



Sleep Times

NEWSLETTER

Message from your president



We are now able to report that the local area support group meetings are being planned with the first of these having been organized for Whangarei on the 31st May. Subsequent area meetings are yet to be confirmed with details to be notified at a later date. We would encourage you to support these as we are arranging some high profile speakers to address these meetings. There will be a lot to be gained from your attendance where there will be ample time for questions and answers. We still need some contact people for some regions who can help us to locate suitable venues. Please contact the secretary if you are able to help. Saanz.secretary@gmail.com

Elaine Bryant

Alternative Power Source for CPAP

Further to the article in our last newsletter regarding this subject we have had some feedback from two members:

The first was a member with a motorhome who stated that they had installed two new house batteries at the end of last year and had an 80watt solar panel on their motorhome. Over Easter they had four brilliant days of sunshine but it was apparent that there was ample power in the batteries to last all night with the CPAP going for eight to nine hours without any severe drain on the batteries and then with them being fully charged again the next day.

LESSON LEARNT – good batteries, efficient solar source, plenty of sun.

The new batteries were probably the secret as they would hold their charge a lot better.

The second feedback was from a member who tried one of the power packs mentioned in the last newsletter only to find that they only got a little over three hours operation on the CPAP before running out of energy. The member was able to return the unit and get a full refund as it was not fit for purpose and performed below the advertised expectations. There seem to be some varying results from power packs so you need to be cautious and research your application before making a purchase. We recommend that you also arrange to be able to return the power source with a full refund if it does not perform sufficiently to give you a good night's sleep. This situation leads to the comment made in the last newsletter that a more high efficiency unit needs development.

On a similar vein, we recently found an article online about alternative power sources for CPAP users, which gave detailed information on how to set up to run CPAP from deep cycle batteries and listed the gear you would need to purchase. The article is too long to run fully in this newsletter but can be accessed online at

<http://tinyurl.com/CPAP-batteries>

Any members who do not have internet access, but who would like to read the full article, can contact Jill Hammonds (newsletter editor) on 021 344253 and she will post a copy to you. However below is the information on battery types and all importantly, a safety warning.

Li-ion Batteries

These types of batteries are currently the most power dense batteries that are readily available. Most of them weigh 3-4 lbs and are about the size of a medium sized book. This type of battery is extremely popular because it recharges quickly and does not suffer from the memory effect. Memory effect is when you only discharge a battery partially and then recharge it. The battery sees that partial discharge as its empty point causing it to have dramatically less capacity. Li-ion batteries do not suffer from this and can be charged daily despite usage. The Super CPAP battery Packs are available in several sizes including the C-150 and C-222.

Gel Batteries

These are the types of battery generally used by Durable Medical Equipment companies. They are used for electric wheelchairs, back up power and other similar applications. This is the type of battery I recommend for several reasons. It is a deep cycle sealed battery, like the AGM battery. There is no maintenance, except external cleaning (a simple dusting). It has a very low self-discharge rate retaining 50% charge after 16 months of no use. The Gel is capable of over 500 full discharges. This type of battery can be purchased at Marine stores, Recreational Vehicle stores, DME companies and Battery distributors. One disadvantage of a Gel battery, unlike the AGM or Flooded batteries, is that the Gel battery does not tolerate a fast high amp recharge without some damage. So using your car to charge a Gel battery should be done only in an emergency situation.

AGM Batteries

AGM batteries were originally designed for military aircraft. This is a sealed deep cycle battery that will not release gases or spill acids if tipped over or moved. This is a good battery to use indoors. It has the same qualities as the Gel Battery described above, except that it will take a fast high amp charge with little or no damage to the plates. This type of battery can be purchased at Marine stores, Recreational Vehicle stores, Battery distributors and possibly at Airplane stores.

Flooded Batteries

Flooded batteries are the type you use in your car, even the so-called maintenance-free ones. They come in two types, starting batteries and deep cycle batteries. The one in your car is a starting battery; a deep cycle battery is usually used in a Recreation Vehicle or Boat. You MUST have a deep cycle type as the primary back up for your CPAP.

Deep cycle means the battery can be totally discharged and then fully charged over and over again without damage to the battery plates. This type of deep cycle battery will run your unit, but is not recommended for use indoors except in an emergency. This type of battery can be purchased at auto parts stores.

Safety Warning!

Any battery capable of running your CPAP contains a substantial amount of energy. You should exercise proper precautions in working with any battery. Shorting the positive and negative terminals of the battery will not only create a nice show of sparks, in some circumstances it can also cause the battery to explode.

You should also be careful not to reverse the positive and negative connections from the battery to the CPAP. It's possible that the incorrect current could damage the CPAP.

You CANNOT use a Flooded battery in the house unless it has good ventilation. Flooded batteries vent hydrogen gas into the atmosphere, and hydrogen accumulations greater than 4% are flammable. DO NOT recharge a flooded battery in the house, as an overcharged battery will "gas" or vent excess hydrogen and oxygen, which can be very flammable. Flooded batteries also contain corrosive battery acid that can be spilled and will ruin carpet or finishes on floors.



Nutrition Corner – Superfoods for busy people



Leafy greens: Having leafy greens around is a great way to boost nutrition, as most are rich in vitamins A, C, and K and folate. Make spinach salads, use romaine on sandwiches, add some greens to your family's favourite smoothie.

The Incredible Egg: Rich in protein and one of the richest sources of choline. The best part is they are easy to prepare either scrambled or boiled.

Hummus: This wonderful food is a good source of protein (from the chickpeas) and healthy fat from olive oil. Try it rolled up in a tortilla/wrap for quick lunch or mixed into lasagne.

Nuts and seeds: With protein and healthy fats, nuts and seeds are perfect for making snack mixes with dried fruit and whole grain cereal.

Canned salmon: Salmon is definitely a super food — rich in omega-3 fats, DHA and EPA, and also a source of protein and vitamin D. Canned salmon is one of the most convenient and cost-effective ways to enjoy it. Just mix it with some olive oil, yoghurt, and small apple chunks and you have fillings for a sandwich.

Whole Wheat Bread: While there are a lot of whole grain options, whole grain bread is one of the easiest to incorporate in sandwiches, grilled or plain.

Yoghurt: Where else can you get calcium and friendly bacteria along with nutrients like protein, B12, phosphorus, and potassium in one little package? Topped with nuts, you have the perfect snack.

Beans and Peas: Foods that double as both a protein source and a vegetable. Beans are easy to prepare and are rich in fibre, protein, and other nutrients. They are filling as well thanks to their soluble fibre content.

Sleep Apnoea and Driving – not just a truckie's problem – we all need to take note.

Alarming rates of sleep apnea in Australian truck drivers

<http://www.georgeinstitute.org/news-and-events/news/alarming-rates-sleep-apnea-australian-truck-drivers>

New research has revealed a high rate of sleep apnea among commercial truck drivers.

“We found that truck drivers participating in the study significantly under-assessed the level of disturbed sleep and consequent daytime sleepiness they experienced. We know that obstructive sleep apnea significantly increases crash risk in car drivers, so these new findings highlight a real danger for road users”, said lead author, Ms Lisa Sharwood.



Ron Grunstein, Professor of Sleep Medicine, CIRUS, University of Sydney and co-author of the research said, “The aim of the study was to determine whether self reporting sleepiness levels were an accurate tool to identify OSA. The question of self reporting sleepiness levels is very important because Australian truck drivers are required to complete the ESS questionnaire as part of a medical examination to obtain a commercial motor vehicle licence”.

Through interviews and a self-reported ‘sleepiness’ scale used worldwide, only 12% of drivers said they experienced daytime/waketime drowsiness. **However the study results showed at least 41% to have had actual disturbed sleep caused by obstructive sleep apnea (OSA), measured by a**

breathing monitoring device at home. OSA results in fragmented sleep and reduced oxygen circulating in the blood due to repeated airway closure.

Prof. Mark Stevenson, Director of the Monash University Accident Research Centre in Melbourne and study lead investigator said, "This study has important implications for licensing truck drivers as it shows that current licence requirements would not identify those with sleep disorders. These findings show there is a significant difference between self reporting and clinical testing for OSA and related sleepiness.

"We know there is an elevated risk of crashing in drivers with untreated OSA therefore it is important that truck drivers—behind the wheels of the largest vehicles on the road and at times with combustible freight—should be tested with a diagnostic tool that does not rely on self-reporting", said Prof Stevenson.

So, while truckies have been identified here, this is an issue we should all give thought to. I wonder how many of you know people who seem to be tired and sleepy, but who have not been diagnosed as having OSA. There are many people out there with the potential to harm themselves and others because they are unaware of the problem – only 12% of the truckies recognised they had a sleepiness problem but 41% showed up as having OSA when tested. Help us to bring greater awareness of the problem to the general public. Share the information in our newsletters, encourage people to visit our website, and when there is a support group meeting in your area, bring other people along to find out more.

Website Revamp

The SAANZ website is currently undergoing a major revamp, and soon we will be able to update information and include copies of our newsletters online. Look out for these changes which should become visible over the next few months. <http://www.sleepapnoeanz.org.nz/>

Next SAANZ Support Group Meeting to be held in Whangarei on May 31st at Manaia Health PHO Rooms, 30 Rust Avenue, Whangarei 6.30p.m. A flyer is included for all members in the area. Further meetings are planned around the regions and flyers will be sent to members in those regions. We are hoping to make Tauranga our next meeting in June. We still need contact people in most areas so please do get in touch with John Titchener at saanz.secretary@gmail.com or phone 07 858-4378. Committee members will attend these meetings so come along and meet some of the team.

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<http://www.sleepapnoeanz.org.nz>

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Disclaimer: The material in this Newsletter is intended for the interest of members of the Sleep Apnoea Association of New Zealand. It is not, and must not be taken as being, Medical Advice. Anyone with a health concern should seek their own qualified Health Professional.

SAANZ are grateful for Fisher & Paykel Healthcare's continued support, friendship to OSA sufferers and families, and help in producing this Newsletter.

A very big
Thank You!

Fisher & Paykel
HEALTHCARE
