

Supplementary material 1: Search Strategy

Pubmed 561

#1 dyslipidemia

((((((((((Dyslipidemias[MeSH Terms]) OR (Dyslipidemia[Title/Abstract])) OR (Dyslipoproteinemia*[Title/Abstract])) OR (Hyperlipidemias[MeSH Terms])) OR (Hyperlipemia*[Title/Abstract])) OR (Hyperlipid*[Title/Abstract])) OR (Lipidemia*[Title/Abstract])) OR (Lipemia*[Title/Abstract])) OR (Hypercholesterolemia[MeSH Terms])) OR (Hypercholester*[Title/Abstract])) OR (High Cholesterol[Title/Abstract])) OR (Cholesterol Level*[Title/Abstract])) OR (Elevated Cholesterol[Title/Abstract])) OR (Cholesterol*, Elevated[Title/Abstract])) OR (Hypertriglyceridemia[MeSH Terms])) OR (Hypertriglyceridem*[Title/Abstract]) 195494

#2 Low carbohydrates

((((((((((diet, ketogenic[MeSH Terms]) OR (ketogenic[Title/Abstract])) OR (ketones[Title/Abstract])) OR (ketone bodies[Title/Abstract])) OR (ketogenic diet[Title/Abstract])) OR (ketosis[Title/Abstract])) OR (ketotic[Title/Abstract])) OR (beta-hydroxybutyrate[Title/Abstract])) OR (medium chain triglyceride diet[Title/Abstract])) OR ((diet, low carbohydrate[MeSH Terms]) OR (((((((carbohydrate diet, low[MeSH Terms]) OR (carbohydrate restricted diet[MeSH Terms])) OR (diet, carbohydrate restricted[MeSH Terms])) OR (diet, atkins[MeSH Terms])) OR (carbohydrate, dietary[MeSH Terms])) OR (carbohydrates, dietary[MeSH Terms])) OR (low carb*[Title/Abstract])) OR (carb* restrict*[Title/Abstract])) OR (high carb*[Title/Abstract])) OR (atkins[Title/Abstract])))) 157278

#3 RCT

((randomized controlled trial[Publication Type]) OR (controlled clinical trial[Publication Type]) OR (randomized-controlled trial[Publication Type]) OR (clinical trial[Publication Type]) OR (crossover design[MeSH Terms]) OR (crossover study[MeSH Terms]) 1013668

#1 AND #2 AND #3 AND (Filters:Human) 561

Web Of Science 608

1, AB=(diet, ketogenic OR ketogenic OR ketones OR ketone bodies OR ketogenic diet OR ketosis OR ketotic OR beta-hydroxybutyrate OR medium chain triglyceride diet OR diet, low carbohydrate OR carbohydrate diet, low OR carbohydrate restricted diet OR diet, carbohydrate restricted OR diet, atkins OR carbohydrate, dietary OR carbohydrates, dietary OR low carb OR carb* restrict* OR high carb* OR atkins) 2353118

2,AB=(Dyslipidemia* OR Dyslipoproteinemia* OR Hyperlipid* OR Hyperlipemia* OR Lipidemia* OR Lipemia* OR Hypercholester* OR High Cholesterol OR Cholesterol Level OR Elevated Cholesterol OR Cholesterol* OR Elevated, Hypertriglyceridem*) 514667

3,TS=(clinical trial OR controlled trial OR random) 3807024

#1 AND #2 AND #3 and Preprint Citation Index (Exclude – Database) and Clinical Trial (Document Types) and English (Languages) and Human (Search within topic) 608

Scopus 494

#1 ((TITLE-ABS-KEY ("diet, ketogenic" OR ketogenic OR ketones OR "ketone bodies" OR "ketogenic diet" OR ketosis OR ketotic OR beta-hydroxybutyrate OR "medium chain triglyceride diet" OR "diet, low carbohydrate" OR "carbohydrate diet, low" OR "carbohydrate restricted diet" OR "diet, carbohydrate restricted" OR "diet, atkins" OR "carbohydrate, dietary" OR "carbohydrates, dietary" OR "low carb" OR "carb* restrict*" OR "high carb*" OR atkins))) 254080

#2 ((TITLE-ABS-KEY (Dyslipidemia* OR Dyslipoproteinemia* OR Hyperlipemia* OR Hyperlipid* OR Lipidemia* OR Lipemia* OR Hypercholester* OR "High Cholesterol" OR "Cholesterol Level*" OR "Elevated Cholesterol" OR "Cholesterol*, Elevated" OR "Hypertriglyceridemia" OR "Hypertriglyceridem*"))) 350836

#3 (((INDEXTERMS ("clinical trials" OR "clinical trials as a topic" OR "randomized controlled trial" OR "Randomized Controlled Trials as Topic" OR "controlled clinical trial" OR "Controlled Clinical Trials" OR "Cross-Over Studies" OR "crossover procedure" OR "clinical trial" OR "controlled study" OR "randomization")))) 9374179

#1 AND #2 AND #3 AND (LIMIT-TO (LANGUAGE,"English")) AND (LIMIT-TO (EXACTKEYWORD,"Human")) AND (LIMIT-TO (DOCTYPE,"ar")) 494

Cochrane 454

#1 MeSH descriptor: [Dyslipidemias] explode all trees 9682
#2 (Dyslipidemia):ti,ab,kw (Word variations have been searched) 6370
#3 (Dyslipoproteinemia*):ti,ab,kw (Word variations have been searched) 57
#4 MeSH descriptor: [Hyperlipidemias] explode all trees 8056
#5 (Hyperlipemia*):ti,ab,kw (Word variations have been searched) 328
#6 (Hyperlipid*):ti,ab,kw (Word variations have been searched) 7630
#7 (Lipidemia*):ti,ab,kw (Word variations have been searched) 111
#8 (Lipemia*):ti,ab,kw (Word variations have been searched) 463
#9 MeSH descriptor: [Hypercholesterolemia] explode all trees 4295
#10 (Hypercholester*):ti,ab,kw (Word variations have been searched) 9300
#11 (High Cholesterol):ti,ab,kw (Word variations have been searched) 21606
#12 (Cholesterol Level*):ti,ab,kw (Word variations have been searched) 29370
#13 (Elevated Cholesterol):ti,ab,kw (Word variations have been searched) 3579
#14 (Cholesterol, Elevated):ti,ab,kw (Word variations have been searched) 43579
#15 (Cholesterols, Elevated):ti,ab,kw (Word variations have been searched) 13
#16 MeSH descriptor: [Hypertriglyceridemia] explode all trees 945
#17 (Hypertriglyceridem*):ti,ab,kw (Word variations have been searched) 2627
#18 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 49876
#19 MeSH descriptor: [Diet, Ketogenic] explode all trees 212
#20 (ketogenic):ti,ab,kw (Word variations have been searched) 919
#21 (ketones):ti,ab,kw (Word variations have been searched) 875

#22 (ketone bodies):ti,ab,kw (Word variations have been searched) 589
 #23 (ketogenic diet):ti,ab,kw (Word variations have been searched) 839
 #24 (ketosis):ti,ab,kw (Word variations have been searched) 602
 #25 (ketotic):ti,ab,kw (Word variations have been searched) 30
 #26 (beta-hydroxybutyrate):ti,ab,kw (Word variations have been searched) 333
 #27 (medium chain triglyceride diet):ti,ab,kw (Word variations have been searched) 123
 #28 MeSH descriptor: [Diet, Carbohydrate-Restricted] explode all trees 830
 #29 MeSH descriptor: [Diet, High-Protein Low-Carbohydrate] explode all trees 32
 #30 MeSH descriptor: [Dietary Carbohydrates] explode all trees 8265
 #31 (low carb*):ti,ab,kw (Word variations have been searched) 12183
 #32 (carb* restrict*):ti,ab,kw (Word variations have been searched) 3589
 #33 (high carb*):ti,ab,kw (Word variations have been searched) 15351
 #34 (atkins):ti,ab,kw (Word variations have been searched) 176
 #35 #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR
 #30 OR #31 OR #32 OR #33 OR #34 29989
 #36 (randomized controlled trial):pt (Word variations have been searched) 0
 #37 (controlled clinical trial):pt (Word variations have been searched) 0
 #38 (randomized-controlled trial):pt (Word variations have been searched) 0
 #39 (clinical trial):pt (Word variations have been searched) 0
 #40 MeSH descriptor: [Cross-Over Studies] explode all trees 48720
 #41 #36 OR #37 OR #38 OR #39 OR #40 48720
 #42 #18 AND #35 AND #41 454

EMBASE 262

#1 'Dyslipidemias'/exp OR 'Dyslipidemia'/exp OR Dyslipoproteinemia:ab,ti OR 'Hyperlipidemias'
 '/exp OR 'Hyperlipemia*':ab,ti OR 'Hyperlipid*':ab,ti OR 'Lipidemia*':ab,ti OR 'Lipemia*':ab,ti
 OR 'Hypercholesterolemia'/exp OR 'Hypercholester*':ab,ti OR 'High Cholesterol':ab,ti OR
 'Cholesterol Level*':ab,ti OR 'Hypertriglyceridemia'/exp OR 'Elevated Cholesterol':ab,ti OR
 'Cholesterol*, Elevated':ab,ti OR Hypertriglyceridem*':ab,ti 383550

#2 'ketogenic diet'/exp OR ketogenic:ab,ti OR ketones:ab,ti OR 'ketone bod*':ab,ti OR 'ketogenic
 diet':ab,ti OR ketosis:ab,ti OR ketotic:ab,ti OR 'beta hydroxybutyrate':ab,ti OR 'medium chain
 triglyceride diet':ab,ti OR 'low carbohydrate diet'/exp OR 'atkins diet'/exp OR 'carbohydrate
 diet'/exp OR 'low carb*':ab,ti OR 'carb* restrict*':ab,ti OR 'high carb*':ab,ti OR atkins:ab,ti
 91934

#3 'crossover procedure':de OR 'randomized controlled trial':de 1146056

#1 AND #2 AND #3 AND 'human'/de 262