THE OUEENSLAND HYPERTENSION ASSOCIATION (INC.) THE B.P. NORNELON THE B.P. NORNELON

EDUCATION AND RESEARCH IN THE FIGHT AGAINST HIGH BLOOD PRESSURE

Incorporating **SALT SKIP NEWS**

FEBRUARY 2023 NEWSLETTER – VOLUME 37, NUMBER 1

Oops! Nearly forgot our News! How could that happen I hear you ask? Well I've had my mind on other things...Like the lawn mower man not coming...selling properties...exchanging contracts...being an absentee seller... where are the Property Titles kept?,,,will the properties pass Building and Pest Reports?...which day does Property 1 go 'unconditional' and what day is 'Settlement Day' and then there's Property 2 and 3 for sale! (That's just the way it is - if you are in the thick of finalising a deceased estate).

Wishing You A Very Happy New Year 2023!!

UK Report: Scanning For High Blood Pressure

Doctors (in the UK) have used a new type of CT scan to light up tiny nodules in a hormone gland and cure high blood pressure by their removal. The nodules are discovered in one-in-twenty people with high blood pressure.

Doctors at Queen Mary University of London and Barts Hospital, and Cambridge University Hospital, have led research using a new type of CT (computed topography) scan to light up tiny nodules in a hormone gland and cure high blood pressure by their removal. The nodules are discovered in one-in-twenty people with high blood pressure.

Published in *Nature Medicine* in January 2023, the research solves a 60-year problem of how to detect the hormone producing nodules without a difficult catheter study that is available in only a handful of hospitals, and often fails. The research also found that, when combined with a urine test, the scan detects a group of patients

who come off all their blood pressure medicines after treatment.

128 people participated in the study of а new scan after doctors found that their **Hypertension** (high blood pressure) caused was bv а steroid hormone. aldosterone. The scan found that in two thirds of the patients with elevated secretion this aldosterone comes from a benign nodule in just one of the adrenal glands which can be safely removed.

The scan uses a very short-acting dose of metomidate, a radioactive dye that sticks only to the aldosterone-producing nodule. The scan was as accurate as the old catheter test, but quick, painless and technically successful in every patient.

Until now, the catheter test was unable to predict which patients would be completely cured of hypertension by surgical removal of the gland. By contrast, the combination of a 'hot nodule' on the scan and urine steroid test detected 18 of the 24 patients who achieved a normal blood pressure without any hypertension medication.

The research, conducted on patients at Barts Hospital, Cambridge University Hospital, and Guy's and St Thomas's, and Universities of Glasgow and Birmingham, was funded by the National Institute for Health and Care Research (NIHR) and Medical Research Council (MRC) partnership, Barts Charity, and the British Heart Foundation.

Professor Morris Brown, co-senior author of the study and Professor of Endocrine Hypertension at Queen Mary University of London, said: "These aldosterone-producing nodules are very small and easily overlooked on a regular CT scan. When they glow for a few minutes after our injection, they are revealed as the obvious cause of Hypertension, which can often then be cured. Until now, 99% are never diagnosed because of the difficulty and unavailability of tests. Hopefully this is about to change."

Professor William Drake, co-senior author of the study and Professor of Clinical Endocrinology at Queen Mary University of London, said: "This study was the result of years of hard work and collaboration between centres across the UK. Much of the 'on the ground' energy and drive came from the talented research fellows who, in addition to doing this innovative work, gave selflessly of their time and energy during the national pandemic emergency. The future of research in this area is in very safe hands."

In most people with Hypertension (high blood pressure), the cause is unknown, and the condition requires life-long treatment by drugs. Previous research by the group at Queen Mary University discovered that in 5-10% of people with Hypertension the cause is a gene mutation in the adrenal glands, which results in excessive amounts of the steroid hormone, aldosterone, being produced. Aldosterone causes salt to be retained in the body, driving up the blood pressure. Patients with excessive aldosterone levels in the blood are resistant to treatment with the commonly used drugs for Hypertension, and at increased risk of heart attacks and strokes. **Source:** <u>Science Daily</u>

Commentary: Professor Michael Stowasser

Professor Michael Stowasser (QHA's President) reviewed this article before it was published. His comments are as follows: 'This is an important, well-written paper

describing a carefully planned and conducted study reporting highly novel findings that are of considerable significance in terms of their potential to markedly enhance the identification of curable forms of primary aldosteronism (PA).

As the authors point out, already in the last few decades, enormous strides have been made in this respect with broadening of screening practices by Units measuring the plasma aldosterone/renin ratio (ARR) in all referred hypertensives revealing that PA is a very common cause of hypertension (with hypokalemic forms representing only the tip of the iceberg).

With careful workup including confirmatory suppression testing in those who screen positive, and, in those confirmed as having PA, adrenal venous sampling (AVS) performed by experts with high success rates of cannulation to differentiate unilateral from bilateral forms, at least 30% of those with PA can be shown to have a unilateral variety of PA, with a very high prospect of biochemical cure and of either cure of hypertension or improvement in control following unilateral adrenalectomy. These patients enjoy markedly reduced pill burdens, reduced rates of cardiovascular and renal morbidity and substantial improvements in quality of life compared to pre-operatively and in general fair considerably better than patients with bilateral PA treated medically with mineralocorticoid receptor antagonists (MRAs) like spironolactone.

It is therefore of some frustration and disappointment that, despite these major enlightenments, physicians seem to be reluctant to screen for PA, and even when they do, to proceed with further workup when screening is positive. One of the barriers is likely to be that AVS is expensive, invasive, difficult to perform and its availability is limited to highly specialised facilities.

Alternative approaches to differentiating unilateral from bilateral PA, such as imaging by CT scanning or isotope scanning with labelled cholesterol, or a variety of biochemical methods, have been fraught with unreliability. In the current study, the authors have assessed the performance of a new tracer (11C-metomidate, (MTO), that they first reported on in the 1990s) which binds to CYP11B2 (aldosterone synthase) CYP11B1 (11beta-hydroxylase), and in combination with PET-CT to enhance imaging resolution. In order to improve selectivity for CYP11B2 binding, they incorporated 72 hours of dexamethasone pre-treatment to suppress expression of CYP11B1. Using a careful study design, all patients confirmed as having PA by internationally accepted criteria underwent both AVS and MTO PET-CT, followed by a multidisciplinary team meeting to judge the likelihood (high, intermediate or low) as having unilateral PA for each of the two studies. If the answer was high for either, surgery was recommended. After a 6-month period of postoperative follow-up, patients were assessed as to whether, and to what degree, their PA had been rectified from the clinical (hypertension) or biochemical (K+ and ARR) perspectives using the PASO consensus criteria.

In short, MTO-PET CT seemed to substantially enhance over and above AVS the number of patients who were deemed unilateral and therefore candidates for surgery, and was no worse, and possibly even a little better (though not significantly), than AVS at predicting improvement/cure of hypertension and biochemical PA'.

Footnote from Professor Stowasser: 'A downside of the MTO approach used by these authors is that they used an isotope that has a very short half-life (20 mins), which means that it has to be created by a cyclotron in the city where it is used so it can get to the X-ray department in time before it becomes inactive. Not many cities have their own cyclotrons, so the technique would only be available to a very small number of institutions.

As a result, even though the MTO scan has been around for over a decade, its use has almost entirely been restricted to patients in the UK. Newer isotopes with much longer half-lives are in development and, if successful, it will be very exciting to see them reach clinical practice, including here in Australia'.

#Hypertension = the silent killer

I Met A Lady With A BP Monitor Attached To Her

While waiting at the doctor's surgery, I noticed a well-dressed woman wending her way towards the bathroom.



say I am a "stickybeak", a "do-gooder" or "not a doctor and have no right to judge people" or similar.

Once outside the surgery I noticed the lady sitting by herself and stopped to exchange greetings with her (little did I know that she was waiting for her order of fish and chips – probably with salt added too!).



The lady talked about herself for a while, her life problems and circumstances and me *who is not a doctor* suggested she may well be being tested for hypertension. Am I an expert? – *certainly not!*

I wish I hadn't referred her to the QHA website for advice and information and a certain "calm down rhythmic breathing tip" but I do hope the comprehensive information about hypertension on <u>www,hypertensionqueensland.com,au</u> was of "some benefit and help for this lady" – who certainly was freaked out by the turn of events her life was throwing at her and asking her to endure.

Note to Self: Next time at the doctor's surgery, *be quiet and say nothing* – particularly to anyone wearing a BP machine!

An Update From Your QHA Committee:

Some of you might have noticed the QHA Committee have are a bit slow in doing important things (like admin work processing memberships, much neededdonations, changing addresses).

Unfortunately, we have had to experience life's ups and downs along the way...and we are very sorry but all of us in some way have been affected.

We are nearly back in the saddle or just plain getting on with things and we'd like to thank you for your patience. It's been greatly appreciated! With an armful of things to get on with – we wanted you to know - we are doing just that!

Thank you, Fran W 0417766949

When she returned I noticed the BP Monitor again - hooked up to her to person. Now don't

Green Light: Masks Are Not Mandatory in Queensland

There are things you can do to help reduce the risk of you catching and spreading COVID-19.

In Queensland, Queensland Health provides advice on what you should do using a traffic light system. The traffic light level – **red**, **amber**, or **green** – is based on the current level of risk in the Queensland community.

You can wear a mask at any time if you choose to.



You should always stay home if you are sick, maintain good hygiene and keep up to date with your vaccinations.

Find out about the different traffic light levels and how they can help you make informed decisions to enhance your personal safety. **Source:** <u>Queensland Health</u>

The <u>QHA</u> provides <u>education</u> and <u>research</u> in the fight against <u>high blood pressure</u>.

Weird But True Facts

About 10,000 of the cells in your body could fit on the head of a pin.

From earth, you always look at the same side of the moon.

All of the blood in your body travels through your heart, once a minute, *and*

Gorillas burp when they are happy!

Source: www.nationalgeographic.com

www.hypertensionqueensland.com.au

Got a Sweetheart? Valentine's Day 14.02.23



Legend Has It:

Saint Valentine supposedly wore a purple <u>amethyst</u> ring, customarily worn on the hands of Christian <u>bishops</u> with an image of <u>Cupid</u> engraved in it, a recognisable symbol associated with love that was legal under the Roman Empire.



Roman soldiers would recognise the ring and ask him to perform marriage for them. Probably due to the association with Saint Valentine, amethyst has become the <u>birthstone</u> of February, which is thought to attract love. **Source:** www.wikipedia.com

Happy St Patrick's Day



17th March 2023 Enjoy!

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Salt Skip News

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The **business address** of the Salt Skip Program is Queensland Hypertension Association Inc. PO Box 193, Holland Park, QLD 4121, E:info@hypertensionqueensland.com.au www.hypertensionqueensland.com.au

Use the editorial address when writing about the newsletter—see the panel on page 4.

What If Sodium In Packaged Foods Was Reduced For An Entire Continent?

Speculation is rife on the health impact of less salt in Australia's packaged foods.

Reformulating packaged foods in Australia to contain less sodium might save about 1,700 lives per year and prevent nearly 7,000 annual diagnoses of heart disease. kidnev disease and stomach cancer, according research to new published in the journal, Hypertension, by the American Heart Association.

The Australian government established a voluntary reformulation program for 27 packaged food categories. Benchmarks, however, include 58 packaged food categories.

"We had previously modelled the potential impact of the Australian program," said the study's co-lead author Kathy Trieu, M.P.H., Ph.D. and senior research fellow in food policy at The George Institute for Global Health.

"In this study, we wanted to estimate the potential number of additional premature deaths, new cases of disease and years lived with disability that may be averted with the sodium benchmarks set by the World Health Organisation (WHO), which are above and beyond the Australian Government's sodium reformation targets".

In their previous study, Trieu and colleagues found that Australia's plan reduced average sodium intake by 107 mg per day per person and may avert about 500 deaths, 1,900 new cases of cardiovascular disease, chronic kidney disease and stomach cancer (combined), and 7,355 disabilityadjusted life years (DALYs) in Australia each year. DALYs are a measure of years of healthy life lost due to illness or premature death.

They applied the same statistical model to estimate the potential impact of extending the Australian plan to include all 58 packaged food categories in the WHO benchmarks. The model used national data from 2011-2012 on sodium intake, food composition and sales for the targeted food categories.

The researchers first estimated the reduction in sodium intake that may occur if the WHO's defined targets were met. Then, using published statistics on the relationship between sodium intake and high blood pressure, they calculated the potential effect of sodium reduction on rates of cardiovascular disease and chronic kidney disease. High blood pressure is a major risk factor for both conditions.

Skip The Salt

Salt Skip News No 239, February 2023

What If Sodium In Packaged Foods Was Reduced For An Entire Continent? ~ *Cont.*

The impact on stomach cancer was calculated using risk estimates derived from published studies of sodium and stomach cancer. The analysis determined the potential number of deaths, new cases of disease and DALYs that may be avoided by following the WHO guidance.

The analyses estimated that implementing the WHO sodium targets in Australia may result in:

- An average of 404 mg per day reduction in sodium for adults;
- Approximately 1,770 fewer deaths from cardiovascular disease, kidney disease and stomach cancer each year, with most of the impact on deaths due to avoiding deaths from cardiovascular disease (1,450 of the total).
- About 4,500 fewer new cases of cardiovascular disease, 2,050 fewer new cases of kidney disease and 350 fewer new cases of stomach cancer per year; and
- A total of 25,670 fewer DALYs from the three conditions.

"Our findings indicate that compliance with WHO benchmarks compared with Australia's current sodium targets may result in substantial health gains and prevent more than three times as many deaths and new cases of disease each year," said Trieu, adding that the greater impact of the WHO benchmarks may be explained by both including more packaged food products and stricter sodium targets.

Study limitations include the use of national nutrition survey data that was collected in 2011-12 and based on a single 24-hour diet recall to estimate food consumption, therefore, this data may not reflect current sodium intake. In addition, estimates of disease burden may be less accurate than estimates of more easily measured outcomes such as death. Also, there may be other ways in addition to blood pressure that sodium reduction affects cardiovascular and kidnev disease.

Source: Australian National Health and Medical Research Council Partnership Project.

Just How Did Covid-19 Affect Our Diet?

New data is highlighting how the public health measures put in place during the early stages of COVID-19 (for example, quarantine, the closure of non-essential services and restrictions on venue capacity) have impacted Australians' dietary habits.

COVID - 19

Opportunity-induced eating and coping with negative emotions (such as stress) might also have an impact on unhealthy snacking behaviour (Verhoeven et al. 2015).

Data from the ABS Household Impacts of COVID-19 Survey showed that:

- In June 2020 (during the early months of the COVID-19 pandemic in Australia), nearly 3 in 10 females (28%) and around 1 in 6 males (16%) reported eating more snack foods (for example, chips, lollies, biscuits) than what was usual prior to the implementation of public health measures in March 2020.
- In contrast, 2 in 10 (20%) people aged 18– 64 reported that they reduced their consumption of soft drinks, cordials and energy drinks during the same time period.
- In April 2020, about 1 in 3 people (36%) reported decreased consumption of takeaway or delivered meals compared with before the pandemic.
- About 4 in 10 people (38%) reported increases in cooking or baking (of those who usually cook or bake) (ABS 2020a, 2020b).

For more information on how the pandemic has affected the population's health in the context of longer term trends, see 'Chapter 2 Changes in the health of Australians during the COVID-19 period' in <u>Australia's health 2022: data</u> insights. **Source:** www.aihw.gov.au

Salt Skip News No 239, February 2023

Page 3 of 4

How To Know If You Are Prediabetic?

Two million Australians have prediabetes and are at high-risk of developing type 2 diabetes – but there is plenty you can do to turn your health around. So how do you know you've got it?

According to Professor Jennie Brand-Miller at the Glycemic Index Foundation (GIF), the short answer is that you won't. A condition where blood glucose levels are higher than normal, prediabetes doesn't come with any obvious warning symptoms.

However, this doesn't mean there is nothing to look out for - or that nothing that can be done about it.

The risk factors are similar to those of type 2 diabetes, and include being overweight – especially if you're carrying excess weight around the midsection.

This is something you can check yourself – a waist circumference over 80 cm for women or 94 cm for men is a risk factor for type 2 diabetes.



Source: www.digitalwellness.com

~ Quick Quotations ~

'A man cannot be comfortable without his own approval' ~ *Mark Twain*

'Every one of us needs to show how much we care for each other and, in the process, care for ourselves' ~ Diana, Princess of Wales

'Loving is not just looking at each other – it's looking in the same direction' ~ Antoine De Saint-Exupἑry



'For you see, each day I love you more, today more than yesterday and less than tomorrow" ~ Rosemonde Gérard

"One day you will ask me which is more important? My life or yours? I will say mine and you will walk away not knowing that you are my life." ~ Khalil Gibran

'A man is lucky if he is the first love of a woman. A woman is lucky if she is the last love of a man' ~ Charles Dickens

'Just don't give up trying to do what you really want to do. Where there is love and inspiration, I don't think you can go wrong' ~ Ella Fitzgerald

> 'You had me at G'day!' ~ *Anon.*

Page 4 of 4

SALT SKIP NEWS No 239

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Crispy Pumpkin Fritters



<u>Tip</u>: Reduce the calories in this dish by using an Air Fryer. Prepare the fritters, spray lightly with olive oil and air fry until golden brown and crispy. Serves: 2 (makes about 16 fritters).

Ingredients:

- 400 g butternut pumpkin, peeled and cut into 3cm pieces
- 3 eggs
- 1 garlic clove, crushed
- ¹/₂ avocado, finely diced
- 10 cherry tomatoes, quartered or finely diced
- 3 tblsp tapioca flour
- 1 top dried parsley
- Freshly ground black pepper
- 125ml (1/2 cup) olive oil (extra virgin), plus 1 tbsp extra
- 1/4 tsp chilli flakes

Method:

- 5 Steam the pumpkin until very soft. Mash and set aside to cool.
- 2. Combine egg with tapioca flour, garlic, dried parsley in a bowl and whisk well. Add the mashed pumpkin and mix to form a thick batter.
- 3. Heat 125 ml of the olive oil in a large, deep frypan over medium / high heat until a small piece of pumpkin batter (tester) sizzles.
- 4. Working in batches, add heaped tablespoon amounts of batter to the hot oil and fry for 3 – 4 minutes on each side or until golden brown. Transfer to paper towel to drain.
- 5. Meanwhile, fry the remaining eggs in the extra olive oil in a large non-stick frypan over medium – high heat sunny-side up or until just cooked.
- 6. To make an avocado salsa, combine the avocado, tomato and chilli flakes with a sprinkle of pepper, then add generous dollops of the avocado salsa to pumpkin fritters and eggs.
- 7. Store any leftovers in an airtight container in the fridge and enjoy cold for lunch the next day!

At Salt Skip News, we are always interested to hear from readers. Please send us your Salt Skip news, tips and salt-free or low sodium recipes... please email to Malcolm.Riley@csiro.au

BP Monitor with Salt Skip News is published every 2 months, from February to December (6 issues a year). This newsletter is not a substitute for health and medical advice. Readers should always seek the advice of a qualified health professional regarding their health or a medical condition.

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