



HIGHLIGHTS

Let's talk about carbohydrates

We all know we should avoid sugar but let's review the basics.

PAGE 3

Case study: ME/CFS patient's health restored

Dr Daud Mohamed looks at a successful ME/CFS recovery case.

PAGE 5

Can memory loss be reversed?

Dr Jean Monro presented two afternoon lectures on the topic.

PAGE 8

Still needing ongoing treatment Chlay's life-changing diagnosis

At the age of 12, Chlay began having health challenges. A passionate musician, dancer and academic, she suddenly found herself unable to stand. This was the beginning of years of not being listened to and being misdiagnosed until she met Dr Jean Monro.

My name is Chlay and I live in Devon. I first became poorly when I was 12 years old. I went from being passionately musical, an over-achiever at school and attending 25 dance sessions a week, to one day suddenly being unable to stand as I waited for the bus. I took the next day off school to recover, but I never properly went back to school ever again. I could barely walk ten steps.

Early that year, a rheumatologist told me I didn't have arthritis but said nothing more, and then a

subluxed (partially dislocated) hip took me to Accident & Emergency where a doctor told me to stop making everyone's life a misery, take two paracetamol and go back to school.

By May, I was misdiagnosed by a local paediatric doctor with Myalgic Encephalomyelitis (ME).

I tried to get on with life, but my health was declining; by September I was housebound and by December, I was being told to go

(CONTINUED ON PAGE 10)



Day in the life of our... Medical Secretary Margaret Schwartz

Breakspear Medical has four medical secretaries. Each secretary is assigned to their specific doctor(s). Their main role is to provide comprehensive medical typing and clerical support. Liaison within the secretarial team and with other staff members is essential to ensure a smooth and efficient service is provided for the patients.

I work for Professor Puri and my work day starts at 9.00 am. I read through my e-mails and print off any queries from patients so that these can be discussed with the doctor and the patients' questions or requests answered. Many of our patients live a long way from the clinic and, after having had a consultation with the doctor, sometimes have new questions which they thought of on the drive home.

Professor Puri is at the clinic only one day per week, so I am happy to liaise with him on the patients' behalf, so they can continue with their treatment or follow-up information that he has provided. I enjoy speaking with the patients and meeting them when they are here at the clinic, either for a consultation or treatment.

After the day's clinic letters are typed, these are sent to the doctor for checking. Each letter is then printed in triplicate, as the top copy goes to the patient's GP or specialist, a copy goes to the patient and the final copy is for the patient's records. Letters, reports and information documents that we type are very varied and interesting. No two days are ever the same!

We are sometimes asked to provide medical information in tabular form, type information leaflets about diseases and treatment, or put together a presentation if the doctor is due to speak at a conference, all of which are extremely interesting and informative. We also deal with telephone queries.

As we are unable to perform MRI or CT scans or x-rays at this facility, occasionally I

am asked to organise them for the patient. This involves liaising with the appropriate service provider, preparing a referral letter and requesting transport, if required.

Our doctors regularly attend medical training events and courses to enable them to keep up with the latest medical developments and research and they will sometimes ask me to contact the organisers to book places, as the best of these events and courses sell out very quickly.

Our doctors sometimes request reference papers about specific conditions and their treatment. We are fortunate enough to have access to an electronic database of relevant recent literature, as well as a large collection of earlier printed material. The doctors also have access to our library of more than 1700 books covering environmental and general medicine. Our patients are very interested in acquiring as many facts as possible about their conditions and, both from our accumulated literature and from current electronic information, we are able to provide them with this.

My day usually ends at 5.00 pm, however, if a patient or doctor requires urgent assistance, I am happy to stay and help.

My job enables me to learn so much about medicine, diseases and treatments, which I still find fascinating, even after working at Breakspear Medical for 19 years.



Let's talk about carbohydrates

We all know that we should lower our sugar intake and this has been fundamental to the Breakspear Medical ethos for decades. But what about the critical role of carbohydrates, which are made of sugars and are a basic food group?

There are three macronutrients required by our bodies:

- carbohydrates
- protein
- fat

Carbohydrates (carbs) are easily metabolised, which means that they are broken down and used by the body as the main fuel source.

Carbs are the sugars, starches and fibres found in fruits, grains, vegetables and milk products.

There are two types of carbs:

- simple carbohydrates
- complex carbohydrates

Simple carbs taste very

sweet and are digested and absorbed quickly and easily. They are called "simple" because they are made up of just one or two sugars. They can lead to spikes in blood sugar levels and sugar highs.

Simple carbs are high on the glycaemic index. The glycaemic index is a method of classifying carbs on how quickly and how high they boost blood sugar.

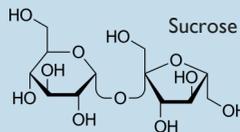
Examples of simple carbs include sucrose (table sugar) and lactose (from dairy products). There are also simple carbs in sweets, fizzy drinks and syrups and,

(CONTINUED ON PAGE 4)

DEFINITION

Carbohydrate:

A biological molecule consisting of carbon, hydrogen and oxygen.



Carbohydrates are found in a wide variety of foods and perform numerous roles in living organisms, providing energy (calories) and structural components.

Plastic can be harmful to your health



FACT:

While they do cost more, Breakspear Medical uses glass bottles for intravenous infusions. This reduces the exposure to any chemicals leaching out of plastic drip bags, which then directly enter the patients' blood.

It is hard to avoid using plastic in our daily lives. There are many chemicals used in plastics that may leach into the contained product. This means products, such as foods, beverages and IV (intravenous) medicines, may transport potentially harmful chemicals that leach from the plastic materials. Some of these particles may adhere to DNA.

Bisphenol A (BPA) is a chemical that is used in plastic containers and some metal containers (because it has been found to protect the metal against corrosion and bacterial contamination). BPA may be present in thousands of consumer goods including plastic water bottles, toilet paper, napkins, food packaging, some baby bottles, compact discs, dental sealants and paper used for receipts.

Research has shown that over time, BPA can seep into the contents of the containers, particularly with warm temperatures. BPA is a hormone disruptor and can have possible health effects on the brain and behaviour and has been linked to coronary heart disease, cancer and developmental and reproductive problems.

Let's talk about carbohydrates

CONTINUED FROM PAGE 3

as these refined foods do not contain vitamins, minerals or fibre, they are called "empty calories". These are the sugars that our bodies do not require and we all should avoid eating them.

An excess of simple carbs in one's diet has been linked with increased risk of heart disease, type 2 diabetes and obesity.

Complex carbs are made of three or more sugars and can provide more sustained energy because they are digested and absorbed slower. As well, foods containing complex carbs usually also contain other essential nutrients. Generally, complex carbs are savoury and are low on the glycaemic index.

Examples of foods high in complex carbs are starchy foods, such as beans, peas, lentils, potatoes and cereals. Non-starchy vegetables,

such as lettuce, kale and broccoli also contain carbs but in smaller quantities.

While carbs are often blamed for weight gain, it is usually the simple carbs and/or empty calories that are the problem. Complex carbohydrates contain dietary fibre, which helps one feel full and is essential to digestion.

As well as eating the right carbs, it is important to consume the right ratio of carbs, protein and fats. The right balance of these macronutrients will ensure that the body processes the carbs as energy and does not store it as fat, as well as ensuring other jobs, such as tissue growth and repair, are completed.

If you have any questions or concerns about balancing your diet, arrange an appointment with one of our qualified nutritional therapists.

Case study: ME/CFS patient's health restored

(CONTINUED FROM PAGE 5)

DEFINITION

ME/CFS

In order to be considered to have ME/CFS, a patient needs to have symptoms for at least six months and the symptoms must have begun or altered significantly since the onset. The patient, Mr TH, met these criteria.

The criteria considered for a diagnosis of ME/CFS are*:

1. Fatigue
2. Post-exertional malaise and/or fatigue
3. Sleep dysfunction
4. Pain
5. Neurological/cognitive manifestations
6. Autonomic manifestations (orthostatic intolerance, NMH, POTS etc.)
7. Neuroendocrine manifestations (temperature regulation etc.)
8. Immune manifestations

*Carruthers BM, Jain AK, De Meirleir KL, Peterson DL, Klimas NG, Lerner AM, et al. Myalgic encephalomyelitis/chronic fatigue syndrome: clinical working case definition, diagnostic and treatment protocols. *Journal of Chronic Fatigue Syndrome*. 2003;11:7-115.

Background

Mr TH was a fit and very active person who cycled on a regular basis and did this as a hobby. On a windy Sunday morning in March 2009, he led a group of cyclists and cycled for about 70 miles. He was fine until the following Friday when he became very unwell and was off sick for a week and became bedridden. Since then, he never recovered fully but managed to work intermittently and suffered from recurrence of ME/CFS symptoms (see *Definition*) plus insomnia. Some doctors thought he was suffering from post-viral fatigue.

Investigations

At Breakspear Medical, a variety of tests were conducted on Mr TH. The significant test results were from:

- The Fatigue Panel, which includes DNA adducts tests (looking for foreign particles adhering to DNA), showing that there were plastic particles present in his DNA
- A Comprehensive Viral Panel showing active rubella, measles and Epstein-Barr Virus (EBV) infections

Treatment & recovery

The patient had treatment with antiviral drugs, including Aciclovir and natural antivirals, together with mitochondrial support and detox supplements. It was recommended that he stop using plastic water bottles (commonly used by cyclists) and not use any plastic involved in food storage, preparation or cooking. Six months later, his Fatigue Panel showed no plastic particles in his DNA, his Comprehensive Viral Panel results for rubella and measles antibodies were negative, although his EBV remained positive, and he had slightly improved energy.

Nine months after starting treatment, the patient felt he was starting to function well. His Comprehensive Viral

Panel came back all clear and the patient became asymptomatic. He started to exercise again and recommenced his hobby of cycling. His ATP (adenosine triphosphate, which is the main energy source for muscles and other tissues) levels had returned to a normal level.

At his recent review consultation, he reported feeling well and he is carrying on with our recommended maintenance supplement programme.

Conclusion

Taking an environmental history is a simple and effective way to evaluate where pollutant exposure may occur. As well, it is beneficial to take a holistic approach to health, including diet and supplementation, to complement the increasing specialisation in environmental healthcare.

RECOMMENDED RECIPE:

Tahini & cashew quinoa

A gluten-, dairy-, and sugar-free vegan meal for two.

**INGREDIENTS:**

60g quinoa	200g button mushrooms, sliced
1 vegetable stock cube*	2 handfuls of curly kale
50g cashew nuts	30ml tahini
30ml coconut oil	Juice of 1 large lemon
1 clove of garlic, chopped	Himalayan pink salt
15g fresh ginger, chopped	Pepper

METHOD:

1. While bringing about 150ml of water to a boil in a saucepan, rinse the quinoa (using a fine strainer) and then add to the boiling water with the vegetable stock cube. Stir, cover and simmer for 10-12 minutes until tender and most of the liquid has been absorbed.
2. While the quinoa is cooking, in a large frying pan over medium heat, toast the cashews until just turning brown and set aside the nuts in a bowl.
3. Return the frying pan to the medium heat and add the coconut oil, garlic and ginger. Stir regularly for 1 minute and then add the mushrooms. Lower the heat slightly and fry for a further 2-3 minutes, stirring occasionally.
4. Remove woody stalks from the kale and chop finely. Add the chopped kale to the mushroom mixture and simmer for a further 3-4 minutes.
5. In a jug, combine the tahini, lemon juice and 60-75ml of water and whisk until smooth and of pouring consistency. (You can add more water or olive oil, if necessary.)
6. Fluff the quinoa with a fork and fold in the tahini sauce and mushroom mixture. Season with salt and pepper to taste.
7. Serve hot, topped with the roasted cashews.

*Check the ingredients to make sure there is no added sugar, yeast, gluten- or dairy-containing ingredients.



Can memory loss be reversed?

On 16 March 2017, Dr Jean Monro presented two lectures on managing cognitive health and memory loss. Here is a brief summary of Dr Monro's lecture on how memory loss may be reversed.

Memory loss may be experienced at any age. Everyone has misplaced keys or forgotten an appointment at some time or another.

As we get older, simple acts of forgetfulness can start to raise concerns of the onset of dementia and Alzheimer's disease. According to the Alzheimer's Society UK, one in 20 people developed it under the age of 65 and women are more likely to develop Alzheimer's than men.

There are a number of commonly identified things that may affect one's memory, such as chronic sleep deprivation, excessive alcohol or substance abuse and prescription drugs, for example sleeping pills, antihistamines, antidepressants, diabetes medication or cholesterol-lowering statins.

Stress can also be the cause of sleep deprivation and forgetfulness.

In some cases of memory loss, the cause may be nutritional deficiencies. For example, vitamin B12 is essential for normal nerve function and people can suffer from

confusion and even dementia without sufficient amounts.

Hidden, underlying health problems may also be a contributing factor.

In our everyday life, we are exposed to toxins which are ingested, inhaled or absorbed through the skin. In our Western world, it would be very difficult to avoid all pesticides, solvents, BPAs, persistent organic pollutants, fossil fuel pollution, cigarette smoke, formaldehyde and many other toxins that may have an effect on memory.

As we get older, our detoxification capacity can become more compromised.

The body's detoxifying system may also be compromised by exposure to toxic metals, viruses, bacterial inflammation, free radicals, carcinogens and some gut bacteria. There are pathology tests available that can assess levels of harmful toxins in the body and there are treatments available to remove the toxicants, reduce inflammation and oxidative stress and normalise function.

(CONTINUED ON PAGE 9)

CONTINUED FROM PAGE 8

Symptoms of an overload of toxins can include:

- fatigue
- weakness
- irritability
- insomnia
- peripheral neuropathy (when nerves malfunction, sending signals of pain when there is nothing causing pain or no signals when there is pain)
- tremors
- memory loss

Coenzyme Q10 is produced by the body and plays both a direct and indirect role in protecting cells against oxidative damage. As we age, the amount the body produces diminishes naturally.

There are many studies which conclude that there is benefit from nutritional support, which can slow down the progression of dementia and Alzheimer's.

Supplementation of magnesium to the brain has been shown to enhance memory and cognitive performance.

It has been suggested that Bacopa monniera (a perennial herb, also known as Brahmi) may increase alertness, alleviate anxiety and improve concentration.

Mushroom products, such as *Hericium erinaceus* and *Coriolus versicolor*, have been found to inhibit the progression of Alzheimer's.

There are many things that can influence cognitive health, including diet, exercise, smoking, hormonal status, nutrition, exposure to pollutants and stress.

If you have concerns and would like a personal treatment plan, book a consultation with one of Breakspear Medical's doctors.



LECTURES

Working full-time and up to six days per week, Breakspear Medical's Medical Director Dr Jean Monro presented two talks on managing cognitive health and regaining memory function in April 2017 at Maple House, co-hosted by the Environmental Medical Foundation (EMF).

The videos of the afternoon lectures are now available to view on the Breakspear Medical YouTube Channel.

Information about upcoming lectures will be posted on our website: breakspearmedical.com/ resources and announced on Facebook and Twitter.



We'd like to hear about your recent experience at Breakspear Medical.

We would be grateful if you would complete our *Patient satisfaction survey* in order to help us improve our service to you in the future. The survey shouldn't take more than ten minutes to complete. Copies are available to pick up and drop off in the Patient Dining Room.

To listen to Chlay's ethereal acoustic & melodic music or learn more, visit: chlay.com



Chlay's life-changing diagnosis

(CONTINUED FROM PAGE 1)

to hospital school and be put on oxygen. But the hospital abuse stories I had heard scared me away.

Still too unwell to return to school, I was without education for a year. Then, with tutoring, I managed four GCSEs and one year of college before I got glandular fever. Still under my incorrect ME diagnosis, I recorded an extended play record (EP) of my own music and donated the proceeds to the ME Association.

Within 48 hours of recording the EP, I was in hospital with suspected appendicitis, but I was offered no treatment. I couldn't walk; I was told to go home and get bed rest. I struggled through the summer holidays and within three weeks of returning to school, I lost the ability to walk again, unable to even lift my feet off the ground.

I was determined to continue with college but a chest infection forced me to quit after eight weeks. I tried to meet with other ill people, but booming and busting throughout that time sent my health into further decline.

I became completely bedridden and my seizures and faints started. At 19, I went to the Burden Centre in Bristol where they simply insisted all

of my symptoms were psychosomatic and stemmed from abuse as a child. This was entirely untrue and an offensive misdiagnosis.

I stayed at the Burden Centre for the physiotherapy and because my friends were able to visit me while I was there. The centre neglected me, failed me, and left me at risk, which caused me injuries. Every time I had a problem, they just said they'd refer me back to local services who had already failed me.

I developed swallowing problems, I couldn't eat, and my paralysis began. I couldn't even lift my head and all of these symptoms continued, fluctuating in severity, for four years.

I eventually had to admit that this problem was bigger than me. I turned to Breakspear Medical, which I had heard of from other ill friends. The cost was daunting and the NHS had advised me that the treatments that Breakspear Medical offered would be of no use. But I was desperate and had no other options.

With my parents' support, I decided to put everything I had into going to Breakspear Medical and booked a phone consultation.

(CONTINUED ON PAGE 11)

CONTINUED FROM PAGE 10

While waiting for the day of the appointment, I was terrified that Breakspear Medical would be just like the NHS, that they wouldn't believe my symptoms were real and that I would be misdiagnosed and mistreated yet again. I was so malnourished from being unable to swallow and, because the NHS had not given me a feeding tube, I couldn't think straight and the countless positive stories I had heard from Breakspear Medical patients just weren't sinking in. My first appointment consisted of 22 vials of blood being taken, multiple tests being

done, a nutrition consultation, an autonomic consultation and a consultation with Dr Jean Monro. She is a true role model to me! I was diagnosed with Ehlers-Danlos Syndrome (EDS), which is the name for a group of genetic connective tissue disorders, and I was found to have hypocapnia (low levels of CO₂), with CO₂ levels close to those of someone in a coma, as well as dysautonomia, which is basically a malfunctioning autonomic nervous system, affecting signals from the nerves to the brain, spinal cord, heart and other organs. These were my first ever correct diagnoses, all on my first appointment.

Over the next month, the results of my tests came through and diagnosed me with various viruses and deficiencies in amino acids and vitamins, as well as candida, elevated nickel levels and Epstein-Barr Virus. I was given a protocol to follow of antivirals and supplements, and a breathing mask to take home.

My symptoms were improving, my swallowing was getting better, and after a month or two of being on the protocol I went back to Breakspear Medical for low-dose immunotherapy (LDI). Just 48 hours after LDI, I could read for the first time in four years. I got stronger and stronger for three weeks but then suddenly crashed. I thought I had a new

Like all journeys, there are ups and downs and last year I started to have extreme hand pain, which stopped me from playing guitar, which is essential to my song writing.

virus and was really scared as every single day I was getting worse. I went back to the clinic in a panic and discovered that the immunotherapy had unmasked my multiple chemical sensitivity. They immediately advised me on how to greatly reduce my chemical exposure. I had relied on luxuries like scented candles to comfort me, but I had to throw it all away and intensely detox. I was given a new protocol to help my liver detox, as well as new immunotherapy. I then started to get better again and my swallowing problem was resolved within 24 hours of a vitamin C drip.

It has been a journey of constant steady improvement from that point on, during which I was able to record some of my songs and even play some live shows, which was always a big dream. I hope to be able to play more in the future. There have been struggles along the way, but my general progression has been upwards and Breakspear Medical have always helped me get back on track. Until recently, I hadn't been back for a year or so because of limited funds, but I had been in touch and want to go back again once finances allow.

Like all journeys, there are ups and downs and last year I started to have extreme hand pain, which stopped me from playing guitar, which is essential to my song writing.

Friends started an awareness campaign called 'Project fix Chlay' which has helped fund recent further testing at Breakspear Medical.

As I can't work and need full-time care, I will continue to need financial help, to allow me to access new treatments and progress to being healthy.

HOW TO HELP CHLAY

To help her get more treatments & continue improving her health, visit: [facebook.com/projectfixchlay](https://www.facebook.com/projectfixchlay)



Medical Librarian retires

On 31 March 2017, Medical Librarian and treasured member of staff, Ann Yarr, retired after nearly 30 years at Breakspear Medical.

In a small Friday afternoon teatime celebration, long-time Medical Librarian Ann Yarr enjoyed a few rare moments in the limelight as fellow staff members thanked her for her years of dedicated service and wished her a happy retirement.

Ann first started working with Dr Jean Monro in 1988 at her clinic in London.

Ann has single-handedly categorised and indexed the thousands of environmental medicine books, papers, journals and studies which make up the Breakspear Medical library.

She has also been a careful proof-reader of letters, papers and previous editions of this newsletter.

All the staff signed the giant greeting card with heart-felt messages, expressing how much she will be missed and wishing her many happy and healthy work-free years to come.

Profile



Dr Margarete Segner 1937-2016

Dr Margarete Segner was a Consultant Physician who was well respected and loved by her patients and colleagues at Breakspear Medical. She was a visiting doctor at Breakspear Medical from the 1990s until she retired just a few years ago.

She gave impeccable attention to detail in caring for her patients and brought the wisdom of many years of experience in environmental medicine and other branches of medicine.

Dr Segner sadly passed away on 17 November 2016 and a funeral service was held in Denmark on 2 December 2016, which would have been her 79th birthday.

A dedicated light of love was held on 11 December 2016 at St Mary's Church, Redbourn, Hertfordshire.

Published by



Breakspear Medical Group Ltd
Hertfordshire House, Wood Lane, Hemel Hempstead,
Hertfordshire HP2 4FD United Kingdom

Editor: Carolyn Northcote Monro
Contributing writers: Dr Jean Monro, Margaret Schwartz, Dr Daud Mohamed and Michele Kingston

Breakspear Medical Bulletin is a private publication that we aim to produce twice annually. It is for the promotion of environmental medicine awareness and Breakspear Medical Group Ltd. This newsletter is not intended as advice on specific cases but as a forum of information researched and stored at Breakspear Medical Group. We urge readers to discuss the articles in this bulletin with their health-care practitioners. Unauthorised reproduction of this newsletter, or quotation except for comment or review, is illegal and punishable by law.

© Copyright 2017 Breakspear Medical Group Ltd and its licensors. All rights reserved.