

# Obesity: identification and classification of overweight and obesity

Search strategies

*NICE guideline <number>*

*Search strategies*

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The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and, where appropriate, their carer or guardian.

Local commissioners and providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

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## Contents

Search design and peer review .....	5
Review management.....	5
Prior work .....	5
Limits and restrictions.....	5
Search filters .....	6
Clinical/public health searches .....	6
Cost effectiveness searches.....	6
Key decisions .....	6
Clinical/public health searches .....	7
Main search – Databases.....	7
Main search – Additional methods.....	8
Search strategy history.....	9
Cost-utility searches .....	36
Main search – Databases.....	36
Re-run searches.....	53

## Search design and peer review

A NICE information specialist conducted the literature searches for the evidence review. The searches were originally run on 5<sup>th</sup> July 2021 and 6<sup>th</sup> July 2021. This search report is compliant with the requirements of [PRISMA-S](#).

The MEDLINE strategy below was quality assured (QA) by a trained NICE information specialist. All translated search strategies were peer reviewed to ensure their accuracy. Both procedures were adapted from the [2016 PRESS Checklist](#). The principal search strategy was developed in MEDLINE (Ovid interface) and adapted, as appropriate, for use in the other sources listed in the protocol, taking into account their size, search functionality and subject coverage.

## Review management

The search results were managed in EPPI-Reviewer v5. Duplicates were removed in EPPI-R5 using a two-step process. First, automated deduplication is performed using a high-value algorithm. Second, manual deduplication is used to assess 'low-probability' matches. All decisions made for the review can be accessed via the deduplication history.

## Prior work

A set of test papers were gathered from a range of source; one paper had been identified by a committee member, 4 were selected a random from a HTA systematic review (Simmonds M et al 2015), 23 papers were supplied by the analysts. The references were sources from previous surveillance searches.

## Limits and restrictions

English language limits were applied in adherence to standard NICE practice and the review protocol.

Limits to exclude [e.g. letters, editorials, news, conferences] were applied in adherence to standard NICE practice and the review protocol.

The search was limited from 1<sup>st</sup> January 1990 to 5<sup>th</sup> July 2021 as defined in the review protocol.

The limit to remove animal studies in the searches was the standard NICE practice, which has been adapted from: Dickersin, K., Scherer, R., & Lefebvre, C. (1994).

[Systematic Reviews: Identifying relevant studies for systematic reviews](#). *BMJ*, 309(6964), 1286.

## Search filters

### Clinical/public health searches

- Systematic reviews filters:
  - Lee, E. et al. (2012) [An optimal search filter for retrieving systematic reviews and meta-analyses](#). *BMC Medical Research Methodology*, 12(1), 51.

In MEDLINE, the standard NICE modifications were used: pubmed.tw added; systematic review.pt added from MeSH update 2019.

In Embase, the standard NICE modifications were used: pubmed.tw added to line medline.tw.

- Diagnosis filter:
  - McMaster Diagnosis filter [optimal]
- Prognosis filter:
  - McMaster Prognosis filter [sensitive]
- Observational filter:
  - The terms used for observational studies are standard NICE practice that have been developed in house.
  - For the prognosis searches, the observational filter was adapted to remove case-control studies, cross-sectional studies, case series studies.

### Cost effectiveness searches

The NICE cost utility (specific) filter was applied to the Medline and Embase searches to identify cost utility studies.

- Cost Utility filter is available via the ISSG search filters resource

### Key decisions

- The searches for this question were done in two parts, the first search was limited to finding systematic reviews and observational studies, from an amended list from a population strategy that had been narrowed using the prognostic filter.
- The second search limited the population terms using a diagnostic filter, this was then limited to systematic review and observational studies. The observational studies filter was not amended for this search.
- The population terms (line 1-47) were the same for both the prognostic and diagnostic searches.

## Clinical/public health searches

### Main search – Databases

Database	Date searched	Database platform	Database segment or version	No. of results downloaded
Cochrane Central Register of Controlled Trials (CENTRAL)	05/07/2021	Cochrane	Issue 7 of 12, July 2021	6195
Cochrane Database of Systematic Reviews (CDSR)	05/07/2021	Cochrane	Issue 7 of 12, July 2021	34
Database of Abstracts of Reviews of Effect (DARE)	05/07/2021	CRD	n/a	138
Embase (Ovid) [prognostic]	05/07/2021	OVID	1974 to 2021 July 02	3991
MEDLINE (Ovid) [prognostic]	05/07/2021	OVID	1946 to July 02, 2021	5211
MEDLINE In-Process (Ovid) [prognostic]	05/07/2021	OVID	1946 to July 02, 2021	55
MEDLINE Epub Ahead of Print [prognostic]	05/07/2021	OVID	July 02, 2021	34
Embase (Ovid) [Diagnostic]	06/07/2021	OVID	1974 to 2021 July 02	1344
MEDLINE (Ovid) [Diagnostic]	06/07/2021	OVID	1946 to July 02, 2021	2059
MEDLINE In-Process (Ovid) [Diagnostic]	06/07/2021	OVID	1946 to July 02, 2021	26
MEDLINE Epub Ahead of Print [Diagnostic]	06/07/2021	OVID	July 02, 2021	14

### Main search – Additional methods

Additional method	Date searched	No. of results downloaded
The analysts added an additional 54 records to the EPPI review. These records were found in previous guidelines/surveillance/pubmed searches or were suggested by the committee.	8 <sup>th</sup> July – 1 <sup>st</sup> September 2021	54

## Search strategy history

### Database: Cochrane – CDSR and CENTRAL

#### Search Strategy:

1	[mh Obesity[mj]]	9567
2	[mh "Body Weight"[mj]]	12380
3	[mh "Body Fat Distribution"[mj]]	163
4	[mh "Body Composition"[mj]]	1043
5	[mh "Adipose Tissue"[mj]]	1267
6	(obes* or overweight or adipos* or anthropometr* or nonobese* or nonoverweight*):ti	23134
7	((obes* or overweight or adipos* or anthropometr* or nonobese* or nonoverweight*) near/4 (central* or measur* or mark* or identify* or identifi* or indicat* or categor* or threshold*)):ab	7819
8	(body near/1 (fat or composit* or weight*)):ti	5268
9	(body near/1 (fat or composit* or weight*) near/4 (central* or measur* or mark* or identify* or identifi* or indicat* or categor* or threshold*)):ab	4865
10	((visceral or subcutaneous) near/1 (fat or fatty or tissue*)):ti	416
11	((visceral or subcutaneous) near/1 (fat or fatty or tissue*) near/4 (central* or measur* or mark* or identify* or identifi* or indicat* or categor* or threshold*)):ab	293
12	{or 1-11}	39696
13	[mh "body mass index"[mj]]	5
14	("body mass ind*" or "body fat ind*" or BMI or BFI):ti	650
15	("body mass ind*" or "body fat ind*" or BMI or BFI):ab	43065
16	[mh "Waist-Hip Ratio"[mj]]	2
17	[mh "Body Weights and Measures"[mj]]	11907
18	(waist near/3 (height* or hip*)):ti	55
19	(waist near/3 (height* or hip*) near/1 (ratio* or measur* or mark* or cut-off* or identify* or identifi* or indicat*)):ab	2136
20	(WHR or WHtR):ti,ab	735
21	(waist near/1 circumference*):ti,ab	7902
22	{or 13-21}	55185
23	12 and 22	21809
24	{or 13-15}	43166
25	{or 16-21}	19958
26	24 and 25	7939

**Database: Cochrane – CDSR and CENTRAL**  
**Search Strategy:**

27	23 or 26	23723
28	MeSH descriptor: [Cardiovascular Diseases] explode all trees	111228
29	MeSH descriptor: [Stroke] explode all trees	10417
30	MeSH descriptor: [Hypertension] this term only	17958
31	MeSH descriptor: [Dyslipidemias] this term only	1287
32	((cardiovascular or cardio* or coronary* or vascular or peripheral or heart* or cardiac* or myocardia*) near/3 (disease* or disorder* or syndrome* or failure* or event* or attack* or arrest* or infarct* or condition* or dysfunct*)):ti,ab	120023
33	(CVD or CHD or IHD or MI):ti,ab	20089
34	(circulatory near/3 (disease* or disorder*)):ti,ab	733
35	(angina* or hypertensi* or atrial-fibrillat* or stroke* or poststroke* or cerebrovascular* or cerebro-vascular*):ti,ab	128534
36	((brain* or cereb* or lacunar) near/2 (accident* or infarc*)):ti,ab	5482
37	((high or raised or elevated or increas*):ti,ab	19581
38	high cholesterol:ti,ab	16852
39	(hypercholesterolaemi* or hypercholesterolemi* or hypercholesteraemi* or hypercholesteremi* or hyperlipidaemi* or hyperlipidemi* or Dyslipidaemi* or Dyslipidemi):ti,ab	10839
40	cardiometabolic-risk*:ti,ab	1626
41	{or 28-40}	284015
42	MeSH descriptor: [Diabetes Mellitus, Type 2] this term only	18433
43	MeSH descriptor: [Metabolic Syndrome] this term only	1865
44	(diabetes near/2 type 2):ti,ab	40220
45	(diabetes near/2 type II):ti,ab	3999
46	(diabetes near/2 (non insulin or noninsulin)):ti,ab	4055
47	(NIDDM or T2DM or T2D):ti,ab	11156
48	((metabolic or dysmetabolic or reaven or insulin resistance) near/2 syndrome*):ti,ab	6702
49	{or 42-48}	53759
50	MeSH descriptor: [Neoplasms] explode all trees	82548
51	(cancer* or neoplas* or oncolog* or malignan* or tumour* or tumor* or carcinoma* or adenocarcinoma*):ti,ab	209034
52	{or 50-51}	226678
53	41 or 49 or 52	528189

**Database: Cochrane – CDSR and CENTRAL  
Search Strategy:**

54	27 and 53 with Cochrane Library publication date Between Jan 1990 and Jul 2021, in Cochrane Reviews	38
55	27 and 53 with Publication Year from 1990 to 2021, in Trials	9797
56	"conference":pt or (clinicaltrials or trialsearch):so	553775
57	55 not 56	6195

**Database: DARE**

1	MeSH DESCRIPTOR Obesity EXPLODE ALL TREES IN DARE	637
2	MeSH DESCRIPTOR Body Weight IN DARE	171
3	MeSH DESCRIPTOR body fat distribution IN DARE	3
4	MeSH DESCRIPTOR Body Composition IN DARE	75
5	MeSH DESCRIPTOR Adipose Tissue EXPLODE ALL TREES IN DARE	31
6	((obes* or overweight or adipos* or anthropometr* or nonobese* or nonoverweight*)):TI IN DARE	385
7	((obes* or overweight or adipos* or anthropometr* or nonobese* or nonoverweight*):adj4 (central* or measur* or mark* or identify* or identifi* or indicat* or categor* or threshold*)):IN DARE	73
8	((body adj1 (fat or composit* or weight*)):TI IN DARE	70
9	((body adj1 (fat or composit* or weight*):adj4 (central* or measur* or mark* or identify* or identifi* or indicat* or categor* or threshold*)):IN DARE	31
10	((visceral or subcutaneous) adj1 (fat or fatty or tissue*)):TI IN DARE	5
11	((visceral or subcutaneous) adj1 (fat or fatty or tissue*):adj4 (central* or measur* or mark* or identify* or identifi* or indicat* or categor* or threshold*)):IN DARE	1
12	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11	909
13	MeSH DESCRIPTOR body mass index IN DARE	236
14	(("body mass ind*" or "body fat ind*" or BMI or BFI)) IN DARE	786
15	MeSH DESCRIPTOR waist-hip ratio IN DARE	4
16	MeSH DESCRIPTOR body weights and measures IN DARE	6
17	((waist adj3 (height* or hip*)):TI IN DARE	2
18	((waist adj3 (height* or hip*):adj1 (ratio* or measur* or mark* or cut-off* or identify* or identifi* or indicat*)):IN DARE	27
19	((WHR or WHtR)) IN DARE	0

**Database: DARE**

20 ((waist adj1 circumference\*)) IN DARE 73  
21 #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 803  
22 #12 AND #21 351  
23 #13 OR #14 786  
24 #15 OR #16 OR #17 OR #18 OR #19 OR #20 90  
25 #23 AND #24 73  
26 #22 OR #25 372  
27 MeSH DESCRIPTOR Cardiovascular Diseases EXPLODE ALL TREES IN DARE 5989  
28 MeSH DESCRIPTOR Stroke EXPLODE ALL TREES IN DARE 878  
29 MeSH DESCRIPTOR Hypertension IN DARE 504  
30 MeSH DESCRIPTOR Dyslipidemias IN DARE 40  
31 (((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*))) IN DARE 4324  
32 ((CVD or CHD or IHD or MI)) IN DARE 549  
33 ((circulatory adj3 (disease\* or disorder\*))) IN DARE 2  
34 ((angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*)) IN DARE 3824  
35 (((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*))) IN DARE 118  
36 (((high or raised or elevated or increas\*) adj2 (blood pressure or bp))) IN DARE 136  
37 (high cholesterol) IN DARE 15  
38 ((hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*)) IN DARE 380  
39 (cardiometabolic-risk\*) IN DARE 9  
40 #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 8375  
41 MeSH DESCRIPTOR Diabetes Mellitus, Type 2 IN DARE 685  
42 MeSH DESCRIPTOR Metabolic Syndrome IN DARE 0  
43 ((diabetes adj2 type 2)) IN DARE 699  
44 ((diabetes adj2 type II)) IN DARE 1  
45 ((diabetes adj2 (non insulin or noninsulin))) IN DARE 4

#### Database: DARE

46	((NIDDM or T2DM or T2D)) IN DARE	16
47	(((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome*)) IN DARE	
	87	
48	(#41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47) IN DARE	775
49	MeSH DESCRIPTOR Neoplasms EXPLODE ALL TREES	12016
50	( (cancer* or neoplas* or oncolog* or malignan* or tumo?r* or carcinoma* or adenocarcinoma*) ) IN DARE	8135
51	(#49 OR #50) IN DARE	8428
52	(#40 OR #48 OR #51) IN DARE	16571
53	(#26 and #52) IN DARE FROM 1990 TO 2021	138

#### Database: Medline (prognostic)

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (255863)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (161823)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (47515)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (27783)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (18068)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (3524)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (1605)
- 8 or/1-7 (313457)
- 9 \*body mass index/ (22403)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (19123)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (111508)
- 12 \*waist-hip ratio/ or \*"body weights and measures"/ (3117)
- 13 (waist adj3 (height\* or hip\*)).ti. (842)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (2500)
- 15 (WHR or WHtR).ti. (47)
- 16 (WHR or WHtR).ab. /freq=2 (3765)
- 17 (waist adj1 circumference\*).ti. (1808)

**Database: Medline (prognostic)**

- 18 (waist adj1 circumference\*).ab. /freq=2 (7255)
- 19 or/9-18 (124530)
- 20 8 and 19 (58896)
- 21 or/9-11 (117305)
- 22 or/12-18 (15378)
- 23 21 and 22 (8153)
- 24 20 or 23 (60872)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (2507987)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*).adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (870724))
- 27 (CVD or CHD or IHD or MI).ti,ab. (99281)
- 28 (circulatory adj3 (disease\* or disorder\*).ti,ab. (5434))
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (729583)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*).ti,ab. (33801))
- 31 ((high or raised or elevated or increas\*).adj2 (blood pressure or bp)).ti,ab. (46855)
- 32 high cholesterol.ti,ab. (6679)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (87349)
- 34 cardiometabolic-risk\*.ti,ab. (5044)
- 35 or/25-34 (2910858)
- 36 \*Diabetes Mellitus, Type 2/ (117022)
- 37 \*Metabolic Syndrome/ (26728)
- 38 (diabetes adj2 type 2).ti,ab. (114709)
- 39 (diabetes adj2 type II).ti,ab. (8250)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (9634)
- 41 (NIDDM or T2DM or T2D).ti,ab. (33597)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (47862)
- 43 or/36-42 (204638)
- 44 exp \*Neoplasms/ (3073109)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (3083040)
- 46 or/44-45 (3881287)
- 47 35 or 43 or 46 (6651029)

**Database: Medline (prognostic)**

- 48 incidence.sh. (278079)
- 49 exp mortality/ (402176)
- 50 follow-up studies.sh. (666060)
- 51 prognos:.tw. (557258)
- 52 predict:.tw. (1410817)
- 53 course:.tw. (569117)
- 54 or/48-53 (3275882)
- 55 24 and 47 and 54 (8396)
- 56 Observational Studies as Topic/ (6536)
- 57 Observational Study/ (103100)
- 58 Epidemiologic Studies/ (8734)
- 59 exp Cohort Studies/ (2169797)
- 60 Comparative Study.pt. (1893237)
- 61 (cohort adj (study or studies)).tw. (199356)
- 62 cohort analy\$.tw. (7735)
- 63 (follow up adj (study or studies)).tw. (47130)
- 64 (observational adj (study or studies)).tw. (99977)
- 65 longitudinal.tw. (224846)
- 66 prospective.tw. (535364)
- 67 retrospective.tw. (497170)
- 68 or/56-67 (4093532)
- 69 (MEDLINE or pubmed).tw. (192740)
- 70 systematic review.tw. (148166)
- 71 systematic review.pt. (157935)
- 72 meta-analysis.pt. (136627)
- 73 intervention\$.ti. (137272)
- 74 or/69-73 (435723)
- 75 68 or 74 (4426102)
- 76 55 and 75 (5407)
- 77 limit 76 to ed=19900101-20211231 (5382)
- 78 animals/ not humans/ (4822395)
- 79 77 not 78 (5380)
- 80 limit 79 to yr="1990-Current" (5380)

**Database: Medline (prognostic)**

- 81 limit 80 to english language (5243)
- 82 limit 81 to (letter or historical article or comment or editorial or news or case reports) (32)
- 83 81 not 82 (5211)

**Database: Medline in process (prognostic)**

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (4793)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (1562)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (685)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (505)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (85)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (38)
- 8 or/1-7 (6448)
- 9 \*body mass index/ (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (663)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (4061)
- 12 \*waist-hip ratio/ or \*\*"body weights and measures"/ (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (22)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (70)
- 15 (WHR or WHtR).ti. (1)
- 16 (WHR or WHtR).ab. /freq=2 (108)
- 17 (waist adj1 circumference\*).ti. (62)
- 18 (waist adj1 circumference\*).ab. /freq=2 (222)
- 19 or/9-18 (4309)
- 20 8 and 19 (1471)
- 21 or/9-11 (4132)
- 22 or/12-18 (394)
- 23 21 and 22 (217)

**Database: Medline in process (prognostic)**

- 24 20 or 23 (1536)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*).adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (20472)
- 27 (CVD or CHD or IHD or MI).ti,ab. (3203)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (53)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (16288)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*).ti,ab. (579)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (887)
- 32 high cholesterol.ti,ab. (122)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (2118)
- 34 cardiometabolic-risk\*.ti,ab. (341)
- 35 or/25-34 (34164)
- 36 \*Diabetes Mellitus, Type 2/ (0)
- 37 \*Metabolic Syndrome/ (0)
- 38 (diabetes adj2 type 2).ti,ab. (4844)
- 39 (diabetes adj2 type II).ti,ab. (170)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (22)
- 41 (NIDDM or T2DM or T2D).ti,ab. (2029)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (1530)
- 43 or/36-42 (6401)
- 44 exp \*Neoplasms/ (0)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (73189)
- 46 or/44-45 (73189)
- 47 35 or 43 or 46 (108411)
- 48 incidence.sh. (0)
- 49 exp mortality/ (0)
- 50 follow-up studies.sh. (0)
- 51 prognos:.tw. (18237)
- 52 predict:.tw. (45122)
- 53 course:.tw. (8970)

**Database: Medline in process (prognostic)**

- 54 or/48-53 (64431)
- 55 24 and 47 and 54 (166)
- 56 Observational Studies as Topic/ (0)
- 57 Observational Study/ (0)
- 58 Epidemiologic Studies/ (0)
- 59 exp Cohort Studies/ (0)
- 60 Comparative Study.pt. (1)
- 61 (cohort adj (study or studies)).tw. (10631)
- 62 cohort analy\$.tw. (394)
- 63 (follow up adj (study or studies)).tw. (716)
- 64 (observational adj (study or studies)).tw. (5245)
- 65 longitudinal.tw. (8344)
- 66 prospective.tw. (15611)
- 67 retrospective.tw. (20721)
- 68 or/56-67 (47804)
- 69 (MEDLINE or pubmed).tw. (10453)
- 70 systematic review.tw. (10000)
- 71 systematic review.pt. (237)
- 72 meta-analysis.pt. (60)
- 73 intervention\$.ti. (5456)
- 74 or/69-73 (19093)
- 75 68 or 74 (63817)
- 76 55 and 75 (55)
- 77 limit 76 to dt=19900101-20211231 (55)
- 78 animals/ not humans/ (0)
- 79 77 not 78 (55)
- 80 limit 79 to yr="1990-Current" (55)
- 81 limit 80 to english language (55)
- 82 limit 81 to (letter or historical article or comment or editorial or news or case reports) (0)
- 83 81 not 82 (55)

**Database: Medline ePub ahead (prognostic)**

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (2813)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (984))
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (433)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (318))
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*).ti. (48))
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (35))
- 8 or/1-7 (3890)
- 9 \*body mass index/ (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (488)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (2867)
- 12 \*waist-hip ratio/ or \*"body weights and measures"/ (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (12)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*).ab. /freq=2 (44))
- 15 (WHR or WHtR).ti. (0)
- 16 (WHR or WHtR).ab. /freq=2 (80)
- 17 (waist adj1 circumference\*).ti. (21)
- 18 (waist adj1 circumference\*).ab. /freq=2 (114)
- 19 or/9-18 (3024)
- 20 8 and 19 (951)
- 21 or/9-11 (2929)
- 22 or/12-18 (222)
- 23 21 and 22 (127)
- 24 20 or 23 (984)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti.ab. (15357))
- 27 (CVD or CHD or IHD or MI).ti.ab. (2394)

**Database: Medline ePubMed ahead (prognostic)**

- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (55)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (13038)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*).ti,ab. (497)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (658)
- 32 high cholesterol.ti,ab. (86)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (1331)
- 34 cardiometabolic-risk\*.ti,ab. (206)
- 35 or/25-34 (26245)
- 36 \*Diabetes Mellitus, Type 2/ (0)
- 37 \*Metabolic Syndrome/ (0)
- 38 (diabetes adj2 type 2).ti,ab. (2763)
- 39 (diabetes adj2 type II).ti,ab. (100)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (34)
- 41 (NIDDM or T2DM or T2D).ti,ab. (1092)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (824)
- 43 or/36-42 (3630)
- 44 exp \*Neoplasms/ (0)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (48473)
- 46 or/44-45 (48473)
- 47 35 or 43 or 46 (74718)
- 48 incidence.sh. (0)
- 49 exp mortality/ (0)
- 50 follow-up studies.sh. (0)
- 51 prognos:.tw. (11751)
- 52 predict:.tw. (36058)
- 53 course:.tw. (8593)
- 54 or/48-53 (51004)
- 55 24 and 47 and 54 (86)
- 56 Observational Studies as Topic/ (0)
- 57 Observational Study/ (4)
- 58 Epidemiologic Studies/ (0)

**Database: Medline ePubMed ahead (prognostic)**

- 59 exp Cohort Studies/ (0)
- 60 Comparative Study.pt. (0)
- 61 (cohort adj (study or studies)).tw. (9566)
- 62 cohort analy\$.tw. (355)
- 63 (follow up adj (study or studies)).tw. (642)
- 64 (observational adj (study or studies)).tw. (4624)
- 65 longitudinal.tw. (7378)
- 66 prospective.tw. (13597)
- 67 retrospective.tw. (19743)
- 68 or/56-67 (43439)
- 69 (MEDLINE or pubmed).tw. (9545)
- 70 systematic review.tw. (9608)
- 71 systematic review.pt. (126)
- 72 meta-analysis.pt. (104)
- 73 intervention\$.ti. (4158)
- 74 or/69-73 (17317)
- 75 68 or 74 (57796)
- 76 55 and 75 (35)
- 77 limit 76 to dt=19900101-20211231 (35)
- 78 animals/ not humans/ (0)
- 79 77 not 78 (35)
- 80 limit 79 to yr="1990-Current" (35)
- 81 limit 80 to english language (34)
- 82 limit 81 to (letter or historical article or comment or editorial or news or case reports) (0)
- 83 81 not 82 (34)

**Database: Embase (prognostic)**

- 1 exp \*obese patient/ or exp \*obesity/ or \*body weight/ or exp \*body composition/ or exp \*adipose tissue/ (343970)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (248280)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (82099)

**Database: Embase (prognostic)**

- 4 (body adj1 (fat or composit\* or weight\*)).ti. (38434)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (29749)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (4879)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (2948)
- 8 or/1-7 (456102)
- 9 \*body mass/ (35086)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (34182)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (232692)
- 12 \*waist hip ratio/ or \*morphometry/ (3591)
- 13 (waist adj3 (height\* or hip\*)).ti. (1390)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (4172)
- 15 (WHR or WHtR).ti. (105)
- 16 (WHR or WHtR).ab. /freq=2 (6406)
- 17 (waist adj1 circumference\*).ti. (2945)
- 18 (waist adj1 circumference\*).ab. /freq=2 (13709)
- 19 or/9-18 (252381)
- 20 8 and 19 (99959)
- 21 or/9-11 (240433)
- 22 or/12-18 (26137)
- 23 21 and 22 (14189)
- 24 20 or 23 (103619)
- 25 exp cardiovascular disease/ or exp cerebrovascular accident/ or hypertension/ or dyslipidemia/ (4307322)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)).ti,ab. (1433748)
- 27 (CVD or CHD or IHD or MI).ti,ab. (198181)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (5660)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (1247242)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (55651)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (74728)
- 32 high cholesterol.ti,ab. (10688)

**Database: Embase (prognostic)**

- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab.  
(159260)
- 34 cardiometabolic-risk\*.ti,ab. (9153)
- 35 or/25-34 (4758959)
- 36 \*non insulin dependent diabetes mellitus/ (152844)
- 37 \*metabolic syndrome X/ (42695)
- 38 (diabetes adj2 type 2).ti,ab. (214820)
- 39 (diabetes adj2 type II).ti,ab. (15630)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (11490)
- 41 (NIDDM or T2DM or T2D).ti,ab. (72312)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (88930)
- 43 or/36-42 (349825)
- 44 exp \*neoplasm/ (3513091)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (4707753)
- 46 or/44-45 (5396085)
- 47 35 or 43 or 46 (9779627)
- 48 incidence.sh. (458247)
- 49 exp mortality/ (1164922)
- 50 follow-up studies.sh. (107)
- 51 prognos:.tw. (994903)
- 52 predict:.tw. (2316883)
- 53 course:.tw. (877026)
- 54 or/48-53 (4962613)
- 55 24 and 47 and 54 (15596)
- 56 (MEDLINE or pubmed).tw. (304215)
- 57 exp systematic review/ or systematic review.tw. (362151)
- 58 meta-analysis/ (219105)
- 59 intervention\$.ti. (220125)
- 60 or/56-59 (750317)
- 61 Clinical study/ (155798)
- 62 Family study/ (25315)
- 63 Longitudinal study/ (157525)

**Database: Embase (prognostic)**

- 64 Retrospective study/ (1096542)
- 65 comparative study/ (905917)
- 66 Prospective study/ (694714)
- 67 Randomized controlled trials/ (206139)
- 68 66 not 67 (686826)
- 69 Cohort analysis/ (723590)
- 70 cohort analy\$.tw. (14813)
- 71 (Cohort adj (study or studies)).tw. (348402)
- 72 (follow up adj (study or studies)).tw. (66443)
- 73 (observational adj (study or studies)).tw. (193528)
- 74 (epidemiologic\$ adj (study or studies)).tw. (111603)
- 75 case series.tw. (117588)
- 76 prospective.tw. (933248)
- 77 retrospective.tw. (994773)
- 78 or/61-65,68-77 (4113252)
- 79 60 or 78 (4707344)
- 80 55 and 79 (6514)
- 81 limit 80 to english language (6392)
- 82 81 not (letter or editorial).pt. (6384)
- 83 nonhuman/ not (human/ and nonhuman/) (4817226)
- 84 82 not 83 (6376)
- 85 limit 84 to yr="1990-Current" (6360)
- 86 limit 85 to dc=19900101-20211231 (6360)
- 87 (conference abstract or conference paper or conference proceeding or "conference review").pt. (4892778)
- 88 86 not 87 (3991)

**Database: Medline (diagnostic)**

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (255863)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (161823)

**Database: Medline (diagnostic)**

- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (47515)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (27783)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (18068)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (3524)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (1605)
- 8 or/1-7 (313457)
- 9 \*body mass index/ (22403)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (19123)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (111508)
- 12 \*waist-hip ratio/ or \*"body weights and measures"/ (3117)
- 13 (waist adj3 (height\* or hip\*)).ti. (842)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (2500)
- 15 (WHR or WHtR).ti. (47)
- 16 (WHR or WHtR).ab. /freq=2 (3765)
- 17 (waist adj1 circumference\*).ti. (1808)
- 18 (waist adj1 circumference\*).ab. /freq=2 (7255)
- 19 or/9-18 (124530)
- 20 8 and 19 (58896)
- 21 or/9-11 (117305)
- 22 or/13-18 (13014)
- 23 21 and 22 (7909)
- 24 20 or 23 (60811)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (2507987)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)).ti,ab. (870724)
- 27 (CVD or CHD or IHD or MI).ti,ab. (99281)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (5434)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (729583)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (33801)

**Database: Medline (diagnostic)**

- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (46855)
- 32 high cholesterol.ti,ab. (6679)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (87349)
- 34 cardiometabolic-risk\*.ti,ab. (5044)
- 35 or/25-34 (2910858)
- 36 \*Diabetes Mellitus, Type 2/ (117022)
- 37 \*Metabolic Syndrome/ (26728)
- 38 (diabetes adj2 type 2).ti,ab. (114709)
- 39 (diabetes adj2 type II).ti,ab. (8250)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (9634)
- 41 (NIDDM or T2DM or T2D).ti,ab. (33597)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (47862)
- 43 or/36-42 (204638)
- 44 exp \*Neoplasms/ (3073109)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (3083040)
- 46 or/44-45 (3881287)
- 47 35 or 43 or 46 (6651029)
- 48 sensitiv:.mp. (1581578)
- 49 predictive value:.mp. (278127)
- 50 accurac:.tw. (353278)
- 51 or/48-50 (1990392)
- 52 24 and 47 and 51 (3538)
- 53 Observational Studies as Topic/ (6536)
- 54 Observational Study/ (103100)
- 55 Epidemiologic Studies/ (8734)
- 56 exp Cohort Studies/ (2169797)
- 57 Comparative Study.pt. (1893237)
- 58 (cohort adj (study or studies)).tw. (199356)
- 59 cohort analy\$.tw. (7735)
- 60 (follow up adj (study or studies)).tw. (47130)
- 61 (observational adj (study or studies)).tw. (99977)

**Database: Medline (diagnostic)**

- 62 longitudinal.tw. (224846)
- 63 prospective.tw. (535364)
- 64 retrospective.tw. (497170)
- 65 Cross-Sectional Studies/ (375692)
- 66 cross sectional.tw. (323772)
- 67 or/53-66 (4395385)
- 68 (MEDLINE or pubmed).tw. (192740)
- 69 systematic review.tw. (148166)
- 70 systematic review.pt. (157935)
- 71 meta-analysis.pt. (136627)
- 72 intervention\$.ti. (137272)
- 73 or/68-72 (435723)
- 74 67 or 73 (4722557)
- 75 52 and 74 (2130)
- 76 limit 75 to ed=19900101-20211231 (2128)
- 77 animals/ not humans/ (4822395)
- 78 76 not 77 (2127)
- 79 limit 78 to yr="1990-Current" (2127)
- 80 limit 79 to english language (2064)
- 81 limit 80 to (letter or historical article or comment or editorial or news or case reports) (5)
- 82 80 not 81 (2059)

**Database: Medline in process (diagnostic)**

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (4793)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (1562)
- 4 (body adj1 (fat or composit\* or weight\*).ti. (685)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (505)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*).ti. (85)

**Database: Medline in process (diagnostic)**

- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (38)
- 8 or/1-7 (6448)
- 9 \*body mass index/ (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (663)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (4061)
- 12 \*waist-hip ratio/ or \*"body weights and measures"/ (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (22)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*).ab. /freq=2 (70)
- 15 (WHR or WHtR).ti. (1)
- 16 (WHR or WHtR).ab. /freq=2 (108)
- 17 (waist adj1 circumference\*).ti. (62)
- 18 (waist adj1 circumference\*).ab. /freq=2 (222)
- 19 or/9-18 (4309)
- 20 8 and 19 (1471)
- 21 or/9-11 (4132)
- 22 or/13-18 (394)
- 23 21 and 22 (217)
- 24 20 or 23 (1536)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (20472)
- 27 (CVD or CHD or IHD or MI).ti,ab. (3203)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (53)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (16288)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (579)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (887)
- 32 high cholesterol.ti,ab. (122)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (2118)
- 34 cardiometabolic-risk\*.ti,ab. (341)
- 35 or/25-34 (34164)

**Database: Medline in process (diagnostic)**

- 36 \*Diabetes Mellitus, Type 2/ (0)  
37 \*Metabolic Syndrome/ (0)  
38 (diabetes adj2 type 2).ti,ab. (4844)  
39 (diabetes adj2 type II).ti,ab. (170)  
40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (22)  
41 (NIDDM or T2DM or T2D).ti,ab. (2029)  
42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (1530)  
43 or/36-42 (6401)  
44 exp \*Neoplasms/ (0)  
45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (73189)  
46 or/44-45 (73189)  
47 35 or 43 or 46 (108411)  
48 sensitiv:.mp. (25044)  
49 predictive value:.mp. (2933)  
50 accurac:.tw. (11820)  
51 or/48-50 (35127)  
52 24 and 47 and 51 (61)  
53 Observational Studies as Topic/ (0)  
54 Observational Study/ (0)  
55 Epidemiologic Studies/ (0)  
56 exp Cohort Studies/ (0)  
57 Comparative Study.pt. (1)  
58 (cohort adj (study or studies)).tw. (10631)  
59 cohort analy\$.tw. (394)  
60 (follow up adj (study or studies)).tw. (716)  
61 (observational adj (study or studies)).tw. (5245)  
62 longitudinal.tw. (8344)  
63 prospective.tw. (15611)  
64 retrospective.tw. (20721)  
65 Cross-Sectional Studies/ (0)  
66 cross sectional.tw. (13909)  
67 or/53-66 (58816)

**Database: Medline in process (diagnostic)**

- 68 (MEDLINE or pubmed).tw. (10453)
- 69 systematic review.tw. (10000)
- 70 systematic review.pt. (237)
- 71 meta-analysis.pt. (60)
- 72 intervention\$.ti. (5456)
- 73 or/68-72 (19093)
- 74 67 or 73 (74550)
- 75 52 and 74 (27)
- 76 limit 75 to dt=19900101-20211231 (27)
- 77 animals/ not humans/ (0)
- 78 76 not 77 (27)
- 79 limit 78 to yr="1990-Current" (27)
- 80 limit 79 to english language (26)
- 81 limit 80 to (letter or historical article or comment or editorial or news or case reports) (0)

**Database: Medline ePub ahead (diagnostic)**

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (2813)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (984)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (433)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (318)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (48)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (35)
- 8 or/1-7 (3890)
- 9 \*body mass index/ (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (488)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (2867)
- 12 \*waist-hip ratio/ or \*\*body weights and measures"/ (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (12)

**Database: Medline ePubMed ahead (diagnostic)**

- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (44)
- 15 (WHR or WHtR).ti. (0)
- 16 (WHR or WHtR).ab. /freq=2 (80)
- 17 (waist adj1 circumference\*).ti. (21)
- 18 (waist adj1 circumference\*).ab. /freq=2 (114)
- 19 or/9-18 (3024)
- 20 8 and 19 (951)
- 21 or/9-11 (2929)
- 22 or/13-18 (222)
- 23 21 and 22 (127)
- 24 20 or 23 (984)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)).ti,ab. (15357)
- 27 (CVD or CHD or IHD or MI).ti,ab. (2394)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (55)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (13038)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (497)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (658)
- 32 high cholesterol.ti,ab. (86)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (1331)
- 34 cardiometabolic-risk\*.ti,ab. (206)
- 35 or/25-34 (26245)
- 36 \*Diabetes Mellitus, Type 2/ (0)
- 37 \*Metabolic Syndrome/ (0)
- 38 (diabetes adj2 type 2).ti,ab. (2763)
- 39 (diabetes adj2 type II).ti,ab. (100)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (34)
- 41 (NIDDM or T2DM or T2D).ti,ab. (1092)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (824)
- 43 or/36-42 (3630)

**Database: Medline ePub ahead (diagnostic)**

- 44 exp \*Neoplasms/ (0)  
45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (48473)  
46 or/44-45 (48473)  
47 35 or 43 or 46 (74718)  
48 sensitiv:.mp. (18627)  
49 predictive value:.mp. (2290)  
50 accurac:.tw. (10029)  
51 or/48-50 (27042)  
52 24 and 47 and 51 (37)  
53 Observational Studies as Topic/ (0)  
54 Observational Study/ (4)  
55 Epidemiologic Studies/ (0)  
56 exp Cohort Studies/ (0)  
57 Comparative Study.pt. (0)  
58 (cohort adj (study or studies)).tw. (9566)  
59 cohort analy\$.tw. (355)  
60 (follow up adj (study or studies)).tw. (642)  
61 (observational adj (study or studies)).tw. (4624)  
62 longitudinal.tw. (7378)  
63 prospective.tw. (13597)  
64 retrospective.tw. (19743)  
65 Cross-Sectional Studies/ (0)  
66 cross sectional.tw. (11732)  
67 or/53-66 (52757)  
68 (MEDLINE or pubmed).tw. (9545)  
69 systematic review.tw. (9608)  
70 systematic review.pt. (126)  
71 meta-analysis.pt. (104)  
72 intervention\$.ti. (4158)  
73 or/68-72 (17317)  
74 67 or 73 (66889)  
75 52 and 74 (14)

**Database: Medline ePubMed ahead (diagnostic)**

- 76 limit 75 to dt=19900101-20211231 (14)
- 77 animals/ not humans/ (0)
- 78 76 not 77 (14)
- 79 limit 78 to yr="1990-Current" (14)
- 80 limit 79 to english language (14)
- 81 limit 80 to (letter or historical article or comment or editorial or news or case reports) (0)
- 82 80 not 81 (14)

**Database: Embase (Diagnostic)**

- 1 exp \*obese patient/ or exp \*obesity/ or \*body weight/ or exp \*body composition/ or exp \*adipose tissue/ (343970)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (248280)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (82099)
- 4 (body adj1 (fat or composit\* or weight\*).ti. (38434)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (29749)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*).ti. (4879)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (2948)
- 8 or/1-7 (456102)
- 9 \*body mass/ (35086)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (34182)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (232692)
- 12 \*waist hip ratio/ or \*morphometry/ (3591)
- 13 (waist adj3 (height\* or hip\*).ti. (1390)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*).ab. /freq=2 (4172)
- 15 (WHR or WHtR).ti. (105)
- 16 (WHR or WHtR).ab. /freq=2 (6406)
- 17 (waist adj1 circumference\*).ti. (2945)
- 18 (waist adj1 circumference\*).ab. /freq=2 (13709)
- 19 or/9-18 (252381)

**Database: Embase (Diagnostic)**

- 20 8 and 19 (99959)  
21 or/9-11 (240433)  
22 or/12-18 (26137)  
23 21 and 22 (14189)  
24 20 or 23 (103619)  
25 exp cardiovascular disease/ or exp cerebrovascular accident/ or hypertension/ or dyslipidemia/ (4307322)  
26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*).adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (1433748)  
27 (CVD or CHD or IHD or MI).ti,ab. (198181)  
28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (5660)  
29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (1247242)  
30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*).ti,ab. (55651)  
31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (74728)  
32 high cholesterol.ti,ab. (10688)  
33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (159260)  
34 cardiometabolic-risk\*.ti,ab. (9153)  
35 or/25-34 (4758959)  
36 \*non insulin dependent diabetes mellitus/ (152844)  
37 \*metabolic syndrome X/ (42695)  
38 (diabetes adj2 type 2).ti,ab. (214820)  
39 (diabetes adj2 type II).ti,ab. (15630)  
40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (11490)  
41 (NIDDM or T2DM or T2D).ti,ab. (72312)  
42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (88930)  
43 or/36-42 (349825)  
44 exp \*neoplasm/ (3513091)  
45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (4707753)  
46 or/44-45 (5396085)  
47 35 or 43 or 46 (9779627)  
48 sensitiv:.tw. (1839818)

**Database: Embase (Diagnostic)**

- 49 diagnostic accuracy.sh. (267004)
- 50 diagnostic.tw. (1061007)
- 51 or/48-50 (2822373)
- 52 24 and 47 and 51 (5709)
- 53 (MEDLINE or pubmed).tw. (304215)
- 54 exp systematic review/ or systematic review.tw. (362151)
- 55 meta-analysis/ (219105)
- 56 intervention\$.ti. (220125)
- 57 or/53-56 (750317)
- 58 Clinical study/ (155798)
- 59 Family study/ (25315)
- 60 Longitudinal study/ (157525)
- 61 Retrospective study/ (1096542)
- 62 comparative study/ (905917)
- 63 Prospective study/ (694714)
- 64 Randomized controlled trials/ (206139)
- 65 63 not 64 (686826)
- 66 Cohort analysis/ (723590)
- 67 cohort analy\$.tw. (14813)
- 68 (Cohort adj (study or studies)).tw. (348402)
- 69 (follow up adj (study or studies)).tw. (66443)
- 70 (observational adj (study or studies)).tw. (193528)
- 71 (epidemiologic\$ adj (study or studies)).tw. (111603)
- 72 (cross sectional adj (study or studies)).tw. (255683)
- 73 case series.tw. (117588)
- 74 prospective.tw. (933248)
- 75 retrospective.tw. (994773)
- 76 or/58-62,65-75 (4311206)
- 77 57 or 76 (4902007)
- 78 52 and 77 (2014)
- 79 limit 78 to english language (1955)
- 80 79 not (letter or editorial).pt. (1955)
- 81 nonhuman/ not (human/ and nonhuman/) (4817226)

**Database: Embase (Diagnostic)**

82 80 not 81 (1952)  
83 limit 82 to yr="1990-Current" (1947)  
84 limit 83 to dc=19900101-20211231 (1947)  
85 (conference abstract or conference paper or conference proceeding or "conference review").pt. (4892778)  
86 84 not 85 (1322)

## Cost-utility searches

### Main search – Databases

Database	Date searched	Database Platform	Database segment or version	No. of results downloaded
EconLit (Ovid)	06/07/2021	OVID	1886 to June 24, 2021	7
Embase (Ovid)	06/07/2021	OVID	1974 to 2021 July 02	44
CRD NHS EED	06/07/2021	CRD	N/A	52
International HTA database (INAHTA)	07/07/2021	INAHTA	N/A	45
MEDLINE (Ovid) (Cost utility)	06/07/2021	OVID	1946 to July 02, 2021	54
MEDLINE In-Process (Ovid)	06/07/2021	OVID	1946 to July 02, 2021	2
MEDLINE Epub Ahead of Print	06/07/2021	OVID	July 02, 2021	1

**Database: Medline**

1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (255863)  
2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (161823)

**Database: Medline**

- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (47515)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (27783)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (18068)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (3524)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (1605)
- 8 or/1-7 (313457)
- 9 \*body mass index/ (22403)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (19123)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (111508)
- 12 \*waist-hip ratio/ or \*"body weights and measures"/ (3117)
- 13 (waist adj3 (height\* or hip\*)).ti. (842)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (2500)
- 15 (WHR or WHtR).ti. (47)
- 16 (WHR or WHtR).ab. /freq=2 (3765)
- 17 (waist adj1 circumference\*).ti. (1808)
- 18 (waist adj1 circumference\*).ab. /freq=2 (7255)
- 19 or/9-18 (124530)
- 20 8 and 19 (58896)
- 21 or/9-11 (117305)
- 22 or/12-18 (15378)
- 23 21 and 22 (8153)
- 24 20 or 23 (60872)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (2507987)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)).ti,ab. (870724)
- 27 (CVD or CHD or IHD or MI).ti,ab. (99281)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (5434)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (729583)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (33801)

**Database: Medline**

- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (46855)
- 32 high cholesterol.ti,ab. (6679)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (87349)
- 34 cardiometabolic-risk\*.ti,ab. (5044)
- 35 or/25-34 (2910858)
- 36 \*Diabetes Mellitus, Type 2/ (117022)
- 37 \*Metabolic Syndrome/ (26728)
- 38 (diabetes adj2 type 2).ti,ab. (114709)
- 39 (diabetes adj2 type II).ti,ab. (8250)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (9634)
- 41 (NIDDM or T2DM or T2D).ti,ab. (33597)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (47862)
- 43 or/36-42 (204638)
- 44 exp \*Neoplasms/ (3073109)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (3083040)
- 46 or/44-45 (3881287)
- 47 35 or 43 or 46 (6651029)
- 48 24 and 47 (23848)
- 49 Cost-Benefit Analysis/ (85302)
- 50 (cost\* and ((qualit\* adj2 adjust\* adj2 life\*) or qaly\*)).tw. (12096)
- 51 ((incremental\* adj2 cost\*) or ICER).tw. (12474)
- 52 (cost adj2 utilit\*).tw. (4794)
- 53 (cost\* and ((net adj benefit\*) or (net adj monetary adj benefit\*) or (net adj health adj benefit\*))).tw. (1550)
- 54 ((cost adj2 (effect\* or utilit\*)) and (quality adj of adj life)).tw. (16650)
- 55 (cost and (effect\* or utilit\*)).ti. (28607)
- 56 or/49-55 (96340)
- 57 48 and 56 (59)
- 58 limit 57 to ed=19900101-20211231 (58)
- 59 animals/ not humans/ (4822395)
- 60 58 not 59 (58)
- 61 limit 60 to yr="1990-Current" (58)

#### Database: Medline

- 62 limit 61 to english language (55)
- 63 limit 62 to (letter or historical article or comment or editorial or news or case reports) (1)
- 64 62 not 63 (54)

#### Database: Medline in process

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (4793)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (1562)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (685)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (505)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (85)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (38)
- 8 or/1-7 (6448)
- 9 \*body mass index/ (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (663)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (4061)
- 12 \*waist-hip ratio/ or \*"body weights and measures"/ (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (22)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (70)
- 15 (WHR or WHtR).ti. (1)
- 16 (WHR or WHtR).ab. /freq=2 (108)
- 17 (waist adj1 circumference\*).ti. (62)
- 18 (waist adj1 circumference\*).ab. /freq=2 (222)
- 19 or/9-18 (4309)
- 20 8 and 19 (1471)
- 21 or/9-11 (4132)
- 22 or/12-18 (394)
- 23 21 and 22 (217)
- 24 20 or 23 (1536)

**Database: Medline in process**

- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*).adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (20472)
- 27 (CVD or CHD or IHD or MI).ti,ab. (3203)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (53)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (16288)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*).ti,ab. (579)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (887)
- 32 high cholesterol.ti,ab. (122)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (2118)
- 34 cardiometabolic-risk\*.ti,ab. (341)
- 35 or/25-34 (34164)
- 36 \*Diabetes Mellitus, Type 2/ (0)
- 37 \*Metabolic Syndrome/ (0)
- 38 (diabetes adj2 type 2).ti,ab. (4844)
- 39 (diabetes adj2 type II).ti,ab. (170)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (22)
- 41 (NIDDM or T2DM or T2D).ti,ab. (2029)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (1530)
- 43 or/36-42 (6401)
- 44 exp \*Neoplasms/ (0)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (73189)
- 46 or/44-45 (73189)
- 47 35 or 43 or 46 (108411)
- 48 24 and 47 (541)
- 49 Cost-Benefit Analysis/ (0)
- 50 (cost\* and ((qualit\* adj2 adjust\* adj2 life\*) or qaly\*).tw. (564)
- 51 ((incremental\* adj2 cost\*) or ICER).tw. (576)
- 52 (cost adj2 utilit\*).tw. (182)
- 53 (cost\* and ((net adj benefit\*) or (net adj monetary adj benefit\*) or (net adj health adj benefit\*))).tw. (69)

**Database: Medline in process**

- 54 ((cost adj2 (effect\* or utilit\*)) and (quality adj of adj life)).tw. (664)
- 55 (cost and (effect\* or utilit\*)).ti. (753)
- 56 or/49-55 (1217)
- 57 48 and 56 (2)
- 58 limit 57 to dt=19900101-20211231 (2)
- 59 animals/ not humans/ (0)
- 60 58 not 59 (2)
- 61 limit 60 to yr="1990-Current" (2)
- 62 limit 61 to english language (2)
- 63 limit 62 to (letter or historical article or comment or editorial or news or case reports) (0)
- 64 62 not 63 (2)

**Database: Medline ePubMed ahead**

- 1 exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/ (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (2813)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (984)
- 4 (body adj1 (fat or composit\* or weight\*)).ti. (433)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (318)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (48)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*)).ab. (35)
- 8 or/1-7 (3890)
- 9 \*body mass index/ (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (488)
- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (2867)
- 12 \*waist-hip ratio/ or \*\*body weights and measures"/ (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (12)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*)).ab. /freq=2 (44)
- 15 (WHR or WHtR).ti. (0)
- 16 (WHR or WHtR).ab. /freq=2 (80)
- 17 (waist adj1 circumference\*).ti. (21)
- 18 (waist adj1 circumference\*).ab. /freq=2 (114)
- 19 or/9-18 (3024)
- 20 8 and 19 (951)
- 21 or/9-11 (2929)
- 22 or/12-18 (222)
- 23 21 and 22 (127)
- 24 20 or 23 (984)
- 25 exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/ (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)).ti,ab. (15357)
- 27 (CVD or CHD or IHD or MI).ti,ab. (2394)

**Database: Medline ePubMed ahead**

- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (55)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (13038)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (497)
- 31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (658)
- 32 high cholesterol.ti,ab. (86)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (1331)
- 34 cardiometabolic-risk\*.ti,ab. (206)
- 35 or/25-34 (26245)
- 36 \*Diabetes Mellitus, Type 2/ (0)
- 37 \*Metabolic Syndrome/ (0)
- 38 (diabetes adj2 type 2).ti,ab. (2763)
- 39 (diabetes adj2 type II).ti,ab. (100)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (34)
- 41 (NIDDM or T2DM or T2D).ti,ab. (1092)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (824)
- 43 or/36-42 (3630)
- 44 exp \*Neoplasms/ (0)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (48473)
- 46 or/44-45 (48473)
- 47 35 or 43 or 46 (74718)
- 48 24 and 47 (330)
- 49 Cost-Benefit Analysis/ (0)
- 50 (cost\* and ((qualit\* adj2 adjust\* adj2 life\*) or qaly\*)).tw. (461)
- 51 ((incremental\* adj2 cost\*) or ICER).tw. (388)
- 52 (cost adj2 utilit\*).tw. (212)
- 53 (cost\* and ((net adj benefit\*) or (net adj monetary adj benefit\*) or (net adj health adj benefit\*))).tw. (58)
- 54 ((cost adj2 (effect\* or utilit\*)) and (quality adj of adj life)).tw. (620)
- 55 (cost and (effect\* or utilit\*)).ti. (621)
- 56 or/49-55 (1193)
- 57 48 and 56 (1)

**Database: Medline ePubMed ahead**

58 limit 57 to dt=19900101-20211231 (1)  
59 animals/ not humans/ (0)  
60 58 not 59 (1)  
61 limit 60 to yr="1990-Current" (1)  
62 limit 61 to english language (1)  
63 limit 62 to (letter or historical article or comment or editorial or news or case reports) (0)  
64 62 not 63 (1)

**Database: Embase**

1 exp \*obese patient/ or exp \*obesity/ or \*body weight/ or exp \*body composition/ or exp \*adipose tissue/ (343970)  
2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (248280)  
3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (82099)  
4 (body adj1 (fat or composit\* or weight\*)).ti. (38434)  
5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (29749)  
6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)).ti. (4879)  
7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (2948)  
8 or/1-7 (456102)  
9 \*body mass/ (35086)  
10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (34182)  
11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (232692)  
12 \*waist hip ratio/ or \*morphometry/ (3591)  
13 (waist adj3 (height\* or hip\*)).ti. (1390)  
14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*).ab. /freq=2 (4172)  
15 (WHR or WHtR).ti. (105)  
16 (WHR or WHtR).ab. /freq=2 (6406)  
17 (waist adj1 circumference\*).ti. (2945)  
18 (waist adj1 circumference\*).ab. /freq=2 (13709)  
19 or/9-18 (252381)

**Database: Embase**

- 20 8 and 19 (99959)  
21 or/9-11 (240433)  
22 or/12-18 (26137)  
23 21 and 22 (14189)  
24 20 or 23 (103619)  
25 exp cardiovascular disease/ or exp cerebrovascular accident/ or hypertension/ or dyslipidemia/ (4307322)  
26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*).adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (1433748)  
27 (CVD or CHD or IHD or MI).ti,ab. (198181)  
28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (5660)  
29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (1247242)  
30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*).ti,ab. (55651)  
31 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)).ti,ab. (74728)  
32 high cholesterol.ti,ab. (10688)  
33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (159260)  
34 cardiometabolic-risk\*.ti,ab. (9153)  
35 or/25-34 (4758959)  
36 \*non insulin dependent diabetes mellitus/ (152844)  
37 \*metabolic syndrome X/ (42695)  
38 (diabetes adj2 type 2).ti,ab. (214820)  
39 (diabetes adj2 type II).ti,ab. (15630)  
40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (11490)  
41 (NIDDM or T2DM or T2D).ti,ab. (72312)  
42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (88930)  
43 or/36-42 (349825)  
44 exp \*neoplasm/ (3513091)  
45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (4707753)  
46 or/44-45 (5396085)  
47 35 or 43 or 46 (9779627)  
48 cost utility analysis/ (10469)

#### Database: Embase

- 49 (cost\* and ((qualit\* adj2 adjust\* adj2 life\*) or qaly\*).tw. (24820)
- 50 ((incremental\* adj2 cost\*) or ICER).tw. (25414)
- 51 (cost adj2 utilit\*).tw. (9197)
- 52 (cost\* and ((net adj benefit\*) or (net adj monetary adj benefit\*) or (net adj health adj benefit\*))).tw. (2562)
- 53 ((cost adj2 (effect\* or utilit\*)) and (quality adj of adj life)).tw. (30312)
- 54 (cost and (effect\* or utilit\*)).ti. (49377)
- 55 or/48-54 (77885)
- 56 24 and 47 and 55 (81)
- 57 limit 56 to english language (77)
- 58 57 not (letter or editorial).pt. (77)
- 59 nonhuman/ not (human/ and nonhuman/) (4817226)
- 60 58 not 59 (76)
- 61 limit 60 to yr="1990-Current" (76)
- 62 limit 61 to dc=19900101-20211231 (76)
- 63 (conference abstract or conference paper or conference proceeding or "conference review").pt. (4892778)
- 64 62 not 63 (44)

#### Database: Econlit

- 1 [exp \*Obesity/ or \*Body Weight/ or \*body fat distribution/ or exp \*Body Composition/ or exp \*Adipose Tissue/] (0)
- 2 (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*).ti. (1126)
- 3 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (337)
- 4 (body adj1 (fat or composit\* or weight\*).ti. (119)
- 5 (body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (38)
- 6 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*).ti. (0)
- 7 ((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*).ab. (0)
- 8 or/1-7 (1416)
- 9 [\*body mass index/] (0)
- 10 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ti. (182)

**Database: Econlit**

- 11 ("body mass ind\*" or "body fat ind\*" or BMI or BFI).ab. /freq=2 (593)
- 12 [\*waist-hip ratio/ or \*\*"body weights and measures"] (0)
- 13 (waist adj3 (height\* or hip\*)).ti. (0)
- 14 (waist adj3 (height\* or hip\*) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*).ab. /freq=2 (1)
- 15 (WHR or WHtR).ti. (1)
- 16 (WHR or WHtR).ab. /freq=2 (5)
- 17 (waist adj1 circumference\*).ti. (2)
- 18 (waist adj1 circumference\*).ab. /freq=2 (3)
- 19 or/9-18 (632)
- 20 8 and 19 (281)
- 21 or/9-11 (625)
- 22 or/12-18 (11)
- 23 21 and 22 (4)
- 24 20 or 23 (281)
- 25 [exp Cardiovascular Diseases/ or exp Stroke/ or Hypertension/ or Dyslipidemias/] (0)
- 26 ((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*).ti,ab. (1090)
- 27 (CVD or CHD or IHD or MI).ti,ab. (381)
- 28 (circulatory adj3 (disease\* or disorder\*)).ti,ab. (44)
- 29 (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*).ti,ab. (637)
- 30 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)).ti,ab. (7)
- 31 ((high or raised or elevated or increas\* ) adj2 (blood pressure or bp)).ti,ab. (68)
- 32 high cholesterol.ti,ab. (28)
- 33 (hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*).ti,ab. (34)
- 34 cardiometabolic-risk\*.ti,ab. (2)
- 35 or/25-34 (1948)
- 36 [\*Diabetes Mellitus, Type 2/] (0)
- 37 [\*Metabolic Syndrome/] (0)
- 38 (diabetes adj2 type 2).ti,ab. (96)
- 39 (diabetes adj2 type II).ti,ab. (13)
- 40 (diabetes adj2 (non insulin or noninsulin)).ti,ab. (2)

#### Database: Econlit

- 41 (NIDDM or T2DM or T2D).ti,ab. (18)
- 42 ((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\$).ti,ab. (13)
- 43 or/36-42 (123)
- 44 [exp \*Neoplasms/] (0)
- 45 (cancer\* or neoplas\* or oncolog\* or malignan\$ or tumo?r\* or carcinoma\* or adenocarcinoma\*).ti,ab. (1766)
- 46 or/44-45 (1766)
- 47 35 or 43 or 46 (3600)
- 48 24 and 47 (7)
- 49 limit 48 to yr="1990 -Current" (7)

#### Database: NHS EED

- 1 MeSH DESCRIPTOR Obesity EXPLODE ALL TREES 1025
- 2 MeSH DESCRIPTOR body weight 218
- 3 MeSH DESCRIPTOR body fat distribution 3
- 4 MeSH DESCRIPTOR body composition 86
- 5 MeSH DESCRIPTOR adipose tissue EXPLODE ALL TREES 42
- 6 ((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*)):TI 651
- 7 (((obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*))) 97
- 8 ((body adj1 (fat or composit\* or weight\*)):TI 73
- 9 ((body adj1 (fat or composit\* or weight\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*))) 37
- 10 (((visceral or subcutaneous) adj1 (fat or fatty or tissue\*)):TI 5
- 11 (((visceral or subcutaneous) adj1 (fat or fatty or tissue\*) adj4 (central\* or measur\* or mark\* or identify\* or identifi\* or indicat\* or categor\* or threshold\*))) 1
- 12 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11) 1373
- 13 MeSH DESCRIPTOR body mass index 363
- 14 ("body mass ind\*" or "body fat ind\*" or BMI or BFI)) 1164
- 15 MeSH DESCRIPTOR waist-hip ratio 6

**Database: NHS EED**

- 16 MeSH DESCRIPTOR body weights and measures 7
- 17 ((waist adj3 (height\* or hip\*))) 36
- 18 ((waist adj3 (height\* or hip\*)) adj1 (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*))) 30
- 19 (WHR or WHtR)1
- 20 ((waist adj1 circumference\*)) 91
- 21 (#13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20) 1190
- 22 (#12 AND #21) 526
- 23 (#13 OR #14) 1164
- 24 (#15 OR #16 OR #17 OR #18 OR #19 OR #20) 113
- 25 (#23 AND #24) 87
- 26 (#22 OR #25) 549
- 27 MeSH DESCRIPTOR Cardiovascular Diseases EXPLODE ALL TREES 10752
- 28 MeSH DESCRIPTOR Stroke EXPLODE ALL TREES 1356
- 29 MeSH DESCRIPTOR Hypertension 846
- 30 MeSH DESCRIPTOR Dyslipidemias 57
- 31 (((cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*) adj3 (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*))) 7710
- 32 (CVD or CHD or IHD or MI) 1151
- 33 ((circulatory adj3 (disease\* or disorder\*))) 3
- 34 ((angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*)) 6157
- 35 ((brain\* or cereb\* or lacunar) adj2 (accident\* or infarc\*)) 188
- 36 ((high or raised or elevated or increas\*) adj2 (blood pressure or bp)) 224
- 37 (high cholesterol) 35
- 38 (((hypercholesterol?emi\* or hypercholester?emi\* or hyperlipid?emi\* or Dyslipid?emi\*))) 634
- 39 (cardiometabolic-risk\*) 10
- 40 (#27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39) 14573

#### Database: NHS EED

- 41 MeSH DESCRIPTOR Diabetes Mellitus, Type 2 1216  
42 MeSH DESCRIPTOR Metabolic Syndrome 0  
43 ((diabetes adj2 type 2)) 1236  
44 ((diabetes adj2 type II)) 6  
45 ((diabetes adj2 (non insulin or noninsulin))) 6  
46 (NIDDM or T2DM or T2D) 50  
47 (((metabolic or dysmetabolic or reaven or insulin resistance) adj2 syndrome\*)) 120  
48 (#41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47) 1345  
49 MeSH DESCRIPTOR Neoplasms EXPLODE ALL TREES 12016  
50 ((cancer\* or neoplas\* or oncolog\* or malignan\* or tumo?r\* or carcinoma\* or adenocarcinoma\*)) 14922  
51 (#49 OR #50) 15703  
52 (#40 OR #48 OR #51) 29840  
53 (#26 and #52) IN NHSEED FROM 1990 TO 2021 52

#### Database: INAHTA

1. (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*)[Title] OR (obes\* or overweight or adipos\* or anthropometr\* or nonobese\* or nonoverweight\*)[abs] 278
2. (body )[Title] AND (fat or composit\* or weight\*)[Title] 2
3. (body )[abs] AND (fat or composit\* or weight\*)[abs] 116
4. (visceral OR subcutaneous)[Title] AND (fat OR fatty OR tissue\*)[Title] 0
5. (visceral OR subcutaneous)[abs] AND (fat OR fatty OR tissue\*)[abs] 11
6. "Obesity"[mhe] 216
7. "Body Weight"[mh] 11
8. "Body Fat Distribution"[mh] 0
9. "Body Composition"[mh] 4
10. "Adipose Tissue"[mh] 5
11. #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1 386

**Database: INAHTA**

12. "Body Mass Index"[mh] 20
13. ("body mass index" or "body mass indexes" or "body mass indices" or "body fat index" or "body fat indexes" or "body fat indices" or BMI or BFI)[Title] OR ("body mass index" or "body mass indexes" or "body mass indices" or "body fat index" or "body fat indexes" or "body fat indices" or BMI or BFI)[abs] 77
14. "Waist-Hip Ratio"[mh] 1
15. "body weights and measures" 0
16. "Body Weights and Measures"[mh] 1
17. (waist)[Title] AND (height\* OR hip\*)[Title] 0
18. (waist AND (height\* OR hip\*))[abs] AND (ratio\* or measur\* or mark\* or cut-off\* or identify\* or identifi\* or indicat\*))[abs] 2
19. (WHR or WHtR)[Title] OR (WHR or WHtR)[abs] 1
20. (waist AND circumference\*)[Title] OR (waist AND circumference\*)[abs] 9
21. #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 91
22. #21 AND #11 72
23. #13 OR #12 87
24. #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 10
25. #24 AND #23 6
26. #25 OR #22 72
27. "Cardiovascular Diseases"[mhe] 2031
28. "Stroke"[mhe] 205
29. "Hypertension"[mh] 143
30. "Dyslipidemias"[mh] 5
31. (cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*)[Title] AND (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)[Title] 617
32. (cardiovascular or cardio\* or coronary\* or vascular or peripheral or heart\* or cardiac\* or myocardia\*)[abs] AND (disease\* or disorder\* or syndrome\* or failure\* or event\* or attack\* or arrest\* or infarct\* or condition\* or dysfunct\*)[abs] 1158
33. (CVD or CHD or IHD or MI)[Title] OR (CVD or CHD or IHD or MI)[abs] 89
34. (circulatory)[Title] AND (disease\* or disorder\*)[Title] 0
35. (circulatory)[abs] AND (disease\* OR disorder\*)[abs] 5

**Database: INAHTA**

36. (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*)[Title] OR (angina\* or hypertensi\* or atrial-fibrillat\* or stroke\* or poststroke\* or cerebrovascular\* or cerebro-vascular\*)[abs] 959
37. (brain\* or cereb\* or lacunar)[Title] AND (accident\* or infarc\*)[Title] 5
38. (brain\* or cereb\* or lacunar)[abs] AND (accident\* or infarc\*)[abs] 36
39. (high or raised or elevated or increas\*)[Title] AND (blood pressure OR bp)[Title] 12
40. (high or raised or elevated or increas\*)[abs] AND (blood pressure OR bp)[abs] 117
41. (high cholesterol)[Title] OR (high cholesterol)[abs] 32
42. (hypercholesterolaemi\* or hypercholesterolemi\* or hypercholestereraemi\* or hypercholesteremi\* or hyperlipidaemi\* or hyperlipidemi\* or Dyslipidaemi\* or Dyslipidemi\*)[Title] OR (hypercholesterolaemi\* or hypercholesterolemi\* or hypercholestereraemi\* or hypercholesteremi\* or hyperlipidaemi\* or hyperlipidemi\* or Dyslipidaemi\* or Dyslipidemi\*)[abs] 48
43. (cardiometabolic-risk\*)[Title] OR (cardiometabolic-risk\*)[abs] 2843
44. #43 OR #42 OR #41 OR #40 OR #39 OR #38 OR #37 OR #36 OR #35 OR #34 OR #33 OR #32 OR #31 OR #30 OR #29 OR #28 OR #27 4855
45. "Diabetes Mellitus Type 2"[mh] 146
46. "Metabolic Syndrome"[mh] 0
47. (diabetes AND type 2)[Title] OR (diabetes AND type 2)[abs] 311
48. ((diabetes AND type II)[Title] OR (diabetes AND type II)[abs]) 311
49. (Diabetes)[Title] AND (non insulin OR noninsulin)[Title] 2
50. (Diabetes)[abs] AND (non insulin OR noninsulin)[abs] 23
51. (NIDDM OR T2DM OR T2D)[Title] OR (NIDDM OR T2DM OR T2D)[abs] 12
52. (metabolic or dysmetabolic or reaven or insulin resistance)[Title] AND (syndrome\*)[Title] 5
53. (metabolic or dysmetabolic or reaven or insulin resistance)[abs] AND (syndrome\*)[abs] 30
54. #53 OR #52 OR #51 OR #50 OR #49 OR #48 OR #47 OR #46 OR #45 371
55. "Neoplasms"[mh] 2298
56. (cancer\* or neoplas\* or oncolog\* or malignan\* or tumour\* or tumor\* or carcinoma\* or adenocarcinoma\*)[Title] OR (cancer\* or neoplas\* or oncolog\* or malignan\* or tumour\* or tumor\* or carcinoma\* or adenocarcinoma\*)[abs] 3088
57. #56 OR #55 3357
58. #57 OR #54 OR #44 7635

**Database: INAHTA**

59. #58 AND #26 45

## Re-run searches

The guideline for weight management adopted a living guideline approach and published recommendations for each review question once they were made. Therefore, re-runs were not required for RQ1.1 and RQ1.2.