## **Sleep Well**

A good night's sleep can leave us feeling refreshed, revived and ready to start the day with a spring in our step.

Unfortunately – in an age when technology is everywhere, being 'busy' is only ever seen as a good thing and stimulants keep us going – our sleep is suffering and insomnia is rife. Our internal body clock, also known as the circadian rhythm, has lost its natural rhythm.

With the recommended 8 hours a night, sleep plays a significant role in healing and repairing our body. Insomnia and erratic sleep patterns have been associated with everything from obesity and cardiovascular disease, to depression and diabetes.

The good news is that nutrition has an important role to play in resetting the sleep-wake cycle, so read on to find out how you can eat your way to a better night's sleep!



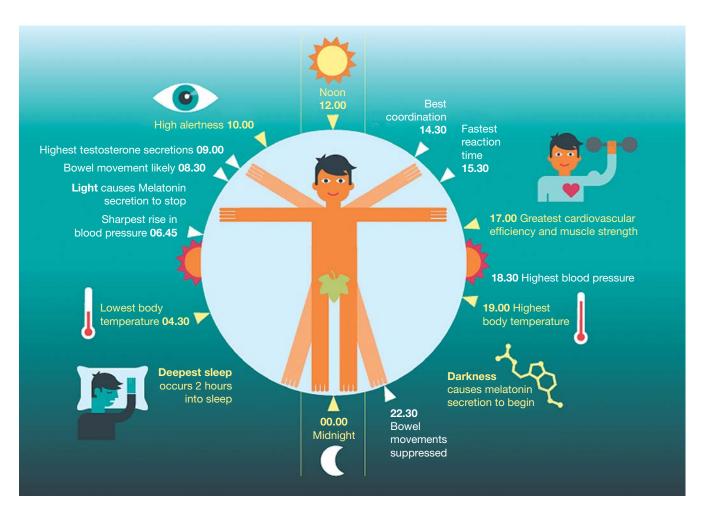
### Your Body clock

Your body has a 24 hour cycle (also known as your circadian rhythm) that helps to regulate when you wake up, your digestion, hormones and many other functions of your body. This inbuilt clock is pre-programmed to respond to you being active during the day and asleep at night, so if you work shifts, your body can find it difficult to adjust.

#### Your body clock is affected by:

• light and darkness • caffeine and energy drinks • exercise • alcohol • sugar

When it comes to circadian balance and melatonin and cortisol regulation, our exposure to daylight is the major influencer.



## Light balance

Levels of the hormone melatonin rise and fall depending on light exposure. Melatonin peaks during the night when it's dark (between 3-4a.m) to help with sleep, and then gradually levels decrease until dawn, and during daylight hours.

#### Here are a few ideas that can help reset the balance:

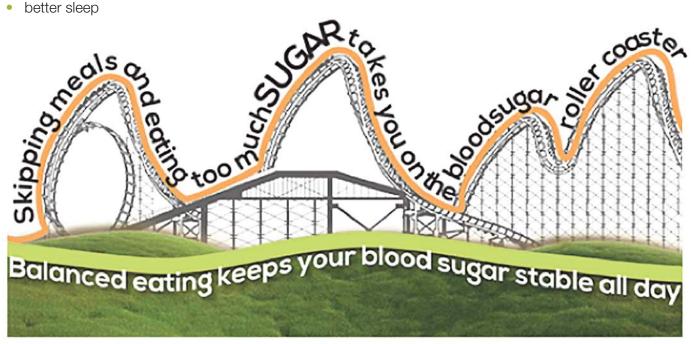
- Spend more time in natural light when the seasons allow. •
- Get outside in the morning for at least 10-30 minutes so you get some exposure to natural daylight in the • early part of the day.
- Any other time spent outdoors during the daytime can also help regulate your rhythm.
- At night, try doing the opposite. Make your room very dark and reduce all artificial light exposure to sleep • more soundly.
- Some experts recommend sleeping with your curtains open in your bedroom to let light in when the sun rises.
- Daylight alarm clocks (also known as sunrise wake up clocks) have been shown to be effective at helping re-set the cortisol balance, leaving us more energised and less stressed during the day.

### sweet dreams!

The more sugar that we eat during the day, the more likely we are to wake in the middle of the night. Even if you don't realise you are waking, the sugar in your system can pull you out of a deep sleep, leaving you feeling exhausted the next day.

Blood-sugar imbalance and mild hypoglycaemia can trigger your adrenals to release adrenalin to compensate for low blood sugar. Having adrenalin coursing through your body at 3 a.m. or 4 a.m. is sure to wake you up. So if you tend to get over to sleep okay, but find yourself waking a few times during the night, try cutting back on sugar and refined carbohydrates, and having some protein with every meal. This will help to balance your blood-sugar balance - and you could end up with the additional benefit of a good night's sleep too.

- sustained energy
- balanced mood •
- less sugar cravings
- better sleep



## sweet dreams!

#### To rebalance blood sugar levels:

- Eat less sugar. Start reading food labels to check your sugar intake. 5g or less per 100g is a low sugar level.
- Studies show that artificial sweeteners promote hyperactivity, insomnia and reduce sleep quality, so be careful that you are not replacing one sleep disrupter with another. Check for ingredients like sucralose, aspartame, saccharin, acesulfame K and sorbitol.
- Wean yourself off gradually and find healthier alternatives that you enjoy.
- Eat a little more protein at mealtimes. Eggs, meat, fish, chicken, nuts and seeds, dairy products, pulses, houmous, nut butters and quinoa are all good sources of protein. Protein tends to make us feel fuller for longer, making us less likely to reach for sugary snacks.
- Choose low GI, slow release carbohydrates like jumbo oats, wholegrains and root veg instead of refined and processed carbohydrate based foods.

### caffeine

We know that caffeine is a stimulant and although most people can tolerate a certain level, it can impact sleep quality and quantity.

Caffeine affect the nervous system, triggering neurotransmitters like dopamine to make us feel more alert and suppressing the sleep hormone, melatonin.

Caffeine begins to affect your body very quickly, with its stimulant effects typically being felt after 25-45 minutes and effects lasting for several hours.

It can take from 6-8 hours for the stimulant effects of caffeine to be reduced by one half.

#### Here's how much caffeine you can find in some common drinks and stimulants:



Item	Caffeine (mg) per serving	Caffeine (mg) per 100g
Brewed coffee	72	40
Brewed decaff coffee	1.5	1
Brewed tea	36	20
Cola	30	8
Reduced sugar cola	53	15
Red Bull	77	30
Dark chocolate coated coffee beans	s 336	869
Milk chocolate coated raisins	220	122
Jelly Belly Extreme Sport Beans	50	176
4Ever Caffeine Tablets	200	200
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For a good night's sleep, avoid caffeine in the late afternoon and evening.

Try herbal teas instead – look out for ingredients like lemon balm and valerian as this combination of herbs has been shown to be particularly effective for sleep and relaxation.

### sleepy foods

- Eggs, fish and walnuts, tomatoes, cherries, mushrooms and cereals are some foods that naturally contain melatonin.
- The amino acid tryptophan, found in foods like oats, bananas, milk, pulses and almonds, is required for melatonin production. Increasing sources of these foods in your diet has the potential to support sleep.
- Magnesium is sometimes known as nature's tranquiliser yet most people in the UK are deficient in it. Magnesium is found in dark green, leafy vegetables, nuts and seeds.
- Epsom salt baths are also a great way of topping up your magnesium levels and can help you relax and unwind at bedtime. Add a few drops of an essential oil like lavender or camomile to your bath then cocoon yourself in a duvet and prepare to sleep like a baby.

## Nutritious Nightcaps

A carefully chosen snack about 1 to 2 hours before bedtime may help balance blood sugar and reduce insomnia. Don't eat immediately before going to sleep as this may cause digestive issues. Try these ideas to help you catch some zzzs:

- Natural yogurt with cherries and flaked almonds
- 2 oatcakes with almond butter
- A small bowl of porridge with walnuts, cinnamon and grated apple
- Warm milk (or warm almond milk) with cinnamon, nutmeg and ginger
- A couple of kiwi fruit
- Camomile tea



### supplement your sleep

#### Brain-calming nutrients for successful sleep...

- **Magnesium** Magnesium is the key nutrient for sleep and yet it is also one of the most deficient. Supplementing with extra magnesium every day may help relax and calm.
- L-tryptophan is an essential amino acid, used by the body to make serotonin, an important neurotransmitter that is crucial for healthy sleep. Low levels of serotonin can lead to a disruption of circadian rhythms and restless sleep.
- L-theanine A little known amino acid found in large quantities in tea, particularly green tea, theanine has scientifically been shown to increase relaxing brain waves. Best taken in supplement form rather than in tea, to avoid the stimulating effects of caffeine and ideally a couple of hours before bed.
- **Milk Protein Hydrolysate** Milk Protein Hydrolysate (also known as Lactium) is the unique ingredient in milk responsible for its calming effect on babies. With known anti-anxiety properties and free of side effects, this innovative supplement is proving to be a useful natural sleep aid, particularly useful for individuals suffering from mild stress and anxiety.
- Vitamins B6, B12 & folic acid are important nutrients for promoting a sense of calm and for healthy balanced sleep too so make sure you are getting optimal levels in your diet.
- **Hops** have been used traditionally for centuries because of their calming, sedative effects and may be a useful herbal support for those struggling to wind down before bedtime.



### catch some zzzs...

#### Simple lifestyle changes can make a big difference to your quality of sleep.

- Maintain a regular sleep and wake pattern, seven days a week.
- Avoid daytime naps, as these can disturb the normal sleep / wake pattern.
- Avoid stimulants such as caffeine, nicotine, alcohol and even chocolate too close to bedtime. Alcohol may initially help you to get to sleep, but can disrupt sleep later on, with a stimulating effect as the body begins to metabolise the alcohol.
- Exercise can promote good sleep, although vigorous exercise is best in the morning or late afternoon, and relaxing exercise, like yoga, or t'ai chi may help to promote relaxation before bedtime.
- Avoid eating large meals before bedtime as well as new foods that you haven't tried before such as spicy foods.
- Ensure plenty of exposure to natural light in the daytime to maintain a healthy sleep-wake cycle.
- Establish a regular relaxing bedtime routine, which may involve a relaxing bath with a couple of drops of lavender essential oil.
- Keep your bed for sleep. If you're struggling with sleep problems, it's not a good idea to watch TV, listen to the radio, or even read in bed.
- Assess your sleep environment and make sure it is pleasant and relaxing, with a comfortable bed and that the room isn't too hot or cold, or too bright.

