

Supplementary Material S1a. Keywords used for the search strategy.

| Population | Intervention | Outcomes |
|--------------|-------------------------|----------------|
| Aged | Resistance training | Balance |
| Old people | Strength training | Proprioception |
| Elderly | Weightlifting | |
| Aging | Endurance training | |
| Older people | Aerobic training | |
| Older adults | Walking | |
| Old adults | Balance training | |
| Senior | Multicomponent training | |
| Geriatric | Multicomponent training | |
| | Multicomponent exercise | |

Supplementary Material S1b: Complete literature search.

PubMed Search Formula

(aged OR "old people" [Title] OR "older people" [Title] OR "older adults" [Title] OR "old adults" [Title] OR elderly OR senior [Title] OR geriatric [Title]) AND ("randomized controlled trial"[Publication Type] OR "controlled clinical trial"[Publication Type] OR "randomized"[Title/Abstract] OR "placebo"[Title/Abstract] OR "clinical trials as topic"[MeSH Terms] OR "randomly"[Title/Abstract] OR "trial"[Title]) AND (balance OR proprioception) AND ("aerobic training" OR "endurance training" OR walking OR "balance training" OR "resistance training" OR "strength training" OR weightlifting OR "multicomponent training" OR "multi component training" OR "multi-component training" OR "multicomponent exercise")

Results: 338

Date: 14/01/2023

Cochrane Library Search Formula

(aged OR "old people" OR "older people" OR "older adults" OR "old adults" OR elderly OR senior OR geriatric) in Title Abstract Keyword AND ("aerobic training" OR "endurance training" OR walking OR "balance training" OR "resistance training" OR "strength training" OR weightlifting OR "multicomponent training" OR "multi component training" OR "multi-component training" OR "multicomponent exercise") in Title Abstract Keyword AND (balance OR proprioception)

Results: 258

Date: 14/01/2023

Web of Science Search Formula

#1

TI=(aged OR "old people" OR "older people" OR "older adults" OR "old adults" OR elderly OR senior OR geriatric)

#2

TS=("aerobic training" OR "endurance training" OR walking OR "balance training" OR "resistance training" OR "strength training" OR weightlifting OR "multicomponent training" OR "multi component training" OR "multi-component training" OR "multicomponent exercise")

#3

TS=(balance OR proprioception)

#4

TS=research design OR TS=comparative stud* OR TS=evaluation stud* OR TS=controlled trial* OR TS=follow-up stud* OR TS=prospective stud* OR TS=random* OR TS=placebo* OR TS=(single blind*) OR TS=(double blind*)

#5 (TS=#1 AND #2 AND #3 AND #4)

Results: 363

Date: 14/01/2023

SportDiscus Search Formula

#1 Título

(aged OR "old people" OR "older people" OR "older adults" OR "old adults" OR elderly
OR senior OR geriatric)

#2

("aerobic training" OR "endurance training" OR walking OR "balance training" OR "resi
stance training" OR "strength training" OR weightlifting OR "multicomponent training" O
R "multi component training" OR "multi-
component training" OR "multicomponent exercise")

#3 (balance OR proprioception)

Results: 144

Date: 14/01/2023