**Supplementary text S1:** Search strategy

The search strategies in the bibliographic databases contained the following three elements:

1) gout\* OR podagra OR tophus OR tophi OR tophaceous OR urate OR uric acid OR hyperurecemi\* OR hyperurecaemi\* OR hyperuricemi\* OR hyperuricaemi\* OR arthritis urica, all searched in title and abstract.

AND

2) body weight OR weight change\* OR weight loss OR weight reduction OR weight gain OR anti obesity OR anti-obesity OR antiobesity OR slimming OR diet\*, all searched in title, abstract.

AND

3) limitation to ‘human’ where possible

**Spe**cifi**ed search strategies**
*Cochrane Central Register of Controlled Trials (CENTRAL):*

No limit on humans, and the terms were searched using the options ‘Record Title’, and ‘Abstract’, using advanced search.

|  |  |
| --- | --- |
| #1 | gout\* or podagra or tophus or tophi or tophaceous or urate or uric acid or hyperurecemi\* or hyperurecaemi\* or hyperuricemi\* or hyperuricaemi\* or arthritis urica:ti or gout\* or podagra or tophus or tophi or tophaceous or urate or uric acid or hyperurecemi\* or hyperurecaemi\* or hyperuricemi\* or hyperuricaemi\* or arthritis urica:ab in Trials (Word variations have been searched) |
| #2 | body weight or weight change\* or weight loss or weight reduction or weight gain or anti obesity or anti-obesity or antiobesity or slimming or diet\*:ti or body weight or weight change\* or weight loss or weight reduction or weight gain or anti obesity or anti-obesity or antiobesity or slimming or diet\*:ab in Trials (Word variations have been searched) |
| #3 | #1 and #2 |

*MEDLINE via OVID from 1946:*

The terms were searched using ‘.ti’ and ‘.ab’, and applying the limit ‘human’, using ‘Multi-Field Search’.

|  |  |
| --- | --- |
| 1 | (gout\* or podagra or tophus or tophi or tophaceous or urate or uric acid or hyperurecemi\* or hyperurecaemi\* or hyperuricemi\* or hyperuricaemi\* or arthritis urica).ti or (gout\* or podagra or tophus or tophi or tophaceous or urate or uric acid or hyperurecemi\* or hyperurecaemi\* or hyperuricemi\* or hyperuricaemi\* or arthritis urica).ab |
| 2 | (body weight or weight change\* or weight loss or weight reduction or weight gain or anti obesity or anti-obesity or antiobesity or slimming or diet\*).ti or (body weight or weight change\* or weight loss or weight reduction or weight gain or anti obesity or anti-obesity or antiobesity or slimming or diet\*).ab |
| 3 | 1 and 2 |
| 4 | limit 3 to humans |

*EMBASE via OVID from 1974:*

The terms were searched using ‘.ti’ and ‘.ab’’, and applying the limit ‘human’, using ‘Multi-Field Search’.

|  |  |
| --- | --- |
| 1 | (gout\* or podagra or tophus or tophi or tophaceous or urate or uric acid or hyperurecemi\* or hyperurecaemi\* or hyperuricemi\* or hyperuricaemi\* or arthritis urica).ti or (gout\* or podagra or tophus or tophi or tophaceous or urate or uric acid or hyperurecemi\* or hyperurecaemi\* or hyperuricemi\* or hyperuricaemi\* or arthritis urica).ab |
| 2 | (body weight or weight change\* or weight loss or weight reduction or weight gain or anti obesity or anti-obesity or antiobesity or slimming or diet\*).ti or (body weight or weight change\* or weight loss or weight reduction or weight gain or anti obesity or anti-obesity or antiobesity or slimming or diet\*).ab |
| 3 | 1 and 2 |
| 4 | limit 3 to humans |

*Web of Science via Web of Knowledge from 1900:*

No limit on humans, and the terms were searched using ‘TI=’ for the gout related terms, and ‘TS=’ for the weight loss related terms, in advanced search.

|  |
| --- |
| TI(gout\* OR podagra OR tophus OR tophi OR tophaceous OR urate OR uric acid OR hyperurecemi\* OR hyperurecaemi\* OR hyperuricemi\* OR hyperuricaemi\* OR arthritis urica) AND TS=(body weight OR weight change\* OR weight loss OR weight reduction OR weight gain OR anti obesity OR anti-obesity OR antiobesity OR slimming OR diet\*) |

*ClinicalTrials.gov (www.ClinicalTrials.gov):*

Since ‘\*’ cannot be used, and since limited space is provided in the search boxes, the following search strategy was used in ‘basic search’:

|  |
| --- |
| (gout OR hyperurecemia OR hyperurecaemia OR hyperuricemia OR hyperuricaemia OR arthritis urica) AND (body weight OR weight changea OR weight loss OR weight reduction OR weight gain OR anti obesity OR anti-obesity OR antiobesity OR slimming OR diet) |

*WHO trial portal, ICTRP (www.who.int/ictrp/en/):*

No limit on humans, and the search concepts were searched in ‘Title’, ‘Condition’ and ‘Intervention’, respectively, in advanced search. Since ‘\*’ means 1 to ‘many’ letters, following terms were added: ‘gout’, ‘weight change’, ‘diet’. Recruitment status were changed to ‘ALL’.

|  |  |
| --- | --- |
| Title | gout\* OR gout OR podagra OR tophus OR tophi OR tophaceous OR urate OR uric acid OR hyperurecemi\* OR hyperurecaemi\* OR hyperuricemi\* OR hyperuricaemi\* OR arthritis urica |
| Condition | gout\* OR gout OR podagra OR tophus OR tophi OR tophaceous OR urate OR uric acid OR hyperurecemi\* OR hyperurecaemi\* OR hyperuricemi\* OR hyperuricaemi\* OR arthritis urica |
| Intervention | body weight OR weight change\* OR weight change OR weight loss OR weight reduction OR weight gain OR anti obesity OR anti-obesity OR antiobesity OR slimming OR diet\* OR diet |