**Supplementary Materials**

**Table S1 Quality Assessment of 12 Studies on the Newcastle-Ottawa Scale**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study | Selection | | | | Comparability | | Exposure | | Score |
| Adequate definition of cases | Representativeness of the cases | Selection of controls | Definition of controls | Control for important factor | Ascertainment of exposure | Same method of ascertainment for cases and controls | Nonresponse rate |
| Bruijstens 2022 | ★ | ★ | ★ | ★ | ★☆ | ★ | ★ | ★ | 8 |
| Chen 2016 | ★ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 7 |
| Choileáin 2020 | ☆ | ☆ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 5 |
| Cosorich 2017 | ★ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 7 |
| Cox 2021 | ★ | ★ | ★ | ★ | ★★ | ★ | ★ | ★ | 9 |
| Forbes 2018 | ★ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 7 |
| Jangi 2016 | ★ | ★ | ☆ | ★ | ★★ | ★ | ★ | ★? | 8 |
| Kozhieva 2019 | ★ | ★ | ☆ | ☆ | ★☆ | ★ | ★ | ★ | 6 |
| Miyake 2015 | ★ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 7 |
| Moles 2022 | ☆ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 6 |
| Navarro 2022 | ★ | ★ | ☆ | ☆ | ☆★ | ★ | ★ | ★ | 6 |
| Oezguen 2019 | ★ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 7 |
| Pellizoni 2021 | ★ | ★ | ☆ | ★ | ★★ | ★ | ★ | ★ | 8 |
| Reynders 2020 | ★ | ★ | ★ | ☆ | ★☆ | ★ | ★ | ★ | 7 |
| Storm 2019 | ★ | ★ | ★ | ☆ | ★★ | ★ | ★ | ★ | 8 |
| Tankou 2018 | ★ | ★ | ☆ | ☆ | ★★ | ★ | ★ | ★ | 7 |
| Tremlett 2016a | ★ | ★ | ☆ | ★ | ★★ | ★ | ★ | ★ | 8 |
| Tremlett 2016b | ★ | ★ | ★ | ★ | ★★ | ★ | ★ | ★ | 9 |
| Tremlett 2021 | ★ | ★ | ★ | ★ | ★★ | ★ | ★ | ★ | 9 |
| Troci 2022 | ★ | ★ | ★ | ☆ | ★☆ | ★ | ★ | ★ | 7 |
| Ventura 2019 | ★ | ★ | ☆ | ☆ | ☆★ | ★ | ★ | ☆ | 5 |
| Yadav 2022 | ★ | ★ | ☆ | ☆ | ★☆ | ★ | ★ | ★ | 6 |
| Zeng 2019 | ★ | ★ | ☆ | ★ | ★★ | ★ | ★ | ★ | 8 |
| Zhou 2021 | ★ | ★ | ★ | ★ | ★★ | ★ | ★ | ★ | 9 |
| Zhou 2022 | ★ | ★ | ★ | ★ | ★★ | ★ | ★ | ★ | 9 |
|  |  |  |  |  |  |  |  |  |  |

A maximum of two stars can be allotted in this category, one for gender, and one for another controlled factor.



Figure S1. Subgroup analysis forest plot depicting country-specific variations in gut flora diversity, as measured by the Shannon index



Figure S2. Subgroup analysis forest plot depicting disease duration-specific variations in gut flora diversity, as measured by the Shannon index



Figure S3. Subgroup analysis forest plot depicting disease phenotype-specific variations in gut flora diversity, as measured by the Shannon index



Figure S4. Subgroup analysis forest plot depicting disease platform-specific variations in gut flora diversity, as measured by the Shannon index



Figure S5. Subgroup analysis forest plot depicting study quality-specific variations in gut flora diversity, as measured by the Shannon index



Figure S6. Subgroup analysis forest plot depicting disease activity-specific variations in gut flora diversity, as measured by the Shannon index



Figure S7. Subgroup analysis forest plot depicting BMI-specific variations in gut flora diversity, as measured by the Shannon index



Figure S8. Subgroup analysis forest plot depicting country-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S9. Subgroup analysis forest plot depicting disease duration-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S10. Subgroup analysis forest plot depicting disease phenotype-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S11. Subgroup analysis forest plot depicting disease platform-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S12. Subgroup analysis forest plot depicting study quality-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S13. Subgroup analysis forest plot depicting disease activity-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S14. Subgroup analysis forest plot depicting BMI-specific variations in gut flora diversity, as measured by the Chao1 index



Figure S15. Subgroup analysis forest plot depicting country-specific variations in gut flora diversity, as measured by the OTU index



Figure S16. Subgroup analysis forest plot depicting disease duration-specific variations in gut flora diversity, as measured by the OTU index



Figure S17. Subgroup analysis forest plot depicting disease phenotype-specific variations in gut flora diversity, as measured by the OTU index



Figure S18. Subgroup analysis forest plot depicting disease platform-specific variations in gut flora diversity, as measured by the OTU index



Figure S19. Subgroup analysis forest plot depicting study quality-specific variations in gut flora diversity, as measured by the OTU index



Figure S20. Subgroup analysis forest plot depicting disease activity-specific variations in gut flora diversity, as measured by the OTU index



Figure S21. Subgroup analysis forest plot depicting BMI-specific variations in gut flora diversity, as measured by the OTU index

Figure S22. Subgroup analysis forest plot depicting country-specific variations in gut flora diversity, as measured by the Simpson index



Figure S23. Subgroup analysis forest plot depicting disease duration-specific variations in gut flora diversity, as measured by the Simpson index



Figure S24. Subgroup analysis forest plot depicting disease phenotype-specific variations in gut flora diversity, as measured by the Simpson index



Figure S25. Subgroup analysis forest plot depicting disease platform-specific variations in gut flora diversity, as measured by the Simpson index



Figure S26. Subgroup analysis forest plot depicting study quality-specific variations in gut flora diversity, as measured by the Simpson index



Figure S27. Subgroup analysis forest plot depicting disease activity-specific variations in gut flora diversity, as measured by the Simpson index



Figure S28. Subgroup analysis forest plot depicting BMI-specific variations in gut flora diversity, as measured by the Simpson index



Figure S29. Sensitivity analysis result of the Shannon index



Figure S30. Sensitivity analysis result of the Chao1 index



Figure S31. Sensitivity analysis result of the OTU index



Figure S32. Sensitivity analysis result of the Simpson index



Figure S33. Forest plot for relative abundance studies for f\_Ruminococcaceae



Figure S34. Forest plot for relative abundance studies for f\_Bacteroidaceae



Figure S35. Forest plot for relative abundance studies for f\_Prevotellaceae



Figure S36. Forest plot for relative abundance studies for f\_Lachnospiraceae



Figure S37. Forest plot for relative abundance studies for p\_Firmicutes



Figure S38. Forest plot for relative abundance studies for p\_Bacteroidetes



Figure S39. Forest plot for relative abundance studies for p\_Proteobacteria



Figure S40. Forest plot for relative abundance studies for p\_Actinobacteria



Figure S41. Forest plot for relative abundance studies for p\_Verrucomicrobia



Figure S42. Forest plot for relative abundance studies for p\_Fusobacteria



Figure S43. Forest plot for relative abundance studies for p\_Tenericutes



Figure S44. Forest plot for relative abundance studies for p\_Euryarchaeota



Figure S45. Forest plot for relative abundance studies for g\_Methanobrevibacter

Figure S46. Forest plot for relative abundance studies for g\_Prevotella



Figure S47. Forest plot for relative abundance studies for g\_Streptococcus

Figure S48. Forest plot for relative abundance studies for g\_Fusobacterium

Figure S49. Forest plot for relative abundance studies for g\_Akkermansia



Figure S50. Forest plot for relative abundance studies for g\_Dialister



Figure S51. Forest plot for relative abundance studies for g\_Ruminococcus



Figure S52. Forest plot for relative abundance studies for g\_Faecalibacterium



Figure S53. Forest plot for relative abundance studies for g\_Roseburia



Figure S54. Forest plot for relative abundance studies for g\_Dorea



Figure S55. Forest plot for relative abundance studies for g\_Blautia



Figure S56. Forest plot for relative abundance studies for g\_Anaerostipes



Figure S57. Forest plot for relative abundance studies for g\_Alistipes



Figure S58. Forest plot for relative abundance studies for g\_Bacteroides

Figure S59. Forest plot for relative abundance studies for g\_Parabacteroides



Figure S60. Forest plot for relative abundance studies for g\_Bifidobacterium



Figure S61. Forest plot for relative abundance studies for g\_Oscillibacter



Figure S62. Forest plot for relative abundance studies for g\_Clostridium



Figure S63. Forest plot for relative abundance studies for g\_Phascolarctobacterium



Figure S64. Forest plot for relative abundance studies for g\_Butyricicoccus



Figure S65. Forest plot illustrating the relationship between MS and f\_Ruminococcaceae



Figure S66. Forest plot illustrating the relationship between MS and f\_Bacteroidaceae



Figure S67. Forest plot illustrating the relationship between MS and f\_Prevotellaceae



Figure S68. Forest plot illustrating the relationship between MS and f\_Lachnospiraceae



Figure S69. Forest plot illustrating the relationship between MS and p\_Firmicutes



Figure S70. Forest plot illustrating the relationship between MS and p\_Bacteroidetes



Figure S71. Forest plot illustrating the relationship between MS and p\_Proteobacteria



Figure S72. Forest plot illustrating the relationship between MS and p\_Actinobacteria



Figure S73. Forest plot illustrating the relationship between MS and p\_Verrucomicrobia



Figure S74. Forest plot illustrating the relationship between MS and p\_Fusobacteria



Figure S75. Forest plot illustrating the relationship between MS and p\_Euryarchaeota



Figure S76. Forest plot illustrating the relationship between MS and g\_Methanobrevibacter



Figure S77. Forest plot illustrating the relationship between MS and g\_Prevotella



Figure S78. Forest plot illustrating the relationship between MS and g\_Streptococcus



Figure S79. Forest plot illustrating the relationship between MS and g\_Fusobacterium



Figure S80. Forest plot illustrating the relationship between MS and g\_Akkermansia



Figure S81. Forest plot illustrating the relationship between MS and g\_Dialister



Figure S82. Forest plot illustrating the relationship between MS and g\_Ruminococcus



Figure S83. Forest plot illustrating the relationship between MS and g\_Faecalibacterium



Figure S84. Forest plot illustrating the relationship between MS and g\_Roseburia



Figure S85. Forest plot illustrating the relationship between MS and g\_Dorea



Figure S86. Forest plot illustrating the relationship between MS and g\_Blautia



Figure S87. Forest plot illustrating the relationship between MS and g\_Anaerostipes



Figure S88. Forest plot illustrating the relationship between MS and g\_Alistipes



Figure S89. Forest plot illustrating the relationship between MS and g\_Bacteroides



Figure S90. Forest plot illustrating the relationship between MS and g\_Parabacteroides



Figure S91. Forest plot illustrating the relationship between MS and g\_Bifidobacterium



Figure S92. Forest plot illustrating the relationship between MS and g\_Oscillibacter



Figure S93. Forest plot illustrating the relationship between MS and g\_Clostridium



Figure S94. Forest plot illustrating the relationship between MS and g\_Phascolarctobacterium



Figure S95. Forest plot illustrating the relationship between MS and g\_Butyricicoccus



Figure S96. Funnel plot showing publication bias within studies examining the relationship between MS and f\_Ruminococcaceae



Figure S97. Funnel plot showing publication bias within studies examining the relationship between MS and f\_Bacteroidaceae



Figure S98. Funnel plot showing publication bias within studies examining the relationship between MS and f\_Prevotellaceae



Figure S99. Funnel plot showing publication bias within studies examining the relationship between MS and f\_Lachnospiraceae



Figure S100. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Firmicutes



Figure S101. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Bacteroidetes



Figure S102. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Proteobacteria



Figure S103. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Actinobacteria



Figure S104. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Verrucomicrobia



Figure S105. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Fusobacteria



Figure S106. Funnel plot showing publication bias within studies examining the relationship between MS and p\_Euryarchaeota



Figure S107. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Methanobrevibacter



Figure S108. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Prevotella



Figure S109. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Streptococcus



Figure S110. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Fusobacterium



Figure S111. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Akkermansia



Figure S112. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Dialister



Figure S113. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Ruminococcus



Figure S114. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Faecalibacterium



Figure S115. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Roseburia



Figure S116. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Dorea



Figure S117. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Blautia



Figure S118. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Anaerostipes



Figure S119 Funnel plot showing publication bias within studies examining the relationship between MS and g\_Alistipes



Figure S120. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Bacteroides



Figure S121. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Parabacteroides



Figure S122. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Bifidobacterium



Figure S123. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Oscillibacter



Figure S124. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Clostridium



Figure S125. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Phascolarctobacterium



Figure S126. Funnel plot showing publication bias within studies examining the relationship between MS and g\_Butyricicoccus

**Overview of the applied search terms in searching of databases**

**PUBMED**

Search number Query Search Details Results Time

#1 Search: ("Multiple Sclerosis"[Mesh]) OR (((((( (Multiple Sclerosis[Title/Abstract])) OR (Sclerosis, Multiple[Title/Abstract])) OR (Sclerosis, Disseminated[Title/Abstract])) OR (Disseminated Sclerosis[Title/Abstract])) OR (MS (Multiple Sclerosis[Title/Abstract]))) OR (Multiple Sclerosis, Acute Fulminating[Title/Abstract])) 99,220 10:26:28

#2 Search: ("RNA, Ribosomal, 16S"[Mesh]) OR ((((rRNA, 16S[Title/Abstract]) OR (16S Ribosomal RNA[Title/Abstract])) OR (RNA, 16S Ribosomal[Title/Abstract])) OR (Ribosomal RNA, 16S[Title/Abstract])) 68,757 10:26:48

#3 Search: ("Gastrointestinal Microbiome"[Mesh]) OR (((((((((((((((((((((((((((((((((((((Gastrointestinal Microbiomes[Title/Abstract]) OR (Microbiome, Gastrointestinal[Title/Abstract])) OR (Gut Microbiome[Title/Abstract])) OR (Gut Microbiomes[Title/Abstract])) OR (Microbiome, Gut[Title/Abstract])) OR (Gut Microflora[Title/Abstract])) OR (Microflora, Gut[Title/Abstract])) OR (Gut Microbiota[Title/Abstract])) OR (Gut Microbiotas[Title/Abstract])) OR (Microbiota, Gut[Title/Abstract])) OR (Gastrointestinal Flora[Title/Abstract])) OR (Flora, Gastrointestinal[Title/Abstract])) OR (Gut Flora[Title/Abstract])) OR (Flora, Gut[Title/Abstract])) OR (Gastrointestinal Microbiota[Title/Abstract])) OR (Gastrointestinal Microbiotas[Title/Abstract])) OR (Microbiota, Gastrointestinal[Title/Abstract])) OR (Gastrointestinal Microbial Community[Title/Abstract])) OR (Gastrointestinal Microbial Communities[Title/Abstract])) OR (Microbial Community, Gastrointestinal[Title/Abstract])) OR (Gastrointestinal Microflora[Title/Abstract])) OR (Microflora, Gastrointestinal[Title/Abstract])) OR (Gastric Microbiome[Title/Abstract])) OR (Gastric Microbiomes[Title/Abstract])) OR (Microbiome, Gastric[Title/Abstract])) OR (Intestinal Microbiome[Title/Abstract])) OR (Intestinal Microbiomes[Title/Abstract])) OR (Microbiome, Intestinal[Title/Abstract])) OR (Intestinal Microbiota[Title/Abstract])) OR (Intestinal Microbiotas[Title/Abstract])) OR (Microbiota, Intestinal[Title/Abstract])) OR (Intestinal Microflora[Title/Abstract])) OR (Microflora, Intestinal[Title/Abstract])) OR (Intestinal Flora[Title/Abstract])) OR (Flora, Intestinal[Title/Abstract])) OR (Enteric Bacteria[Title/Abstract])) OR (Bacteria, Enteric[Title/Abstract])) 85,104 10:27:09

#4 Search: ((("Multiple Sclerosis"[Mesh]) OR (((((( (Multiple Sclerosis[Title/Abstract])) OR (Sclerosis, Multiple[Title/Abstract])) OR (Sclerosis, Disseminated[Title/Abstract])) OR (Disseminated Sclerosis[Title/Abstract])) OR (MS (Multiple Sclerosis[Title/Abstract]))) OR (Multiple Sclerosis, Acute Fulminating[Title/Abstract]))) AND (("RNA, Ribosomal, 16S"[Mesh]) OR ((((rRNA, 16S[Title/Abstract]) OR (16S Ribosomal RNA[Title/Abstract])) OR (RNA, 16S Ribosomal[Title/Abstract])) OR (Ribosomal RNA, 16S[Title/Abstract])))) AND (("Gastrointestinal Microbiome"[Mesh]) OR (((((((((((((((((((((((((((((((((((((Gastrointestinal Microbiomes[Title/Abstract]) OR (Microbiome, Gastrointestinal[Title/Abstract])) OR (Gut Microbiome[Title/Abstract])) OR (Gut Microbiomes[Title/Abstract])) OR (Microbiome, Gut[Title/Abstract])) OR (Gut Microflora[Title/Abstract])) OR (Microflora, Gut[Title/Abstract])) OR (Gut Microbiota[Title/Abstract])) OR (Gut Microbiotas[Title/Abstract])) OR (Microbiota, Gut[Title/Abstract])) OR (Gastrointestinal Flora[Title/Abstract])) OR (Flora, Gastrointestinal[Title/Abstract])) OR (Gut Flora[Title/Abstract])) OR (Flora, Gut[Title/Abstract])) OR (Gastrointestinal Microbiota[Title/Abstract])) OR (Gastrointestinal Microbiotas[Title/Abstract])) OR (Microbiota, Gastrointestinal[Title/Abstract])) OR (Gastrointestinal Microbial Community[Title/Abstract])) OR (Gastrointestinal Microbial Communities[Title/Abstract])) OR (Microbial Community, Gastrointestinal[Title/Abstract])) OR (Gastrointestinal Microflora[Title/Abstract])) OR (Microflora, Gastrointestinal[Title/Abstract])) OR (Gastric Microbiome[Title/Abstract])) OR (Gastric Microbiomes[Title/Abstract])) OR (Microbiome, Gastric[Title/Abstract])) OR (Intestinal Microbiome[Title/Abstract])) OR (Intestinal Microbiomes[Title/Abstract])) OR (Microbiome, Intestinal[Title/Abstract])) OR (Intestinal Microbiota[Title/Abstract])) OR (Intestinal Microbiotas[Title/Abstract])) OR (Microbiota, Intestinal[Title/Abstract])) OR (Intestinal Microflora[Title/Abstract])) OR (Microflora, Intestinal[Title/Abstract])) OR (Intestinal Flora[Title/Abstract])) OR (Flora, Intestinal[Title/Abstract])) OR (Enteric Bacteria[Title/Abstract])) OR (Bacteria, Enteric[Title/Abstract]))) 46 10:29:09

**WEB OF SCIENCE**

ID Query Sort Results Time

1 Gastrointestinal Microbiome (TOPIC) OR Gut Microbiome (TOPIC) OR Gut Microflora (TOPIC) OR Gut Microbiotas (TOPIC) OR Gastrointestinal Flora (TOPIC) OR Gut Flora (TOPIC) OR Gastrointestinal Microbiota (TOPIC) OR Gastrointestinal Microbial Community (TOPIC) OR Gastrointestinal Microflora (TOPIC) OR Gastric Microbiome (TOPIC) OR Intestinal Microbiome (TOPIC) OR Intestinal Microbiota (TOPIC) OR Intestinal Microflora (TOPIC) OR Enteric Bacteria (TOPIC) OR Gastrointestinal Microbiomes (TOPIC) OR Microbiome, Gastrointestinal (TOPIC) 159154 Mon Jul 03 2023 22:39:43 GMT+0800

2 RNA, Ribosomal, 16S (TOPIC) OR rRNA, 16S (TOPIC) OR 16S Ribosomal RNA (TOPIC) OR RNA, 16S Ribosomal (TOPIC) OR Ribosomal RNA, 16S (TOPIC) 139635 Mon Jul 03 2023 22:40:53 GMT+0800

3 Multiple Sclerosis (TOPIC) OR Sclerosis, Multiple (TOPIC) OR Sclerosis, Disseminated (TOPIC) OR Disseminated Sclerosis (TOPIC) OR MS (Multiple Sclerosis) (TOPIC) OR Multiple Sclerosis, Acute Fulminating (TOPIC) 194876 Mon Jul 03 2023 22:43:23 GMT+0800

4 #1 AND #2 AND #3 96 Mon Jul 03 2023 22:44:20 GMT+0800

**EMBASE**

No. Query Results Date

#1 'multiple sclerosis'/exp 162902 3-Jul-23

#2 'multiple sclerosis':ab,ti OR 'sclerosis, multiple':ab,ti OR 'sclerosis, disseminated':ab,ti OR 'disseminated sclerosis':ab,ti OR (ms:ab,ti AND 'multiple sclerosis':ab,ti) OR 'multiple sclerosis, acute fulminating':ab,ti 144374 3-Jul-23

#3 'rna 16s'/exp 95197 3-Jul-23

#4 'rna 16s':ab,ti OR 'rna, ribosomal, 16s':ab,ti OR 'rrna, 16s':ab,ti OR '16s ribosomal rna':ab,ti OR 'rna, 16s ribosomal':ab,ti OR 'ribosomal rna, 16s':ab,ti 5947 3-Jul-23

#5 'intestine flora'/exp 97871 3-Jul-23

#6 'intestine flora':ab,ti OR 'gastrointestinal microbiome':ab,ti OR 'gastrointestinal microbiomes':ab,ti OR 'microbiome, gastrointestinal':ab,ti OR 'gut microbiome':ab,ti OR 'gut microflora':ab,ti OR 'gut microbiota':ab,ti OR 'gastrointestinal flora':ab,ti OR 'gut flora':ab,ti OR 'gastrointestinal microbiota':ab,ti OR 'gastrointestinal microbial community':ab,ti OR 'microbial community, gastrointestinal':ab,ti OR 'gastrointestinal microflora':ab,ti OR 'gastric microbiome':ab,ti OR 'intestinal microbiome':ab,ti OR 'intestinal microbiota':ab,ti OR 'intestinal microflora':ab,ti OR 'intestinal flora':ab,ti OR 'enteric bacteria':ab,ti 88997 3-Jul-23

#7 #1 OR #2 176870 3-Jul-23

#8 #3 OR #4 96749 3-Jul-23

#9 #5 OR #6 123912 3-Jul-23

#10 #7 AND #8 AND #9 192 3-Jul-23

**Cochrane**

ID Search Hits

#1 (multiple sclerosis):ti,ab,kw OR (Sclerosis, Multiple):ti,ab,kw OR (Sclerosis, Disseminated):ti,ab,kw OR (Disseminated Sclerosis):ti,ab,kw OR (MS (Multiple Sclerosis)):ti,ab,kw 12300

#2 Multiple Sclerosis, Acute Fulminating 1

#3 (RNA, Ribosomal, 16S):ti,ab,kw OR (rRNA, 16S):ti,ab,kw OR (16S Ribosomal RNA):ti,ab,kw OR (RNA, 16S Ribosomal):ti,ab,kw OR (Ribosomal RNA, 16S):ti,ab,kw 1565

#4 (Gastrointestinal Microbiome):ti,ab,kw OR (Gut Microbiome):ti,ab,kw OR (Gut Microflora):ti,ab,kw OR (Gut Microbiotas):ti,ab,kw OR (Gastrointestinal Flora):ti,ab,kw 4330

#5 (Gut Flora):ti,ab,kw OR (Gastrointestinal Microbiota):ti,ab,kw OR (Gastrointestinal Microbial Community):ti,ab,kw OR (Gastrointestinal Microflora):ti,ab,kw OR (Gastric Microbiome):ti,ab,kw 3971

#6 (Intestinal Microbiome):ti,ab,kw OR (Intestinal Microbiota):ti,ab,kw OR (Intestinal Microflora):ti,ab,kw OR (Enteric Bacteria):ti,ab,kw OR (Gastrointestinal Microbiomes):ti,ab,kw 3473

#7 #1 OR #2 12301

#8 #4 OR #5 OR #6 7531

#9 #7 AND #8 31

**Ovid**

Ovid MEDLINE(R) ALL <1946 to Jul3, 2023>

Search Lippincott Willams&Wikins Books@Ovid

Search All Journals@Ovid (Abstract only)

Search LWW Journals Full Texts@Ovid

1 multiple sclerosis.mp. [mp=ab, bo, bt, ti, hw, ot, nm, fx, kf, ox, px, rx, an, ui, sy, ds, on, ux, mx, tx, mc, st, or, tn, ps, cb, rn, sq, mq, ge, tm, mi, sh, ct] 276289

2 (multiple sclerosis or sclerosis, multiple or sclerosis, disseminated or disseminated sclerosis or multiple sclerosis, acute fulminating or MS).af. 2940461

3 (multiple sclerosis or sclerosis, multiple or sclerosis, disseminated or disseminated sclerosis or multiple sclerosis, acute fulminating or MS).af. 2940461

4 (multiple sclerosis or sclerosis, multiple or sclerosis, disseminated or disseminated sclerosis or multiple sclerosis, acute fulminating or MS).af. 2940461

5 (RNA, Ribosomal, 16S or rRNA, 16S or 16S Ribosomal RNA or RNA, 16S Ribosomal or Ribosomal RNA, 16S).af. 89999

6 (Gastrointestinal Microbiome or Gut Microbiome or Gut Microflora or Gut Microbiotas or Gastrointestinal Flora or Gut Flora or Gastrointestinal Microbiota or Gastrointestinal Microbial Community or Gastrointestinal Microflora or Gastric Microbiome or Intestinal Microbiome or Intestinal Microbiota or Intestinal Microflora or Enteric Bacteria or Gastrointestinal Microbiomes or Microbiome, Gastrointestinal).af. 139751

7 (Gastrointestinal Microbiome or Gut Microbiome or Gut Microflora or Gut Microbiotas or Gastrointestinal Flora or Gut Flora or Gastrointestinal Microbiota or Gastrointestinal Microbial Community or Gastrointestinal Microflora or Gastric Microbiome or Intestinal Microbiome or Intestinal Microbiota or Intestinal Microflora or Enteric Bacteria or Gastrointestinal Microbiomes or Microbiome, Gastrointestinal).af. 139751

8 4 and 5 and 6 1790