full-fat dairy intake vs. no dairy intake



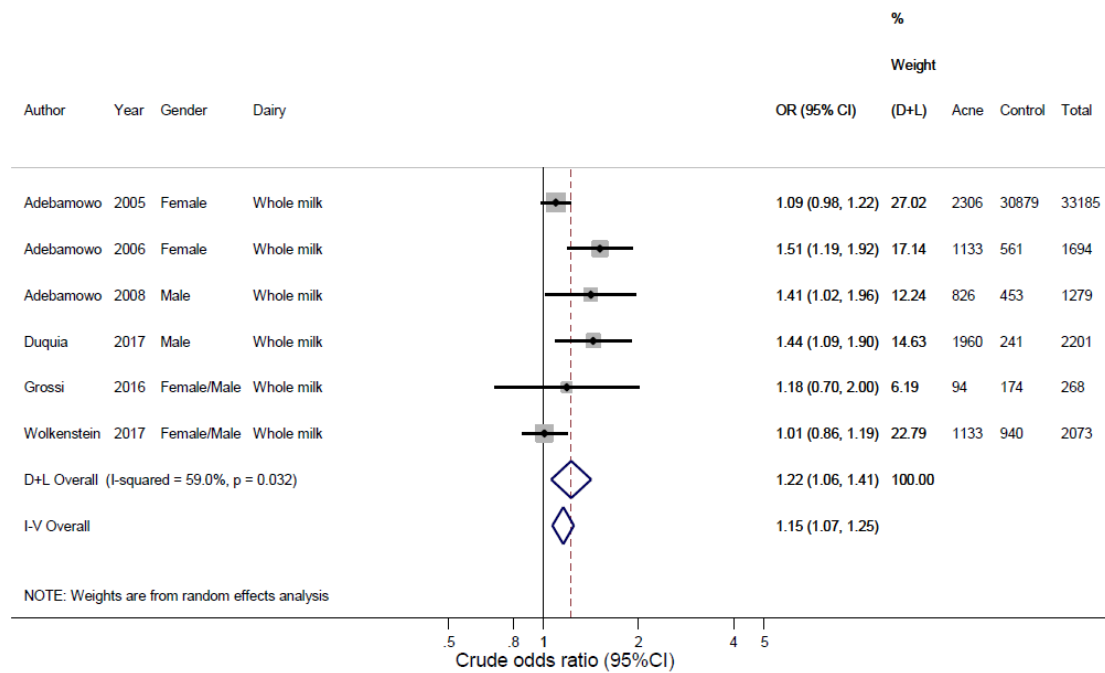
Supplementary Figure 2

Any milk intake vs. no milk intake



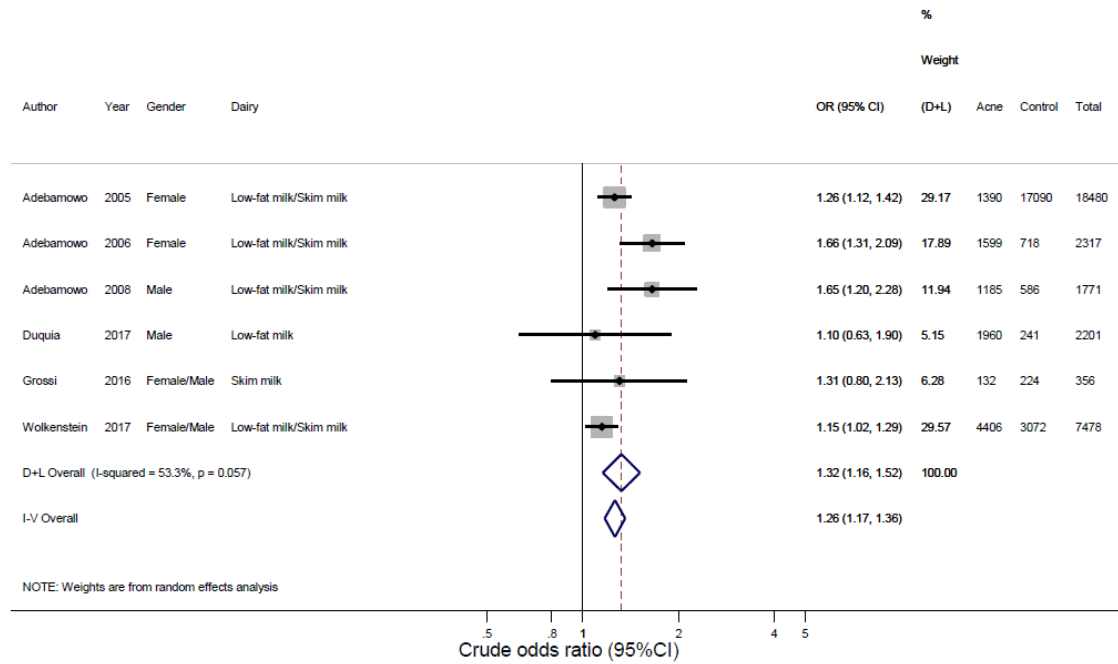
Supplementary Figure 3

Whole milk intake vs. no milk intake



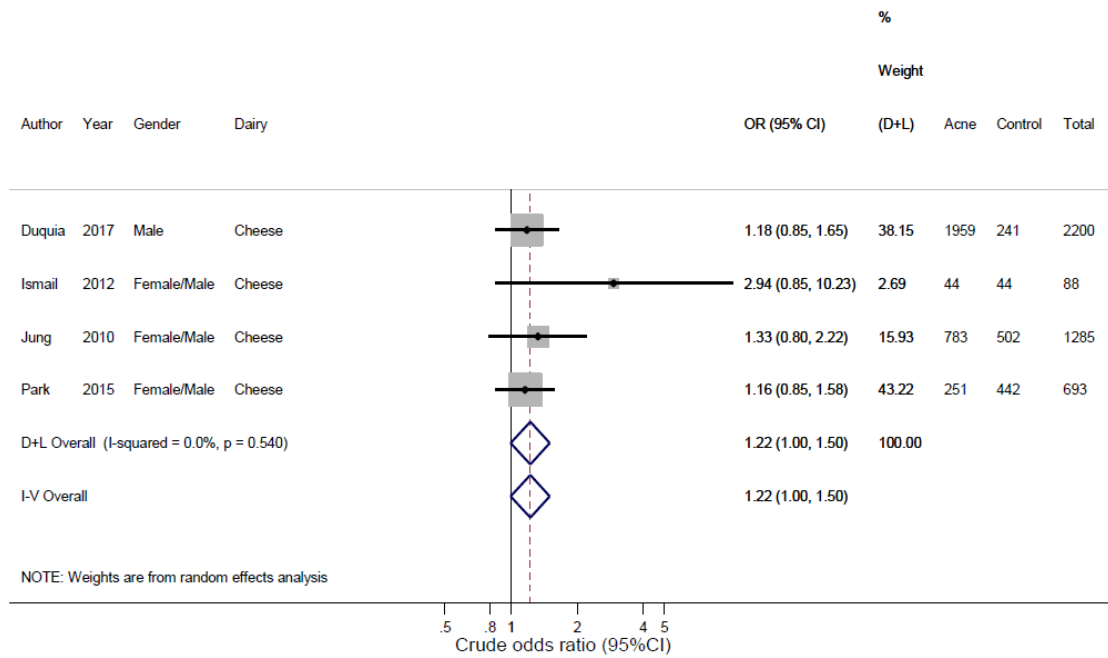
Supplementary Figure 4

Low-fat/skim milk intake vs. no milk intake



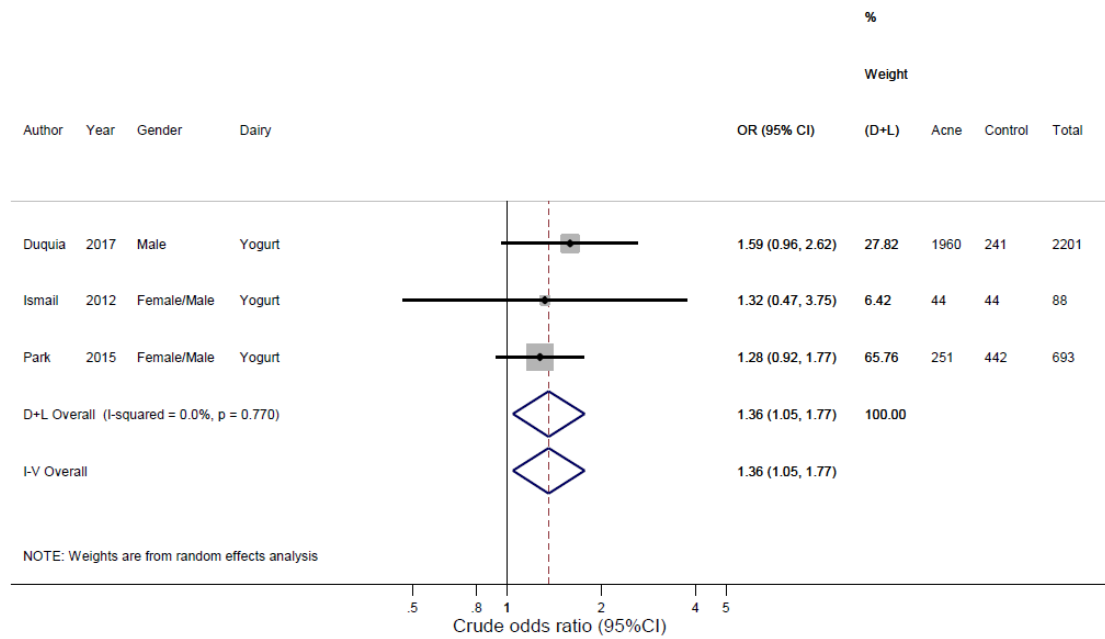
Supplementary Figure 5

Cheese vs. no cheese intake



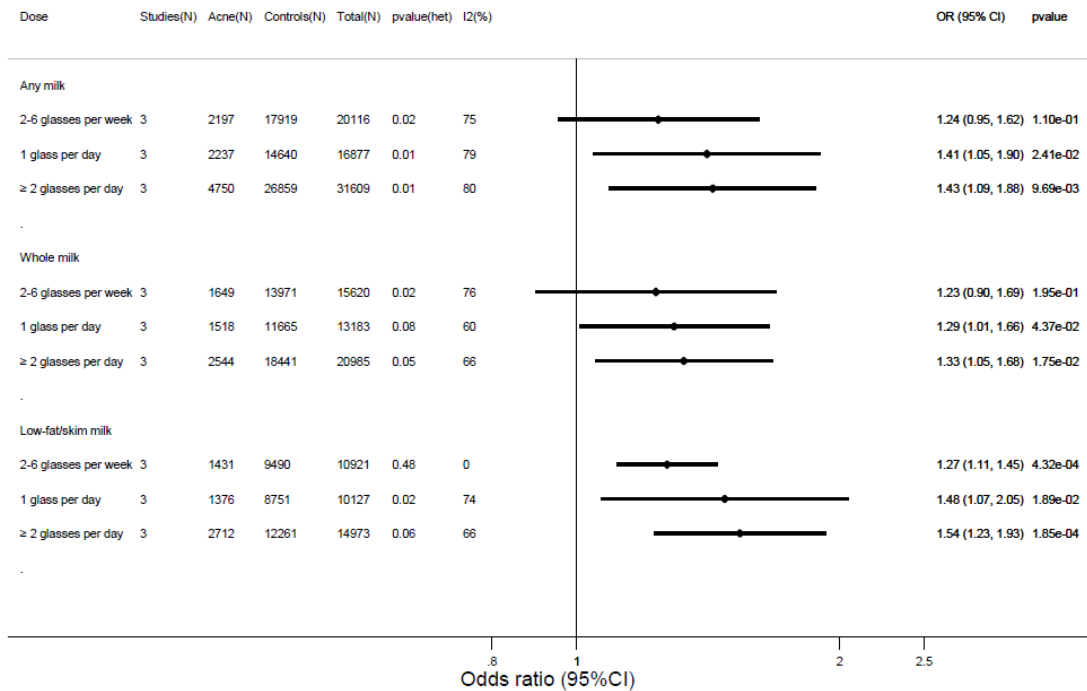
Supplementary Figure 6

Yogurt intake vs. no intake



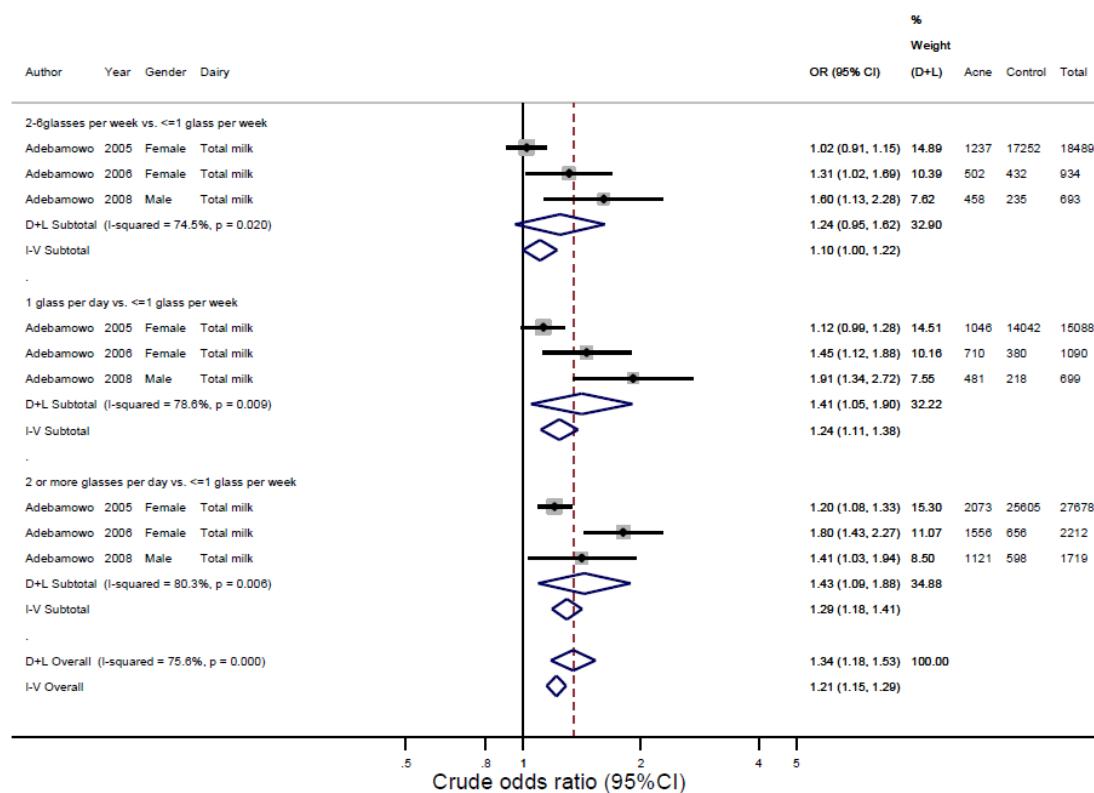
Supplementary Figure 7

Meta-analyses of frequency of milk intake and acne
compared to <=1 glass per week



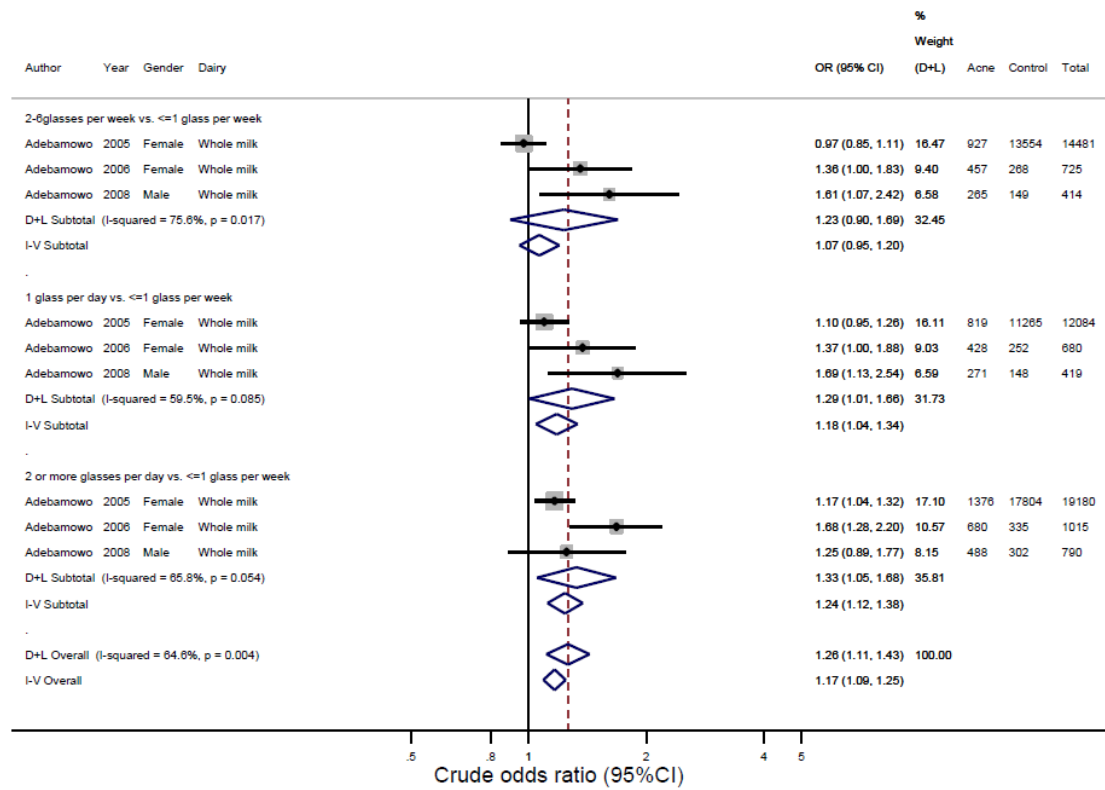
Supplementary Figure 8

Amount of total milk intake



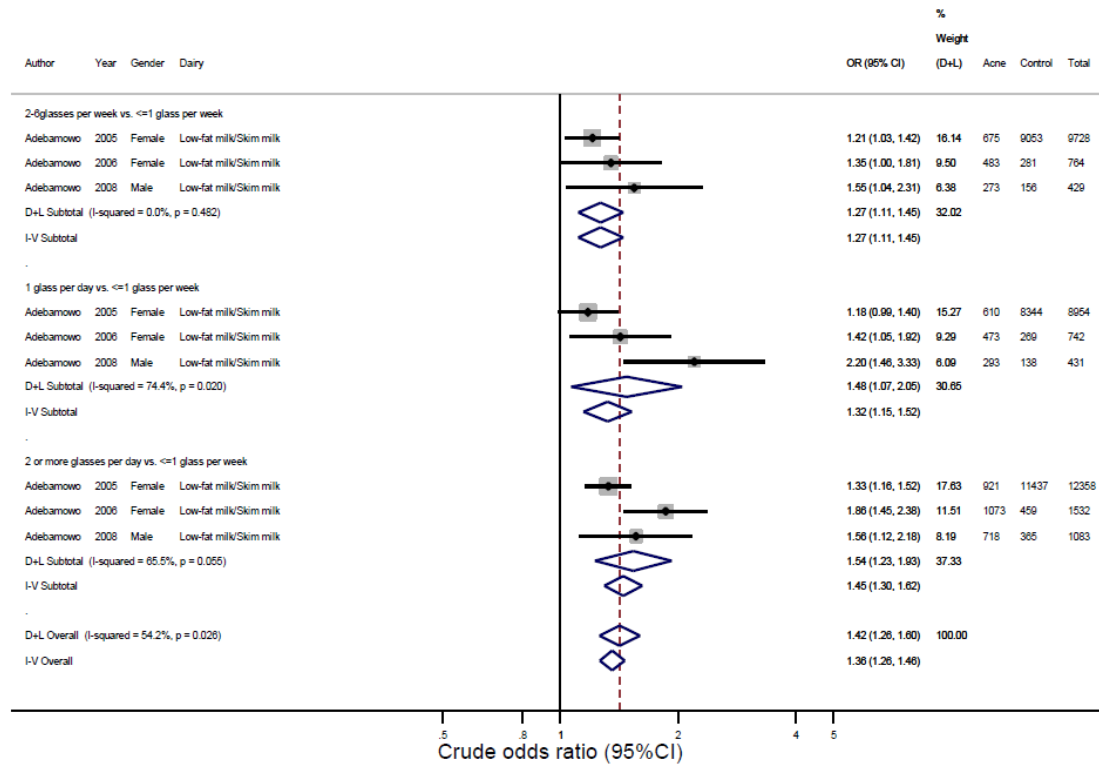
Supplementary Figure 9

Amount of whole milk intake



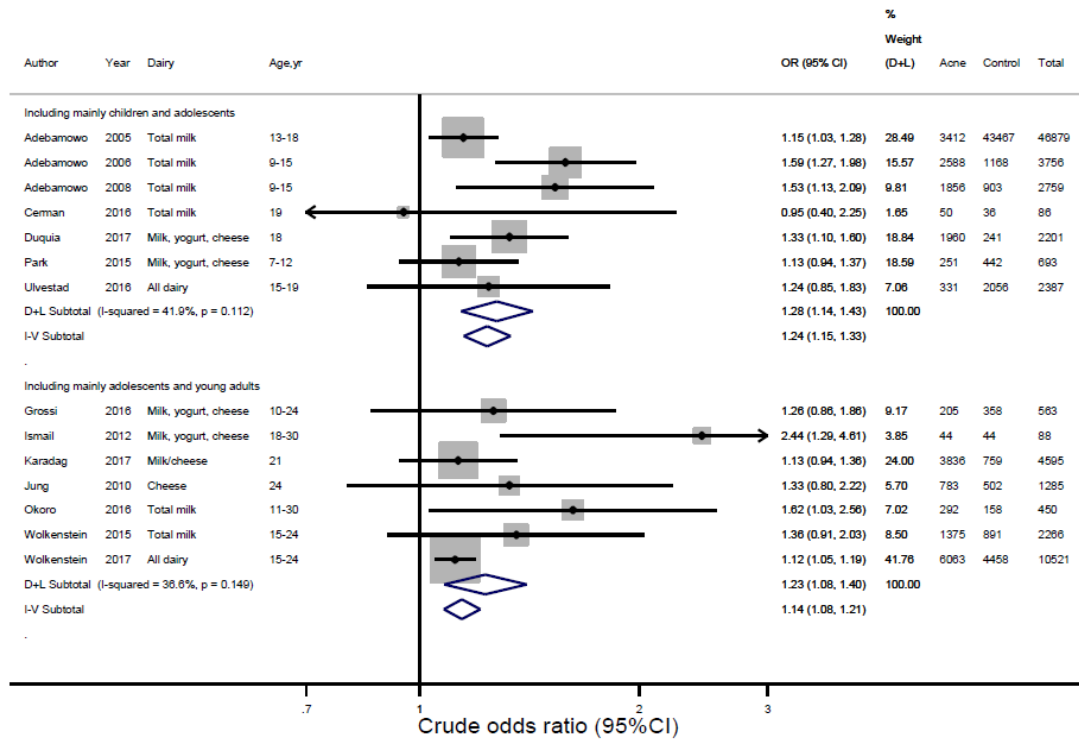
Supplementary Figure 10

Amount of low-fat/skim milk intake



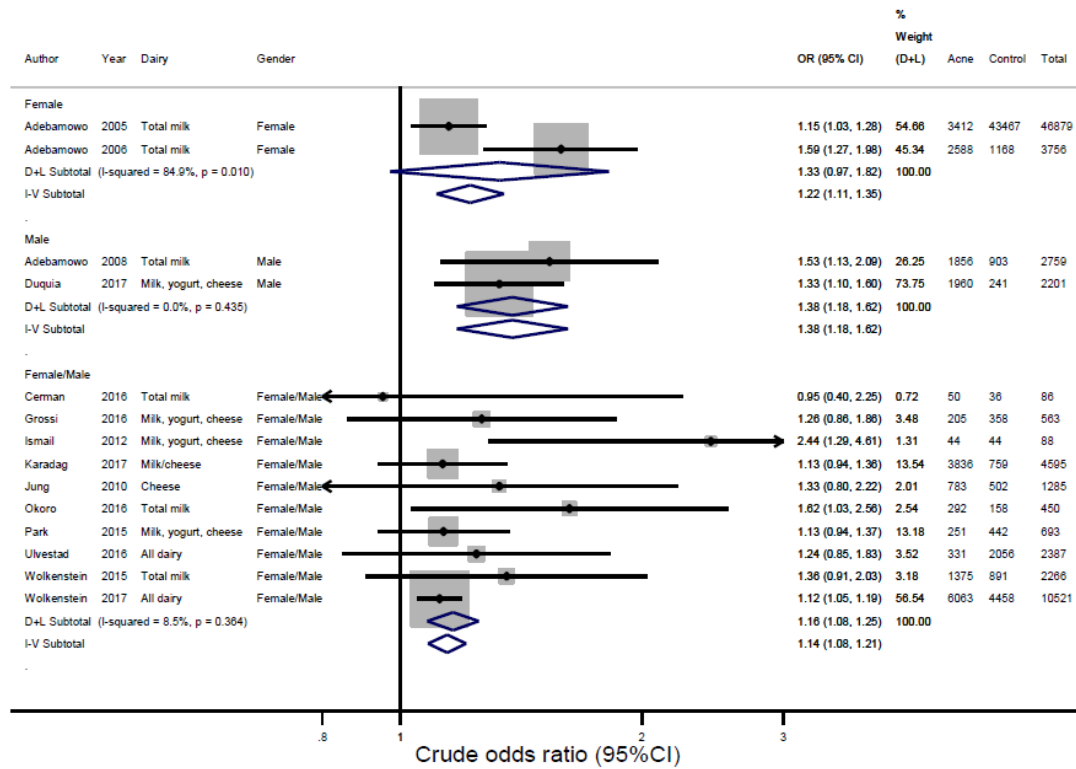
Supplementary Figure 11

Any dairy intake vs. no dairy intake by age group



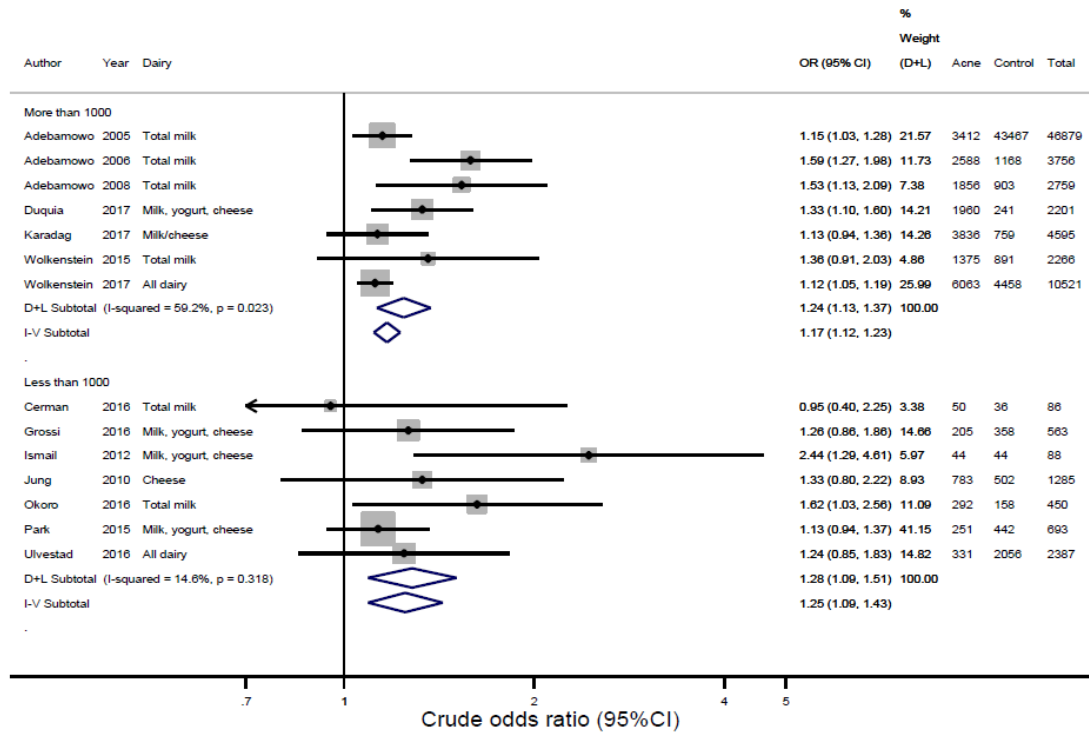
Supplementary Figure 12

Any dairy intake vs. no dairy intake by gender group

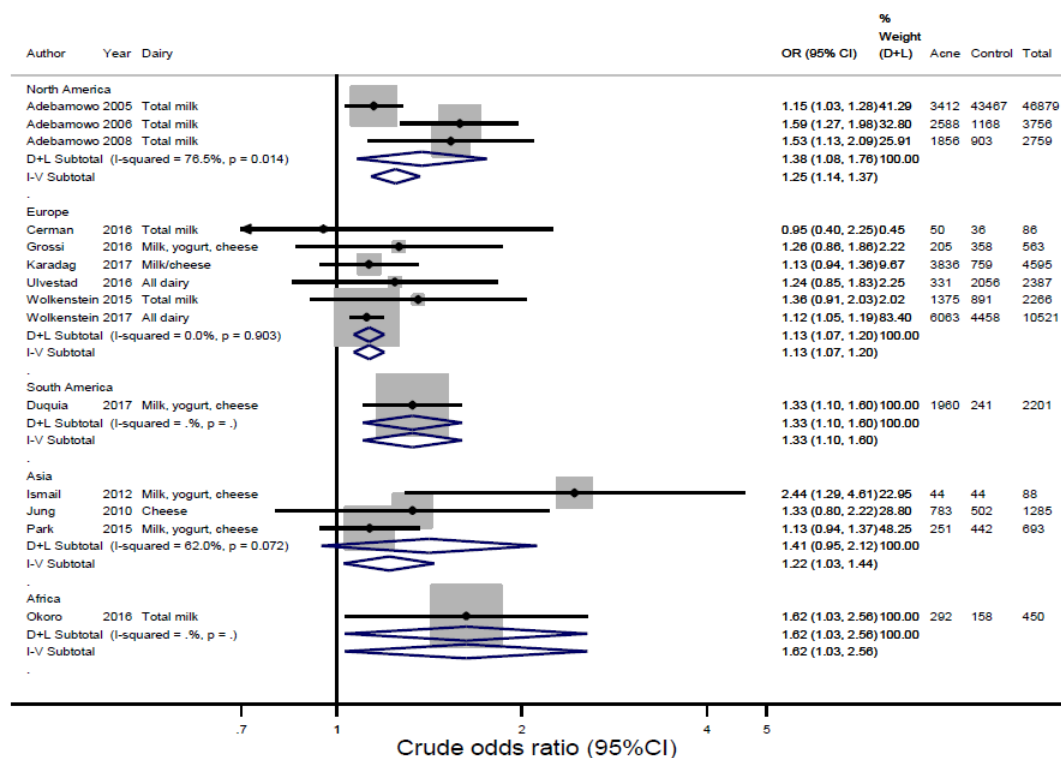


Supplementary Figure 13

Any dairy intake vs. no dairy intake by number of cases

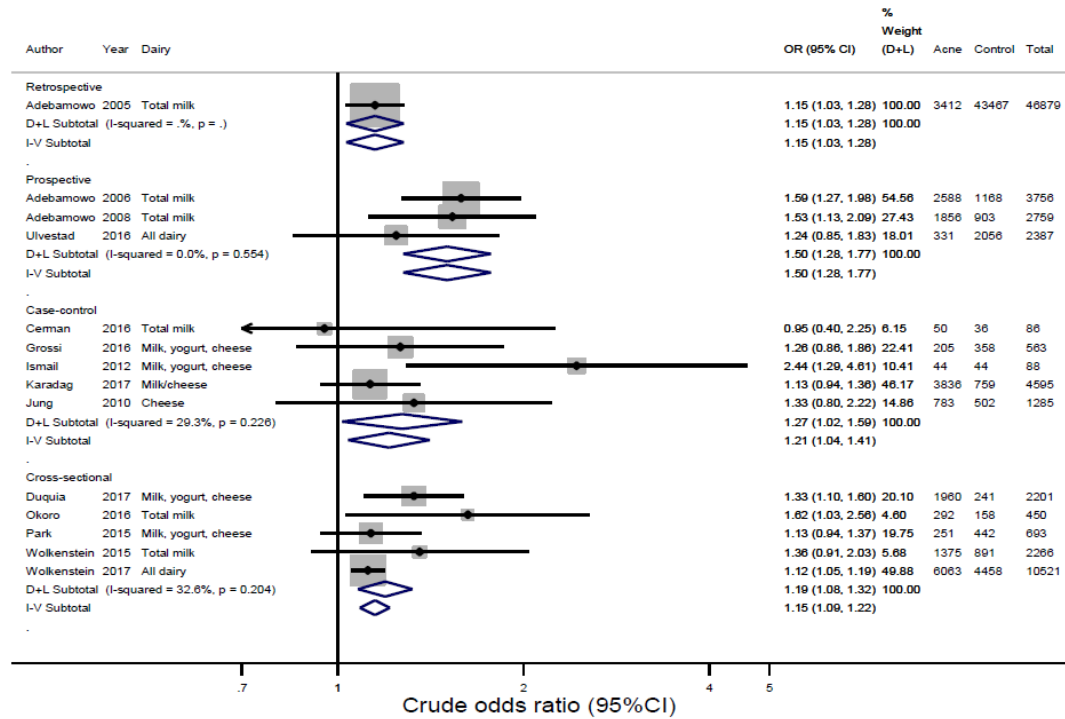


Supplementary Figure 14 Any dairy intake vs. no dairy intake
by continent

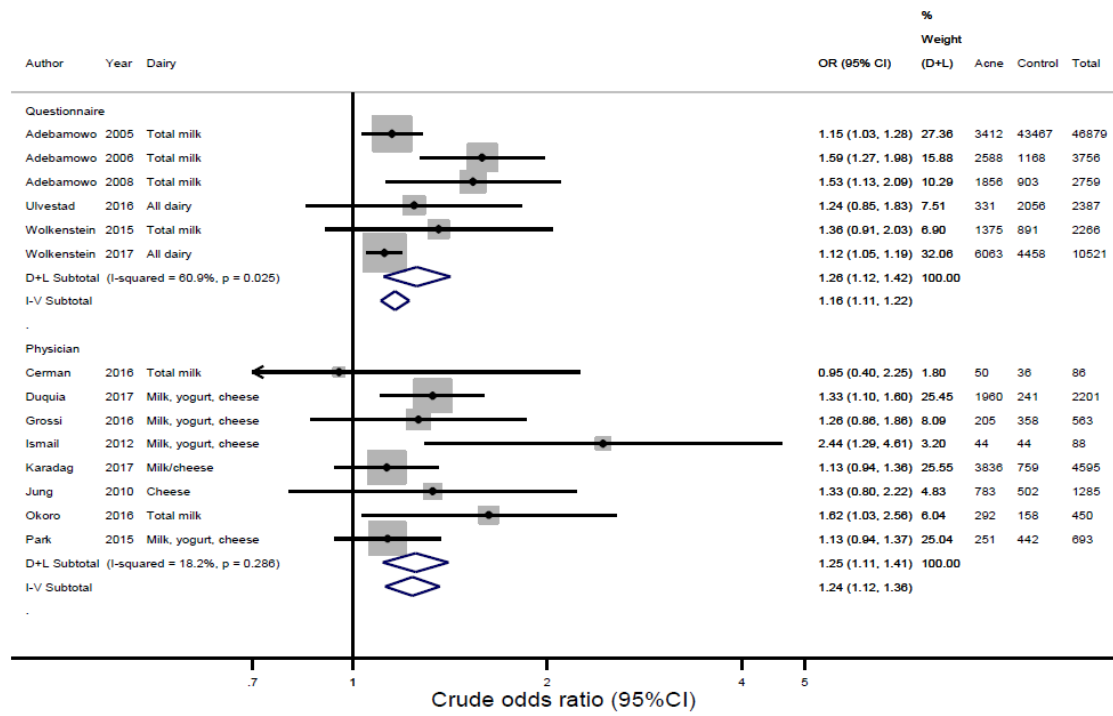


Supplementary Figure 15

Any dairy intake vs. no dairy intake by design

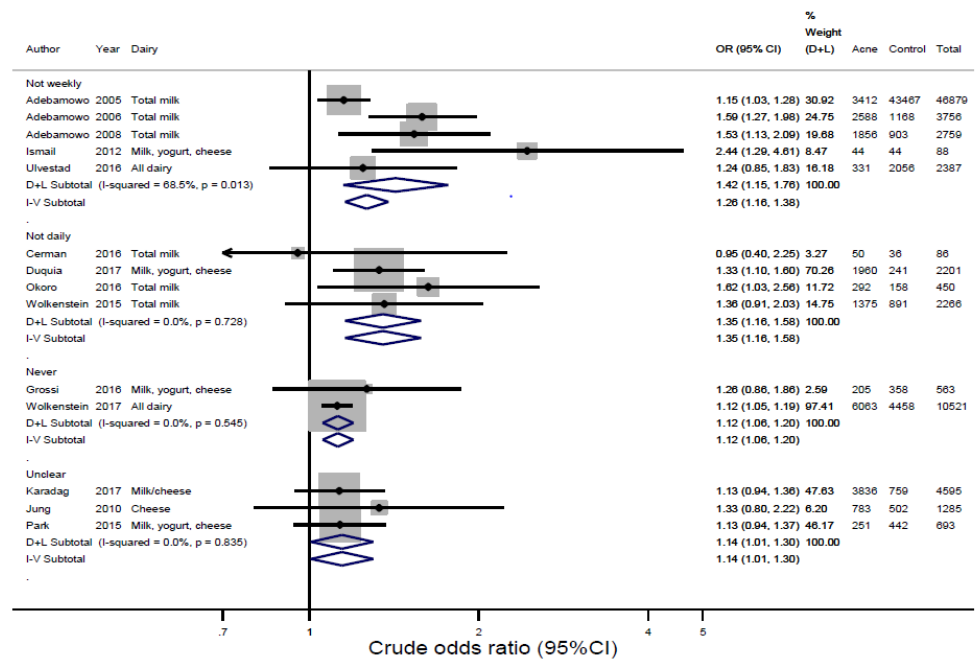


Supplementary Figure 16

Any dairy intake vs. no dairy intake
by acne diagnosis

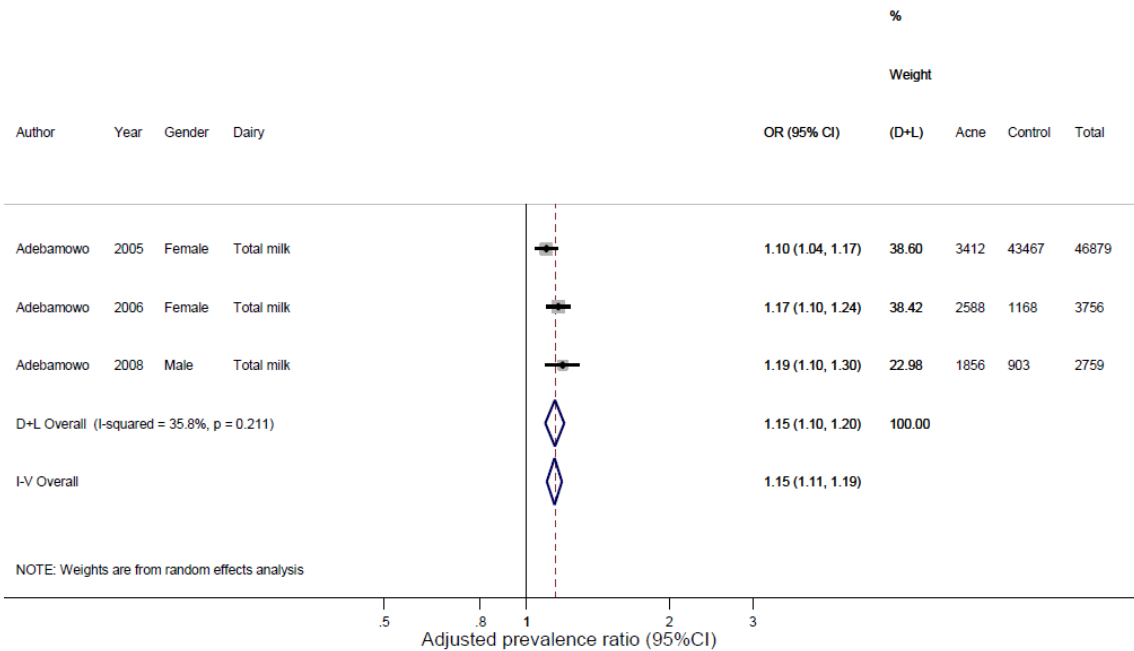
Supplementary Figure 17

Any dairy intake vs. no dairy intake by reference group



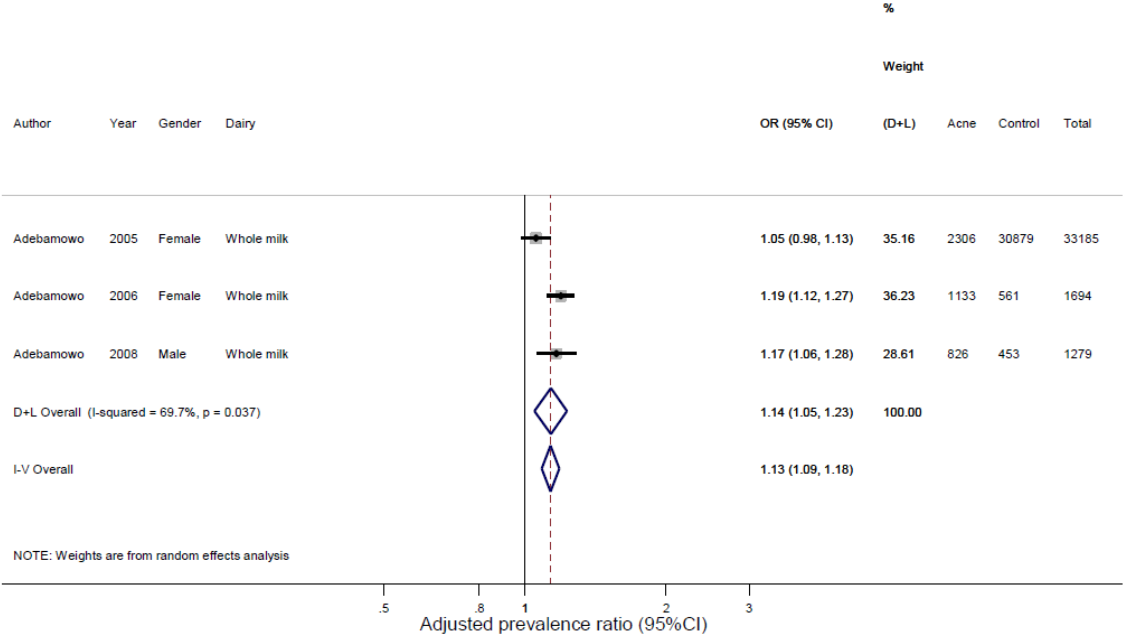
Supplementary Figure 18

Any milk intake vs. no milk intake



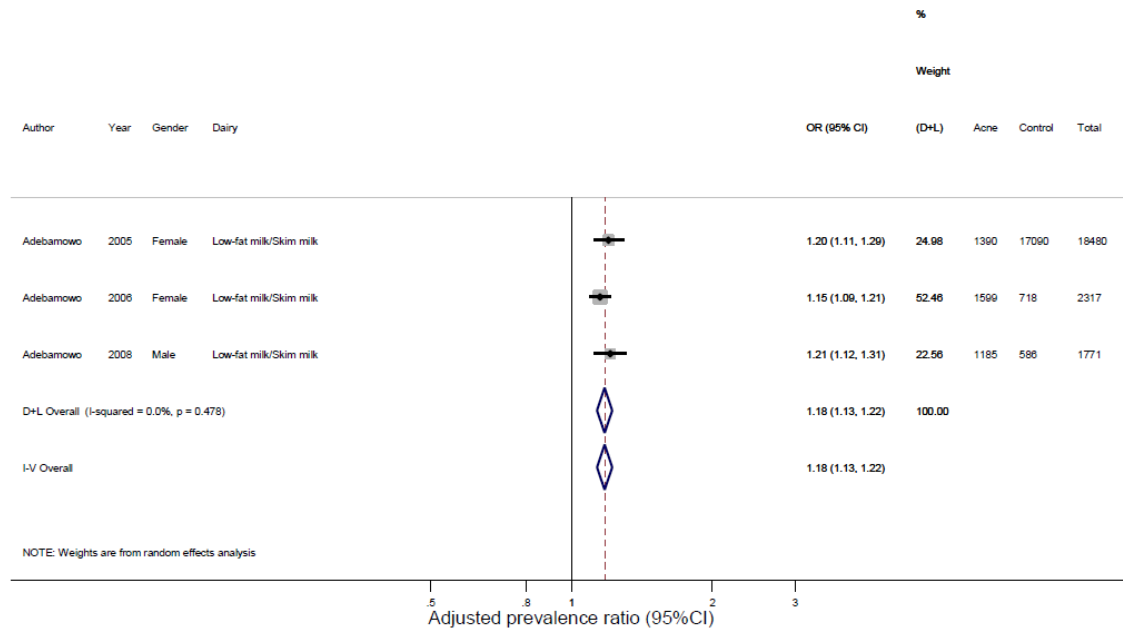
Supplementary Figure 19

Whole milk intake vs. no milk intake



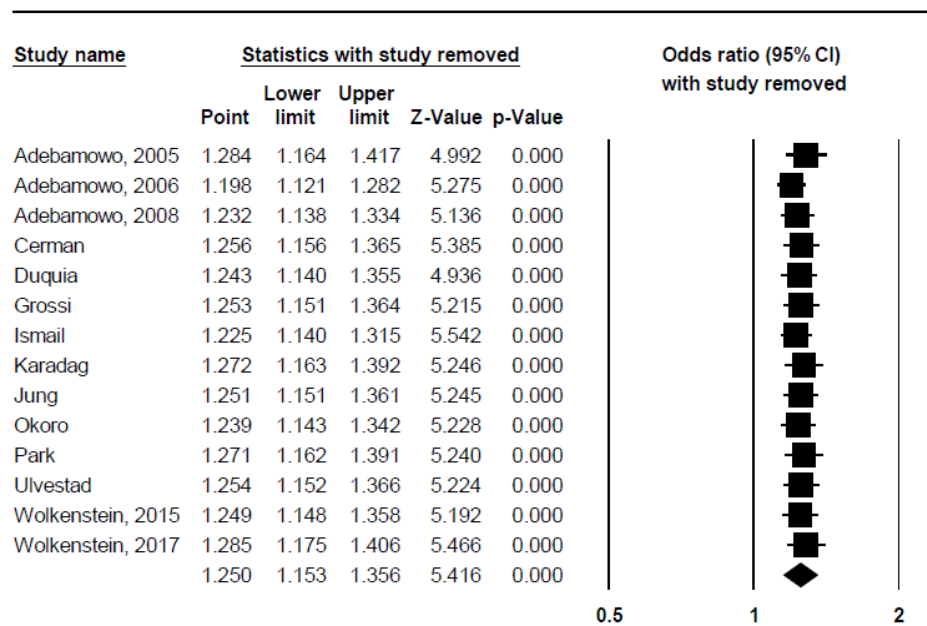
Supplementary Figure 20

Low-fat/skim milk intake vs. no milk intake



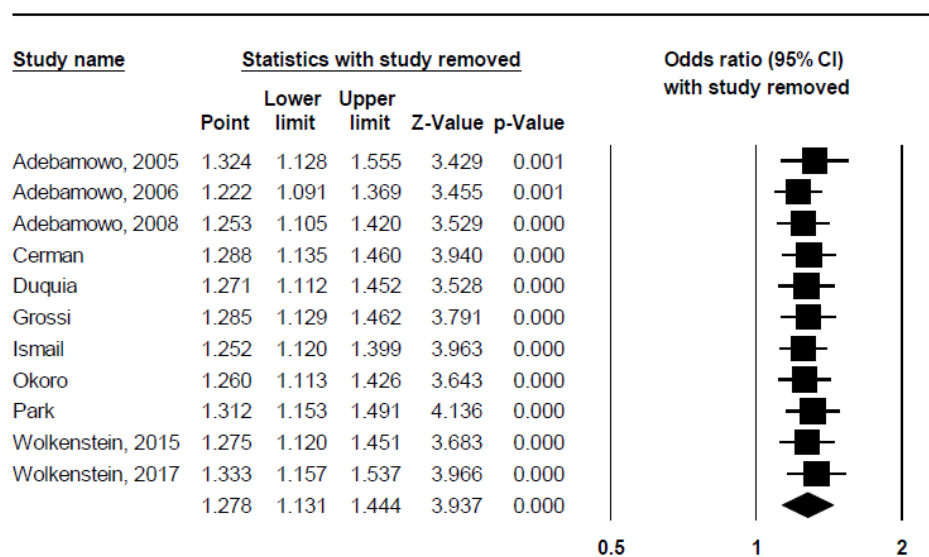
Supplementary Figure 21

Leave one out analysis
- Any dairy intake vs. no dairy intake

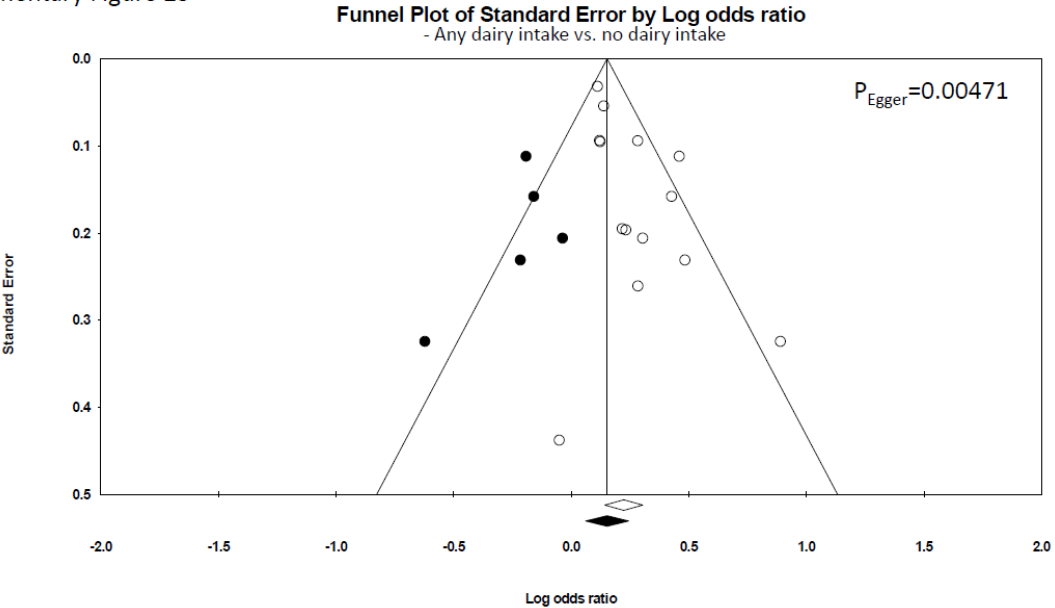


Supplementary Figure 22

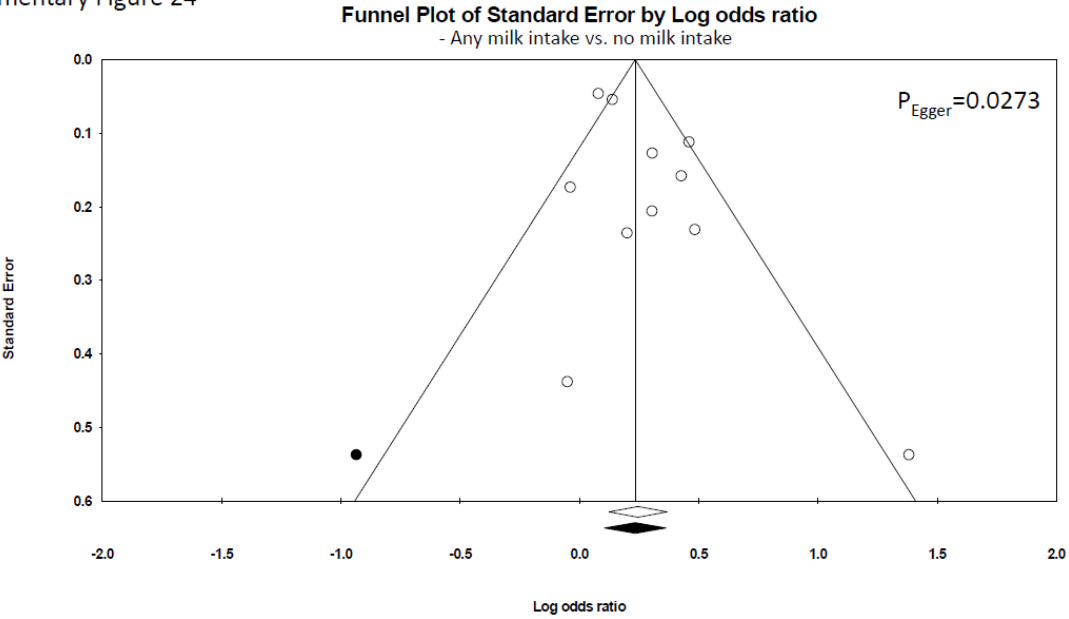
Leave one out analysis
- Any milk intake vs. no milk intake



Supplementary Figure 23



Supplementary Figure 24



Supplementary Table 1. Sensitivity analyses for the association of dairy intake and acne

Subgroup	Studies,N	OR(95% CI)*	I-square,%	p(het)
Age				
Children and adolescents	7	1.28(1.14-1.43)	42	0.112
Adolescents and young adults	7	1.23(1.08-1.40)	37	0.149
Gender				
Female	2	1.33(0.97-1.82)	85	0.010
Male	2	1.38(1.18-1.62)	0	0.435
Female/male	10	1.16(1.08-1.25)	9	0.364
Cases				
More than 1000	7	1.24(1.13-1.37)	59	0.023
Less than 1000	7	1.28(1.09-1.51)	15	0.318
Continent				
North America	3	1.38(1.08-1.76)	77	0.014
Europe	6	1.13(1.07-1.20)	0	0.903
South America	1	1.33(1.10-1.60)	NA	NA
Asia	3	1.41(0.95-2.12)	62	0.072
Africa	1	1.62(1.03-2.56)	NA	NA
Design				
Retrospective	1	1.15(1.03-1.28)	NA	NA
Prospective	3	1.50(1.28-1.77)	0	0.554
Case-control	5	1.27(1.02-1.59)	29	0.226
Cross-sectional	5	1.19(1.08-1.32)	33	0.204
Acne Diagnosis				
Questionnaire	7	1.23(1.11-1.36)	53	0.045
Physician-verified	7	1.30(1.13-1.49)	19	0.286
Reference group				
Not weekly	5	1.42(1.15-1.76)	69	0.013
Not daily	4	1.35(1.16-1.58)	0	0.728
Never	2	1.12(1.06-1.20)	0	0.545
Unclear	3	1.14(1.01-1.30)	0	0.835

*Random effects meta-analyses

NA: not applicable

p(het): p-value for heterogeneity based on Q-statistics

Supplementary Table 2. Study-specific Newcastle-Ottawa quality assessment

Case-control studies		Selection				Comparability	Exposure			Total
		S1	S2	S3	S4	C1	E1	E2	E3	
		Case validation	Case representativeness	Control selection	Control validation	Confounder adjustment	Ascertainment	Method case/control	Non-response	
Cerman	2016	1	0	1	0	0	0	0	0	2
Grossi	2016	1	1	0	1	0	0	1	0	4
Ismail	2012	1	1	1	1	0	0	1	0	5
Karadag	2017	1	1	0	1	0	0	1	0	4
Jung	2010	1	1	1	1	0	0	1	0	5

Cohort studies		Selection				Comparability	Outcome			Total
		S1	S2	S3	S4	C1	O1	O2	O3	
		Exposed representativeness	Non-exposed Selection	Exposure ascertainment	Outcome baseline		Outcome assessment	Follow up	Losses follow-up	
Adebamowo	2004	1	1	0	0	2	0	0	0	4
Adebamowo	2006	1	1	0	0	2	0	1	1	6
Adebamowo	2008	1	1	0	0	2	0	1	1	6
Duquia	2017	1	1	0	0	1	0	0	0	3
Okoro	2016	1	1	0	0	0	0	0	0	2
Park	2015	1	1	0	0	0	0	0	0	2
Ulvestad	2016	1	1	0	0	2	0	1	1	6
Wolkenstein	2015	1	1	0	0	0	0	0	0	2
Wolkenstein	2017	1	1	0	0	0	0	0	0	2

Legend: A minimum number of one star (i.e. asterisk) is awarded within category "Selection", and a maximum of two stars within "Comparability". Answers "a" and/or "b" within the sub-categories S1-S4, C1, E1-E3, and O1-O3 meet the requirement for a star. Sub-categories evaluate definitions and selection of cases and controls, representation and selection of cohorts, ascertainment of exposure, and outcome.