



# Breakspear Medical Bulletin

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## Notes on the ideal diet for life

Ron Leon, Breakspear's Nutritional Consultant, has extensive knowledge of good nutrition and provides some basic recommendations which the majority of people should follow.

Look in the health section of any good bookshop and you will find no shortage of books which propose 'the ideal diet for life'.

With such a plethora of books reportedly portraying the ideal diet, is it any wonder that the consumer is confused?

Everyone should consider the following principles in order to achieve optimum health through



proper nutrition.

### Eat organic

The organic food market is the fastest growing industry in the UK, partly because people are willing to pay more for foods that they believe to be healthier and more nutritious. Although

little research has been published comparing the quality of organic versus conventionally grown food, an article published in the Journal of Agriculture and Food Chemistry in 2007 reported on a 10-year study (1994-2004) of two different flavonoid compounds, quercetin

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you to print out and complete at home when convenient. Currently we are designing on-line order forms which can be emailed directly to the appropriate department.

All the holiday closure dates and last date for placing orders before Christmas will be posted on the website for quick and easy access.

If you have any suggestions for improvements to the website, please email to: [webmaster@breakspearmedical.com](mailto:webmaster@breakspearmedical.com)

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**New on-line opinion questionnaire. See page 7 for details.**

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# On the market: the best selection of probiotics

**Ron Leon**

The word *probiotics* comes from Latin 'pro' meaning 'for' and 'biotics' meaning 'life.'

Generally, probiotics can be defined as non-pathogenic microorganisms, which affect the person ingesting them by improving the bacterial balance in the intestinal tract.

Many people take probiotics in the belief that they are exerting some positive effect on their health, and would be surprised to learn that taking some probiotics may actually be harmful.

Two of the most important factors determining whether probiotics are beneficial or detrimental to one's health are:

- whether or not the supplements contain viable microorganisms
- the purity of the supplements, including the identification of potential pathogens (i.e. undesirable bacteria) contaminating these supplements.

While most store-bought probiotics include live strains of bacteria or yeast, which come in numerous forms, such as yogurts, fermented products (e.g. kefir) and nutritional supplements, the quality of supplements varies significantly. Of the many types of microorganisms used as



probiotics, species of *Lactobacillus* (particularly *Lactobacillus acidophilus*) are most often recommended by healthcare professionals and most frequently purchased by the general public.

Many people take probiotics in the belief that they are exerting some positive effect on their health, and would be surprised to learn that taking some probiotics may actually be harmful.

The *Lactobacillus* species are used to treat a variety of conditions and diseases. The associated benefits include improving the health of the intestinal tract, enhancing immune function and decreasing the occurrence of vaginal infections.

Unfortunately the quality of readily available probiotics, like that of most nutritional supplements, is not closely regulated by governmental agencies, either in the UK or in the USA. In 2006, Bastyr University (USA) undertook a study to examine the safety and reliability of commercially available *Lactobacillus* supplements.

In the study, 20 bottles of *Lactobacillus* supplements were obtained from different manufacturers to determine if the label claims were identical to what was actually found upon laboratory analysis. The researchers found that 30% of the *Lactobacillus* samples had contaminants present and 20% of the brands had no viable bacteria present. If no bacteria are present within the probiotic supplements then taking the supplement will obviously not benefit the consumer.

More importantly, and what is more concerning, if pathogenic bacteria are present in the ingested supplement then this will most probably cause adverse effects in the consumer.

Another important aspect is the quantity of bacteria present in each capsule. For example, the Culturelle® brand - *Lactobacillus* GG (named after its discoverers Gorbach and Goldin at Tufts University, USA) - contains 30 billion viable organisms per capsule, and has been shown to be very effective against a broad variety of gastrointestinal disorders, such as diarrhoea.

Other supplements supply *Lactobacillus* species

## Breakspear Medical Bulletin

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## Ask Dr Monroe

**I have been told that I have thyroid autoantibodies. Does this mean I have a thyroid deficiency and, if so, what do I need to do about it?**

It is assumed that an autoantibody disease is due to the presence of antibodies which have mistakenly started to attack healthy normal cells.

The immune system has the task of establishing what is 'self' and what is 'non-self', thereby conveying a protection by producing antibodies to fight invaders such as bacteria or viruses. Once this distinction has been made, "self" is preserved and "non-self" is destroyed. However, the distinction between "self" and "non-self" is not absolute.

The basis of autoimmunity may be a resemblance between a specific foreign molecule and a molecule of the self. This 'molecular mimicry' (similarity between molecular structures) can cause the immune system to then mount a response to healthy tissue that has a foreign antigen stuck to it, such as food, viruses and bacteria. Since antibodies have been shown, under appropriate circumstances, to prevent cell-mediated tissue damage, it is conceivable that they may have a protective rather than a destructive function. Therefore, it is not necessarily a bad thing to have auto-antibodies. They may, in fact, be protecting that tissue from other assaults rather than attacking it.

In the case of the thyroid autoantibodies, it may not follow that the target organ, which is the thyroid, is not producing enough thyroid hormone. The thyroid depends upon being stimulated from the pituitary by a hormone called thyroid stimulating hormone, and the thyroid will then produce forms of thyroid hormones thyroxine (T4) and triiodothyronine (T3). Occasionally people who are chronically ill cannot convert T4 (the

stored form) into T3 (the active form). Tests can measure the various thyroid hormones, which will help determine if there is a need for thyroid hormone replacement. It may be sufficient for some people to have certain supplements which support the thyroid gland in producing its own hormones naturally.

There are two epidemiological studies which have been conducted about thyroid autoantibodies. The first study investigated a village in Colombia where there were a large number of people who had thyroid autoantibody disease. It was ascertained that people in the village drank water from 1 of 3 wells. From Well A, all people who drank that water developed thyroid disease; from Well B half did and half did not and from Well C none of these developed it. The difference between the waters was that Well A was heavily contaminated with oil shale, Well C was free from oil shale contaminant and Well B had some. It was therefore determined that oil shale had an effect on the development of thyroid autoimmune disease. Another study was done in a different location where again well water was examined to see whether it had been contaminated with bacterial products. It concluded that where that water had been heavily contaminated people also had thyroid autoantibody disease.

My view is that it is advisable to check anyone who has thyroid autoantibodies for contaminants, either chemical contaminants, which are often chlorinated substances, chlorinated hydrocarbons or bacterial antibodies. Blood can be tested for the presence of antibodies to bacteria which may be implicated in the autoimmune process. If there are high levels of these bacterial antibodies, it reflects an increased gut permeability, thus allowing a large amount of bacterial products to enter the systemic circulation. This can lead to molecular mimicry and an autoimmune response being mounted.

(Continued from page 2)

in much lower amounts (<500 million per capsule), which may be ineffective in treating digestive disorders, particularly since there are about 100 trillion bacteria present in the digestive tract.

For most people, taking a quality probiotic supplement for the general well-being of the digestive tract would be beneficial. Because the quality of supplements can vary significantly, as illustrated in the Bastyr study, people should only purchase supplements which are manufactured

by reputable companies.

Klaire Laboratories' Ther-Biotic Complete® or Vital-10® or Pure Encapsulations' *Lactobacillus acidophilus* are suitable choices for most people and can be purchased directly from Breakspear Pharmacy. For those with sensitivities, digestive symptoms or currently taking antibiotics, a consultation with one of Breakspear's doctors or the nutritional consultant is recommended prior to taking any probiotic supplement.

## Notes on the ideal diet for life

(Continued from page 1)

and kaempferol, in tomatoes.

Quercetin is an anti-oxidant linked with inhibiting production and release of histamine and other allergic/inflammatory mediators. The study found that the levels of quercetin in organic tomatoes were 79% higher than those in conventionally grown tomatoes.



The ideal diet for life is one in which refined carbohydrates are kept to an absolute minimum.

Kaempferol has been associated with reduced risk of heart disease. The study found the levels of kaempferol in organic tomatoes were 97% higher than in conventionally grown ones.

Nutritional variations aside, eating organic food should significantly reduce one's exposure to pesticides.

A study published in Italy in 2007 examined the data provided by local laboratories from 2002-2005 on 3508 samples of plant origin (e.g. citrus fruits, legumes, potatoes); 266 samples were from organic farming products. All samples were analysed for pesticide residues and the results showed:

*...the vast majority of organic farming products were in conformity with the relevant legislation and did not contain detectable pesticide residues...organic fruits and vegetables can be expected to contain fewer agrochemical residues than conventionally grown alternatives.*

### Eat more fruits and vegetables

There is much debate over the amount of fruit and vegetables one should eat each day.

According to an article published in The Times in 2005, the 'five-a-day' slogan originated in 1991 in a promotional campaign run by the fruit and vegetable producers and the Health Department in California. In spite of this recommendation, which incidentally was not scientifically derived, the average intake of fruit and vegetables in Britain is a meagre 2.7 servings per day.

The target in Denmark and Germany is 7.5 servings per day. The World Cancer Research Fund recommends 10 servings per day.

Five servings of fruit and vegetables per day should be considered the minimum and variety is equally important. Plants contain phytochemicals

(plant- or fruit-derived chemical compounds), which perform numerous functions within the body and are important for health. The suggestion is to include foods from each of these categories:

- **White/yellow:** onion, garlic, cauliflower
- **Orange/red:** pepper, tomato, carrot, apricot, mango, sweet potato
- **Purple/red:** aubergine, dark grapes, red cabbage, berries, plums
- **Green:** spinach, broccoli, Brussels sprouts, cabbage, kale, watercress, parsley

### Eat the right type of carbohydrate

Carbohydrates form a large food group, which is composed of many different classes of compounds.

Although carbohydrates are best known for providing the body with its main source of energy, they also perform numerous other vital functions. Carbohydrates have traditionally been classified as 'simple' and 'complex.' However, this definition fails to take into account the 'intermediate' carbohydrates, such as fructooligosaccharides (FOS), which are 'prebiotic' carbohydrates. Prebiotic carbohydrates avoid being digested in the upper part of the intestinal tract and arrive in the large intestine where they are used by beneficial bacteria as a food source. Prebiotics are found in foods such as onion, garlic, Jerusalem artichoke and asparagus.

When carbohydrates are refined, such as when whole corn is processed to make high-fructose corn syrup (present in numerous soft drinks), many vitamins, minerals and fibre are lost. Other examples of refined carbohydrates are table sugar, cakes, biscuits and white flour. Consuming these refined carbohydrates generally has adverse effects on the body (and is linked to Type 2 diabetes). For this reason, most healthcare practitioners recommend eating foods which have not been refined or that have been minimally processed. Other carbohydrates may be used in the body as glyconutrients and include arabinose, mannose and the glyconutrients from mushrooms, which can be valuable.

The ideal diet for life is one in which refined carbohydrates are kept to an absolute minimum.



Research is building linking the consumption of refined carbohydrates to obesity, diabetes and cardiovascular disease.

The increasing rates of obesity are contributing to the frequency and the total number of cases of Type 2 diabetes in adults, young people and children. While in Type 1 diabetes the body produces little or no insulin, in Type 2 diabetes the body does not make enough insulin, or cannot use insulin properly, which is called insulin resistance.

A simple explanation of how carbohydrates are metabolised starts with a carbohydrate meal. As the carbohydrates are eaten, the body's

blood glucose (sugar) levels rise. The pancreas (a gland behind the stomach) then secretes insulin, which moves glucose out of the blood and into muscle and fat cells, where it is either broken down to produce energy or stored.

Insulin levels should be kept as stable as possible throughout the day. This is accomplished through the consumption of fibre-rich, fresh fruit and vegetables, unprocessed whole grains combined with some fat and protein at each meal. An example could be cooked steel cut/pinhead oats (not instant oats), 1 chopped apple or banana or a handful of berries, milk of choice (e.g. rice, soya or cow's), 2 tablespoonfuls of pumpkin and/or sunflower seeds and a sprinkled ½ teaspoon of cinnamon for breakfast.

### Eat enough good fat and protein

Fats should primarily be composed of polyunsaturated (e.g. fish, flax, hemp) and monounsaturated (e.g. olive and rapeseed oil, avocado), with saturated fat being kept to a minimum.

This does not mean that saturated fat should be eliminated from the diet, as this type of fat plays important physiological roles within the body, one

of which is to stabilise the outer membrane of all cells. However, most people's diet is already high in saturated fat through the consumption of red meat and full fat dairy products. Poultry (without skin) and fish have lower saturated fat and these foods are good sources of lean protein.

Another good way of adding protein to one's diet is by eating beans and grains. One does not need to eat legumes (beans and peas) and grains at the same meal in order to obtain a 'complete' protein. Animal proteins are called 'complete proteins' because they contain

### The basic principles of the ideal diet for life:

- Eat plain fresh food only (organic if possible)
- Avoid all flavourings, colourings and additives
- Avoid processed foods such as white flour and preserved, tinned, smoked, salted or pickled foods
- Eat as varied a diet as possible
- Avoid alcohol except for red wine in moderation. (Red wine has antioxidant properties.)
- Drink green, white and black tea, all of which contain antioxidants which are beneficial to health; consume minimal amounts of coffee and avoid caffeinated soft drinks
- Drink filtered or glass bottled water
- Avoid instant drinks including hot chocolate and Horlicks, as these generally contain considerable amounts of added sugar
- Use honey, maple syrup and xylitol as sweeteners, but only sparingly
- Avoid smoking

all of the essential amino acids that humans require ('essential' meaning they must be acquired from the diet). Soya protein (i.e. soybeans, tofu, soya milk) is also a 'complete protein' due to the fact that it contains appreciable amounts of the essential amino acids. However, most plant foods contain 'incomplete proteins' because they are low in one or more of the essential human amino acids. For example, legumes have low levels of an essential amino acid called methionine; cereals and grains have low levels of a different essential amino acid called lysine. The combination of a legume with a grain will produce a complete protein, but they do not always need to be eaten at the same meal. This is because the amino acids are circulated in the blood for several hours after a meal. When the next meal is eaten, as long as it provides the complementary amino acids, then the body will be able to make complete proteins for numerous functions, such as the manufacture of muscle.

*For more information, speak to our qualified nutritional consultant, Ron Leon.*

# Notes on water fluoridation



Currently there is a strong worldwide movement calling for an end to water fluoridation. Citing various research studies, the Fluoride Action Network's Professionals' Petition is appealing to professionals to support their belief that "fluoridation is outdated, has serious risks that far outweigh any minor benefits, violates sound medical ethics and denies freedom of choice."

The British Fluoridation Society's website, [www.bfsweb.org](http://www.bfsweb.org), justifies water fluoridation by concluding that fluoride reduces the number of decayed, missing and filled teeth in children and adults, which results in fewer toothaches, abscesses, extractions and general anaesthetics therefore saving the NHS money.

While the BFS website provides references to studies about the apparent safety of fluoridation, including effects on general health, the Fluoride Action Network's Professionals' Petition includes various recent events which they argue make action to end water fluoridation urgent.

Some of points raised in the petition are as follows:

- The National Research Council (part of the US National Academy of Sciences) published a review of fluoride's toxicology which concluded that 4 parts per million (ppm) is unsafe and should be lowered. Research examined suggested that even 1 ppm may cause adverse health effects such as impaired glucose tolerance, bone fractures, lowered IQ, arthritic-like conditions and decreased thyroid function and that fluoridation at 1 ppm provides no margin of safety.
- 1 ppm provides no control on any individual's fluoride intake, which depends on the amount of water drunk, and on intake from other sources such as beverages, toothpaste, toiletries, medications, pesticides and air pollution. This factor is of particular concern for babies and children who are not able to cope with the same quantities as adults, not just because of their smaller size, but because children's growing bodies' ratio of intake is often higher.
- Formula made with fluoridated water contains 250 times more fluoride than the average

0.004ppm concentration found in human breast milk in non-fluoridated areas.

- The US Centers for Disease Control and Prevention (CDC) provided evidence that 32% of American children have dental fluorosis which is an abnormal discolouration and mottling of the enamel, which is caused by fluoride.\*
- The CDC's concession in 1999 and 2001 concluded that the predominant benefit of fluoride in reducing tooth decay is topical and not systemic. That means that fluoride works to reduce tooth decay from the outside of the tooth and not from the inside, therefore it does not make sense to drink it and expose the entire body to the long term risks of fluoride ingestion.
- There have been many research reports indicating that there is little difference in tooth decay between fluoridated and non-fluoridated communities.

Over 500 professionals have put their names to Fluoride Action Network's Professionals' Petition. For more information, visit [www.FluorideAction.net](http://www.FluorideAction.net).



A shocking article, *Cathy's Horses, Deformed and Disabled by Fluoridated Water*, by Elizabeth A McDonagh first published in

Namaste Magazine Vol.9 Issue 2, now available through [www.npwa.org.uk](http://www.npwa.org.uk), tells the story of an American Quarter Horse farm where bouts of colic, skin, thyroid and reproductive problems were frequent and vets could not explain them. Post-mortem bone analysis reported that the animals had suffered from Chronic Fluoride Poisoning caused by the local city water. The owners went on to present their case to their water and sanitation board and shortly after the board voted unanimously to cease fluoridation.

\* The English National Pure Water Association website states, "It is estimated that between 48% - 54% of children living in fluoridated areas develop dental fluorosis, the visible sign of fluoride poisoning."

# Diagnostic criteria for IBS

According to a clinical update in the Lancet, which is one of the world's leading peer-reviewed general medical journals, irritable bowel syndrome (IBS) is one of the commonest reasons for a consultation with a doctor.

IBS is a chronic disorder with symptoms including recurrent abdominal pain and intermittent diarrhoea, often alternating with constipation. It most commonly affects people between the ages of 20 and 30 and is twice as common in women as in men.

The Lancet article states that diagnostic criteria for IBS are summarised as follows:

Recurrent abdominal pain or discomfort at least 3 days a month in past 3 months associated with 2 or more of:

- ☐ Improvement with defecation
- ☐ Onset associated with change in frequency of stool
- ☐ Onset associated with change in form of stool

In some cases further investigation may be needed to rule out other conditions that can cause similar symptoms.

Other alarm indicators which suggest that other diseases should be excluded before diagnosing IBS are:

- ☐ Patient older than 50 years of age
- ☐ Male



- ☐ Short history of symptoms
- ☐ Documented weight loss
- ☐ Nocturnal symptoms
- ☐ Family history of colon cancer
- ☐ Rectal bleeding
- ☐ Recent antibiotic use

While many patients believe that stress is an important factor contributing to their symptoms, diet, particularly wheat and dairy products, is the commonest culprit. Tests for coeliac disease, which is an inflammatory condition caused by sensitivity to gluten, which is contained in grains, are positive for 3-5% of IBS patients in the UK.

If you suspect that you are suffering from IBS, a doctor will be able to offer dietary changes which may include an elimination diet, food intolerance testing, treating food allergies and help with anxiety/depression, and/or drug/nutrient therapy which may improve global symptoms, constipation, diarrhoea and pain.

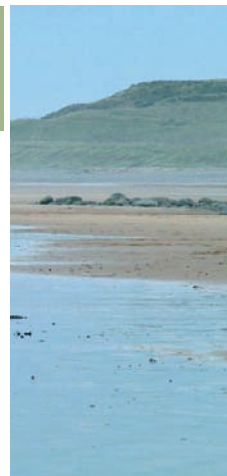
## → Tell us your thoughts on fluoridation

Visit [www.breakspearmedical.com/survey](http://www.breakspearmedical.com/survey) to complete our on-line survey.

We'd like to find out more about you and your opinion on articles published in the Bulletin, so in conjunction with this issue we have posted an on-line questionnaire about water fluoridation.

Simply visit [www.breakspearmedical.com/survey](http://www.breakspearmedical.com/survey) and complete the short questionnaire. The data collected will appear in a forthcoming Bulletin. Your comments may also be published in an upcoming Bulletin. You may sign your questionnaire or complete it anonymously.

Thanks in advance for taking an interest in our new web feature!





## Did you know...?

### Polymorphic light eruption may affect as many as 10% of population

Polymorphic light eruption (PLE) is described as a rash that comes up after exposure to light, which ranges from a mild rash to severe.

The British Skin Foundation website explains:

‘Poly’ means ‘many’, and ‘morphic’ means ‘forms’. In other words, the rash of PLE can take many different forms, including small red bumps, larger red areas, and blisters. In PLE, a rash with one or more of these components comes up a day or two after exposure to the sun. PLE is common, perhaps affecting as many as 10% of the population. It tends to appear in the spring.

It is not infectious and has no connection to skin cancer.

According to the British Skin Foundation, there is no treatment that will get rid of the condition; however, many people remain clear if they avoid exposure to the sun and use an effective sunscreen.

### Dairy-deficient diet may increase diabetes risk

A recent article in MedPage Today stated, “A lack of vitamin D and calcium in the diet may increase the risk for the metabolic syndrome and type 2 diabetes in patients with impaired glucose tolerance...” The article goes on to explain that there is evidence to suggest that vitamin D and calcium may have effects on the function of insulin-secreting beta cells of the pancreas or on insulin action in tissues.

### Link between diet and breast cancer

Cancer Epidemiology Biomarkers & Prevention website published an article about a breast cancer study which linked a typical Western diet—which includes meat, sweets, potatoes, and processed foods—and breast cancer, especially among women who have gone through menopause. The researchers from the Harvard School of Public Health, USA, discovered the connection after monitoring the health of 1459 women from Shanghai.

### Major change in cervical cancer screening

According to a British Medical Journal article, liquid based cytology is the first major change in the preparation method of cervical screening samples for over 50 years.

This new method of screening washes the cells in a vial of liquid, which is then filtered and a random sample presented in a thin layer on a glass slide, which can be screened by staff or subjected to partially automated imaging.

Women benefit from the faster reports and reduced anxiety.

One of the studies quoted in the article found that the ThinPrep Imager, which is the automated imaging system used to screen the slides, detected 1.29 more cases per 1000 women with suspect samples than conventional cytology .

Breakspear Hospital offers cervical screening using ThinPrep samples which detect abnormalities as well as the presence of human papilloma virus (HPV), which is the virus that causes cervical cancer.

### Iron deficiency leading risk factor for disability and death

A paper in the Lancet (August 11, 2007) stated, “Iron deficiency is one of the leading risk factors for disability and death worldwide, affecting an estimated 2 billion people.” An iron deficiency may lead to poor pregnancy outcome, impaired academic performance, and decreased productivity. Targeted iron supplementation, or enriching foods with iron, or both, can control iron deficiency. It is also important that supplements which help absorption of iron, such as ascorbic acid, be considered.



# Notes on prostate health



There are many male-specific conditions that are increasingly prevalent with age. Two such conditions which fall into the category of prostate health are benign prostatic hyperplasia and prostate cancer.

Benign prostatic hyperplasia is rarely life-threatening but does cause irritating urinary symptoms such as urgency, frequency,

nocturia (the need to get up during the night in order to urinate) and obstructive symptoms such as weak stream, hesitancy, intermittency and incomplete emptying.

This condition occurs in up to 70% of men aged 70 years and older. By the age of 80 years, an estimated 1 in 4 men will have undergone treatment to relieve the symptoms.

Treatment options include:

- Watchful waiting
- Phytotherapies
- Prescription medications
- Surgical procedures
- Minimally invasive techniques
- Transurethral resection of the prostate
- Laser prostatectomy

Prostate cancer is the most common cancer in men in the UK. It accounts for 24% of all new male cancer diagnoses.

There has been a huge rise in the number of cases of prostate cancer over the last 20 years. Fortunately due to various new techniques for detecting it (and benign prostatic hyperplasia), the increase in mortality has been much less.

Until recently, the diagnosis of prostate cancer has relied heavily upon the following testing methods:

- 1) Physical examination - including a digital rectal examination (DRE).
- 2) Serum prostate-specific antigen (PSA) - the level rises in people with prostate cancer.
- 3) Biopsy - small samples are removed from a man's prostate gland to be tested for the presence of cancer.

Unfortunately all of these methods have shortcomings.

The first test that is done by doctors is usually a digital rectal examination. However, this can raise the PSA for at least 4 weeks and therefore when a blood sample is taken it should be a fasting sample, and should be taken 4 weeks after the rectal examination. It should also be borne in mind that ejaculation may cause a transient minor increase of PSA. The digital rectal examination is very poor diagnostically, with only 10% being shown to be confirmatory.

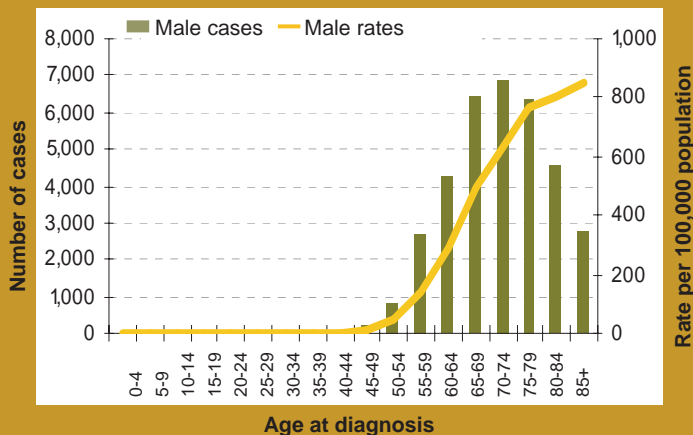
Prostate-specific antigen (PSA) is an enzyme which is produced almost exclusively from the epithelial cells of prostatic tissue. It is present in high concentrations in seminal fluid and becomes elevated in people with prostate cancer. There are non-malignant (non-cancerous) conditions which occur in many men as they get older, such as prostatitis and benign prostatic hyperplasia, that can cause PSA levels to rise and therefore the PSA test results evaluated alone may incorrectly lead to a diagnosis of cancer.

Approximately 75% of men suspected to have a cancer based on PSA testing actually have non-cancerous conditions.

Another test which can be done is free PSA.

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**Numbers of new cases and age specific incidence rates, prostate cancer, UK 2004.** Adapted from <http://info.cancerresearchuk.org>



## Notes on prostate health

*(Continued from page 9)*

Often prostate-specific antigen becomes completely stuck or bound onto proteins. Some is not bound and is called free PSA. In patients who have adenocarcinoma of the prostate (cancer that originates in glandular tissue), more of the PSA is bound to proteins and less is free. The free PSA test measures the free PSA present and if the level is very low, the likelihood of the patient having prostate cancer is high. Measuring both the free PSA and bound PSA gives a clearer evaluation.

Prostate biopsy will often cause complications and as many as 10-25% of patients with a negative biopsy may have prostate cancer. It is therefore very important to have a more accurate laboratory evaluation.



There is a further test available, called PCA3, that tests for a substance from prostate cancer cells. This substance is not produced by benign or normal tissue and therefore checking for this from a urine sample is highly specific to prostate cancer. It is a non-invasive test, as it is analysed from a urine sample, and it may help to reduce the number of unnecessary biopsies. It is best taken after a digital rectal examination in order to have a sufficient number of prostate cells in the urine. After the digital rectal examination, 20-30ml of urine is collected. The PCA3 test is prostate cancer specific, as the PCA3 gene is present in more than 95% of malignant tissue.

***If you wish to have these tests done to assess prostate health, then do please arrange an appointment at Breakspear Hospital.***

## New thoughts on vitamin C helping diabetics



Diabetes Care published the results of a study from Warwick Medical School, Clinical Science Research Institute, Coventry, which provided evidence that vitamin C could help reduce some of the complications associated with diabetes.

The study reported that vitamin C helped to "mop-up" tissue-damaging molecules called free radicals that are over-produced in diabetics, even after blood-sugar levels were normalised. Over-production of free radicals can damage tissues which can lead to possible amputations,

heart disease or blindness.

In the study, the drug telmisarten had the same effect as vitamin C as it stimulates the natural removal of free radicals from cells.

Some experts continue looking for other drugs to try to stop the free radical production permanently, but it may suit people with allergies and sensitivities to utilise the safer, drug-free ways of doing this through achieving optimum nutrition.

## Help save the environment and help Breakspear Hospital Trust

In an effort to be more environmentally friendly by cutting down on our use of printing inks and paper, and possibly reducing some of the carbon emissions of postal trucks, we are asking people to sign up to receive their Breakspear Medical Bulletin by email!

You will receive email notification and a URL link which will take you directly to the latest Breakspear Medical Bulletin *before* it is mailed out by the printers. That means you will be one of the first people to see the new Bulletin possibly days before it is snail mailed to everyone else!

If you sign up for email receipt of the Breakspear Bulletin, Breakspear Medical Group will donate £2 to Breakspear Hospital Trust. The money raised by the Trust is used to help patients who are unable to afford treatment for allergy and environmental illnesses and also helps fund medical research projects.

***All you have to do is send your full name, current mailing address, and email address to [Ljenkins@breakspearmedical.com](mailto:Ljenkins@breakspearmedical.com) with the subject heading: "Save the environment and donate to Breakspear Hospital Trust."***

## Available at our Pharmacy

Breakspear Pharmacy offers a collection of everyday products that we've selected as wise choices for sensitive people. Household cleaners, personal hygiene items, as well as recommended products such as Epsom salts and hydrogen peroxide, are all available at competitive prices. Visit our Pharmacy section at [www.breakspearmedical.com](http://www.breakspearmedical.com) for more information or talk to our Pharmacy staff.

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**Call us:** + 44 (0) 1442 266 244.

Call our Pharmacy Department between 9:00 am and 4:30 pm, Monday to Friday. Outside those times, you may leave your telephone number and we will call you back.

**Send a fax:** + 44 (0) 1442 266 388.

Please write a note, stating which products you would like to purchase, including your credit card details and daytime phone number in case any details have not printed clearly.

**Write a letter:** Breakspear Pharmacy, Hertfordshire House, Wood Lane, Hemel Hempstead, Hertfordshire HP2 4FD, United Kingdom

Please write a note, including your credit card details or enclosing a cheque. Please make cheques payable to "Breakspear Hospital" and print your name, address, telephone number and cheque card number on the reverse of the cheque.

### Or come and visit us at Breakspear Hospital!

*All prices are inclusive of VAT, where applicable.*

*There will be an additional charge for postage and packaging.*

*Stock items will be dispatched within 24 hours of the order being processed.*

*Breakspear Hospital reserves the right to alter prices without notice.*

## Far Infrared Sauna Blanket



The Far Infrared Sauna Blanket has been designed to provide a sauna experience that is portable and easy to clean for people who do not have access to a conventional sauna.

For over two thousand years, increasing the body's temperature has been attributed with healing, preventative, and cleansing properties. Sauna is used to boost metabolism as pulse rates increase, blood vessels become much more flexible, extremities benefit from increased circulation and toxins are excreted through sweat and on the breath.

Breakspear Pharmacy has the Far Infrared Sauna Blankets in stock and packaged ready for you to take home for £525. We also offer the Far Infrared Portable Sauna for £345.

## Separate measles, rubella and mumps vaccinations available for all ages

Outbreaks of measles, which is the most infectious serious childhood disease, have been reported as occurring widely in the United Kingdom. Between January and September this year there were 480 confirmed cases. Children as young as 3 months and up to 12 years were showing "extremely convincing" measles symptoms.

In line with the National Health Service immunisation policy, Breakspear Hospital offers separate measles, rubella and/or mumps and both primary and booster mercury-free vaccinations for anyone over the age of 13 months. We also offer blood tests to confirm immunity for healthcare workers, students, parents, child minders or anyone else who may be in contact with suspected cases or children including those who are too young to receive vaccinations.

You do not need a referral. Advance payment is not required.

Simply make an appointment by telephoning our Immunisation Department at 01442 867 280.

## Bulletin Board



Joseph, son of Catherine and Sean Power, was born on 16 July 2007 and weighed 6 lbs 14 oz. Catherine works in our Antigen Laboratory.

### Dr Daymond presents

Consultant rheumatologist, Dr Terence Daymond, presented his lecture, "Lyme: the disease that ticks all the right boxes" at the 6<sup>th</sup> UK Tick Borne Conference on 6 July 2007.



### Dr Monro lectures in Paris

Dr Jean Monro presented a series of lectures at the European Masters in Aesthetic & Anti-Aging Medicine in Paris, 9-14 October 2007. Her lectures included "Adverse Effects of Pesticides on Male and Female Fertility" and "Detoxification by Hyperthermia".



### More BCG clinics

To keep up with the demand for BCG (tuberculosis) vaccinations, the Immunisation Department now has more clinics available.

Prior to the BCG vaccination, a skin test (the Mantoux test) is performed. For more information about this test and all our other mercury-free vaccinations, visit [www.breakspearmedical.com/files/travel.html](http://www.breakspearmedical.com/files/travel.html) or telephone the Immunisation Department's direct line 01442 867 280.

## Breakspear reviewing prices

With effect from 1 November 2007, we have increased the postal charges incurred in sending out goods to reflect the current Royal Mail rates.

As from the beginning of 2008 we will be introducing small general price increases for testing and low-dose immunotherapy vaccines.

### New prices effective 1 January 2008

Initial consultation:	£120*
Full day allergy testing:	£210
Half day allergy testing:	£110
Part day allergy testing:	£58

Note: prices for follow-up consultations are as previously.

\* Consultation rates start at these prices, however, prices do vary for some specialist physicians. Please confirm with Reception when booking your appointment.