

How to cure insomnia with your eyes shut

It's all about harnessing the power of your dreams, says *Professor Jason Ellis*, whose groundbreaking research has stunned sleep experts – including himself

There's every chance you will have been experiencing wild and crazy dreams over the past few months. During times of stress we are more likely to dream – and remember them – as the brain churns through different ways of coping. One of the most common scenarios seems to be

dreams of being chased around a supermarket.

But I have to be honest – despite my 21 years of experience studying sleep and my role as director of Northumbria Sleep Research Centre – dreaming has always played a very tangential role in my work.

Academic sleep experts research the life-altering impact of insomnia and we work with people whose lives are

blighted by a debilitating inability to sleep. In our field, dream research sits right on the very edge of the furthest periphery. It's not something we tend to talk about. Until now. Early last year I completed a research study which surprised me so much, I was initially reluctant to put the results forward for publication. I was genuinely concerned that I would be ridiculed for stepping too far away from measurable science, into the land of mystical 'woo-woo'.

But the results were undeniable: the study showed that teaching people with insomnia to control their dreams really can improve sleep. In fact, the process took the majority of the study participants out of the insomnia bracket completely.

Over a period of just one month, 37 of the 48 people who participated in the study successfully learned to →



'THE RESULTS OF THIS TRIAL HAVE BEEN UNPRECEDENTED IN THE FIELD OF SLEEP SCIENCE'



control their lucid dreaming process. And of those who did master the technique, an impressive 68 per cent kicked their protracted and troublesome insomnia into touch. No one could have been more surprised than me. I never thought I'd say this, but I am now a believer in the power of dreams.

WHY DREAMS ARE IMPORTANT

My interest in dreams was piqued when reading work by respected American neuroscientist Rosalind Cartwright, who demonstrated that dreams could play an important part in helping people process trauma such as divorce or bereavement. She found that what and how we dream about traumatic experiences can influence how quickly and how well we recover.

At the same time, a colleague of mine was conducting an insomnia study in which she woke subjects during REM sleep (which is the stage of sleep where you are most likely to experience colourful, fantastical and vivid dreams) to ask them about their dreams.

You'd expect waking people up like this would make their feelings of exhaustion worse, but to everyone's surprise, the researcher noticed that the process appeared to improve the subject's perception of their sleep.

This could be because the waking process served to reassure the subject that they were actually sleeping (when many people with insomnia believe they barely sleep at all). But we were intrigued by the idea that there might be something potentially useful in the dream itself, to which the subject would ordinarily be oblivious.

We needed to find a way of replicating this insomnia-busting effect without actually waking people up. That's where lucid dreaming comes in.

WHAT IS LUCID DREAMING?

A lucid dream is different from an ordinary one, as sleepers are aware that they are dreaming even though they're asleep. Some can even control what is happening in their dream. Around 70 per cent of people experience lucid dreaming at least once in their lives, some more frequently than others.

We are not sure precisely what is happening during lucid dreaming, but it appears to trigger interesting patterns of brain activity. Normal sleep (and daydreaming) shows relatively low brain activity on scans, but during lucid dreaming a number of areas of the brain light up in similar patterns to those expressed when someone is practising mindfulness.

Fortunately, one of my students had an interest in lucid dreaming and performed a small pilot study, using a well-known dream analysis technique (see opposite) to encourage people to become more aware of their dreaming process. When the subjects reported a



PUT NIGHTMARES TO BED

Scans show that the brain behaves differently when you are having a pleasant dream to how it behaves when you are having a nightmare. A technique called 'imagery reversal therapy' has been used to help people with post-traumatic stress disorder ease some of the stress and anxiety associated with their nightmares and bad dreams.

We don't yet know whether nightmares are bad for us, or whether they may fulfil a useful psychological function by helping us to develop problem-solving skills or learn how to deal with complex situations.

Reimagining the ending of a bad dream or the context of a dream during the day to make it less threatening may help frightening dreams seem more manageable.



measurable improvement in their insomnia scores, I was stunned. I was even more surprised when a second student had the same result for a similar pilot study, and I was very tempted to put both down to a fluke of science. But it was too bizarre and, after all my years of experience, I was still unable to explain the mechanism by which monitoring your dreams could be a strategy for managing insomnia.

So my only option was to conduct a proper trial. I was curious, and the idea of working with dreams and dreaming seemed like a fun distraction when my research is so often focused on long-established psychological techniques. In our study, we set out to investigate whether by encouraging lucid dreaming we could provide the subject with a period of 'mindful' sleeping which could improve their perceived quality of sleep.

The results of this latest trial have been unprecedented in the field of sleep science. The participants in the study reported waking each morning feeling refreshed, in control and emotionally strong.

No one is more surprised than me to be saying that I now believe teaching people to control their dreams may be helpful in easing intransigent insomnia issues. We still don't know exactly how this process works. It just does. And this research has heralded a whole new area for me, which I believe will help us to understand more about dreams and how they relate to mood, trauma and insomnia.

HOW IT IMPROVES SLEEP QUALITY

Even though some parts of the brain switch off during sleep, we believe that this may not happen entirely for those who report insomnia. So, at a time when parts of the brain should be 'down regulated' to rest, some don't go fully 'offline'.

This means the brain is attending to the environment, perceiving and remembering this information. Your body might be asleep, but your brain remains active. This is exhausting, and it helps explain how some people with insomnia will frequently report that they were awake much of the night, when sleep researchers observe them apparently sleeping well.

Because of the link between the brain's reaction to mindfulness and lucid dreaming, one theory is that lucid dreaming helps to calm an active mind.

Dreams could equally just be a 'rubbish bin' of concepts we no longer need to remember, rising to the surface of our consciousness as they pass through.

NOW TRY IT YOURSELF

In our insomnia study, we used four different techniques to train the participants, coaching them over a period of two weeks until those who could manage the techniques were extremely adept at controlling their dreams.

Here is the first technique we used. See if it works for you. It is designed to train your brain into being aware of when you are dreaming, and it helps to set up the ideal circumstances for lucid dreaming. The more you practise, the better you should get.

START KEEPING A DREAM DIARY

- ★ Put a notebook and pen by your bed or have your phone ready to record a voice memo.
- ★ As soon as you wake up, recall any dream you might

WHY DO WE DREAM?

- ★ One theory suggests that dreams enable our brain to process information and to help us learn how to handle challenging situations.
- ★ Dreams may help us process what we have learnt throughout the day.
- ★ Other researchers believe the function of dreams is to problem-solve emotional issues.
- ★ Dreams may simply be memories that we don't want or need to remember in the long term.

have had in as much detail as possible – you need to capture as much of its vividness as you possibly can.

- ★ Do this immediately (during the night if you wake up from a dream) because dreams dissipate very quickly in terms of their richness.
- ★ Write out the dream and underline or highlight any very obvious dream-like happenings (such as 'a monster chased me' or 'I flew'), which could never happen in the real (waking) world.
- ★ This process helps to positively reinforce the fact that you were dreaming, and that you are recalling an actual dream and not merely a sequence of anxious thoughts.

REHEARSE YOUR DREAM

- ★ During the day, take time to imagine yourself back in your dream.
- ★ Go somewhere for some peace and quiet, where you will be uninterrupted. Close your eyes and go back to your dream, replaying it in your mind.
- ★ You might like to change any unpleasant elements (such as 'I was completely naked') to a more comfortable alternative ('I was wearing comfy clothes').
- ★ Focus on the dream-like components that you previously underlined and visualise yourself being back in the dream and being fully aware of what is going on. Repeat this visualisation two or three times. This thinking and ruminating process is extremely relaxing for the brain and could contribute to the insomnia-busting benefits.

REMIND YOURSELF

- ★ Just before you fall asleep at night, remind yourself about your dreams, and have a last run through of your most evocative one, visualising yourself being back in there.
- ★ Focus particularly on the weird and wonderful dream-like happenings and remind yourself that these things happen only when you're asleep.
- ★ Tell yourself you *will* remember that you are dreaming, and that you will be looking out for 'dream signs' (the fantastical events, such as flying or time travel, which could only occur in a dream).
- ★ This reminding process increases the likelihood that you will dream and remember it (the exact same dream won't necessarily recur).