Dear Alice,

I would ideally love to maintain a consistent exercise routine. However, there are stretches of time during which I get very little sleep, due either to a hectic schedule or a lot of stress. During these times (sometimes one or two weeks), I find it almost impossible to go work out. I'm simply too fatigued (I don't drink caffeine because it disrupts my sleep — even one cup in the morning!). The result is that I start to get flabby and untoned, and I then I tend to fluctuate between almost-toned to back-to-flabby.

My question is, what is the relationship between sleep deprivation and exercise? When you are very tired and have been getting little sleep for several days, is it better to just take it easy and let your exercise program go, or is it better to persist and work out anyway, albeit at a lower intensity?

I have bouts of insomnia, so it's not too helpful to just say "try to get more sleep." Sometimes I just can't.

— Tired and Flabby

Answer

Dear Tired and Flabby,
Ultimately, when deciding between the two when you're exhausted, your best bet is getting some more shut-eye. But before you run yourself ragged, it seems that there are two issues here for you to consider. The first issue is getting inadequate sleep. Sleep deprivation increases your risk of developing cognitive problems and chronic diseases such as diabetes and obesity. Additionally, sleep can affect your ability to lose or maintain a certain weight as hormones that control appetite can be affected by sleep. The second concern is incorporating physical activity, which could be a great way to help you get back into a healthy sleep routine. In addition, regular physical activity may help control weight, protect against certain health conditions and diseases, boost energy, improve your mood, and have a positive effect on your sex life (oh, baby!). However, research has shown that a lack of sleep can undermine the health benefits of physical activity. So, what can you do? Read on to learn more.

First, try to focus on sleep. Have you considered why you may be experiencing insomnia? For example, have you been under any added stress or feeling anxious about something? It may be helpful to try some relaxation techniques before bed, such as listening to a guided meditation, or perhaps taking a warm bath or listening to calm music. A walk after dinner may even help you wind down and start to focus on relaxing a bit in preparation for bedtime. Along with prepping your body for bed, here are some additional tips for upping your zzz score:

- Limit caffeine, alcohol, or nicotine close to your bedtime. These products have all been shown to interfere with sleep quality, which in turn may keep you awake at night. You already mentioned that you don't consume caffeine to prevent it from affecting your sleep, but if you consume alcohol or nicotine, you may want to limit it near the time you'd go to sleep.
- Limit naps to 20 to 30 minutes [2]. Try to get your sleep at night, but, if napping during the day, keep 'em short and sweet to reduce grogginess and to maintain alertness and performance without disrupting your nighttime sleep.
- Avoid late night eating [3]. Foods heavy in dairy and carbohydrates can lead to indigestion if consumed right before bed.
- Keep a regular bedtime schedule, even on weekends.
- Avoid exposing yourself to bright lights right before going to bed, such as bright computer and cell phone screens (particularly screens with blue light, as that can affect sleep patterns).
- Try to make sure your bed is used only for bedtime activities — in other words, for sleep and sex only. Studying in your bed may cause your mind to associate your bed with work, thus cueing your mind to think about work instead of rest.
- Create a sleeping environment that is dark, quiet, cool, and comfortable. You may find that blackout curtains, an eye mask, a white noise machine, or earplugs are helpful for you.
- If you can't fall asleep within twenty minutes, get out of bed and do something calming, such as reading or listening to music, until you feel more tired.
- Enjoy regular physical activity, but try to finish up at least three hours before you plan to go to bed. While exercising daily is known to improve sleep quality, exercising too close to your bedtime may increase alertness, keeping you awake.
- Consider checking out the Sleep [4] questions in the Go Ask Alice! archives for even more info!
You seemed to be a bit concerned about gaining weight. It may be helpful to know that sleep can affect hormonal activity tied to appetite and therefore might have a direct impact on your ability to lose or maintain a healthy weight. Leptin (a hormone secreted by fat cells that decreases hunger) and ghrelin (a hormone secreted in the stomach that increases hunger) work like a checks and balances system in the body and control your feelings of fullness and hunger. When you don't get enough sleep, your leptin levels drop and your ghrelin levels rise. In other words, sleep deprivation makes you more likely to crave sugary, high-carb foods (thanks to higher levels of ghrelin). Also, lack of sleep may interfere with your body's ability to repair muscles and bones post-workout.

The major takeaway: If you “are very tired and have been getting little sleep for several days,” your best bet is to hit the hay. For these reasons, it may be more helpful for you to focus on getting sleep than physical activity — at least for right now. Better to catch up on those zzz’s than hit the gym or walking path sleep deprived and fuzzy-eyed. Physical activity might help you stay toned and get back into a healthy sleeping pattern, but it’s necessary to get enough sleep so you actually reap the health benefits of physical activity.

Lastly, if you’ve tried some of these tips and you’re still struggling with insomnia, you may want to contact a health care provider to discern the underlying reasons behind it. You may find it helpful to read more about stress and time management. If these strategies don't prove to be successful, it might also be helpful to reach out to a mental health professional or a health promotion specialist to develop techniques for managing your stress.

Take care,

Alice!

Category:
- General Health [5]
- Sleep [6]
- Nutrition & Physical Activity [7]
- Fitness [8]

Related questions
- Constant fatigue – dietary or nutritional causes? [9]
- Why do we yawn? [10]
- Melatonin [11]

Resources
- Medical Services (Morningside) [12]
- Counseling and Psychological Services (CPS) (Morningside) [13]
- Medical Services (CUIMC) [14]
- Mental Health Services (CUIMC) [15]

Published date:
Jan 22, 2015

Last reviewed on: