

# The Importance of Sleep by Tessa Jupp RN

If you are old enough to remember . . . I mean before TV (Channel 7 started in 1959 in WA) **Friday night at the pictures was Kids Night** and **Saturday night was Family Night**. We didn't go every week, it depended on what was showing but I always thought it was a waste of time my sister going (she is only a year younger than me) because she was often asleep while the trailers were on - before the main film had even started. Whereas I was always wide awake till the end of the film 10.30 - 11pm! Dad carried her out to the car, fast asleep. I had to walk to the car because I was still awake. My sister still goes to bed and gets up with the birds, and I am still a night-owl.

**Everyone has their own night-time sleeping patterns.** They are programmed into us and we shouldn't change them. Interestingly, a study published in **Diabetes Care** in **2015**, reported on a **study of over 64,000 Nurses** looking at the relevance of natural **early-risers (larks)** or **late-to-bed (night-owls)** people, shift-work and the development of diabetes and cancers, including breast cancer.

What they found was that we should have jobs where the work time fits with our natural sleep-time patterns. They found an equally poor long-term health effect for "larks" having to work late shifts, and for "night-owls" to have to get up for a 7am start. It was found that 35% were "larks", 54% middle-of-the-road, and 11% were "night-owls".

## The Results of the Study:

**"Imposing both partial sleep deprivation and circadian misalignment on participants resulted in decreased metabolic rates, increased plasma glucose levels, decreased insulin sensitivity; and work schedules that constrained individual natural sleep timing were associated with obesity. In conclusion, the results suggest that if work times interfere with individual natural circadian sleep timing, shift and day workers may be at an increased risk for type 2 diabetes."**

So when we go to bed is important and very individual. Our health suffers if we try to go against our natural pre-determined inclinations. **Sleeping problems** amongst WA polio survivors escalated **from 36% in 1989 to 80% by 2004**. This has reduced to 73% in 2014 since I have been working on ways for us to improve our sleep.

The problem of getting a good night's sleep has increased in the normal population of late as well and the results of our survey of polio survivors in the other Australian states show levels of poor sleep ranging from 84% in SA and Vic to 88% in NSW, Qld and Tas. So this is a real problem and there are more dire health consequences than just being tired and grumpy.

In the risk factors for raised blood sugar and diabetes that I mentioned in previous newsletters this year, not getting 7-8 hours sleep features, as well as being under stress.

**People get stressed just because they think they are not getting enough sleep.** My mother used to **worry** so much that she wouldn't be able to get back to sleep if she was woken up - that I had a 12 midnight curfew when I lived at home in my twenties, before I was married!

I am one of the lucky ones! I am usually asleep as soon as my head hits the pillow and can go straight back to sleep if I wake during the night. In fact I feel cheated if I don't wake a few times during the night - just to see how long the night is! - and these wakes are usually at the end of the REM times, as in the chart below. But I can't get to sleep if I go to bed too early - and my natural pattern is to sleep in later. So I get a lot of my work done late at night.

My husband used to be envious as it took him half an hour to get to sleep. One of my sons is like me and the other like him. The same with two of my grandchildren.

So why are we all so different?

When I was a kid we had a definite sleep-time routine. After tea we read or played cards, (or watched TV when it came in) then had a hot bath, supper (hot milk cocoa, crackers and cheese or home-made cake) off to bed and out like a light.

Having a hot bath stimulates the parasympathetic nervous system which activates while

we are asleep so **being warm helps us get to sleep**. The sympathetic nervous system is active when we are awake and is stimulated by cold. So a cold shower wakes us up, & **being cold or having a cold bed will keep us awake**.

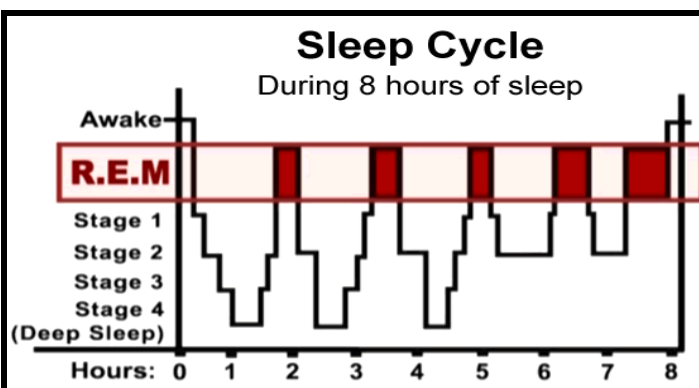
There are definite stages to the sleep cycle and if we don't sleep enough hours, we don't get the benefit we should.

**Stage 1** is a light sleep from which we are easily woken.

We begin to lose muscle tone, causing twitches and jerks

**Stage 2** is marked by a loss of nearly all muscle tone. We spend around half of all your sleep in Stage 2; a light dreamless sleep.

**Stage 3 and 4** is known as slow-wave, a dreamless stage of sleep; it is actually the most likely time for sleepwalking to occur. **REM Sleep** marks the onset of **dreaming**. **REM sleep** deprivation impairs our ability to learn complex tasks and **form long-term memories**.



# Common Sleep Problem Solutions by Tessa Jupp RN

Not getting enough good quality sleep (7-8 hours) means that we cut short these sleep cycles and they do have a purpose. If we imagine our bodies like the supermarket at night, shelves are restocked, rubbish cleaned up and thrown out and tills tallied up and recorded. Everything is readied for the next day and our bodies do this while we sleep as well. Three of the most common complaints I get from people are:

## 1. I have trouble falling asleep at night.

The short answer to this one is - **ZINC** will usually fix this.

In simple terms, zinc is low in our soil and most people are short on zinc. Taking extra **Zinc turns off** all the “**racing**” thoughts going round and round in the brain. I liken it to shutting down our “brain computer” and doing a “**save**”.

We need zinc to commit short term memory from today’s happenings to long term memory, so we can remember important events later.

You may have heard of taking **melatonin** and **GABA** or even **5HTP** to help us sleep. We don’t have to buy these. Our bodies normally make them as long as we have enough of the ingredients. **Zinc** is the major one we are missing so we should start there.

**Melatonin** results from the breakdown of an essential amino acid called tryptophan, which is found in most protein-based foods but is particularly plentiful in **chocolate**, oats, dried dates, **dairy foods**, **red meat**, eggs, fish, poultry, sesame seeds, almonds, sunflower and pumpkin seeds, bananas, and peanuts. We need zinc, B3, B6, C and magnesium to convert these foods to **tryptophan** then to **5HTP** then to **serotonin**, and then into **melatonin**.

So this is where the **hot cocoa**, and **cheese and crackers** for supper, came in when we were young. We also need a dark room for the body to make melatonin, so pull the curtains and switch off or hide any night lights, including clock radios. Uncover if you need to get up for the loo.

**GABA?** - to make it we need glutamine and taurine (best taken in the morning) and again B6 and then zinc at night.

## 2. I wake after a few hours and can’t get back to sleep.

A. Again, try **2 more zinc** as GABA is needed to get back to sleep. Also **magnesium**, potassium (soup or veggie water), glycine (**gelatine** - jelly or jelly lollies) or **chocolate**. Avoid artificial sweeteners, coffee, MSG or taking too much glutamine (and don’t take it at night as glutamine is for mental alertness during the day).

Other things that keep us awake are **restless legs or cramps** (need more **magnesium**) **pain** (often need magnesium for muscle aches - try **cutting out cheese and yoghurt**; take **manganese** for painful hip or shoulder or stiffness; **gelatine and borax for arthritic pain**).

Frequent **trips to the loo** and incontinence may respond to taking **cranberry tablets** - not juice, it is too sweet.

If we eat sweet foods before bed this can cause a rise in blood sugar, followed by a sharp dip a few hours later which wakes us. Getting up to go to the loo and **voiding** will raise blood sugar, which may then allow you to go

back to sleep. A better idea is a bit of **protein for supper** - ie crackers with cheese, egg or fish to even out blood sugar. Nuts and seeds or carrot/celery sticks act as resistant starch so help maintain an even blood sugar too.

### MOST COMMON SLEEP COMPLAINTS

#### 1. I have trouble falling asleep at night.

A. Zinc chelate 220mg x 4 taken 30 mins before bed. Take magnesium before bed too. Have a hot bath/shower before bed

#### 2. I wake after a few hours and can’t get back to sleep.

A. You need more GABA - so take glutamine and taurine + B6 in the morning and zinc chelate x 4 before bed. Have some protein for supper and eat some chocolate. Jelly helps too. Fix pain problems.

#### 3. I wake up every morning feeling tired.

A. You are not getting enough dream time.

Check for **sleep apnoea** - do you snore?



#### 3. I wake up every morning feeling tired.

A. You may **not** be getting enough dream time. Dreams are one of the ways your brain consolidates memories. During dream time, your brain can reorganize and review the day’s events. It also connects new experiences to older ones. That’s why getting enough REM sleep can enhance learning as well as memory.

The second thing that happens during REM sleep is that your body’s muscles completely relax. This state of relaxation allows you to feel energized and rejuvenated the next morning.

As you can see, REM sleep is crucial to helping you feel sharp, healthy, and well-rested during the day. But if you are getting plenty of shuteye and *still* waking up tired, it may be because you’re not getting enough REM sleep. Lack of health-restoring REM sleep leaves you drowsy and fatigued the next day. It makes it hard to focus, remember names, or recall where you put your car keys. Even worse, it can do lasting damage to your memory. Taking Vitamin B3 in the morning can help you make more 5HTP which helps your dream time. L-theanine is a substance in green tea that helps as well and sea salt has 84 minerals you need

### Salt vital for sleep regulation



• **Before getting into bed** drink a full glass of water then **put a few grains** of good quality **sea salt on your tongue** as you lay down and let it stay there.

• You will fall into a natural **deep sleep!**

• (Don’t take salt without the glass of water – it can make your nose bleed.)

# What Your Sleeping Position Says About You and Your Health

by Chief Scientific Advisor, Dr. Victor Marchione, M.D. 14 February 2014

Tossing and turning, getting cocooned by the sheets, or waking up several times during the night by your partner's snoring? If this happens on a regular basis, you may be sleep-deprived. You're bound to wake up feeling groggy and miserable, no matter how much coffee you drink to perk you up.

There's no two ways about it. Sleep, I always tell my patients, is crucial for your health. It bolsters your immune system so you can fight off illness. It gives your body a chance to repair and reset, your subconscious mind time to roam free, and helps keep your weight in check. Adequate sleep is linked to numerous benefits, including better memory, curbing inflammation, and, take note: a happy marriage. Since we sleep for a third of our lives, it's going to have a significant impact on our day-to-day. So, if things aren't perfect under the covers, it's time to take a look at your sleep position and how it could affect your health.

## On Your Back

Sleeping on your back is the best position to get proper rest. The back-sleeper maintains the back, neck and spine in a neutral position, making it better for your body's alignment, especially if you're prone to back pain, stiffness or problems. The back position is also good for circulation to the brain and preventing acid reflux. When the head is elevated (a single, puffy pillow is recommended), your stomach sits below your oesophagus so acid or food can't come back up. While it's best to avoid foods that irritate or cause acid reflux, this is a reassuring technique.

For back-sleeping, some holistic therapists, such as acupuncturists, suggest placing your hands, palms down, first on your chest, then waist, then belly to find the most comfortable resting place for the hands and to fall asleep faster.

In a recent survey out of Britain on sleep positions, 1,000 people responded to questions about their sleep habits. Researchers found a possible co-relation between sleep position and personality. The back position with both arms straight at your sides is called the "soldier;" it was the first choice for best sleep position for 8 percent of study participants. Like its namesake, personality traits associated with this position include self-disciplined and reserved with high expectations for themselves and others.

However, the back is not the best position for those with a tendency to snore; the base of the tongue falls to the back wall of the throat which causes a vibrating sound as you breathe. To head off snoring, try sleeping on your side.

Another version of the back-sleeper is the "starfish" - those who lie on their backs with legs sprawled and arms stretched out beyond the head. In the British sleep survey, starfish sleepers don't like to be the centre of attention, but say friendship is a priority, along with tending to the needs of others.

## On Your Side

Side sleepers, good for you! Next to the back, sleeping in this position is good for your overall health. Even better, sleep on your left side, which helps ease acid reflux.

Side-sleeping reduces snoring. Also, sleeping on your left side is the best position during pregnancy; it boosts circulation to the heart, so it's also a boost for baby. Pregnant women should not sleep on their back because of the extra pressure and weight this puts on the spine.

What's your personality when you're a side-sleeper? If you're in the "log" position - lying on your side with legs straight and arms resting at your sides, you're reportedly easy-going, social and trusting, while a little gullible at times, according to the British survey.

And if you side-sleep with both arms stretched out in front, you're in the "yearner" position. The yearner is described as open, but also cynical and suspicious. You're slow to make decisions, but when you do, you stick to them.

## Curled Into Foetal Position

Retreating into the foetal position, with your knees pulled up high and your chin tucked into your chest may seem like the ultimate security blanket, but it's not so good for your health. It restricts your deep diaphragmatic breathing and puts pressure on your organs, not to mention your spine. People with an arthritic back or joints will only feel more irritation. Straightening out a little can help make this position work better for you. In the foetal position, face wrinkles will be aggravated, although snoring could improve.

In the survey of sleep habits, "foetal" was the most popular among men and women, with 41 percent choosing it as their favourite. The associated personality type is the hard shell and soft underbelly: People with a tough exterior, but shy and sensitive under the surface.

## On Your Stomach

Not good, not good! Sleeping on your stomach is bad for your spine. Twisting your neck and face to the side all night on the pillow will cause aches and pains and further discomfort. It puts added pressure on muscles and joints that can snowball by irritating nerves, resulting in numbness and tingling.

Face-down keeps your upper airways more open. So if you snore and aren't suffering from neck or back pain, it's fine to try sleeping in this position.

In the personality sleep study, stomach-sleepers are called "free-fallers." They sleep on their stomachs, while the head turns to the side and the arms curl around the pillow. Free-fallers are considered sociable and brash, but often have inner anxiety and sensitivity to criticism.

Sleep is important; it leads to better health and marriage harmony. Although it's hard to own up to, many of our sleep problems are the result of our own bad habits. We sleep in or

we stay up late. We have a drink late at night - alcohol disrupts our sleep - or we eat foods that disagree with us that also mess with our sleep rhythms. These habits, over time, teach our body not to sleep, and leave us turning to sleeping pills for relief, or computer work in the middle of the night to pass the time. Now's the time to take our sleep seriously, instil good sleep habits of regular bed and wake times, a completely dark, cool room, no screens before bedtime and, of course, a sleep position that's good for our health and helps us work through our personality quirks.

