

Appendix S1. Search strategy

MEDLINE (OVID)

1 exp Exercise/ 155144
2 exp Exercise Movement Techniques/ 6656
3 exp Exercise Therapy/ 40526
4 Physical Fitness/ 25579
5 physical endurance/ or exercise tolerance/ 27754
6 Physical Exertion/ 56542
7 exp Sports/ 158842
8 Dancing/ 2435
9 (exercis* or sport* or fitness* or gym* or aerobic*).tw. 401526
10 ((weight* or strength* or duranc* or circuit*) adj5 (program* or train* or session*)).tw. 29079
11 (physical* adj5 (fit* or activ* or movement* or train* or condition* or program*)).tw. 123740
12 (activ* adj2 life*).tw. 8654
13 (run* or walk* or jog* or sprint* or treadmill* or row* or swim* or bicycl* or cycl* or danc* or yoga or tai chi or tai ji or qigong or qi gong).tw. 1306489
14 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 1803538
15 Telomer* 29810
16 14 and 15 3702
17 limit 16 to human 2629

EMBASE

1 exp Exercise/ 330185
2 exp Exercise Movement Techniques/ 70054
3 exp Exercise Therapy/ 70054
4 Physical Fitness/ 40459
5 physical endurance/ or exercise tolerance/ 36886
6 Physical Exertion/ 258912
7 exp Sports/ 154204
8 Dancing/ 4020
9 (exercis* or sport* or fitness* or gym* or aerobic*).tw. 515185
10 ((weight* or strength* or duranc* or circuit*) adj5 (program* or train* or session*)).tw. 36309
11 (physical* adj5 (fit* or activ* or movement* or train* or condition* or program*)).tw. 163630
12 (activ* adj2 life*).tw. 12228
13 (run* or walk* or jog* or sprint* or treadmill* or row* or swim* or bicycl* or cycl* or danc* or yoga or tai chi or tai ji or qigong or qi gong).tw. 1670686
14 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 2329316
15 Telomer* 35492
16 14 and 15 4761
17 limit 16 to human 3923

SPORTDiscus (EBSCO)

S1 DE "EXERCISE" OR DE "ABDOMINAL exercises" OR DE "AEROBIC exercises" OR DE "ANAEROBIC exercises" OR DE "AQUATIC exercises" OR DE "ARM exercises" OR DE "BACK exercises" OR DE "BREATHING exercises" OR DE "BREEEMA" OR DE "BUTTOCKS exercises" OR DE "CALISTHENICS" OR DE "CHAIR exercises" OR DE "CHEST exercises" OR DE "CIRCUIT training" OR DE "COMPOUND exercises" OR DE "DO-in" OR DE "EXERCISE -- Immunological aspects" OR DE "EXERCISE adherence" OR DE "EXERCISE for children" OR DE "EXERCISE for girls" OR DE "EXERCISE for men" OR DE "EXERCISE for middle-aged persons" OR DE "EXERCISE for older people" OR DE "EXERCISE for people with disabilities" OR DE "EXERCISE for women" OR DE "EXERCISE for youth" OR DE "EXERCISE therapy" OR DE "EXERCISE video games" OR DE "FACIAL exercises" OR DE "FALUN gong exercises" OR DE "FOOT exercises" OR DE "GYMNASTICS" OR DE "HAND exercises" OR DE "HATHA yoga" OR DE "HIP exercises" OR DE "ISOKINETIC exercise" OR DE "ISOLATION exercises" OR DE "ISOMETRIC exercise" OR DE "ISOTONIC exercise" OR DE "KNEE exercises" OR DE "LEG exercises" OR DE "LIANGONG" OR DE "METABOLIC equivalent" OR DE "MULAN quan" OR DE "MUSCLE strength" OR DE "PILATES method" OR DE "PLYOMETRICS" OR DE "QI gong" OR DE "REDUCING exercises" OR DE "RUNNING" OR DE "RUNNING -- Social aspects" OR DE "SCHOOLS -- Exercises & recreations" OR DE "SEXUAL exercises" OR DE "SHOULDER exercises" OR DE "STRENGTH training" OR DE "STRESS management exercises" OR DE "STRETCHING exercises" OR DE "TAI chi" OR DE "TREADMILL exercise" OR DE "WHEELCHAIR workouts" OR DE "YOGA"
S2 DE "PHYSICAL fitness" OR DE "ANAEROBIC exercises" OR DE "ASTROLOGY & physical fitness" OR DE "BODYBUILDING" OR DE "CARDIOVASCULAR fitness" OR DE "CIRCUIT training" OR DE "COMPOUND exercises" OR DE "ISOLATION exercises" OR DE "LIANGONG" OR DE "MUSCLE strength" OR DE "PERIODIZATION training" OR DE "PHYSICAL fitness -- Genetic aspects" OR DE "PHYSICAL fitness for children" OR DE "PHYSICAL fitness for girls" OR DE "PHYSICAL fitness for men" OR DE "PHYSICAL fitness for older people" OR DE "PHYSICAL fitness for people with disabilities" OR DE "PHYSICAL fitness for women" OR DE "PHYSICAL fitness for youth" OR DE "SPORT for All"
S3 DE "EXERCISE tolerance"
S4 DE "BALL games" OR DE "ANETSO" OR DE "BALL hockey" OR DE "BALLE au tamis (Game)" OR DE "BASEBALL" OR DE "BASKETBALL" OR DE "BATTLE ball" OR DE "BICYCLE polo" OR DE "BILLIARDS" OR DE "BOWLING games" OR DE "BROOMBALL" OR DE "CAMOGIE (Game)" OR DE "CRICKET (Sport)" OR DE "CROQUET" OR DE "DODGEBALL" OR DE "FIELD hockey" OR DE "FLICKERBALL" OR

DE "FOOTBALL" OR DE "GOAL ball" OR DE "GOLF" OR DE "GOLF croquet" OR DE "HANDBALL" OR DE "HURLING (Game)" OR DE "INDOOR hockey" OR DE "JAPANESE polo" OR DE "JIAN zi (Game)" OR DE "KANG (Game)" OR DE "KICKBALL" OR DE "LACROSSE" OR DE "LAPTA (Game)" OR DE "LAWN tempest (Game)" OR DE "MINTON (Game)" OR DE "PARLOR football" OR DE "PARLOR tennis" OR DE "PICKLE ball" OR DE "PICKLEBALL (Game)" OR DE "PIZE-ball" OR DE "POLO" OR DE "POLOCROSSE" OR DE "PUSH ball" OR DE "QUIDDITCH (Game)" OR DE "RACQUETBALL" OR DE "RAGA (Game)" OR DE "ROLL ball" OR DE "ROUNDERS" OR DE "RUGBALL" OR DE "SCHLAGBALL" OR DE "SHINTY (Game)" OR DE "SOCCER" OR DE "SOFTBALL" OR DE "SPEED-a-way (Game)" OR DE "SPEEDBALL" OR DE "STICKBALL (Game)" OR DE "STOOLBALL" OR DE "TABLE tennis" OR DE "TCHOUKBALL" OR DE "TENNIS" OR DE "TETHERBALL" OR DE "TRAPBALL" OR DE "VOLLEYBALL" OR DE "WALLYBALL" OR DE "WATER polo" OR DE "WICKET" OR DE "WIFFLE ball"

S5 DE "PHYSICAL training & conditioning" OR DE "ACROBATICS -- Training" OR DE "ALTITUDE training" OR DE "ANAEROBIC training" OR DE "ARCHERY -- Training" OR DE "BADMINTON (Game)" OR DE "BASE training (Exercise)" OR DE "BASEBALL -- Training" OR DE "BASKETBALL -- Training" OR DE "BICYCLE racing -- Training" OR DE "BODYBUILDING -- Training" OR DE "BOWLING -- Training" OR DE "BOXING -- Training" OR DE "BULLFIGHT training & conditioning" OR DE "BUNGEE jumping training & conditioning" OR DE "CANOES & canoeing -- Training" OR DE "CAVING training & conditioning" OR DE "COMPOUND exercises" OR DE "CONTRAST training (Physical training & conditioning)" OR DE "COXSWAINING -- Training" OR DE "CRICKET training & conditioning" OR DE "CROSS-training (Sports)" OR DE "CYCLING -- Training" OR DE "DANCE training & conditioning" OR DE "DEEP diving training & conditioning" OR DE "DIVING -- Training" OR DE "DOGSLEDDING training & conditioning" OR DE "ENDURANCE sports -- Training" OR DE "FENCING -- Training" OR DE "FIELD hockey training & conditioning" OR DE "FOOTBALL -- Training" OR DE "FUNCTIONAL training" OR DE "GLIDING & soaring training & conditioning" OR DE "GOLF -- Training" OR DE "GYMNASTICS -- Training" OR DE "HANDBALL training & conditioning" OR DE "HIKING training & conditioning" OR DE "HOCKEY -- Training" OR DE "HUNTING training & conditioning" OR DE "INTERVAL training" OR DE "ISOLATION exercises" OR DE "KAYAKING -- Training" OR DE "KNIFE fighting -- Training" OR DE "KORFBALL -- Training" OR DE "LACROSSE training & conditioning" OR DE "LONG slow distance training" OR DE "MARTIAL arts -- Training" OR DE "MOTORSPORTS training & conditioning" OR DE "MOUNTAINEERING -- Training" OR DE "NUNCHAKU -- Training" OR DE "ORIENTEERING -- Training" OR DE "OVERTRAINING" OR DE "PACE training" OR DE "PARACHUTING training & conditioning" OR DE "PARAKITING training & conditioning" OR DE "PERIODIZATION training" OR DE "PERSONAL training" OR DE "POLO training & conditioning" OR DE "PRACTICE (Sports)" OR DE "PRESEASON (Sports)" OR DE "RACQUETBALL -- Training" OR DE "RECOVERY training" OR DE "RELAY racing -- Training" OR DE "REPETITION training" OR DE "RESISTANCE training (Physical training & conditioning)" OR DE "ROCK climbing -- Training" OR DE "RODEO training & conditioning" OR DE "ROLLER skating training & conditioning" OR DE "ROWING -- Training" OR DE "RUGBY football -- Training" OR DE "RUNNING -- Training" OR DE "SHOT putting -- Training" OR DE "SKATING -- Training" OR DE "SKIS & skiing -- Training" OR DE "SKYDIVING training & conditioning" OR DE "SOCCER -- Training" OR DE "SOFTBALL -- Training" OR DE "SPEED endurance training" OR DE "SQUASH (Game)" OR DE "STRENGTH training" OR DE "SURFING -- Training" OR DE "SWIMMING -- Training" OR DE "TABLE tennis training & conditioning" OR DE "TEAM handball -- Training" OR DE "TENNIS -- Training" OR DE "TRACK & field -- Training" OR DE "TRIATHLON -- Training" OR DE "TUG of war (Game)" OR DE "VAULTING (Horsemanship)" OR DE "VOLLEYBALL -- Training" OR DE "WATER polo -- Training" OR DE "WEIGHT training" OR DE "WHEELCHAIR sports -- Training" OR DE "WINTER sports training & conditioning" OR DE "WRESTLING -- Training" OR DE "YOGA training & conditioning"

S6 DE "DANCE" OR DE "AERIAL dance" OR DE "AEROBIC dancing" OR DE "AFRICAN American dance" OR DE "BALLE" OR DE "BALLROOM dancing" OR DE "BELLY dance" OR DE "BREAK dancing" OR DE "CHA-cha (Dance)" OR DE "COUNTRY dancing" OR DE "DANCE for people with disabilities" OR DE "FLAMENCO" OR DE "FOLK dancing" OR DE "FREE skating" OR DE "HIP-hop dance" OR DE "ICE dancing" OR DE "JAZZ dance" OR DE "LINE dancing" OR DE "LION dance" OR DE "MODERN dance" OR DE "MOVEMENT notation" OR DE "ORIGINAL set pattern dance (Skating)" OR DE "POLE dancing" OR DE "ROUND dancing" OR DE "SALSA (Dance)" OR DE "SHISHIMAI (Dance)" OR DE "SQUARE dancing" OR DE "STEP dancing" OR DE "TANGO (Dance)" OR DE "TAP dancing"

S7 TI ((weight* or strength* or duranc* or circuit*) N5 (program* or train* or session*)) OR AB ((weight* or strength* or duranc* or circuit*) N5 (program* or train* or session*))

S8 TI (exercis* or sport* or fitness* or gym* or aerobic*) OR AB (exercis* or sport* or fitness* or gym* or aerobic*)

S9 TI (physical* N5 (fit* or activ* or movement* or train* or condition* or program*)) OR AB (physical* N5 (fit* or activ* or movement* or train* or condition* or program*))

S10 TI activ* N2 life* OR AB activ* N2 life*

S11 TI (run* or walk* or jog* or sprint* or treadmill* or row* or swim* or bicycl* or cycl* or danc* or yoga or tai chi or tai ji or qigong or qi gong) OR AB (run* or walk* or jog* or sprint* or treadmill* or row* or swim* or bicycl* or cycl* or danc* or yoga or tai chi or tai ji or qigong or qi gong)

S12 TI activ* N2 life* OR AB activ* N2 life*

S13 AB Telomer*

S14 S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11 or S12

S15 S13 or S14 49

Supplementary material to article by X. Lin et al. "Effect of different levels of exercise on telomere length: A systematic review and meta-analysis"

CINAHL (EBSCO)

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S12 TI activ* N2 life* OR AB activ* N2 life*

S13 AB Telomer*

S14 S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11 or S12

S15 S13 or S14 134

Excluded articles

The following references were excluded (except for reviews and conference abstracts)

Ten articles with sample number less than 100 were excluded:

1. Mathur S, Ardestani A, Parker B, Cappizzi J, Polk D, Thompson PD. Telomere length and cardiorespiratory fitness in marathon runners. *J Investig Med* 2013; 61: 613-615.
2. Shin YA, Lee JH, Song W, Jun TW. Exercise training improves the antioxidant enzyme activity with no changes of telomere length. Mechanisms of ageing and development. *Mech Ageing Dev* 2008; 129: 254-260.
3. Denham J. Lack of association between PBMC telomere length and endurance exercise. *J Appl Biomed* 2017; 15: 9-13.
4. Kadi F, Ponsot E, Piehl-Aulin K, Mackey A, Kjaer M, Oskarsson E, et al. The effects of regular strength training on telomere length in human skeletal muscle. *Med Sci Sports Exerc* 2008; 40: 82-87.
5. Ludlow AT, Zimmerman JB, Witkowski S, Hearn JW, Hatfield BD, Roth SM. Relationship between physical activity level, telomere length, and telomerase activity. *Med Sci Sports Exerc* 2008; 40: 1764-1771.
6. LaRocca TJ, Seals DR, Pierce GL. Leukocyte telomere length is preserved with aging in endurance exercise-trained adults and related to maximal aerobic capacity. *Mech Ageing Dev* 2008; 40: 1764-1771.
7. Kim JH, Ko JH, Lee DC, Lim I, Bang H. Habitual physical exercise has beneficial effects on telomere length in postmenopausal women. *Menopause* 2012; 19: 1109-1115.
8. Osthus IB, Sgura A, Berardinelli F, Alsnes IV, Bronstad E, Rehn T, et al. Telomere length and long-term endurance exercise: does exercise training affect biological age? A pilot study. *PLoS One* 2012; 7: e52769.
9. Venturilli M, Morgan GR, Donato AJ, Reese V, Bottura R, Tarperi C, et al. Cellular aging of skeletal muscle: telomeric and free radical evidence that physical inactivity is responsible and not age. *Clin Sci (Lond)* 2014; 127: 415-421.
10. Borghini A, Giardini G, Tonacci A, Matorci F, Mercuri A, Mrakic-Spota S, et al. Chronic and acute effects of endurance training on telomere length. *Mutagenesis* 2015; 30: 711-716.

Supplementary material to article by X. Lin et al. "Effect of different levels of exercise on telomere length: A systematic review and meta-analysis"

Twenty-five articles that did not provide the mean (SD) telomere length were also excluded:

1. Bekaert S, De Meyer T, Rietzschel ER, De Buyzere ML, De Bacquer D, Langlois M, et al. Telomere length and cardiovascular risk factors in a middle-aged population free of overt cardiovascular disease. *Aging Cell* 2007; 6: 639–647.
2. Puterman E, Lin J, Blackburn E, O'Donovan A, Adler N, Epel E. The power of exercise: Buffering the effect of chronic stress on telomere length. *PLoS One* 2010; 5: e10837.
3. Farzaneh-Far R, Lin J, Epel E, Lapham K, Blackburn E, Whooley MA. Telomere length trajectory and its determinants in persons with coronary artery disease: longitudinal findings from the heart and soul study. *PLoS One* 2010; 5: e8612.
4. Weischer M, Bojesen SE, Nordestgaard BG. Telomere shortening unrelated to smoking, body weight, physical activity, and alcohol intake: 4,576 general population individuals with repeat measurements 10 years apart. *PLoS Genet* 2014; 10: e1004191.
5. Cherkas LF, Aviv A, Valdes AM, Hunkin JL, Gardner JP, Surdulescu GL, et al. The effects of social status on biological aging as measured by white-blood-cell telomere length. *Aging Cell* 2014; 10: e1004191.
6. Bendix L, Gade MM, Staun PW, Kimura M, Jeune B, Hjelmborg JV, et al. Leukocyte telomere length and physical ability among Danish twins age 70+. *Mech Ageing Dev* 2011; 132: 568–572.
7. Du M, Prescott J, Kraft P, Han J, Giovannucci E, Hankinson SE, et al. Physical activity, sedentary behavior, and leukocyte telomere length in women. *Am J Epidemiol* 2012; 175: 414–422.
8. Kingma EM, de Jonge P, van der Harst P, Ormel J, Rosmalen JG. The association between intelligence and telomere length: a longitudinal population based study. *PLoS One* 2012; 7: e49356.
9. Loprinzi PD. Cardiorespiratory capacity and leukocyte telomere length among adults in the united states. *Am J Epidemiol* 2015; 182: 198–201.
10. Puterman E, Lin J, Krauss J, Blackburn EH, Epel ES. Determinants of telomere attrition over 1 year in healthy older women: stress and health behaviors matter. *Mol Psychiatry* 2015; 20: 529–35.
11. Silva LC, de Araujo AL, Fernandes JR, Matias Mde S, Silva PR, Duarte AJ, et al. Moderate and intense exercise lifestyles attenuate the effects of aging on telomere length and the survival and composition of t cell subpopulations. *Age (Dordr)* 2016; 38: 24.
12. Zhu H, Wang X, Gutin B, Davis CL, Keeton D, Thomas J, et al. Leukocyte telomere length in healthy Caucasian and African-American adolescents: relationships with race, sex, adiposity, adipokines, and physical activity. *J Pediatr* 2011; 158: 215–220.
13. Loprinzi PD, Sng E. Mode-specific physical activity and leukocyte telomere length among u.S. Adults: implications of running on cellular aging. *Prev Med* 2016; 85: 17–19.
14. Loprinzi PD, Loenneke JP, Blackburn EH. Movement-Based Behaviors and Leukocyte Telomere Length among US Adults. *Med Sci Sports Exerc* 2015; 47: 2347–2352.
15. Fujishiro K, Diez-Roux AV, Landsbergis PA, Jenny NS, Seeman T. Current employment status, occupational category, occupational hazard exposure and job stress in relation to telomere length: the Multiethnic Study of Atherosclerosis (MESA). *Occup Environ Med* 2013; 70: 552–560.
16. García-Calzón S, Gea A, Razquin C, Corella D, Lamuela-Raventós RM, Martínez JA, et al. Longitudinal association of telomere length and obesity indices in an intervention study with a mediterranean diet: the PREDIMED-NAVARRA trial. *Int J Obes (Lond)* 2014; 38: 177–182.
17. Ponsot E, Lexell J, Kadi F. Skeletal muscle telomere length is not impaired in healthy physically active old women and men. *Muscle Nerve* 2008; 37: 467–472.
18. Song Z, von Figura G, Liu Y, Kraus JM, Torrice C, Dillon P, et al. Lifestyle impacts on the aging-associated expression of biomarkers of DNA damage and telomere dysfunction in human blood. *Aging Cell* 2010; 9: 607–615.
19. Tiainen AM, Männistö S, Blomstedt PA, Moltchanova E, Perälä MM, Kaartinen NE, et al. Leukocyte telomere length and its relation to food and nutrient intake in an elderly population. *Eur J Clin Nutr* 2012; 66: 1290–1294.
20. Latifovic L, Peacock SD, Massey TE, King WD. The influence of alcohol consumption, cigarette smoking, and physical activity on leukocyte telomere length. *Cancer Epidemiol Biomarkers Prev* 2016; 25: 374–380.
21. Sassenroth D, Meyer A, Salewsky B, Kroh M, Norman K, Steinhagen-Thiessen E, et al. Sports and exercise at different ages and leukocyte telomere length in later life – data from the Berlin Aging Study II (BASE-II). *PLoS One* 2015 Dec 2; 10: e0142131.
22. Soares-Miranda L, Imamura F, Siscovick D, Jenny NS, Fitzpatrick AL, Mozaffarian D. Physical activity, physical fitness, and leukocyte telomere length: the cardiovascular health study. *Med Sci Sports Exerc* 2015; 47: 2525–2534.
23. Mirabello L, Huang WY, Wong JY, Chatterjee N, Reding D, Crawford ED, et al. The association between leukocyte telomere length and cigarette smoking, dietary and physical variables, and risk of prostate cancer. *Aging Cell* 2009; 8: 405–413.
24. von Kanel R, Bruwer EJ, Hamer M, de Ridder JH, Malan L. Association between objectively measured physical activity, chronic stress and leukocyte telomere length. *J Sports Med Phys Fitness* 2017; 57: 1349–1358.
25. Cassidy A, De Vivo I, Liu Y, Han J, Prescott J, Hunter DJ, et al. Associations between diet, lifestyle factors, and telomere length in women. *Br J Nutr* 2010; 91: 1273–1280.