

Supplementary data. Search strategy

Search Entry Formulation

Key Concepts	Concept 1	Concept 2
	Idiopathic Male Infertility or Sperm Quality	Probiotics
Controlled vocabulary terms / Subject terms	“Infertility, Male” [MeSH Term] “Semen Analysis” [MeSH Term] OR “Sperm Count” [MeSH Term]	“Probiotics” [MeSH Term] OR “Lactobacillus” [MeSH Term] OR “Bifidobacterium” [MeSH Term]
Free text terms / natural language terms	“Idiopathic Male Infertility” OR “Azoospermia” OR “Asthenozoospermia” OR “Teratozoospermia” OR “Oligospermia” OR “Sperm Volume” OR “Sperm Motility” OR “Sperm Quality” OR “Sperm Parameter”	“Probiotic supplementation” OR “Microbiota” OR “Probiotic supplements”

Search Query for PubMed

No.	Entry	Filter	Total findings
1	((((((Infertility, Male[MeSH Terms]) OR (Idiopathic Male Infertility)) OR (Azoospermia)) OR (Asthenozoospermia)) OR (Teratozoospermia)) OR (Oligospermia))	None	35,681
2	(((((((Semen Analysis[MeSH Terms])) OR (Sperm Count[MeSH Terms])) OR (Male Infertility)) OR (Sperm Concentration)) OR (Sperm Volume)) OR (Sperm Motility)) OR (Sperm Quality)) OR (Sperm Parameter)	None	102,003
3	((((((Probiotics[MeSH Terms]) OR (Lactobacillus[MeSH Terms])) OR (Bifidobacterium[MeSH Terms])) OR (Probiotic supplementation)) OR (Microbiota)) OR (Probiotic supplements)) OR (Probiotic therapy)	None	181,724
4	S1 AND S2 AND S3	None	64

Search Query for EBSCO

No.	Entry	Filter	Total findings
1	(MH "Infertility, Male") OR TX "Idiopathic Male Infertility" OR TX "Azoospermia" OR TX "Asthenozoospermia" OR TX "Teratozoospermia" OR TX "Oligospermia" OR TX "Male Infertility"	None	58,916
2	(MH "Semen Analysis") OR TX (MH "Sperm Count") OR TX "Sperm Concentration" OR TX "Sperm Volume" OR TX "Sperm Motility" OR TX "Sperm Quality" OR TX "Sperm Parameter"	None	1,933
3	(MH "Probiotics") OR (MH "Lactobacillus") OR (MH "Bifidobacterium") OR TX "Probiotic supplementation" OR TX "Microbiota" OR TX "Probiotic supplements" OR TX "Probiotic therapy"	None	240,949
4	S1 AND S2 AND S3	None	6

Search Query for Proquest

No.	Entry	Filter	Total findings
1	mainsubject("Infertility, Male") OR ("Idiopathic Male Infertility") OR "Azoospermia" OR "Asthenozoospermia" OR "Teratozoospermia" OR "Oligospermia" OR ("Male Infertility")	None	31,682
2	mainsubject("Semen Analysis") OR mainsubject("Sperm Count") OR ("Sperm Concentration") OR ("Sperm Volume") OR ("Sperm Motility") OR ("Sperm Quality") OR ("Sperm Parameter")	None	26,650
3	mainsubject("Probiotics") OR mainsubject("Lactobacillus") OR mainsubject("Bifidobacterium") OR ("Probiotic supplementation") OR "Microbiota" OR ("Probiotic supplements") OR ("Probiotic therapy")	None	233,477
4	S1 AND S2 AND S3	None	389

Search Query for Google Scholar

No.	Entry	Filter	Total findings
1	allintitle: ("Sperm") AND ("Probiotics")	None	12