## A good nights sleep... if only it was that easy!

## **By Marcus Webb**

On the surface of it, a good nights sleep would appear to be one of those fundamental processes that should simply happen when your head hits the pillow. After all, of you feel tired or fatigued it would make perfect sense that you should welcome the chance to have a sleep but as so many fibromyalgia and chronic fatigue (FM/CFS) sufferers will testify, you can be fatigued but at the same time suffer paradoxically severe insomnia. As the American comedian W C Fields so aptly quipped "The best cure for insomnia is to get a lot of sleep"... if only it was that simple!



Before we look at ways of promoting sleep understanding some sleep basics is a good idea. Broadly speaking, sleep can be split into two main categories; the deep sleep state known as rapid eye movement sleep (REM sleep) and the stages of lighter sleep known as non-REM sleep. During a typical night, a good sleeper will cycle between REM and non-REM sleep 4-5 times interspersed by occasional mini-wakes lasting 1-2 minutes every couple of hours. The loss of the ability to migrate into REM sleep or return to sleep after a mini-wake typically characterises the condition known as non-restorative sleep disorder, a common 'bed-fellow' in cases of FM/CFS. Stress and anxiety os a very common factor that underlies this pattern of disturbed sleep and one that is known to have a severe impact on night time cortisol levels. Cortisol is a key sleep regulating hormone and one that is commonly out of balance in FM/CFS cases.

In health, cortisol levels normally decline at bedtime. This helps to facilitate a calmer brain and nervous system and encourages the sleep process to begin. When we are anxious or stressed cortisol is released in higher amounts and this level does not drop at bedtime.

As a result, sleep becomes deregulated when we are stressed and we lie awake in a state of hyper-vigilance; after all, your body would not want you to sleep when running from a tiger! Simply taking sedatives to force a state of drugged sleep is not really the answer but there may be a solution in the form of a natural agent known as phosphatidyl serine (PS). Originally, PS was isolated from animal tissue but modern extraction methods now ensure that supplements supply ultra pure PS derived from soya beans making it suitable for vegetarians.

When scientists were investigating the effects of PS on the stress response they noted something quite amazing. In healthy volunteers exposed to a biological stressor such as using an exercise bike their levels of stress hormones (including cortisol) shot up. However, when the same volunteers took PS before their cycling task there was a significant drop in the release of cortisol. They concluded that PS can influence the complex chemical cascade that ultimately results in elevated cortisol. Armed with this knowledge, PS was rapidly adopted by those with stress-related sleep disturbance with some very positive outcomes. It would appear that a single capsule of a 500mg dose of PS complex (containing 100mg of actual PS) 30-60 minutes before bed works well but some may need to use PS on an ongoing basis for a few weeks before the full benefit can be appreciated. This dose can be increased to 2-3 capsules if needed. In general, PS is a safe supplement with minimal risk of drug-nutrient interactions. However, drugs taken for Alzheimers disease (Acetylcholinesterase (AChE) inhibitors) can interact with PS since PS and the drugs both increase the levels of acetylcholine. Similar cautions should be extended to drugs that manage glaucoma. If in doubt, you should always talk to your pharmacist or doctor.

## **Resources:**

500mg phosphatidyl serine complex (containing 100mg of phosphatidyl serine) is available from: www. supersupps.com