

November 2018 [www.sleepapnoeanz.org.nz](http://www.sleepapnoeanz.org.nz)

## President's Message

Greetings Members,

I'm just back from 2 months of travelling around the world - visited our family in Kentucky and then took the opportunity to travel in France, Italy and Croatia. It was a good trip but has definitely reminded me that I'm getting older. With the AGM fast approaching it is time to take stock and think how we can manage to keep SAANZ alive and supporting members, while allowing some of us who have been working away for quite a few years, to look at what our future input will be. No decisions have been made at this point, but it certainly needs to be on the agenda for the AGM. So come along if you are in the area, and particularly if you think you could contribute to the organisation in some way. I know we have one member who has expressed an interest in helping out, so hopefully we will discover some more. You don't need to be in Auckland as our meetings are mostly held online these days. Please get in touch if you would like to join us and we will see if we can find a way of bringing you on board. Email [saanz.editor@gmail.com](mailto:saanz.editor@gmail.com) or phone 021344253.



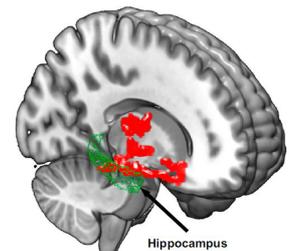
This meeting will be held In The Stewart Building at Fisher & Paykel Healthcare, Maurice Paykel Place, East Tamaki, Auckland on Wednesday 21st November at 6pm. As with previous years' formats we will have a finger food meal to start the evening, followed by the annual meeting and concluding with an informal support meeting. Alex Bartle (Hon Advisor), Pru Murray (F&PH) and Warren Jones (NZ Sleep Foundation) have expressed their intention of being there and contributing to our support meeting. Details will appear on the website. All welcome.

Keep healthy and sleep well.  
Jill Hammonds  
President / Editor

## A Small Study From the United States Has Indicated That Losing Just One Full Night of Sleep Can Elevate Levels of a Protein in the Brain Associated With Alzheimer's Disease.

The study examined a group of 20 participants aged between 22 and 72 years after a night of rested sleep and after a night of sleep deprivation, with the participants staying awake for around 31 hours.

Following the night of sleep deprivation, the researchers scanned each participant's brain using positron emission tomography (PET) and found that levels of beta-amyloid, a metabolic waste product found in the fluid between brain cells that is strongly associated with Alzheimer's, increased by about five per cent.



The increase of beta-amyloid occurred in the thalamus and hippocampus, two regions of the brain that are especially vulnerable to damage during the early stage of Alzheimer's Disease. A hallmark of Alzheimer's Disease is the tendency for beta-amyloid proteins to clump together to form amyloid plaques, which then negatively influences the communication between neurons.

While ongoing sleep deprivation can elevate brain beta-amyloid levels of mice, far less is known about the impact of sleep deprivation on beta-amyloid levels in the human brain. This study is one of the first to demonstrate just how important sleep is for clearing levels of human beta-amyloid.

Beta-amyloid levels are estimated to increase by around 43 percent in individuals with Alzheimer's disease, as opposed to healthy older adults. It is not known whether the higher levels in beta- amyloid among the study participants would subside after a full night of sleep.

Another interesting thing that the researchers found was that participants with the largest increases in beta- amyloid reported the worst mood changes after sleep deprivation. They noted that even though the study sample was small, the research demonstrates the negative effect of sleep deprivation on beta-amyloid burden in the human brain, but future studies are needed to assess the results in a larger and more diverse population.

It is important to note that the link between sleep disorders and Alzheimer's is considered 'bidirectional,' since elevated beta-amyloid may also lead to sleep deprivation.

The researchers said the study provides a new insight into how a lack of sleep can impact the brain, and that the results may help health practitioners better treat Alzheimer's.

<https://www.niaaa.nih.gov/news-events/news-releases/lack-sleep-may-be-linked-risk-factor-alzheimer%E2%80%99s-disease>

## FINDING THE CAUSE OF EXCESSIVE DAYTIME SLEEPINESS

By Michelle Chadwick

Daytime sleepiness has a significant impact on quality of life. People with daytime sleepiness struggle with social, academic and work demands, plus are at risk of motor vehicle and workplace accidents and generally have poorer health than comparable adults.



Accurate diagnosis is important, not only because of the negative impacts of sleepiness and its root causes on health and social function, but because excessive sleepiness is generally remediable with appropriate treatment. The list of possible causes of excessive daytime sleepiness spans virtually every major area of medicine, neurology and psychiatry. A clear, detailed history is invaluable in negotiating these numerous diagnostic considerations.

To assist patients and doctors when considering the cause of daytime sleepiness, we have compiled a list of known causes and routine tests. *Please note: there are numerous possible causes. This is by no means a complete list. It is intended as a guide to assist you and your doctor find the cause of your excessive daytime sleepiness.*

### Causes of Daytime Sleepiness

#### *Sleep Disorders*

Behavioural sleep deprivation

The most common cause of daytime sleepiness is insufficient sleep or poor sleep hygiene.

#### *Sleep-related breathing disorders*

Sleep apnea, residual sleepiness in treated obstructive sleep apnea and upper airways resistance syndrome.

#### *Other sleep disorders*

These include circadian rhythm sleep disorders (Delayed Sleep Phase Syndrome, shift work disorder), REM Sleep Behaviour Disorder and other Parasomnias, plus post-traumatic hypersomnia (following head trauma or illness), insomnia, narcolepsy, plus sleep-related movement disorders (Periodic Limb Movement Disorder, Restless Legs Syndrome.)

#### *Psychiatric*

Include mental health conditions such as depression, anxiety and bipolar.

### *Medical conditions*

Other medical conditions associated with sleep fragmentation, resulting in daytime sleepiness include irritable bowel syndrome (IBS) arthritis, spondylosis, chronic pain, nocturnal angina, epilepsy, asthma, chronic obstructive pulmonary disease, alcoholism, urinary dysfunction, gastro- oesophageal reflux and gastrointestinal disorders.

Other conditions include head trauma, stroke, cancer, inflammatory conditions, encephalitis, Chronic Fatigue Syndrome, Malformation, MS, neurodegenerative conditions (Parkinson's Disease, myotonic dystrophy) Fibromyalgia, Hypothyroidism and Ehlers-Danlos Syndrome.

### *Medication effects*

Includes prescription, non-prescription, and drugs of abuse – refer to the list of medications on the next page.

### *Other considerations*

Hypersomnia may develop after a viral infection, such as mononucleosis (glandular fever/mono) or Guillain-Barre syndrome.

Patients may experience fatigue and hypersomnolence and can sleep most of the 24-hour day. The outcome tends to be favourable, however, the resolution may take months or even years.

Long sleepers, also called 'healthy hypersomniacs', are people who require more sleep at night than normal. They may be misdiagnosed with idiopathic hypersomnia (IH) because of extremely long sleep episodes at night. They are usually alert once they have obtained their required amount of sleep.

Excessive daytime sleepiness affects at least 20 percent of the population and identifying the underlying cause can prove difficult.

While it may be tempting for a doctor to diagnose IH in cases of excessive daytime sleepiness of unknown cause, this does a gross disservice to the many patients that do not meet the clinical definition of IH, which is a neurological disorder diagnosed by identifying key clinical features and by a thorough exclusion process.

Unfortunately, a lack of awareness and proper understanding of what these key clinical features are and a less than thorough exclusion process results in misdiagnosis and unnecessary prescription of stimulant medications. It also results in the underlying cause remaining unidentified and untreated.

### **Routine tests to consider for causes of daytime sleepiness**

- Sleep Apnoea
- Thyroid tests should include: TSH, Free T3 (FT3) Free T4 (FT4) Reverse T3 (rT3), and thyroid antibodies for Hashimoto's Thyroiditis
- Nutrient deficiencies including vitamin D (25-Hydroxy) B12 and serum folate, magnesium, zinc, iodine and selenium.
- Iron studies: Iron, TIBC, %Sat, Ferritin
- Carnitine panel: free, total, esterified, esterified/free
- C-Reactive Protein
- Complete Blood Count
- Complete Metabolic Panel (glucose, sodium, creatinine)
- Cortisol

## **Nutrition Corner**

Salad time is here again. Here's a recipe to get you started.

### **Chili Lime Southwestern Chicken Salad**

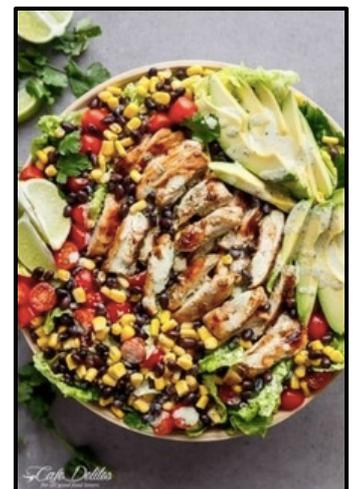
A Chili Lime Southwestern Chicken Salad with a low fat and CREAMY Cilantro Chili Lime Dressing that doubles as a marinade!

Servings: **4**

Author: Karina - Cafe Delites <https://cafedelites.com/>

### **Ingredients**

- 4 skinless , boneless chicken thigh fillets
- Marinade/Dressing:
- 2 tablespoons olive oil



- 1/3 cup freshly squeezed lime juice
- 4 tablespoons fresh chopped cilantro (or flat-leaf parsley)
- 2 cloves garlic , crushed
- 1 teaspoon brown sugar
- 1/2-3/4 teaspoon red chilli flakes (adjust to your preference of spice)
- 1/2 teaspoon ground Cumin
- 1 teaspoon salt
- 1/4 cup plain greek yogurt (or sour cream) -- FOR DRESSING ONLY

#### Salad:

- 4 cups romaine (cos) lettuce leaves, washed and dried
- 1 cup grape / cherry tomatoes , halved
- 1 ripe avocado , sliced
- 1 cup black beans , washed and rinsed
- 1 cup corn , washed and rinsed

#### Instructions

1. Whisk marinade ingredients together to combine, or pulse in a magic bullet using a small cup OR a small food processor until blended (all except for the greek yogurt). Pour half the marinade into a shallow dish to marinate the chicken fillets for two hours if time allows. Refrigerate the reserved untouched marinade to use as the dressing.
2. Heat about one teaspoon of oil in a grill pan or skillet over medium-high heat and grill chicken fillets on each side until golden, crispy and cooked through. (Grill in batches to prevent excess water being released.) Once chicken is cooked, set aside and allow to rest.
3. Slice chicken into strips and prepare salad with leaves, tomatoes, avocado slices, black beans, corn and chicken.
4. Prepare dressing with remaining marinade/dressing with the 1/4 cup greek yogurt; mix well to combine OR pulse in a small food processor or magic bullet small cup.
5. Drizzle the creamy dressing over the salad; divide into 4 bowls and serve.

#### Fitness Tip



Walking is still one of the best forms of exercise you can get. Getting out and walking 30 minutes a day on 4 days of the week is a great start. If that seems daunting then start with 10 minutes twice a day on 4 days of the week and gradually build. Build it into your daily routine so that it becomes automatic. Perhaps make it the thing you do after brushing your teeth in the morning, or before you sit down for that morning coffee or tea. If you're working, try a 10 minute walk in your lunch break and another 10 minutes as soon as you arrive home after work (leave it until you've had a quick rest and it will never happen.) If you commute by bus, get off one stop earlier and build up to more - maybe on a nice evening you might walk quite a bit of your commute.

#### Q&A - questions submitted via the website and support meetings

**No questions this quarter.**

Check out the website questions section [http://www.sleepapnoeanz.org.nz/frequently\\_asked\\_questions.shtml](http://www.sleepapnoeanz.org.nz/frequently_asked_questions.shtml)

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