



# Getting Active to Sleep Soundly

★ By Dr Zara Quail

Regular exercise is key to maintaining good health, mental wellbeing and cognitive function.(1) But, did you know that exercise is also a major factor in getting a good night's sleep? Sleep is an essential activity for the body to rest allowing time for repair and creating new cells as well as enabling neuron communication and toxins removal from the brain.(2) To understand the effect of exercise on sleep, scientists study the components of sleep including how long it takes to fall asleep (sleep onset), how long one sleeps for (sleep duration), how well one sleeps (sleep quality) and how refreshed one feels when you wake up. What we know is that sleeping patterns do change across the life span. As we age, we may find that we sleep for shorter duration, go to bed or wake earlier or have more broken sleep.

## ★ EXERCISE-SLEEP LINKS

- So, how does exercise affect our sleep? Apart from the obvious of feeling physically tired after a jolly good brisk walk, there are a number of theories why exercise aids sleep:(3-5)
- Burn more energy to restore more energy through deeper rest: Increased exercise during the day uses up more energy which has been associated with deeper rest to rebuild cells and energy stores.
- Warm up to cool down: As the body naturally readies itself for sleep, there is a cooling of the core body temperature. If exercise increases the core temperature, then the cooling down after exercise could be sensed by the body as part of preparing for sleep later.
- Work out to calm down: Exercise has also been shown to reduce symptoms of anxiety and improve mood. Diminishing the effect of worrying thoughts at bedtime and improving mood have been found to have good effects on sleep.
- Sleep well to get more active: Poor sleep has been shown to reduce physical activity levels the next day.

## ★ WHAT TYPE OF EXERCISES HELP SLEEP?

Research has helped identify which types of exercise can help us get optimal amount of quality Zzzs. In generally healthy older adults who experienced mild to moderate difficulties with their sleep, doing moderate-intensity and endurance exercise was shown to improve sleep quality, reduce the time to fall asleep and help them feel more rested in the morning.(3-6) Even 20 to 30 minutes of exercise like a moderate workout class, dancing, brisk walking, jogging, cycling or an active gardening session could help.(2)

**See Page 3 for Goldster Class Suggestions**

## ★ WHAT TYPE OF EXERCISES HELP SLEEP?

The most sleep benefits were demonstrated for moderate exercise done at least 3 times a week for between 3 and 6 months.(6) In addition, exercise like yoga, and the slow, relaxing movements of Tai Chi and Baduanjin (a traditional Chinese exercise) have shown to be associated with improved sleep quality.(3, 6) While these exercises have shown promising results for sleep in general, for anyone who has severe difficulty sleeping, insomnia or feels unusually sleepy during the day, it is very important to discuss sleep concerns with a healthcare practitioner who can help to assess the possible underlying causes and advise on treatment.

## ★ WHEN SHOULD ONE EXERCISE TO AID SLEEP?

So, if we know which types of exercise are good for sleep, how do we know when to exercise for a restorative sleep session? General advice is not to exercise within 90 minutes before bedtime to give the body enough time to cool down before sleep and let the “feel good” endorphins from exercise settle. However, there is more research ongoing on the timing of exercise for sleep. Some light to moderate activity may not have as much of an effect in the evenings and high intensity exercise later in the day may not disrupt sleep as much as previously thought.(7, 8) Moderate and strengthening exercises have been shown to be best in the mornings. An outdoor walk or run is best during daylight hours for the additional benefits on the body’s circadian rhythm, also known as the sleep-wake cycle, from the exposure to sunlight. Do remember hat and sunscreen if the sun is strong.

Whether it’s rise and shine yoga, an invigorating morning workout, an upbeat dance class or a serene Tai Chi session, why not find out for yourself which exercises could help improve your sleep?

- Dr Zara Quail

Start your journey to a  
better nights sleep

Try Goldster for FREE!

Sign up for FREE 30 day trial for access to 300+ live online classes per month.



[www.goldster.co.uk](http://www.goldster.co.uk)

Dr Zara Quail is the Clinical Scientific Research Lead (a.k.a. Chief Geek) at Goldster. She spends much of her time assessing all the research on activities to promote healthy ageing so we can bring you the widest range of evidence-based ways to live well. She also co-authors research papers. Read the latest one on [“How Does Participation in Formal Education or Learning for Older People Affect Wellbeing and Cognition? A Systematic Literature Review and Meta-Analysis”](#) by clicking the link.



# GETTING ACTIVE TO SLEEP SOUNDLY



## MONDAY

7am Rise and Shine Yoga  
8am Core and Strength workout  
10am Tai Chi Refresh  
8pm Yin Yoga for Sleep

## TUESDAY

8am Strength & Energy Workout  
9.30 am Hatha Yoga  
10am Bollywood Dancing  
4pm Ballet Barre  
5pm Chair Yoga & Dance

## WEDNESDAY

7am Strength & Energy Workout  
8am Whole-Body Moderate Workout  
9am Introduction to Yoga  
10am Tai Chi with Qigong  
4pm Dance  
5pm Strength & Cardio Workout

## THURSDAY

7am Strength & Energy Workout  
8am Kundalini Yoga  
9am Tai Chi  
10am Mobility Flow  
4pm Whole-Body Moderate Workout  
5pm Afternoon Yoga  
8pm Yin Yoga for Sleep

## FRIDAY

7am Morning Yoga  
8am Tai Chi  
9.30am Whole-Body Moderate Workout  
10am Zumba

## SATURDAY

7am Strength & Energy Workout  
8am Kundalini Yoga  
10am Core & Balance Workout  
4pm Mobility Flow  
5pm Chair Yoga & Dance

## SUNDAY

8am Strength & Energy Workout  
9am Intro to Tai Chi  
10am Contemporary Ballet  
11am Advanced Contemporary Ballet

## Try Goldster for FREE!

Sign up for FREE 30 day trial for access to 300+ live online classes per month.



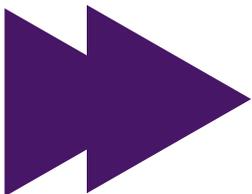
[www.goldster.co.uk](http://www.goldster.co.uk)

# LIVE HAPPIER & HEALTHIER FOR LONGER, STARTING TODAY

## ★ REFERENCES

- References
1. World Health Organization. WHO guidelines on physical activity and sedentary behaviour.2020. Available from: <https://www.who.int/publications/i/item/9789240015128>.
  2. National Institute of Neurological Disorders and Stroke. Brain Basics: Understanding Sleep2019. Available from: <https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep>.
  3. Varrasse M, Li J, Gooneratne N. Exercise and Sleep in Community-Dwelling Older Adults. Current Sleep Medicine Reports. 2015;1(4):232-40. Available from: <https://link.springer.com/article/10.1007/s40675-015-0028-6>
  4. Kline CE. The bidirectional relationship between exercise and sleep: Implications for exercise adherence and sleep improvement. Am J Lifestyle Med. 2014;8(6):375-9. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4341978/>
  5. Montgomery P, Dennis JA. Physical exercise for sleep problems in adults aged 60+. Cochrane Database of Systematic Reviews. 2002(4). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7017641/>
  6. Vanderlinden J, Boen F, van Uffelen JGZ. Effects of physical activity programs on sleep outcomes in older adults: a systematic review. International Journal of Behavioral Nutrition and Physical Activity. 2020;17(1):11. Available from: <https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-020-0913-3>
  7. Larsen P, Marino F, Melehan K, Guelfi KJ, Duffield R, Skein M. Evening high-intensity interval exercise does not disrupt sleep or alter energy intake despite changes in acylated ghrelin in middle-aged men. Exp Physiol. 2019;104(6):826-36. Available from: <https://physoc.onlinelibrary.wiley.com/doi/full/10.1113/EP087455>
  8. Stutz J, Eiholzer R, Spengler CM. Effects of Evening Exercise on Sleep in Healthy Participants: A Systematic Review and Meta-Analysis. Sports Med. 2019;49(2):269-87. Available from: <https://link.springer.com/article/10.1007/s40279-018-1015-0>

## ★ SEE MORE FROM DR ZARA QUAIL



**How to increase your sense of calm**

★ By Dr Zara Quail