**Search Strings for Medline, Embase, Cochrane, Web of Science, CINAHL, and PubMed**

**Medline Search String (Ovid Medline ALL - 1946 to December 14,2020)**

1. Diet Records/
2. Self Report/
3. mHealth/
4. Mobile Applications/
5. Smartphone/
6. Telehealth/
7. (app? or application\* or "cell phone" or cellphone or computer or diary or diaries or digital or electronic or email or "e-mail" or internet or journal\* or log? or logged or logging or mHealth or mobile or online or PDA? or phone? or record\* or smartphone\* or technology or telehealth or track\* or web).ti,ab.
8. (self adj2 (administer\* or evaluat\* or monitor\* or regulat\* or report\* or track\*)).ti,ab.
9. **OR/1-8 [self-monitoring terms]**
10. \*Obesity/th
11. \*Weight Loss/
12. ("body mass" or bmi or calor\* or diet\* or obes\* or overweight or weight).ti.
13. **OR/10-11 [weight terms]**
14. **AND/ 9,13 [self-monitoring and weight terms]**
15. (clinical or comparative or comparison or controlled or crossover or "cross-over" or evaluation or experiment\* or intervention\* or multicenter or "multi-center" or program\* OR project\* or random\* or trial\*).ti,ab.
16. Clinical study/
17. Exp Clinical Trial/
18. Comparative Effectiveness Research/
19. Comparative Study/
20. Multicenter Studies/
21. Outcome assessment/
22. Random Allocation/
23. Exp Randomized Controlled Trial/
24. Exp Randomized Controlled Trials As Topic/
25. **OR/15-24 [study types]**
26. **AND/14, 25 [topic and study types]**
27. exp Animals/ NOT Humans.sh.
28. (animal\* or canine or dog or dogs or murine or rabbit\* or rat or rats or mouse or mice or pig or pigs or primate or primates or veterinar\*).ti,ab,kf.
29. **OR/27,28 [non-human terms]**
30. **26 NOT 29**

**Embase Search String (Ovid Embase Classic + Embase 1947-2020, December 14)**

1. ((weight or diet or dietary or food) adj3 (self adj (administer\* or evaluat\* or monitor\* or regulat\* or report\* or restrict\* or track or tracking))).ti,ab.
2. (clinical or comparative or comparison or controlled or crossover or "cross-over" or evaluation or experiment\* or intervention\* or multicenter or "multi-center" or program\* or project\* or random\* or trial\*).ti.
3. Clinical study/
4. exp Clinical Trial/
5. Comparative Effectiveness/
6. Comparative Study/
7. Controlled Clinical Trial/
8. Controlled Study/
9. Intermethod Comparison/
10. Intervention Study/
11. exp Longitudinal Study/
12. Major Clinical Study/
13. Multicenter Study/
14. Outcome assessment/
15. Randomization/
16. exp Randomized Controlled Trial/
17. **or/2-16 [study types]**
18. **and/1,17 [topic and study types]**
19. (exp ANIMAL/ or exp ANIMAL MODEL/ or exp ANIMAL EXPERIMENT/ or EXPERIMENTAL ANIMAL/ or NON-HUMAN/) not exp HUMAN/
20. (animal? or canine or dog or dogs or murine or rabbit\* or rat or rats or mouse or mice or pig or pigs or primate or primates or veterinary).ti,ab,kw.
21. **or/19-20 [non-human terms]**
22. **18 NOT 21**

**Cochrane library**

Record Title: obese or obesity or overweight or weight

Record Title: application or "cell phone" or cellphone or computer or diary or diaries or digital or electronic or email or "e-mail" or internet or journal or log or logs or logged or logging or mHealth or mobile or online or PDA or phone or record or self-monitor or smartphone or technology or teleconsultation or telehealth or telemedicine or telemonitor or track or web

**Web of Science**

Title: obes\* or overweight or weight

Title: application or "cell phone" or cellphone\* or computer\* or diary or diaries or digital or electronic or email\* or "e-mail" or internet or journal\* or log or logs or logged or logging or mHealth or mobile or online or PDA or phone or record\* or self-monitor\* or smartphone\* or technology or teleconsultation\* or telehealth or telemedicine or telemonitor\* or track\* or web

Topic: loss or lose or losing or lost or maintain\* or body mass or bmi or self or diet or dietary or calor\*

**CINAHL**

TI ( obes\* or overweight or weight ) AND TI ( application or "cell phone" or cellphone or computer or diary or diaries or digital or electronic or email or "e-mail" or internet or journal or log or logs or logged or logging or mHealth or mobile or online or PDA or phone or record or self-monitor or smartphone or technology or teleconsultation or telehealth or telemedicine or telemonitor or track or web ) AND AB ( loss or lose or losing or lost or maintain\* or body mass or bmi or self or diet or dietary or calor\* )

Apply equivalent subjects

Exclude MEDLINE records

**Ovid PsychINFO**

1. ("body mass" or bmi or calor\* or diet or obes\* or overweight or weight).ti.
2. (self adj (administer\* or evaluat\* or monitor\* or regulat\* or report\* or track\*)).ti.
3. ((calor\* or food or diet\*) adj5 (app? or application\* or "cell phone" or cellphone or computer or diary or diaries or digital or electronic or email or "e-mail" or internet or journal\* or log? or logged or logging or mHealth or mobile or online or PDA? or phone? or record\* or smartphone\* or technology or teleconsultation\* or telehealth or telemedicine or telemonitoring or track\* or web)).ti.
4. **2 or 3**
5. **1 and 4**
6. (clinical or comparative or comparison or controlled or crossover or "cross-over" or evaluation or experiment\* or intervention\* or multicenter or "multi-center" or program\* or project\* or random\* or study or studies or trial\*).ti,ab.
7. **5 and 6**

**PUBMED [Keyword search only for the purpose of retrieving the most recently published citations)**

("body mass"[Title] OR bmi[Title] OR calor\*[Title] OR diet[Title] OR obes\*[Title] OR overweight[Title] OR weight[Title]) AND

(clinical[Title] OR comparative[Title] OR comparison[Title] OR controlled[Title] OR crossover[Title] OR "cross-over"[Title] OR evaluation[Title] OR experiment\*[Title] OR intervention\*[Title] OR multicenter[Title] OR "multi-center"[Title] OR program\*[Title] OR project\*[Title] OR random\*[Title] OR study[Title] OR studies[Title] OR trial\*[Title]) AND

(self[Title] AND (administer\*[Title] OR evaluat\*[Title] OR monitor\*[Title] OR regulat\*[Title] OR report\*[Title] OR track\*[Title])) OR ((calor\*[Title] OR food[Title] OR diet\*[Title]) AND (app?[Title] OR application\*[Title] OR "cell phone"[Title] OR cellphone[Title] OR computer[Title] OR diary[Title] OR diaries[Title] OR digital[Title] OR electronic[Title] OR email[Title] OR "e-mail"[Title] OR internet[Title] OR journal\*[Title] OR log?[Title] OR logged[Title] OR logging[Title] OR mHealth[Title] OR mobile[Title] OR online[Title] OR PDA?[Title] OR phone?[Title] OR record\*[Title] OR smartphone\*[Title] OR technology[Title] OR teleconsultation\*[Title] OR telehealth[Title] OR telemedicine[Title] OR telemonitoring[Title] OR track\*[Title] OR web)[Title])) NOT Medline[sb]