# **Breakspear Medical Bulletin**

Issue 36 Spring 2014

### Notes on detoxifying and free radicals

Every day, our bodies are bombarded with free radicals

When trying to understand the

importance of detoxifying, it is a good starting point to understand what free radicals are, how they can cause damage to healthy cells, and how to combat them.

# Simplified explanation of free radicals

The body is orbiting. composed of many different cells. Cells are composed of molecules, which are made up of atoms. Atoms are the smallest particles of an element or compound that have the properties which make up

that element or compound.

An atom is made up of a nucleus (the control centre), which is

made up of neutrons (with no electrical charge) and protons (with positive charge) and orbiting electrons (the particles circulating the nucleus with a negative charge). The numbers of protons, electrons and neutrons vary to make different substances.

Molecules are

always trying to maintain a state of maximum stability, which is when there are equal numbers of protons and electrons.

(Continued on page 4)

# Inside:

New thoughts on linking brain, behaviour and immunity

5

5

6

7

8

9

10

12

12

New thoughts on sports clothing contaminating the environment

Notes on damp houses and mould-induced illness

#### Recommended recipe

The benefits of psychological counselling explained

New thoughts on smartphones disturbing sleep

Did you know..?

Validating the existence of chemical sensitivity

Help us to set the standard for scent-free workplaces

Bulletin board

### Breakspear

Medical Group Ltd
Hertfordshire House
Wood Lane

Hemel Hempstead Hertfordshire HP2 4FD United Kingdom

Tel: + 44 (0) 1442 261 333 Fax: + 44 (0) 1442 266 388

# New vaccine for meningitis B now available

Diagram of an oxygen

protons and 8 neutrons

atom, with a nucleus

(centre) made of 8

Breakspear's Immunisation Clinic now offers MenB vaccinations

According to the charity Meningitis Now, it is estimated that there are 1870 cases of meningitis B (MenB) in the UK each year.

The best way to prevent meningitis is by vaccination.

Breakspear Medical Group is now offering the MenB Bexsero vaccine.

Until recently, there were meningococcal vaccines for only

4 of the 5 main serogroups. Vaccines for serogroups A, C,

W135 and Y are based on polysaccharides (chains of sugar units, used to store carbohydrates in plants and animals) from the bacterial surface capsule (the cell wall of bacteria).

This method has not been possible for MenB due to its structure.

However, in January 2013, after

(Continued on page 2)

# ľ

## New vaccine for meningitis B now available

(Continued from page 1)

20 years of research, a new vaccine called Bexsero was licensed by the European Commission. It uses 4 proteins instead of the bacterial capsule polysaccharide and protects against the majority of circulating MenB strains.

The Bexsero vaccine can be administered to infants aged 2 months or older. At this time, there has been no announcement on whether the NHS will be providing this vaccine free of charge anytime in the future.

Children in the UK are routinely vaccinated against serogroup C (MenC), as part of the NHS childhood vaccination programme. Babies usually have their first MenC vaccination when they are 3 months old. Babies then have their second dose at 12 months and then a teenage booster is given.

Serogroups A, Y and W135 are more common in other countries and therefore it is recommended that if you are travelling to highrisk areas, such as parts of Africa and Saudi Arabia, you should receive vaccinations against these groups at least 3 weeks prior to your visit. Speak to your GP or Breakspear health professional about your travel vaccination needs

#### **Breakspear Medical Bulletin**

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

Carolyn Northcote Monro Contributing writers:

Michele Kingston Dr Jean Monro Daniel Segal

Breakspear Medical Bulletin is a private publication that we aim to produce 3 times 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

© Copyright 2014 Breakspear Medical Group Ltd and its licensors. All rights reserved.

#### **About meningitis**

Meningococcal disease can be caused by various types of the meningococcal bacterium. These can cause



meningitis and septicaemia. Both of these conditions are life-threatening.

Meningitis is an acute inflammation of the protective membranes covering the brain and spinal cord. Meningitis and septicaemia (blood poisoning) often happen together.

The 2 types of meningitis are:

- bacterial meningitis, which is spread through close contact and is very serious
- viral meningitis, which is spread through coughing, sneezing and poor hygiene and is the more common and less serious

Meningitis and septicaemia can strike quickly and without warning. Be familiar with the signs and symptoms and take action immediately if you suspect infection, particularly in children.

Babies and young children under the age of 5 years are the most at-risk group for meningitis. However, 1 in 4 15-19 year olds carry the bacteria in the back of their throat and this is the second most at-risk group. Infection can strike at any age.

15% of those who survive bacterial meningitis are left with severe after-effects, such as brain damage, hearing and sight loss, scarring and loss of limbs.



### Ask Dr Jean Monro

I recently started getting itchy welts on my face and hands when exposed to cold temperatures outside. Why is this and Is there anything I can do to stop it?

Cold-induced urticaria, also known as "cold hives", is a condition which develops when susceptible people are exposed to low temperatures. For example: when walking in a windy cold environment, being immersed in cold water, eating cold foods or beverages, or holding a cold object.

Cold-induced urticaria occurs in 2-3% of the general population. It occurs as part of an overactive element of the very important temperature-sensing system in the human body, which helps protect us from fungal colonisation and assists us in evaluating favourable living conditions

The medical term for cold-induced urticaria is "mast cell activation disease" and it can result in a large number of clinical symptoms.

Sufferers can have local symptoms, such as a burning sensation in the skin, redness, urticaria (itching) and oedema (swelling). If the skin is scratched, a wheal is the result. This is called dermatographism.

During cold-induced urticaria, when a sufferer is exposed to a cold environment, their mast cells release histamine and then calcium enters the cells. Normally calcium is kept outside cells, but if it enters, it can then activate the release of more histamine from pockets within the mast cells and the histamine itself causes blood vessels to widen and a reaction to occur, with the typical itchy redness that is described above.

It has been found that reactions will also occur in a larger number of people with cold-induced urticaria when they are exposed to menthol (2-isopropyl-5-methylcyclohexanol). This is the active ingredient of peppermint and is widely used as flavouring in foods, cosmetics, mouth washes, toothpastes, drinks and ointments. In very sensitive sufferers, menthol can cause urticaria, asthma and rhinitis.

Putting a cube of ice on a person's forearm which results in erythematous (red) skin is a diagnostic test for more than 90% of sufferers.

Other tests used are dermatographia (scratch

# Some of the more unexpected additional urticaria signs and symptoms:

- abdominal pain, cramping and/or bloating
- anxiety
- asthma-like symptoms
- blood pressure irregularity (either high or low)
- bone pain
- conjunctivitis
- constipation
- cough
- cutaneous urticaria (hives)
- diarrhoea
- difficulty concentrating
- difficulty in focusing
- environmental sensitivities
- fainting
- fatigue
- fibromyalgia
- forgetfulness
- gastritis
- headache

- high cholesterol
- hot flushes
- IBS
- itching of the skin light-headiness
- malabsorption
- migratory arthritis
- ,
- mouth ulcers
- musculoskeletal muscle pain
- nausea
- non-cardiac chest pain
- oedema (swelling, fluid retention)
- palpitations
- rhinitis
- shortness of breath
- sinusitis
- skin flushing
- sleeplessness
- tinnitus
- vertigo

test) and there are also blood tests that can provide a diagnosis.

Treatments include the avoidance of triggers, the use of antihistamines, mast cell membrane stabilising preparations such as sodium chromoglycate (Nalcrom) for food sensitivities, low-dose immunotherapy and some anti-IgE treatments or immunosuppression with steroids or other drugs.

Occasionally an inheritable disease can produce cold urticaria. Atypical cold urticaria can sometimes be due to an infectious disease or form of vasculitis (inflammation of blood vessels). Intracellular calcium studies can identify sensitivities to suspected allergens or items to which a person is sensitive.



# Notes on elements of a good detox programme

(Continued from page 1)

But sometimes there are odd, unpaired electrons, which break down bonds and form free radicals. These are very unstable and they are constantly trying to become stable by stealing electrons from other molecules or bonding with another atom to share electrons.

This causes a chain reaction as more atoms lose electrons and become unstable, or are bonded with other atoms and so on and so on.

Some free radicals occur normally during metabolism. Some are created by the body's immune system to neutralise viruses and bacteria.

Some free radicals happen as a result of environmental factors, such as pollution, UV radiation, cigarette smoke and pesticides.

Because of their unstable nature causing harm to cells, it is good to reduce the number of free radicals in the body.

#### How to combat free radicals

Damage from free radicals accumulates with time, as more and more exposure to environmental factors occurs. They have been implicated in cancer causation, liver damage, lung damage, and inflammatory processes.

To neutralise free radicals, the body can use antioxidants. Antioxidants donate one of their own electrons, which stabilises the previously unstable free radical. The antioxidants themselves do not become unstable because they are stable with or without that electron.

There are 3 main nutritional approaches to prevent free radical damage. The first is to provide micronutrients for the body's protection mechanism, such as zinc, manganese and selenium supplements. The second is to take supplements which have an intrinsic antioxidant (free radical quenching) activity, such as vitamins A, C and E. Thirdly, it is beneficial to maintain a diet rich in antioxidants.

For a more concentrated administration of

antioxidants, your Breakspear doctor may recommend a variety of vitamin and mineral infusions. Infusions may take from as little as 1/2 an hour to 4 hours to administer at the clinic.

#### Other methods of detoxifying

While saunas have been used for centuries to help flush toxins from the body, at Breakspear we use the IRATHERM®1000, which is an infrared-A bed. It raises the surface and core temperatures of the body, which then increases metabolism and secretion. There are various

additional actions one can take to increase ..at Breakspear we use the IRATHERM®1000. the effectiveness of the which in an infrared-A IRATHERM, including bed. It raises the surface taking niacin and and core temperature of bromelain, which the body, which then encourages more increases metabolism chemicals to be and secretion. released, and additional aerobic

exercise and/or stimulating skin circulation. It is also important to drink lots of water and replace mineral loss that will invariably accompany the loss of stored toxins.

#### **Detoxification evaluation**

Detoxification is a major body function. The four routes of excretion of toxins from the body are:

- kidneys
- lungs
- gut
- skin

In order to determine the best path for clearing unwanted chemicals from the body, one must know how the systems are working and address the most heavily burdened systems appropriately.

There are many evaluations available to measure the detoxification pathways and ability.

For example, urine samples can provide a measurement of urinary sulphites and urinary organic acids to assess the Krebs cycle (citric acid cycle, which is crucial to one's energy production). A detoxigenomics panel (checking liver function) and methylation pathway assessment (which is linked to many chronic diseases) are also available.

While eating a balanced, antioxidant-filled organic diet and avoiding pollutants are good steps to detoxifying, these 2 steps are only a small part of a good detoxification programme.

### New thoughts on linking brain, behaviour and immunity

**Evolution:** a gradual process in which something changes into a usually more complex or better form.

A paper recently published in "Brain, Behavior and Immunity" has made a connection between inflammation and depression.<sup>1</sup>

Humans have evolved behavioural and immune responses in order to survive and reproduce over thousands of generations. Generally, individuals with a more vigorous immune response have been the ones most likely to survive.

The authors compiled evidence that this evolved way of successfully reacting to the harsh environment has a direct effect on today's everyday activities, such as the how the body responds to environmental conditions, food consumed, allergic disorders, as well as the modern consequences of obesity and the metabolic syndrome.



...inflammation appears very important in the mechanism that causes depression.

The infection defence hypothesis suggests that behaviour would naturally change when the body feels it is under attack. Inflammation leads

> to reduced exploratory behaviour, in the form of depression and hypervigilance (sensory sensitivity), which not only conserves the individual's energy but also reduces, through social withdrawal, the spread of infection.

The authors conclude that inflammation appears very important in the mechanism that causes depression.

Their understanding of science and collected clinical evidence

support the use of various anti-inflammatory interventions to help improve outcomes for patients with depression.

1. Raison CL, Miller AH. Malaise, melancholia and madness: the evolutionary legacy of an inflammatory bias. Brain Behav Immun. 2013 Jul;31:1-8.

## New thoughts on sports clothing contaminating the environment

In recent advances of nanotechnology (a new science that utilises current understanding of atomic and molecular structure), a product called nanosilver was created to kill bacteria and other microorganisms.

A few years ago, sports clothing manufacturers started

incorporating nanosilver particles into workout clothes because they kill bacteria, moulds and fungi, reducing the smell of used gym clothes.

Nanosilver has been added to shirts, shorts, tracksuit bottoms, socks, underwear and bedding. It has also been incorporated into vacuum cleaners, washing machines, cosmetics, sunscreens, toys and other products.

Research has shown that after 4 to 5 washes, the treated fabric starts to break down,



The long term effects of this product on human, animal and plant life are still unknown.

shedding the nanosilver particles into the washing machine wastewater, which could then eventually enter streams and rivers, crop irrigation and the water table.

There have been a few studies which suggest that only a small amount of

nanosilver remains in the sewage sludge system after filtration. The related concern is that, in many countries, sewage sludge is applied to land.

The long term effects of this product on human, animal and plant life are still unknown. However, it is clear that nanosilver does not distinguish between good and bad bacteria and other microbes which are essential for ecological systems.

### Notes on damp houses and mould-induced illness

Moulds can grow on virtually any

damp organic surface, including

carpet, wood, paper, foods and

insulation.

As high winds and flooding repeatedly strike the nation, this will be having a knock-on effect on our homes and ultimately our health.

Mould is a naturally occurring fungus, which serves the purpose of breaking down dead organic matter. Tiny mould spores float in the air, and generally are not a problem; however, if they

start growing in one's house, they have the potential to cause health problems.

Moulds can grow on virtually any damp organic surface, including carpet, wood, paper, foods and insulation.

Moulds produce allergens (substances that cause allergic reactions) and irritants. Some can cause toxic substances, such as

mycotoxins,\* which can lead to respiratory and lung problems and are among the most toxic agents in the world.

When exposed to mould, some people may experience symptoms similar to hay fever, such as sneezing, runny nose, red eyes and skin rash, or experience irritation to the throat, causing coughing and/or asthma attacks. Some common varieties of mould can cause neurological consequences and sensitisation.

Upper respiratory tract symptoms have occurred in as many as 38% of those people exposed to the mould dampness. Approximately 50% of exposed people develop a cough and 80% develop increased wheezing. 21% of all cases of asthma are attributable to exposure to dampness or mould.

Mould growth, both in indoor environment and the structure of the home, should be avoided, promptly removed, and action taken to prevent it from recurring.

#### Check for moulds

Initial finding of the moulds and bacteria should be by visual inspection. Look for mould and water stains, then use moisture meter readings, looking particularly in areas of elevated moisture, such as wall cavities and carpeting, and examining for visible mould.

Be careful when there is potential to exposure to mould by using gloves and eye protection and

avoid inhalation whenever possible. Respirators can be purchased at many hardware stores.

#### Remove moulds

It is important to ensure that the house is decontaminated from moulds, and the use of dehumidifiers can be helpful here. In addition, the treatment of moulds can be effected in 2 ways.

One is to use ultraviolet light, which moulds cannot tolerate. The other way is to use hydrogen peroxide (widely available), which they also will not tolerate. This can be painted onto mouldy areas and the oxygen that is released from the product oxidises the mould and clears it away.

It may be necessary to dispose of absorbent or porous materials if they have become mouldy.

You may wish to contact a professional if the damage is extensive. If the source is caused by sewage or other contaminated water, be sure the professional has experience in cleaning and fixing damage from that type of contaminating source.

If a home is heavily exposed to moulds, there are fungicides on the market which are used in the form of sprays. However, the chemicals that are in aerosols can become a further problem for particularly sensitive people.

#### Eliminate potential for recurrence

The cause of the dampness may be obvious or caused by less obvious plumbing or roof leaks, landscaping errors, leaky gutters, condensation caused by unvented appliances or in drains from heating, ventilation or air conditioning units.

One can test for the presence of moulds by exposing settle plates with specific culture media. Both bacterial and fungal chemicals, which are produced by their metabolic activity, can also be evaluated. Determining the type of mould may disclose the source and aid in finding the best solution to removing it or help determine the extent of contamination.

\* Mycotoxins can be tested for in urine samples, and antibody tests can establish whether a person has developed sensitivity to mould spores.

### Recommended recipe

Michele Kingston, Clinical Nutritionist

Carrots are perhaps best known for their rich supply of the antioxidant nutrient that was actually named after them: beta-carotene.

Not only are these delicious root vegetables the source of beta-carotene, they are also a source of a wide variety of antioxidants and other health-supporting nutrients. They also contain other carotenoids (especially alphacarotene and lutein), hydroxycinnamic acids (including caffeic, coumaric, ferulic), anthocyanins (in the case of purple and red carrots) and polyacetylenes (especially falcarinol and falcarindiol).

Carrots are an excellent source of vitamin A (in the form of carotenoids) and a very good source of biotin, vitamin K, dietary fibre, molybdenum, potassium, vitamin B6 and vitamin C. They are also a good source of manganese, niacin, vitamin B1, panthothenic acid, phosphorus, folate, copper, vitamin E and vitamin B2.

The best way to cook carrots is to steam them for approximately 5 minutes, as this enhances their flavour and even makes some nutrients more accessible to absorption than if consumed raw. Steaming better preserves antioxidants, particularly carotenoids, than other forms of cooking. As some nutrients, such as vitamin C, will dissolve into the steam water, it is a good idea to use the water collected in the steamer after cooking for making a gravy or stock or simply drinking, so that you do not lose any of the nutrients.

Carrots are very versatile. They can be eaten raw as snacks, often with dips such as hummus, or puréed in smoothies, cooked in soups or steamed, roasted or mashed as part of the main course. They are also in many popular cakes, biscuits and this Bulletin's featured recipe, carrot loaf.

#### Carrots come in a variety of colours

Carrots do not have to be orange. In fact, orange carrots only became popular in the 16th century. "Rainbow packs" of carrots are often available at markets and fresh vegetable shops and may contain purple, white, yellow, red or black carrots.

#### **Carrot loaf**



A crumbly, moist, grainand dairy-free carrot loaf, sweetened without sugar

#### Ingredients

125 g dates

125 g peeled raw carrot (about 1 large)

1 tbsp lemon juice (about 1/2 lemon)

75 g drained chopped pineapple

30 g ground almonds

60 g tapioca flour

60 g potato flour

3/4 tsp baking soda

1/4 tsp cream of tartar

1/4 isp cream or tarta

1/2 tsp salt

1/2 tsp cinnamon 1/4 tsp cloves

1/4 tsp nutmeg

85 ml vegetable oil

1 large egg

100 g sultanas

50 g walnuts in large pieces

#### Method

- 1. Preheat oven to 180°C/170°C fan.
- Grease a non-stick 25.75 x 12.75 x 6.75 cm loaf pan.
- Put the dates in a heat-proof bowl or large mug and cover with 100 ml hot water. Let sit for about 10 minutes and then purée in a food processor.
- While the dates are soaking, finely grate the carrot into a separate bowl and stir in the lemon juice and pineapple. Set aside.
- Measure the dry ingredients into a mixing bowl and combine.
- Using a mixer or food processor, add the oil and puréed dates to the dry mixture and combine well.
- Add the egg.
- 8. Fold in the sultanas, walnuts and the carrot mixture until evenly mixed.
- Pour into the prepared pan and bake for about 45-50 minutes or until a knife comes out clean.
- Remove from the oven and turn the loaf out to cool.



## The benefits of psychological counselling explained

Daniel Segal BA Psychology, MSc Mental Health Counseling

Psychological counselling is used to help individuals from multiple angles that help to alter a person's actions and thought processes simultaneously. Since a person's brain continues to learn and evolve during their whole lifespan, sometimes we find that a person's actions and thoughts might become non-congruent or not working in sync. This can be due to many factors that include a person's history, environment or their heath status.

Psychological counselling encompasses a number of

therapeutic techniques that try to get both the brain thought processes and the individual's physical actions to work together making the individual healthier all round.

Reframing is a way to help someone look at reality with a different perspective. For example, instead of becoming frustrated with a stranger pushing in the queue, a person reframing would stay calm, think from the other individual's perspective and accept that maybe there was a reason for them pushing in.

Reality therapy focuses on realism, responsibility and the right-and-wrong.

Relaxation/imagery techniques help individuals take control of the physical reactions associated with their problems by helping them receive the required amount of oxygen and slowing their heart rate. The entire process is structured and

tailor-made for each person and can be used with a variety of physical illnesses.

Energy management helps an individual pace their daily life, allowing them to be active and yet keeping them within their physical capabilities so as not to worsen their physical symptoms.

Each case requires an assessment, which takes into account the individual's social, family, educational and environmental histories, as well as the presenting problem, which might be physical or mental health.

Thought Emotion

Actions

Psychological counselling can help in many different areas such as:

- ADHD (attention deficit hyperactivity disorder)
- anorexia
- anxieties
- communication skills
- depression
- fears

- obesity
- OCD (obsessive compulsive disorder)
- phobias
- self-esteem
- social issues
- stress
- and much more

Psychological counselling cannot cure physical illness; however, it can help make a person stronger physically and mentally.

Psychological counselling is an active process and includes homework each week that builds on the week before. Homework may include: practice of the relaxation/imagery techniques, diary keeping for energy managements, desensitisation practice, which is a way of diminishing emotional responses to a negative event or stimulus and a process named self-efficacy, which relates to a person's belief in their ability to succeed and affect the world around them.

Psychological counselling will help build selfefficacy in easy manageable steps and within the individual's energy limits.

Daniel would be pleased to receive any questions you may have or to book an appointment, please contact Reception 01442 261 333

Case study

Mrs Smith (name changed to protect identity) is a woman in her

late 50s who had been involved in what she called a "horrific car accident". Because of this, she could no longer get into her car, much less drive, which was disrupting her and her family's life as she was the only driver in the family. She had developed palpitations and a paralyzing fear of driving.

After an assessment and explanation of the process that would be needed in her particular case, the first items we worked through were the

way she described the accident.

Speech has a profound effect on the way we think and the way we act. With her use of the word "horrific" in connection with her accident, I imagined a car pile-up, ambulances, police or even a death. It turned out that when she had stopped at a red light she was rear-ended at low speed, which did not create a dent or scratch. In no way did I belittle her accident since that was her belief and perspective on the event, but I did challenge her views and definitions of the word "horrific". After a short while, a few examples and

(Continued on page 9)

...smartphones keep

late into the evening,

fall asleep.

people mentally engaged

making it hard to relax and

## New thoughts on smartphones disturbing sleep

Over the last few years, there have been several published studies that show that smartphones are depriving many people of a good night's sleep.

A pair of studies at Michigan State University, USA, concluded that people who monitored

their smartphones for business purposes after 9:00pm were more tired and were less engaged the following day.

It was suggested the reason for this was that smartphones keep people mentally engaged late into the evening, making it hard to relax and fall asleep.

The studies concluded that smartphones had a larger negative effect than watching television and using laptops and tablets.

Last year, researchers at the Mayo Clinic in Baltimore, USA, concluded that one cause of mobile electronic devices causing disturbance is the bright light-emitting diodes that allow the use of such devices in dimly lit rooms. The light exposure can interfere with melatonin secretion. Melatonin is the hormone that controls the natural sleep-wake cycle.

The study recommended dimming the screen to mid to low settings and the user holding the screen at least 1 foot from their face. This distance seemed to reduce the risk that the screen's light would be enough to suppress the user's melatonin secretion, which disrupted sleep.

### The Cress Experiment

In 2013, 5 teenage students (grade 9) came up with an ingenious experiment to demonstrate that mobile phones had an effect on sleep and concentration.

The girls from Hjallerup School in North Jutland, Denmark, grew 12 trays of cress seeds. They placed 6 of the trays in one room and 6 trays in another. These were both kept at the same temperature and received the same amount of water and sunlight for 12 days.

However, one room also had 2 routers emitting roughly the same type of radiation as an ordinary mobile phone alongside the trays.

The girls monitored the plants for 12 days and took photos of the trays throughout the experiment.

From their photos, it became clear that the trays of plants that grew in the room without the routers thrived, while the trays with the routers either did not grow at all or mutated or died.

It has been reported that all the girls have decided not to sleep with a mobile phone anywhere near their beds for fear of the negative effects.

#### (Continued from page 8)

re-framing the situation, she realised that her previous view was not the correct view of her accident.

Over the next few weeks she learned to use the relaxation/imagery techniques to calm herself and bodily reactions to her fear whilst thinking of all the years of driving she had behind her and never having been in any other accidents. She accepted driving can be very safe but accidents do occur.

As time went on, we used the desensitisation

techniques where she would look at car magazines and control her physical and psychological reaction to seeing the car. This moved on to sitting in the car, starting the car, driving around the block, driving from area to area and then back on the motorway.

Her self-efficacy and control over her fear improved so much that during our last session together, she witnessed the aftermath of an accident and it did not affect her ability to drive. This process took a total of 3 months and now, 2 years later, I occasionally see her driving past.

# Did you know...?

# Link between vitamin D and multiple sclerosis (MS)

Researchers have found that patients with multiple sclerosis (MS) had much lower blood levels of vitamin D than the healthy controls.

They also found that the levels of vitamin D support an association with the severity of MS.

Another study found that low levels of vitamin D were indicative of depressive symptoms in MS patients. The study was conducted after a relation between vitamin D and depressive and fatigue symptoms in both MS patients and the healthy population had been reported.

# Zinc may help with type 2 diabetes

While researchers concluded that more studies are needed, a recent study found that zinc supplementation may have beneficial effects on glycaemic control, potentially helping those with type 2 diabetes.

Studies have shown than zinc mimics the action of insulin. They have also demonstrated its role in regulating inflammation and oxidative stress and reducing fasting blood glucose and glycated haemoglobin.

#### You can help the planet by cutting what you eat by a third, food expert advises

Should retailers and restaurants sell smaller portions to avert a looming supply crisis?

Professor Tim Benton, University of Leeds, has published concerns about the potential food security crisis, as the production and supply of safe and nutritious foods in a sustainable way for a growing global population becomes a fundamental issue.

According to the official United Nations estimate 2011, the world's population has passed 7 billion. The latest projections estimate the population will reach 9.55 billion by 2050 and 10.85 billion in 2100.

Prof Benton recommends that smaller portions be served, our calorific intake be cut by a third, and further measures should be taken to tackle food waste, in order to face the global food demands of the near future.



The Global Food Security work group estimates that 868 million people worldwide are undernourished and one-third of all food produced globally goes to waste.

The Daily Telegraph, 22 July 2013, reported that Prof Benton, head of the Global Food Security working group, stated that global demand for food would outstrip supply, leaving poorer nations unable to buy enough.

The Global Food Security working group estimates that 868 million people worldwide are undernourished and one-third of all food produced globally goes to waste.

At the same time, two-thirds of adults in Britain are overweight or obese, according to Department of Health figures. It is estimated that three-quarters of food waste occurs at the consumer stage.

#### MHRA warning over Chinese medicines

An article in the Daily Telegraph, 20 August 2013, stated that the Medicines and Healthcare products Regulatory Agency (MHRA) said that some unlicensed Chinese medicines contain "dangerously high" levels of lead, mercury and arsenic. One product, which goes by a variety of names, was found to have "extremely high" levels of arsenic by the Swedish National Food Agency (SFNA), the MHRA said.

These products have not been authorised for use in the UK but investigators have found them readily available on the internet.

The MHRA's head of herbal policy, Richard Woodfield, said "The adulteration of traditional Chinese medicines with heavy metals is a significant international problem and can pose a serious risk to public health."

### **Available at our Pharmacy**



Pick up a copy of our **Scent-free Spring cleaning products** leaflet which features 6 of the most popular cleaning products we offer.

You may place orders by:

 visiting Breakspear Pharmacy's online shop anytime of the day or night to order and pay securely for all the Pharmacy items available.

www.breakspearmedical.com/shop

- telephoning the Pharmacy to place your order 01442 266 333 ext 291.
- speaking to one of our Pharmacy staff next time you are visiting the clinic.

Please let your family and friends know that our online shop is open to anyone wishing to buy quality nutritional products and scent-free household supplies.

# Validating the existence of chemical sensitivity

It has been estimated that 3% of Canadians have been diagnosed with environmental sensitivities.

In 2007, the Canadian Human Rights Commission (CHRC) commissioned a report called "The Medical Perspective on Environmental Sensitivities". Written by Dr Meg Sears, the report validates the existence of chemical sensitivities and electromagnetic phenomena.

The report states, "Accommodation of people with environmental sensitivities is an opportunity to improve environmental quality and workers' performance, and to prevent the development of sensitivities in others..."

Many people with environmental sensitivities are hidden away, as they have to create (and are often confined to) a chemical-free home, which makes it hard to fight for awareness and rights, and to lobby for a better environment.

One such person, Varda Burstyn, fought a legal battle focusing on the fact that she and others

to accommodate their environm (Tax credits were people with other impairments.) In confidential settle her life was arran

...environmental sensitivities is considered a disability and those living with environmental sensitivities are entitled to the protection of the Canadian Human Rights

had faced discrimination by being denied tax credits to retrofit their homes for medical reasons to accommodate their environmental sensitivities.

(Tax credits were available to people with other disabilities and impairments.) In 2012, a confidential settlement to improve her life was arranged, which may prevent future discrimination against sufferers from environmental sensitivities.

Today in Canada, environmental sensitivities are considered a disability and those living with environmental sensitivities are entitled to the protection of the Canadian Human Rights Act,

which prohibits discrimination on the basis of disability. The Canadian Human Rights Commission will receive any enquiry and process any complaint from any person who believes that he or she has been discriminated against because of an environmental sensitivity. Like others with a disability, those with environmental sensitivities are required by law to be accommodated.

## Help us to set the standard for scent-free workplaces

Breakspear Medical Group has had a scentfree policy for as long as most of us can remember.

We hope to lead our patients, visitors, students, staff, contractors, and perhaps even our critics, in our quest to make scent-free the norm.

To set the best example, we are currently developing a detailed, formal company-wide policy to clearly explain what is expected of everyone entering the buildings at Breakspear.

We hope this detailed policy will become the standard that other companies adopt in the near future, as the evidence builds that chemical sensitivities, allergies, asthma and chronic headaches/migraines are becoming more and more common.

We would appreciate hearing from our patients and readers and have devised a survey to help us gather your opinions and collect your

suggestions as to what should be included in the new detailed scent-free policy.

Please take the time to complete the online survey: www.breakspearmedical.com/scentsurvey before 31 May 2014. You may complete the survey anonymously or, if you wish, include your name and contact details so that any points you wish to talk about in

further detail can be addressed.

Thank you in advance for taking part in this survey, which will help with development of the new detailed company policy.

#### Bulletin board



Breakspear Hospital Trust

# Charity name change announcement

We are proud to announce that after celebrating its 10 year anniversary, the charity has

changed its name from Breakspear Hospital Trust to the Environmental Medicine Foundation, with effect from January 2014.

The name change is due to the trustees and supporters feeling that that new name reflects the charity's objectives more clearly.

The charity will continue the work it has been doing to date and will be rebranding the letterhead, website, and forms in due course.

#### **Extending thanks**

In response to the anniversary appeal, the foundation received some very generous donations, making the 10th financial year one of the best for some time.

Thank you so much for your support, from both the trustees and the patients who were helped. We hope you will continue to help fund the increasing demand from less fortunate patients.



Breakspear Pharmacy has moved As many of you will

know, Breakspear Medical Group

purchased the former Arlon Printing building next door, renamed it Maple House, and moved the Pharmacy from 909 Paradise.

The first floor will be renovated shortly and potentially used for lectures and training sessions.

The 909 building is now on the market for let.

#### How are we doing?

The only way that Breakspear can find out

how to improve our services is to receive feedback from our patients.

There are 2 easy ways to let us know how we're doing:

Satisfaction surveys: The easiest way for you to let us know how we're doing is by completing a patient satisfaction survey, available online, at the clinic or from any member of staff.

Testimonials: We are often asked for patient testimonials and would be very pleased if you'd drop us a few lines, to let others know about the successful treatment you received at our clinic. Please drop a letter off at Reception, email: info@breakspearmedical.com or put it in the post.