**Supplementary Digital Content**

**Search strategy**

1. Exp polysaccharides bacterial/or probiotics/or exp dietary fiber
2. Probiotics
3. Synbiotics
4. Probiotic\*.mp
5. Synbiotic\*.mp
6. Prebiotic\*.mp
7. Dietary Carbohydrates
8. Dietary Carbohydrate\*.mp
9. Lactobacillus helveticus/ or lactobacillus.mp. or Lactobacillus casei/ or Lactobacillus leichmannii/ or Lactobacillus reuteri/ or Lactobacillus brevis/ or Lactobacillus plantarum/ or Lactobacillus acidophilus/ or Lactobacillus delbrueckii/ or Lactobacillus/ or Lactobacillus rhamnosus/ or Lactobacillus fermentum/
10. lactobacillus GG.mp.
11. lactobacillus acidophillus.mp. [mp=protocol supplementary concept, rare disease supplementary concept, title, original title, abstract, name of substance word, subject heading word, unique identifier]
12. lactobacillus gasseri.mp.
13. lactobacillus lactis.mp.
14. lactobacillus paracasei.mp.
15. lactobacillus johnsonii.mp.
16. Bifidobacterium.mp. or Bifidobacterium/
17. Bifidobacterium breve.mp.
18. Bifidobacterium longum.mp
19. Bifidobacterium infantis.mp.
20. Bifidobacterium adolescentis.mp.
21. Bifidobacterium lactis.mp.
22. Bifidobacterium animalis.mp.
23. Bacillus/ or Bacillus.mp.
24. Clostridium butyricum.mp. or Clostridium/ or Clostridium butyricum/
25. Streptococcus thermophillus.mp.
26. Escherichia coli.mp. or Escherichia coli/
27. Propionibacterium/ or Propionibacterium freudenreichii.mp.
28. Enterococcus SF68.mp.
29. Enterococcus faecalis.mp. or Enterococcus faecalis/
30. Saccharomyces boulardi.mp.
31. VSL 3.mp.
32. GanedenBc.mp.
33. LAFTI B94.mp.
34. Bifidobacterium BB12.mp.
35. Mutaflor.mp.
36. Actimel.mp.
37. Cultura.mp.
38. Camptothecin/ or Yakult.mp.
39. Proviva.mp. or Enterobacteriaceae/
40. Vifit.mp.
41. Verum.mp.
42. Bio-K+.mp.
43. Multibionta.mp.
44. Dietary Fiber/ or Inulin/ or Oligosaccharide\*/ or Oligofructose.mp.

AND

1. Postoperative Complications/ or Abdomen/ or Surgical Wound Infection/ or Abdominal surgery.mp. or Laparotomy/
2. Colorectal surgery.mp. or Colorectal Surgery/
3. Colectomy/ or Colon/ or Colon surgery.mp.
4. Colectomy.mp. [mp=protocol supplementary concept, rare disease supplementary concept, title, original title, abstract, name of substance word, subject heading word, unique identifier]
5. hemicolectomy.mp. [mp=protocol supplementary concept, rare disease supplementary concept, title, original title, abstract, name of substance word, subject heading word, unique identifier]
6. Anastomosis, Surgical/ or anterior resection.mp.
7. Hartmann's procedure.mp.
8. Colonic resection.mp.
9. Sigmoidectomy.mp.
10. Sigmoid resection.mp.
11. Hepatectomy.mp. or Hepatectomy/
12. Liver Transplantation/ or Liver surgery.mp.
13. liver resection.mp.
14. Cholecystectomy/ or Biliary surgery.mp. or Biliary Tract Surgical Procedures/
15. hepatic resection.mp.
16. Pancreatectomy/ or pancreatic surgery.mp. or Pancreaticoduodenectomy/
17. Digestive System Surgical Procedures/ or Whipple's procedure.mp.
18. pancreatic resection.mp.
19. gynecological surgery.mp. or Gynecologic Surgical Procedures/
20. gynaecological surgery.mp.
21. Kidney Transplantation/ or transplant surgery.mp. or Transplantation/
22. aortic aneurysm repair.mp

AND

1. postoperative complication.mp. or Postoperative Complications/
2. infectious complications.mp.
3. Reconstructive Surgical Procedures/ or surgical complications.mp.
4. wound infection.mp. or Wound Infection/
5. bacterial infections.mp. or Bacterial Infections/
6. septi\*.mp. [mp=protocol supplementary concept, rare disease supplementary concept, title, original title, abstract, name of substance word, subject heading word, unique identifier]