

Appendix A. Search Strategies

PubMed

Search number	Query	Results
1	"cereal fiber"[tiab:~2] OR "cereal fibers" OR "cereal fibre"[tiab:~2] OR "cereal fibres" OR ((cereal OR edible OR whole) AND grain*) OR "soluble fiber*" OR "soluble fibre*" OR "insoluble fiber*" OR "insoluble fibre*" OR "high fiber" OR arabinoxylan* OR pentose* OR fructan* OR "high amylase*" OR agar* OR alginate* OR "alginic acid*" OR carrageenan* OR hexosan* OR pentosan* OR xylose OR oligosaccharide* OR fructooligosaccharide* OR Galactooligosaccharide* "alginic acid" OR "beta glucan" OR "cereal bran"[tiab:~2] OR "cereal brans" OR "diet fiber"[tiab:~4] OR "diet fibers"[tiab:~4] OR "diet fibre"[tiab:~4] OR "diet fibres"[tiab:~4] OR "Dietary Fiber"[Mesh] OR "dietary fiber*" OR "dietary fibre*" OR ((fiber OR fibre) AND consum*) OR "guar gum" OR "gum arabic" OR "non-starch polysaccharide*" OR "nonstarch polysaccharide*" OR "oat bran*" OR "resistant dextrin*" OR "resistant maltodextrin*" OR "resistant starch*" OR "rice bran" OR "supplement fiber"[tiab:~2] OR "supplement fibre"[tiab:~2] OR Supplement* fiber* OR Supplement* fibre* OR "wheat bran" OR "wheat dextrin" OR "xanthan gum" OR scFOS OR agar OR alginate OR carageen OR cellulose OR chitin OR glucomannan OR hemicellulose OR inulin OR lignin OR oligofructose OR pectin OR PHGG OR polydextrose OR polyuronide OR prebiotics OR psyllium OR raffinose OR roughage* OR "butyrylated high amylose maize starch" OR HAMS B OR Prebiotic OR "1 kestose" OR "kivia powder" OR kiwifruit OR lactulose OR oatmeal OR plantago* OR prune* OR pullulan OR "resistant glucan" OR "Agar"[Mesh] OR "Alginates"[Mesh] OR "Carrageenan"[Mesh] OR "Chondrus"[Mesh] OR "Cellulose"[Mesh] OR "Chitin"[Mesh] OR "Fructans"[Mesh] OR "Inulin"[Mesh] OR "Lignin"[Mesh] OR "Oligosaccharides"[Mesh] OR Pentoses[Mesh] OR "Pectins"[Mesh] OR "Prebiotics"[Mesh] OR "Prunus africana"[Mesh] OR "Psyllium"[Mesh] OR "Raffinose"[Mesh] OR Xylose[Mesh]	504,912
2	Laxation OR "Gastrointestinal Motility"[MeSH] OR "gastrointestinal motility" OR "gut motility"[tiab:~4] OR "stool frequency"[tiab:~2] OR defecat* OR defaecat* OR "Defecation"[Mesh] OR "gastrointestinal transit"[tiab:~4] OR "intestinal transit"[tiab:~4] OR Fecal OR faecal OR feces OR faeces OR "Feces"[Mesh] OR "Constipation"[Mesh] OR Constipat* OR "functional bowel disorder*" OR "bowel movement"[tiab:~4] OR "bowel movements"[tiab:~4] OR "bowel function"[tiab:~4] OR Bloat* OR Diarrhea[Mesh] OR Diarrhea OR Diarrhoea OR "Bristol scale"[tiab:~3]	401,694
3	("Random Allocation"[Mesh] OR "Clinical Trial" [Publication Type] OR "Double-Blind Method"[Mesh] OR "Single-Blind Method"[Mesh] OR random* OR "Placebos"[Mesh] OR Placebo* OR ((clinical OR controlled) AND trial*) OR ((singl* OR doubl* OR trebl* OR tripl*) AND (blind* OR mask*)) OR crossover OR cross-over OR "treatment switching" OR "Treatment Switching"[Mesh] OR RCT OR "Randomized Controlled Trial" [Publication Type] OR systematic[sb])	3,085,036
4	"English"[lang]	32,081,319
5	#2 AND #3 AND #4 AND #5	4,865
5	#6 NOT (piglet*[title] OR pig[title] OR pigs[title] OR dog[title] OR dogs[title] OR rat[title] OR rats[title] OR canine[title] OR chicken*[title] OR "dog food"[title] OR ewe[title] OR ewes[title])	4,284

Embase

No.	Query	Results
#1	'dietary fiber'/exp OR 'dietary fiber'	43467
#10	'gut motility' OR 'stool frequency' OR defecat* OR defaecat* OR 'gastrointestinal transit' OR 'intestinal transit' OR fecal OR faecal OR feces OR faeces	318957
#11	'constipation'	126896
#12	'functional bowel disorder'	571
#13	'bowel movement'	4233
#14	'bowel function'	7232
#15	bloat* OR diarrhea OR diarrhoea	381307
#16	'bristol scale'	250
#17	#8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16	740652
#18	#7 AND #17	36652
#19	'randomized controlled trial'/exp OR 'controlled clinical trial'/de OR random*:ti,ab,tt OR 'randomization'/de OR 'intermethod comparison'/de OR placebo:ti,ab,tt OR compare:ti,tt OR compared:ti,tt OR comparison:ti,tt OR ((evaluated:ab OR evaluate:ab OR evaluating:ab OR assessed:ab OR assess:ab) AND (compare:ab OR compared:ab OR comparing:ab OR comparison:ab)) OR ((open NEXT/1 label):ti,ab,tt) OR (((double OR single OR doubly OR singly) NEXT/1 (blind OR blinded OR blindly)):ti,ab,tt) OR 'double blind procedure'/de OR ((parallel NEXT/1 group*):ti,ab,tt) OR crossover:ti,ab,tt OR 'cross over':ti,ab,tt OR (((assign* OR match OR matched OR allocation) NEAR/6 (alternate OR group OR groups OR intervention OR interventions OR patient OR patients OR subject OR subjects OR participant OR participants)):ti,ab,tt) OR assigned:ti,ab,tt OR allocated:ti,ab,tt OR ((controlled NEAR/8 (study OR design OR trial)):ti,ab,tt)	6532553

No.	Query	Results
	OR volunteer:ti,ab,tt OR volunteers:ti,ab,tt OR 'human experiment'/de OR trial:ti,tt	
#2	(cereal OR high OR whole OR soluble OR diet* OR supplemen*) AND (fibre* OR fiber* OR grain* OR bran*)	274406
#20	#18 AND #19	11410
#21	#18 AND #19 AND ([article]/lim OR [article in press]/lim) AND [humans]/lim AND [english]/lim	4668
#3	arabinoxylan* OR pentose* OR fructan* OR 'high amylase*' OR agar* OR alginate* OR 'alginic acid*' OR carrageenan* OR hexosan* OR pentosan* OR xylose OR oligosaccharide*	370160
#4	'alginic acid'	31338
#5	'beta glucan' OR 'guar gum' OR 'gum arabic' OR 'non-starch polysaccharide*' OR 'nonstarch polysaccharide*' OR 'oat bran*' OR 'resistant dextrin*' OR 'resistant maltodextrin*' OR 'resistant starch*' OR 'rice bran' OR 'wheat bran' OR 'wheat dextrin' OR 'xanthan gum'	30126
#6	scfos OR agar OR alginate OR carageen OR cellulose OR chitin OR glucomannan OR hemicellulose OR inulin OR lignin OR oligofructose OR pectin OR phgg OR polydextrose OR polyuronide OR prebiotics OR psyllium OR raffinose OR roughage* OR hamsb OR prebiotic	351012
#7	#1 OR #2 OR #3 OR #4 OR #5 OR #6	821160
#8	'gastrointestinal motility' OR 'gastrointestinal motility'/de	23064
#9	laxation	348

CINAHL

((MH "Dietary Fiber" OR MH "Agar" OR MH "Alginates" OR MH "Carrageenan" OR MH "Chondrus" OR MH "Cellulose" OR MH "Chitin" OR MH "Fructans" OR MH "Inulin" OR MH

"Lignin" OR MH "Oligosaccharides" OR MH "Pentoses" OR MH "Pectins" OR MH "Prebiotics" OR MH "Prunus africana" OR MH "Psyllium" OR MH "Raffinose" OR MH Xylose OR ((cereal OR high OR whole OR soluble OR diet* OR supplemen*) AND (fibre* OR fiber* OR grain* OR bran*)) OR arabinoxylan* OR pentose* OR fructan* OR "high amylase*" OR agar* OR alginate* OR "alginic acid*" OR carrageenan* OR hexosan* OR pentosan* OR xylose OR oligosaccharide* OR "alginic acid" OR "beta glucan" OR "guar gum" OR "gum arabic" OR "non-starch polysaccharide*" OR "nonstarch polysaccharide*" OR "oat bran*" OR "resistant dextrin*" OR "resistant maltodextrin*" OR "resistant starch*" OR "rice bran" OR "wheat bran" OR "wheat dextrin" OR "xanthan gum" OR "butyrylated high amylose maize starch" OR scFOS OR agar OR alginate OR carageen OR cellulose OR chitin OR glucomannan OR hemicellulose OR inulin OR lignin OR oligofructose OR pectin OR PHGG OR polydextrose OR polyuronide OR prebiotics OR psyllium OR raffinose OR roughage* OR HAMS B OR Prebiotic OR "1 kestose" OR "kivia powder" OR kiwifruit OR lactulose OR oatmeal OR plantago* OR prune* OR pullulan OR "resistant glucan")) AND ((MH "Gastrointestinal Motility+" OR Laxation OR "gastrointestinal motility" OR "gut motility" OR Stool frequency OR defecat* OR defaecat* OR "gastrointestinal transit" OR "intestinal transit" OR Fecal OR faecal OR feces OR faeces OR MH "Feces" OR MH "Constipation" OR Constipation OR Constipated OR "functional bowel disorder*" OR "bowel movement*" OR "bowel function" OR Bloat* OR MH "Diarrhea" OR Diarrhea OR Diarrhoea OR "Bristol scale")) AND (("Random Allocation" OR "Clinical Trial" OR random* OR placebo* OR ((clinical OR controlled) AND trial*) OR ((singl* OR doubl* OR trebl* OR tripl*) AND (blind* OR mask*)) OR crossover OR cross-over OR "treatment switching" OR MH "Treatment Switching" OR RCT OR "Randomized Controlled Trial" OR MH "Systematic Review" OR systematic review OR meta-analysis))

Limits: Academic Journals, English language

1157 citations