

Table S1 – Search strategies according to different databases (25th June, 2023)

Databases	Search syntax	Results
PubMed via MedLine	<p>(((((("metagenome"[Title/Abstract] OR "microbiota"[Title/Abstract] OR "stool"[Title/Abstract]) AND "microbi"[Title/Abstract]) OR "fecal"[Title/Abstract]) AND "flora"[Title/Abstract]) OR "intestinal"[Title/Abstract]) AND "flora"[Title/Abstract]) OR "intestinal"[Title/Abstract]) AND "bacteria"[Title/Abstract]) OR "gut"[Title/Abstract]) AND "flora"[Title/Abstract]) OR "gut"[Title/Abstract]) AND "bacteria"[Title/Abstract]) OR "microbiot"[Title/Abstract] OR "feces"[Title/Abstract]) AND "microflora"[Title/Abstract]) OR "colon"[Title/Abstract]) AND "flora"[Title/Abstract]) OR ("microbiota"[MeSH Terms] OR "microbiota"[All Fields] OR "microbiotas"[All Fields] OR "microbiota s"[All Fields] OR "microbiotae"[All Fields]) OR ("microbial"[All Fields] OR "microbially"[All Fields] OR "microbials"[All Fields])) AND ("communal"[All Fields] OR "communalism"[All Fields] OR "communalities"[All Fields] OR "communality"[All Fields] OR "communally"[All Fields] OR "commune"[All Fields] OR "communes"[All Fields] OR "community s"[All Fields] OR "communitys"[All Fields] OR "residence characteristics"[MeSH Terms] OR ("residence"[All Fields] AND "characteristics"[All Fields]) OR "residence characteristics"[All Fields] OR "communities"[All Fields] OR "community"[All Fields])) OR ("communal"[All Fields] OR "communalism"[All Fields] OR "communalities"[All Fields] OR "communality"[All Fields] OR "communally"[All Fields] OR "commune"[All Fields] OR "communes"[All Fields] OR "community s"[All Fields] OR "communitys"[All Fields] OR "residence characteristics"[MeSH Terms] OR ("residence"[All Fields] AND "characteristics"[All Fields]) OR "residence characteristics"[All Fields] OR "communities"[All Fields] OR "community"[All Fields])) AND ("microbial"[All Fields] OR "microbially"[All Fields] OR "microbials"[All Fields])) OR ("microbial"[All Fields] OR "microbially"[All Fields] OR "microbials"[All Fields])) AND ("communal"[All Fields] OR "communalism"[All Fields] OR "communalities"[All Fields] OR "communality"[All Fields] OR "communally"[All Fields] OR "commune"[All Fields] OR "communes"[All Fields] OR "community s"[All Fields] OR "communitys"[All Fields] OR "residence characteristics"[MeSH Terms] OR ("residence"[All Fields] AND "characteristics"[All Fields]) OR "residence characteristics"[All Fields] OR "communities"[All Fields] OR "community"[All Fields])) OR ("microbial"[All Fields] OR "microbially"[All Fields] OR "microbials"[All Fields])) AND ("communal"[All Fields] OR "communalism"[All Fields] OR "communalities"[All Fields] OR "communality"[All Fields] OR "communally"[All Fields] OR "commune"[All Fields] OR "communes"[All Fields] OR "community s"[All Fields] OR "communitys"[All Fields] OR "residence characteristics"[MeSH Terms] OR ("residence"[All Fields] AND "characteristics"[All Fields]) OR "residence characteristics"[All Fields] OR "communities"[All Fields] OR "community"[All Fields])) AND ("composite"[All Fields] OR "composite s"[All Fields] OR "composited"[All Fields] OR "composites"[All Fields] OR "compositing"[All Fields] OR "composition"[All Fields] OR "compositional"[All Fields] OR "compositions"[All Fields])) OR ("communal"[All Fields] OR "communalism"[All Fields] OR "communalities"[All Fields] OR "communality"[All Fields] OR "communally"[All Fields] OR "commune"[All Fields] OR "communes"[All Fields] OR "community s"[All Fields] OR "communitys"[All Fields] OR "residence characteristics"[MeSH Terms] OR ("residence"[All Fields] AND "characteristics"[All Fields]) OR "residence characteristics"[All Fields] OR "communities"[All Fields] OR "community"[All Fields])) AND ("composite"[All Fields] OR "composite s"[All Fields] OR "composited"[All Fields] OR "composites"[All Fields] OR "compositing"[All Fields] OR "composition"[All Fields] OR "compositional"[All Fields] OR "compositions"[All Fields]) AND ("microbial"[All Fields] OR "microbially"[All Fields] OR "microbials"[All Fields])) OR ("composite"[All Fields] OR "composite s"[All Fields] OR "composited"[All Fields] OR "composites"[All Fields] OR "compositing"[All Fields] OR "composition"[All Fields] OR "compositional"[All Fields] OR "compositions"[All Fields])</p>	n= 1,888

"microbiomic"[All Fields] OR "microbiomics"[All Fields] OR "microbiota"[MeSH Terms] OR "microbiota"[All Fields] OR "microbiome"[All Fields] OR "microbiomes"[All Fields]) OR ("microbiome s"[All Fields] OR "microbiomic"[All Fields] OR "microbiomics"[All Fields] OR "microbiota"[MeSH Terms] OR "microbiota"[All Fields] OR "microbiome"[All Fields] OR "microbiomes"[All Fields]) AND ("human s"[All Fields] OR "humans"[MeSH Terms] OR "humans"[All Fields] OR "human"[All Fields]) OR "dysbiosis"[Title/Abstract] OR "dysbioses"[Title/Abstract] OR "disbiosis"[Title/Abstract] OR "disbioses"[Title/Abstract] OR "bacterial"[Title/Abstract] AND "translocation"[Title/Abstract] OR "dysbacteriosis"[Title/Abstract] OR "dysbacterioses"[Title/Abstract] OR "disbacteriosis"[Title/Abstract] OR "probiotic*"[Title/Abstract] OR "prebiotic*"[Title/Abstract] OR "symbiotic"[Title/Abstract] OR "synbiotic"[Title/Abstract] OR "gut"[Title/Abstract] AND "liver"[Title/Abstract] AND "axis"[Title/Abstract] AND "hbv"[Title/Abstract] OR "chronic"[Title/Abstract] AND "hepatitis b"[Title/Abstract] OR "chronic"[Title/Abstract] AND "hepatitis b"[Title/Abstract] AND "virus"[Title/Abstract] AND "infection"[Title/Abstract] OR "hepatitis b"[Title/Abstract] AND "virus"[Title/Abstract] AND "infection"[Title/Abstract] AND "chronic"[Title/Abstract] OR "hepatic"[Title/Abstract] AND "cirrhosis"[Title/Abstract] OR "cirrhosis"[Title/Abstract] AND "hepatic"[Title/Abstract] OR "cirrhosis"[Title/Abstract] AND "liver"[Title/Abstract] OR "fibrosis"[Title/Abstract] AND "liver"[Title/Abstract] OR "liver"[Title/Abstract] AND "fibrosis"[Title/Abstract] AND ((ffrft[Filter]) AND (classicalarticle[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR comparativestudy[Filter] OR controlledclinicaltrial[Filter]) AND (english[Filter]) AND (2000:2023[pdat]))

Google Scholar*	Metagenomes]gut bacteria]feces microflora]microbial communities]human microbiomes]]dysbiosis]]HBV]]chronic hepatitis B]]liver fibrosis]]HBV virus related cirrhosis]]probiotic prebiotic synbiotic]]gut liver axis]]fecal microbiota transplantation"	Google Scholar (<i>n=193</i>); Publish or Perish (<i>n=1000</i>)
Web of Science (WOS)	((("metagenome*" OR "microbio*" OR "intestinal bacteria" OR "gut bacteria" OR "Microbial Communities" OR "Microbial Community Composition*" OR "Community Composition, Microbial" OR "Composition, Microbial Community" OR "fecal flora") AND ("Human*" OR "Human Microbiome*" OR "Microbiome, Human" OR "dysbio*" OR "dysbacterio*" OR "fecal microbio* transplant*" OR "pr?biotic*" OR "sy?biotic*") AND ("HBV" OR "chronic hepatitis B" OR "chronic hepatitis B virus infection*" OR "liver fibrosis" OR "hepatitis B virus related cirrhosis" OR "hepatic cirrhosis" OR "cirrhosis liver" OR "fibrosis liver" OR "gut liver axis"))))	<i>n= 1497</i>
Wiley Online Library	"metagenom* OR microbio* OR fecal flora OR intestinal flora OR gut bacteria OR Human microbio* OR dysbios* OR disbios* OR bacterial translocation OR disbacterios*" anywhere and ""HBV" OR "chronic hepatitis B" OR hepatitis B AND virus AND infection AND Chronic OR hepatic cirrhosis OR liver fibrosis" anywhere and ""gut liver axis" OR pr?biotic* OR sy?biotic* OR "fecal microbiota transplantation" OR "Fecal transplantation"" anywhere	<i>n= 588</i>
AI-powered research tools		
Semantic Scholar	Gut microbiota AND chronic Hepatitis B OR HBV OR hepatitis AND dysbiosis	<i>n= 379</i>
Scite	Gut microbiota AND chronic Hepatitis B OR HBV OR hepatitis AND dysbiosis	<i>n= 194</i>

*The previous syntax used in PubMed search, has been modified as a maximum of 256 keywords are only allowed for usage in the Google Scholar database.