

APPENDIX 1. Search strategy for CINAHL, EMBASE, Medline and SportDiscus.

Database: OVID Medline Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present> (982 citations)

Search performed: January 2, 2017. Total citations: 3056

- 1 exp Dietary Proteins/
- 2 (protein* adj3 (diet* or supplement* or intake* or consum*)).ti,ab,kf.
- 3 (protein* adj3 ingest*).ti,ab,kf.
- 4 or/1-3
- 5 Resistance Training/
- 6 Weight Lifting/
- 7 Isometric Contraction/
- 8 ((weight* or isometric or strength or resistance) adj3 (train* or lift* or exercise*)).ti,ab,kf.
- 9 exp muscle strength/
- 10 ((muscle* or muscular) adj3 strength*).ti,ab,kf.
- 11 or/5-10
- 12 4 and 11
- 13 animals/ not (humans/ and animals/)
- 14 12 not 13
- 15 limit 14 to english language
- 16 remove duplicates from 15

Database: Embase <1974 to 2016 December 30> (1161 citations)

Search performed: January 2, 2017

- 1 protein intake/
- 2 (protein* adj3 (diet* or supplement* or intake* or consum* or ingest*)).ti,ab,kw.
- 3 1 or 2
- 4 resistance training/
- 5 weight lifting/
- 6 ((weight or isometric or strength or resistance) adj3 (train* or lift* or exercise*)).ti,ab,kw.
- 7 muscle strength/
- 8 ((muscle* or muscular) adj3 strength*).ti,ab,kw.
- 9 isometric contraction*.ti,ab,kw.
- 10 or/4-9
- 11 3 and 10
- 12 exp animal/
- 13 human/
- 14 11 not (12 not (12 and 13))
- 15 remove duplicates from 14

16 limit 15 to english language

Database: CINAHL (406 citations)

Search performed: January 2, 2017

S15 S12 NOT S13 Limiters - English Language
S14 S12 NOT S13
S13 (MH "Animals+") NOT ((MH "Human") AND (MH "Animals+"))
S12 S4 and S11
S11 S5 OR S6 OR S7 OR S8 OR S9 OR S10
S10 (muscle* or muscular) N3 strength*
S9 (MH "Muscle Strength+")
S8 (weight* or isometric* or strength* or resistance) N3 (train* or lift* or exercise*)

S7 (MH "Weight Lifting")
S6 (MH "Muscle Strengthening+")
S5 (MH "Resistance Training")
S4 S1 OR S2 OR S3
S3 protein N3 (intake* or inject* or supplement* or diet* or consum)
S2 (MH "Dietary Proteins+")
S1 (MH "Diet, High Protein")

Database: SPORTDiscus (507 citations)

Search performed: January 2, 2017

S10 S4 AND S9 Limiters - Language: English
S9 S5 OR S6 OR S7 OR S8
S8 (muscle* or muscular) N3 (strength*)
S7 DE "MUSCLE strength" OR DE "GRIP strength" OR DE "KRAUS-Weber test"
S6 (weight* or isometric* or strength* or resistance) N3 (train* or lift* or exercise*)
S5 DE "RESISTANCE training (Physical training & conditioning)" OR DE
"ISOMETRIC exercise" OR DE "WEIGHT training"
S4 S1 OR S2 OR S3
S3 protein* N3 (inject* or diet* or supplement* or intake* or consum*)
S2 DE "HIGH-protein diet" OR DE "FOOD -- Protein content"
S1 DE "LOW protein diet"