

Supplementary material

Table S1: Electronic search strategies.

| Database | Search Strategy |
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| Cochrane Library | |
| #1 | MeSH descriptor: [Dietary Fibre] |
| #2 | Roughage* |
| #3 | Polysaccharide* |
| #4 | Soluble fibre* |
| #5 | Insoluble fibre* |
| #6 | Prebiotic* |
| #7 | #1 OR #2 OR #3 OR #4 OR #5 OR #6 |
| #8 | MeSH descriptor: [Diet] |
| #9 | Diet* |
| #10 | Consume* |
| #11 | Supplementation* |
| #12 | Food* |
| #13 | #8 OR #9 OR #10 OR #11 OR #12 |
| #14 | MeSH descriptor: [cellulose] |
| #15 | Lignin* |
| #16 | Hemicellulose* |
| #17 | Hexosane* |
| #18 | #14 OR #15 OR #16 OR #17 |
| #19 | Fiber* OR fibre* OR high-fiber* OR high-fibre |
| #20 | Fructans* |
| #21 | Inulin* |
| #22 | Pectin* |
| #23 | MeSH descriptor: [metabolic endotoxemia] |
| #24 | Lipopolysaccharide (LPS)* |
| #25 | Endotoxemia* |
| #26 | Endotoxin-translocation* |
| #27 | Lipopolysaccharide binding protein* |
| #28 | Low-grade inflammation* |
| #29 | Bacterial endotoxin* |
| #30 | Gut permeability* |
| #31 | Toll-like receptor-4* |
| #32 | Systemic inflammation* |
| #33 | #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 |
| #34 | #7 AND #33 |
| #35 | #13 AND #18 AND #33 |
| Pubmed | |
| #1 | Metabolic endotoxemia OR Endotoxemia |
| #2 | Endotoxemia OR Lipopolysaccharide |
| #3 | Dietary fibre OR dietary Fiber OR Soluble Fibre OR Insoluble Fibre OR Soluble Fiber OR Insoluble Fiber OR Prebiotic OR Inulin OR Polysaccharide |

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| | OR Fructan OR Pectin OR Lignin OR |
| | Supplementation |
| #4 | Randomized controlled trial |
| #5 | Controlled clinical trial |
| #6 | Quasi-randomized trial |
| #7 | Cross-over clinical trial |
| #8 | Placebo |
| #9 | Randomly |
| #10 | Groups |
| #11 | Humans |
| #12 | #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 |
| #13 | #12 AND #11 |
| #14 | #1 AND #2 AND #3 AND #13 |
| MEDLINE OVID | |
| 1. | Exp Dietary fibre/ |
| 2. | Roughage*.tw. |
| 3. | Polysaccharide*.tw. |
| 4. | Soluble fibre*.tw. |
| 5. | Insoluble fibre*.tw. |
| 6. | Prebiotic* .tw. |
| 7. | OR /1-6 |
| 8. | Diet/ |
| 9. | Diet*.tw. |
| 10. | Consume*.tw. |
| 11. | Supplementation*.tw. |
| 12. | Food*.tw. |
| 13. | OR/8-12 |
| 14. | Exp cellulose/ |
| 15. | Exp Lignin/ |
| 16. | Exp Hemicellulose/ |
| 17. | Exp Hexosane/ |
| 18. | Cellulose* . tw. |
| 19. | Lignin* . tw. |
| 20. | Hemicellulose*.tw. |
| 21. | Hexosane*.tw. |
| 22. | (Fiber* OR fibre* OR high-fiber* OR high-fibre) |
| 23. | Fructans/ |
| 24. | Fructans*.tw. |
| 25. | Inulin/ |
| 26. | Inulin*.tw. |
| 27. | Pectin/ |
| 28. | Pectin*.tw. |
| 29. | OR/14-28 |
| 30. | 7 AND 13 AND 29 |
| 31. | Exp Metabolic Endotoxemia/ |
| 32. | Metabolic endotoxemia*.tw. |
| 33. | Endotoxemia*.tw. |
| 34. | Lipopolysaccharide*.tw. |

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| 35. | Endotoxin-translocation*.tw. |
| 36. | Lipopolysaccharide binding protein*.tw. |
| 37. | Low-grade inflammation*.tw. |
| 38. | Bacterial endotoxin*.tw. |
| 39. | Gut permeability*.tw. |
| 40. | Toll-like receptor-4*.tw. |
| 41. | Systemic inflammation*.tw. |
| 42. | OR/31-41 |
| 43. | 30 AND 42 |
| 44. | Randomized control trial.pt. |
| 45. | Controlled trial.pt. |
| 46. | Randomized.pt. |
| 47. | Quasi-randomized trial |
| 48. | Cross-over clinical trial |
| 49. | Placebo |
| 50. | Randomly |
| 51. | Groups |
| 52. | Humans |
| 53. | 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 |
| 54. | 43 AND 53 |
| ClinicalTrials.gov | [Advanced Search] Disease or condition: Metabolic endotoxemia OR endotoxemia OR low-grade inflammation Other terms: dietary fiber OR dietary fibre OR Bran OR Soluble fiber OR Insoluble Fiber OR Roughage ORx fructan OR pectin OR Lignins OR Inulin OR Prebiotic OR Polysaccharide OR supplementation Study type: Clinical Trials (intervention studies) [Basic search] (Metabolic endotoxemia OR Endotoxemia) AND (dietary fiber OR dietary fibre OR Bran OR Soluble fiber OR Insoluble Fiber OR Roughage ORx fructan OR pectin OR Lignins OR Inulin OR Prebiotic OR Polysaccharide OR supplementation) |

WHO ICTRP