

Notes

(All websites listed in the Notes were accessed in November 2023.)

Introduction

- p. ix **This has been proven to have incredible health benefits:** Murphy, M. H. et al. 2019. 'The effects of continuous compared to accumulated exercise on health: A meta-analytic review'. *Sports Medicine*, 49 (10), 1585–1607.
- p. x **The WHO physical activity guidelines:** available at <https://www.who.int/news-room/fact-sheets/detail/physical-activity>.

Midlife Health and the Menopause

- p. 3 **Not only will exercise help you manage your symptoms:** Anderson, E. & Durstine, J. L. 2019. 'Physical activity, exercise, and chronic diseases: A brief review'. *Sports Medicine and Health Science*, 1 (1), 3–10.
- p. 3 **A 2020 study found that sticking to a healthy lifestyle:** see <https://www.bmj.com/company/newsroom/healthy-habits-in-middle-age-linked-to-longer-life-free-from-disease/>.
- p. 4 **In October 2021, the *Independent* newspaper reported:** Maya Oppenheim, 'Fear of being labelled hysterical: 1 in 10 women experience suicidal thoughts due to perimenopause'. *Independent*, 6 October 2021.

Mental health

- p. 8 **Anxiety is a common symptom of the menopause transition:** Currie, H. & Moger, S. J. 2019. 'Menopause – Understanding the impact on women and their partners'. *Post Reproductive Health*, 25 (4), 183–90.
- p. 8 **Research has shown that exercise promotes the growth of neurons:** Schoenfeld et al. 2013. 'Physical exercise prevents stress-induced activation of granule neurons and enhances local inhibitory mechanisms in the dentate gyrus'. *Journal of Neuroscience*, 33 (18), 7770–77.
- p. 8 **There is ample evidence that partaking in low- to moderate-intensity exercise:** Martínez-Domínguez, S. J. et al. 2018. 'Health Outcomes and Systematic Analyses (HOUSAY) Project. The effect of programmed exercise over anxiety symptoms in midlife and older women: a meta-analysis of randomized controlled trials'. *Climacteric*, 21 (2), 123–31.
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disturbance during the menopause transition’. *Seminars in Reproductive Medicine*, 28 (5), 404–21.

Hot Flashes

- p. 16 **But early studies are showing:** Gretchen Reynolds, ‘Exercise May Ease Hot Flashes, Provided It’s Vigorous’. *New York Times*, 3 August 2016; Carina Storrs, ‘Exercise during menopause could reduce hot flashes, study says’. *CNN Health*, 27 January 2016.
- p. 16 **Data from the Study of Women’s Health Across the Nation:** Woods, R. et al. 2020. ‘Association of lean body mass to menopausal symptoms: The Study of Women’s Health Across the Nation’. *Women’s Midlife Health*, 6 (1), 10–16.
- p. 16 **One study using a simple breathing technique:** Huang, A. J. et al. 2015. ‘Device-guided slow-paced respiration for menopausal hot flashes: a randomized controlled trial’. *Obstetrics & Gynecology*, 125 (5), 1130–38.

Joint pain

- p. 18 **Exercise actually increases strength:** see the Mayo Clinic’s website at <https://www.mayoclinic.org/diseases-conditions/arthritis/in-depth/arthritis/art-20047971>.

Diabetes and heart health

- p. 20 **A study published in the *British Journal of Sports Medicine*:** Garcia, L. et al. 2023. ‘Non-occupational physical activity and risk of cardiovascular disease, cancer and mortality outcomes:

- a dose–response meta-analysis of large prospective studies’. *British Journal of Sports Medicine*, 57 (15), 979–89.
- p. 20 **On the other hand, sedentary activity:** Ekelund, U. et al. 2020. ‘Joint associations of accelerometer-measured physical activity and sedentary time with all-cause mortality: a harmonised meta-analysis in more than 44 000 middle-aged and older individuals’. *British Journal of Sports Medicine*, 54 (24), 1499–1506.
- p. 20 **But ‘exercise snacking’ has also been shown:** see the BBC’s online resource ‘Trust me I’m a Doctor’ at <https://www.bbc.co.uk/programmes/articles/ybbX1JS7xBtwcvlSsqHXSr/do-i-really-need-to-exercise-for-30-minutes-at-a-time-to-get-the-health-benefits>.
- p. 21 **A 2021 study published in the *Journal of the American Heart Association*:** Srikanthan, P. et al. 2021. ‘Sex differences in the association of body composition and cardiovascular mortality’. *JAHA*, 10 (5), e017511.

Health span, not lifespan

- p. 22 **Dr Peter Attia is an expert in longevity:** see his podcast at <https://peterattiamd.com/podcast/>.

Muscle is key for longevity

- p. 23 **Research from the National Institute on Aging:** see <https://www.nia.nih.gov/news/how-can-strength-training-build-healthier-bodies-we-age>.
- p. 23 **Dr Gabrielle Lyon is a pioneer in this area:** Gabrielle Doré, ‘Muscle is the cornerstone of longevity’. *Worth*, 8 March 2023.
- p. 24 **Studies show that people who have more muscle mass are at a lower risk:** Andrew Gregory, ‘Muscle strengthening

lowers risk of death from all causes, study shows'. *Guardian*, 28 February 2022.

- p. 24 **Research shows that exercising for as little as 11 minutes could prevent:** Garcia, L. et al. 2023. 'Non-occupational physical activity and risk of cardiovascular disease, cancer and mortality outcomes: a dose-response meta-analysis of large prospective studies'. *British Journal of Sports Medicine*, 57 (15), 979–89.

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- p. 25 **According to a Bath University study:** Perkin, O. J., McGuigan, P. M. & Stokes, K. A. 2019. 'Exercise snacking to improve muscle function in healthy older adults: A pilot study'. *Journal of Aging Research*, 3, 1–9.
- p. 26 **One study showed that a six-week squat exercise routine:** Chen, N. et al. 2021. 'Effects of resistance training in healthy older people with sarcopenia: a systematic review and meta-analysis of randomized controlled trials'. *European Review of Aging and Physical Activity*, 18 (1), article no. 23.
- p. 26 **Research clearly demonstrates that strength-training exercises:** Seguin, R. & Nelson, M. E. 2003. 'The benefits of strength training for older adults'. *American Journal of Preventive Medicine*, 25 (3), supplement 2, 141–9.

Alzheimer's and dementia

- p. 27 **A whole body of diverse recent research has shown that hormones:** see the Alzheimer's Society website at <https://www.alzheimers.org.uk/about-dementia/risk-factors-and-prevention/hormones-and-dementia>.

- p. 28 **Neuroscientist Wendy Suzuki says:** you can listen to her presentation ‘Do your brain a favour – move your body’ on the TED Radio Hour at <https://www.npr.org/transcripts/1148805673>.

My mission to get Asians fit

- p. 29 **Studies have shown that South Asians:** see the Gov.UK website at <https://www.ethnicity-facts-figures.service.gov.uk/health/diet-and-exercise/physical-activity/latest>.
- p. 29 **In addition, South Asians in the UK are six times more likely:** see <https://www.diabetes.co.uk/south-asian/>.

Exercise snacking

- p. 31 **Rather than doing 30–60 minutes of exercise:** Schmidt, W. D., Biwer, C. J. & Kalscheuer, L. K. 2001. ‘Effects of long versus short bout exercise on fitness and weight loss in overweight females’. *Journal of the American College of Nutrition*, 20 (5), 494–501.
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- p. 31 **Professor Marie Murphy of Ulster University:** Murphy, M. H. et al. 2019. ‘The effects of continuous compared to accumulated exercise on health: A meta-analytic review’. *Sports Medicine*, 49 (10), 1585–1607.
- p. 32 . . . **these exercise snacks, all added up, may even be better for improving blood pressure:** Nancy Schimelpfening,

'Exercise snacks: 1-minute workouts can improve fitness, overall health'. *Healthline*, 8 December 2022. Gretchen Reynolds, 'These 2-minute exercise bursts may be better than your regular workout'. *Washington Post*, 4 January 2023.

Sit less, move more

- p. 35 **This is less likely to result in long amounts of time sitting, which are linked to:** Anna Guildford, '5-minute walks every 30 minutes may help counter effects of too much sitting'. *Medical News Today*, 12 January 2023.
- p. 35 **A study in 2020 found:** Ekelund, U. et al. 2020. 'Joint associations of accelerometer-measured physical activity and sedentary time with all-cause mortality: a harmonised meta-analysis in more than 44 000 middle-aged and older individuals'. *British Journal of Sports Medicine*, 54 (24), 1499–1506.
- p. 35 **In fact, a study published by the Mayo Clinic found:** Agata Blaszczyk-Boxe, 'Two hours of sitting cancels out 20 minutes of exercise, study finds'. *CBS News*, 8 July 2014.
- p. 35 **People who exercise but spend the rest of their day sitting:** Farrahi, V. et al. 2022. 'Joint profiles of sedentary time and physical activity in adults and their associations with cardiometabolic health'. *Medicine & Science in Sports & Exercise*, 54 (12), 2118–28.

Backed by science

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- activity-snacking-helps-people-type-1-diabetes-manage-blood-sugar-levels-new-study.
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- p. 38 **A study from December 2022 found:** Stamatakis, E. et al. 2022. 'Association of wearable device-measured vigorous intermittent lifestyle physical activity with mortality'. *Nature Medicine*, 28, 2521–9.
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cardiovascular disease, cancer and mortality outcomes: a dose-response meta-analysis of large prospective studies'. *British Journal of Sports Medicine*, 57 (15), 979–89.

- p. 41 **Hitting these guidelines for physical activity:** see NHS sources, including <https://www.staffahealth.co.uk/your-health/benefits-of-exercise/>; <https://111.wales.nhs.uk/encyclopaedia/e/article/exercise/>; <https://www.nhsinform.scot/healthy-living/keeping-active/benefits-of-exercise>. See also <https://www.dundee.ac.uk/ise/exercise/why-exercise-important>.

Cardio

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Strength training

- p. 62 **In a 2021 study, researchers found that compared to women in early perimenopause:** Ko, J. & Park, Y. M. 2021. 'Menopause and the loss of skeletal muscle mass in women'. *Iranian Journal of Public Health*, 50 (2), 413–14.
- p. 62 **One study shows that menopausal women who strength trained:** see <https://www.bupa.co.uk/newsroom/ourviews/strength-training-menopause>.
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Bone health and osteoporosis

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Stretching

- p. 71 **A study found that implementing stretching exercises at work:** Montero-Marín, J. et al. 2013. 'Effectiveness of a stretching program on anxiety levels of workers in a logistic platform: a randomized controlled study'. *Atención Primaria*, 45 (7), 376–83 (Spanish).
- p. 71 **Research published in the *Journal of Applied Physiology*:** Antonio, J. & Gonyea, W. J. 1993. 'Progressive stretch overload of skeletal muscle results in hypertrophy before hyperplasia'. *Journal of Applied Physiology*, 75 (3), 1263–71.

Balance

- p. 74 **A 2016 study found that older adults:** Hafström, A. et al. 2016. 'Improved balance confidence and stability for elderly after 6 weeks of a multimodal self-administered balance-enhancing exercise program: A randomized single arm crossover study'. *Gerontology & Geriatric Medicine*, 26 (2), epub.
- p. 75 **... people's ability to sit on the floor and then stand up:** Linda Carroll, 'How long will I live? Simple sitting test predicts longevity'. *Today*, 16 September 2016.
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10 Second Balance Snack

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Pelvic Floor Snack

- p. 89 **Studies are indicating that low muscle mass and strength:**
 Yang, S. J. et al. 2021. 'Association of decreased grip strength with lower urinary tract symptoms in women: a cross-sectional study from Korea'. *BMC Women's Health*, 21, article no. 96. See also the Abstracts of the International Continence Society's annual meeting, Vienna, 7 to 10 September 2022.

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End of Day Stretch Snack

- p. 92 **It can help relieve menopausal symptoms:** Avis, N. E. et al. 2014. 'Pilot study of integral yoga for menopausal hot flashes'. *Menopause*, 21 (8), 846–54.

The power of HIIT

- p. 101 **In a small study of postmenopausal obese women:**
 Grossman, J. A, Arigo, D. & Bachman, J. L. 2018. 'Meaningful weight loss in obese postmenopausal women: a pilot study of high-intensity interval training and wearable technology'. *Meno-pause*, 25 (4), 465–70.

Lower Body Strength Snack

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Daily Wake-Up Snack

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Desk Stretch Snack

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Move after meals

- p. 205 **But one 2022 study:** Buffey, A. J. et al. 2022. ‘The acute effects of interrupting prolonged sitting time in adults with standing and light-intensity walking on biomarkers of cardiometabolic health in adults: A systematic review and meta-analysis’. *Sports Medicine*, 52 (8), 1765–87.
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- p. 211 **A walk of 30 minutes a day can lower the risk:** see <https://walking.heartfoundation.org.au/benefits>.
- p. 211 **These individuals had a life expectancy:** see <https://le.ac.uk/news/2022/april/walking-speed-ageing>.
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- p. 212 **Latest studies show even 3 minutes walking:** see <https://www.sunderland.ac.uk/more/news/story/Activity-snacking-helps-people-with-type-1-diabetes-2109>.
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cardiovascular disease, cancer and mortality outcomes: a dose-response meta-analysis of large prospective studies'. *British Journal of Sports Medicine*, 57 (15), 979–89.

Squat Snack

- p. 224 **Bonus wall sit challenge:** Edwards, J. J. et al. 2023. 'Exercise training and resting blood pressure: a large-scale pairwise and network meta-analysis of randomised controlled trials'. *British Journal of Sports Medicine*, 57 (20), 1317–26.

Squat for longevity and a healthy brain

- p. 226 **One study that followed healthy adults:** Newman, A. B. et al, on behalf of the Health, Aging and Body Composition Study Investigators. 2006. 'Strength, but not muscle mass, is associated with mortality in the Health, Aging and Body Composition Study cohort'. *The Journals of Gerontology: Series A*, 61 (1), 72–7.
- p. 226 **According to Dr Damian Bailey:** see <https://www.onlygood-newsdaily.com/post/squats-improve-brain-power>.

Feel Good Mentally

- p. 247 **I have heard of so many women going to their doctors:** Maya Oppenheim, 'Menopausal women wrongly prescribed antidepressants which make their symptoms worse, warn experts'. *Independent*, 10 October 2019; Newson Health, 'Delayed diagnosis and treatment of menopause is wasting NHS appointments and resources'. *Balance*, 30 June 2021.

- p. 247 **In fact, a large new meta-analysis of studies:** Singh, B. et al. 2023. 'Effectiveness of physical activity interventions for improving depression, anxiety and distress: an overview of systematic reviews'. *British Journal of Sports Medicine*, 57 (18), 1203–9.
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The benefits of exercise for mental health

- p. 249 **One study found that, over time:** Elavsky, S. 2009. 'Physical activity, menopause, and quality of life: the role of affect and self-worth across time'. *Menopause*, 16 (2), 265–71.

Brain

- p. 252 **Studies have shown that a single exercise session:** Morava, A., Fagan, M. J. & Prapavessis, H. 2019. 'Effects of caffeine and acute aerobic exercise on working memory and caffeine withdrawal'. *Scientific Reports*, 9, 19644.
- p. 253 **A study in the *Journal of Alzheimer's Disease Reports*:** Won, J., Nielson, K. A. & Smith, J. C. 2023. 'Large-scale network connectivity and cognitive function changes after exercise training in older adults with intact cognition and mild cognitive impairment'. *JAD Reports*, 7 (1), 399–413.
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- p. 254 **Walking while you work can improve memory:** Labonté-LeMoyne, E. et al. 2015. 'The delayed effect of treadmill desk usage on recall and attention'. *Computers in Human Behavior*, 46, 1–5.
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Breath

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- p. 260 **I was fascinated to read in James Nestor's book:** *Breath: The New Science of a Lost Art*. London: Penguin Life, 2020.

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- p. 264 **Studies on the effects of outdoor exercise:** Teas, J. et al. 2007. 'Walking outside improves mood for healthy postmenopausal women'. *Clinical Medicine Insight: Oncology*, 1: CMO.S343.

Self-care

- p. 266 **One study found that choosing to be alone:** Nguyen, T. T., Ryan, R. M. & Deci, E. L. 2018. 'Solitude as an approach to affective self-regulation'. *Personality and Social Psychology Bulletin*, 44 (1), 92–106.
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Smiling Snack

- p. 281 **Research has shown that intentionally exercising your facial muscles:** see <https://bethesunnotthesalt.com/what-is-a-smile/>.

Dose of Vitamin G Snack

- p. 285 **Studies show that actively practising gratitude makes you happier:** see <https://www.health.harvard.edu/healthbeat/giving-thanks-can-make-you-happier>; <https://www.happify.com/hd/the-science-behind-gratitude/>.

Superbrain Snack

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Alternate Nostril Breathing Snack

- p. 289 **Breathing through your nose may improve cognitive function:** Soni, S., Joshi, L. N. & Datta, A. 2015. 'Effect of controlled deep breathing on psychomotor and higher mental functions in normal individuals'. *Indian Journal of Physiology and Pharmacology*, 59 (1), 41–7.
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Write Away Your Worries Snack

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Grounding Snack

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Expressive Writing Snack

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Sunshine Snack

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