



Making London Beautiful

2011

# Health & Wellbeing News

Issue 6



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# New Year, New You?

Ok, who's made themselves a promise to do things differently this year?

Have you resolved to stop doing something, to do more of something else, to give something up, to lose, to save, to gain or to change your life or yourself in any way..?

Let's have a show of hands!



See, you're not alone! January is the traditional time to set goals and targets for things we want to achieve in the year ahead.

Sadly, even the very best-intentioned resolutions can fall by the wayside, and in January's SPIRIT newsletter we've looked at ways to help you keep the promises you've made yourself.

It's really easier than you think- take a look at the ideas and tips and keep us posted on how you're getting on- your story could inspire others who'd appreciate a little motivation.

## Make 2011 a year to try something new



Ever been rockclimbing?  
Paintballing?  
Rollerblading?  
Or even surfing?

Why not try a new activity this year and challenge yourself a little - there are a host of outdoor and indoor activity centres

around London offering great deals for beginners in a multitude of activities - and the beach isn't far away if you really DO fancy waxing up that board and catching some waves!

## Music 'releases mood-enhancing chemical in the brain'

By Sonya McGilchrist  
Health reporter, BBC News



Researchers scanned volunteers' brains with MRI and PET machines

Music releases a chemical in the brain that has a key role in setting good moods, a study has suggested.

The study, reported in Nature Neuroscience, found that the chemical was released at moments of peak enjoyment.

Researchers from McGill University in Montreal said it was the first time that the chemical - called dopamine - had been tested in response to music.



Dopamine increases in response to other stimuli such as food and money. It is known to produce a feel-good state in response to certain tangible stimulants - from eating sweets to taking cocaine.

Dopamine is also associated with less tangible stimuli - such as being in love.

In this study, levels of dopamine were found to be up to 9% higher when volunteers were listening to music they enjoyed.

The report authors say it is significant in proving that humans obtain pleasure from music - an abstract reward - that is comparable with the pleasure obtained from more basic biological stimuli.

Music psychologist, Dr Vicky Williamson from Goldsmiths College, University of London welcomed the paper. She said the research didn't answer why music was so important to humans - but proved that it was.

"This paper shows that music is inextricably linked with our deepest reward systems" said Dr Williamson.

The relatively small sample had been narrowed down from an initial group of 217 people.

This was because the subjects taking part would have to experience "chills" consistently, to the same piece of music, without diminishing on multiple listening or in different environments.

A type of nuclear medicine imaging called a PET scan was used for two sessions. For one session, volunteers listened to music that they highly enjoyed and during the other, they listened to music that they were neutral about.

In the third session the music alternated between enjoyed and neutral, while a functional magnetic resonance imaging, or fMRI scan was made.

Data gathered from the two different types of scans was then analysed and researchers were able to estimate dopamine release.

Dopamine transmission was higher when the participants were listening to music they enjoyed.

A key element of the study was to measure the release of dopamine, when the



**Does playing classical music to babies make a difference? Opinion is divided; but many experts think that it may stimulate the brain in a way that helps educational and emotional development.**

**It's known as the Mozart Effect, a theory which is credited with boosting IQ, improving health, strengthening family ties and even producing the occasional child prodigy.**

**Numerous studies conclude that playing music to babies in the womb and in the early years helps build the neural bridges along which thoughts and information travel.**

**And research suggests it can stimulate the brain's alpha waves, creating a feeling of calm; a recent study of premature infants found that they were soothed by the music.**

**The USA adopts a clear approach to the idea: for example, in Florida, all state-funded pre-schools are required to play classical music by law, and many US hospitals give classical CDs to new mums.**

**In the UK, many parents have also embraced the theory, with Classic FM's Music for Babies CD enjoying several weeks at the top of the classical charts.**

participants were feeling their highest emotional response to the music.

To achieve this, researchers marked when participants felt a shiver down the spine of the sort that many people feel in response to a favourite piece of music.

This "chill" or "musical frisson" pinpointed when the volunteers were feeling maxim pleasure.

The scans showed increased endogenous dopamine transmission when the participants felt a "chill". Conversely, when they were listening to music which did not produce a "chill", less dopamine was released.

### What is dopamine?

Dopamine is a common neurotransmitter in the brain. It is released in response to rewarding human activity and is linked to reinforcement and motivation - these include activities that are biologically significant such as eating and sex.

Dr Robert Zatorre said: "We needed to be sure that we could find people who experienced chills very consistently and reliably.

"That is because once we put them in the scanner, if they did not get chills then we would have nothing to measure.

"The other factor that was important is that we wanted to eliminate any potential confound from verbal associations, so we used only instrumental music.

"This also eliminated many of the original sample of people because the music they brought in that gave them chills had lyrics."



More info at [www.bbc.co.uk/health/](http://www.bbc.co.uk/health/)

## Nine basic human needs for emotional wellbeing: Part 3

### The need for challenge and creativity.

Learning something new, expanding horizons, improving on existing skills all provide a sensation of progress and achievement. Without this, a person can feel worthless, or that there is no real reason for their being.

Feeding our creative nature feeds our essence and spurs us on to achieve in areas and disciplines that we love, rather than just do well in things we must or are expected to do.

### The need for intimacy.

Tying in with the need for attention, it seems that people have a need to share their ideas, hopes and dreams with others close to them. For some, this can be as simple a talking to a loved pet, but for most of us, it requires that we have at least one individual with whom we can converse 'on the same level'.

This can be a spouse, partner, parent, sibling or trusted friend - the great thing is there are no rules as to who is best for us - our hearts tell us!

### The need to feel a sense of control.



The results of total loss of control over your surroundings, relationships or body are not hard to imagine, and have been well documented.

From survivors of torture, to someone losing their job, those who are able to maintain a sense of control somewhere in their life fare the best. This is why having

a variety of interests and activities is so important.

In a crisis when all may seem lost, retaining and being conscious of a sense of control over our own behaviour - and applying it positively - can make a world of difference in how we respond to a situation or others' actions or attitudes.

**Next month: The need for a sense of status, and for a sense of safety and security**

**And we sum up - what we can do to meet all nine needs?**

## DIABETES: A common problem



Diabetes occurs because the body can't use glucose properly, either owing to a lack of the hormone insulin, or because the insulin available doesn't work effectively.

The full name 'diabetes mellitus' derives from the Greek word 'diabetes' meaning siphon - to pass through - and 'mellitus' - the Latin for honeyed or sweet. This is because not only is excess sugar found in the blood but it may also appear in the urine, hence it being known in the 17th century as the 'pissing evil'.

Diabetes has been a recognised condition for more than 3,500 years. According to the charity Diabetes UK, more than 2 million people in the UK have the condition, and up to 750,000 more are believed to have it without realising they do.

**More than three-quarters of people with diabetes have what is called type 2 diabetes mellitus. This used to be known as non-insulin dependent diabetes mellitus (NIDDM) or maturity-onset diabetes mellitus. The remainder have type 1 diabetes mellitus, which used to be known as insulin-dependent diabetes mellitus.**

The remainder have type 1 diabetes mellitus, which used to be known as insulin-dependent diabetes mellitus.

## What's the difference?

- **In type 1**, the body's unable to produce any insulin. This usually starts in childhood or young adulthood. It's treated with diet control and insulin injections.
- **In type 2**, not enough insulin is produced or the insulin that is made by the body doesn't work properly. This tends to affect people as they get older, and usually appears after the age of 40.

## Normal blood sugar control

The body converts glucose from food into energy.

Glucose comes ready made in sweet foods such as sweets and cakes, or from starchy foods such as potatoes, pasta or bread once they're digested. The liver is also able to manufacture glucose.

Under normal circumstances, the hormone insulin, which is made by the pancreas, carefully regulates how much glucose is in the blood. Insulin stimulates cells to absorb enough glucose from the blood for the energy, or fuel, that they need. Insulin also stimulates the liver to absorb and store any glucose that's left over.

After a meal, the amount of glucose in the blood rises, and this triggers the release of insulin. When blood glucose levels fall, during exercise for example, insulin levels fall too.



A second hormone manufactured by the pancreas is called glucagon. It stimulates the liver to release glucose when it's needed, and this raises the level of glucose in the blood.

Insulin is manufactured and stored in the pancreas, which is a thin gland about 1.5cm (6in) long that lies

crosswise behind the stomach. It's often described as being two glands in one, since in addition to making insulin it also produces enzymes that are vital for digestion of food.

These include lipase, which helps to digest fat, and amylase that helps to digest starchy foods. It also

releases 'bicarbonate of soda' to neutralise any stomach acid that may otherwise damage the lining of the gut.

Diabetes that isn't controlled can cause many serious long-term problems. Excess glucose in the blood can damage the blood vessels, contributing to heart disease, strokes, kidney disease, impotence and nerve damage.



Uncontrolled diabetes is the most common cause of blindness in people of working age. People with diabetes are also 15 per cent more likely to have an amputation than people without the condition.

In most cases, it's possible to reduce the risk of such complications by following medical advice and keeping diabetes under control. It's

vitaly important for people with diabetes to check their glucose levels regularly at home and to attend hospital check-ups, so any problems can be detected and treated early.

## How is it diagnosed?

Diabetes may be detected during a routine urine test when excess glucose is present. When symptoms have drawn attention to the problem, a blood test will confirm whether or not the underlying cause is diabetes.

Antenatal screening is not possible.

## Who's affected?

Those at risk include:

- People over 40, or over 25 and African-Caribbean, Asian or from a minority ethnic group
- People with a close family member who has type 2 diabetes
- People who are overweight or who have a large waist size
- Women with polycystic ovary syndrome who are overweight
- Women who've had diabetes in pregnancy (gestational diabetes)

## What's the treatment?



The first step in the treatment of diabetes is to eliminate the symptoms. The next step is to prevent the physical harm it can cause.

Although no cure exists for type 1 diabetes, its symptoms can be eliminated by adhering to a healthy diet that has a controlled amount of sugar in it, and by having regular injections of insulin to replace that which the body is not providing. This aims to keep the blood glucose level steady.

Insulin can't be taken by mouth because digestive juices and enzymes destroy it before it can get into the bloodstream. Scientists are working on ways of overcoming this.

Most people find giving themselves the injections simple and painless, as the needle is so fine. How often someone needs to inject insulin depends on what their diabetes specialist has recommended and which type of insulin they're using.

Insulin can be short-acting, medium-acting or long-acting. Some people need it twice a day, some three times a day and some use an insulin pen to give themselves insulin just before meals.

Devices are becoming available that deliver insulin continuously under the skin in response to need. Inhaled insulin is also available. Self-help

- Monitor blood glucose levels
- Attend hospital check-ups
- Have regular eye checks

- Inform the DVLA
- Wear a medi-alert bracelet
- Always have some sugar available

Many people with type 2 diabetes need only to eat a healthy diet to control their diabetes. If this isn't enough, medication or insulin may be necessary. Everyone with diabetes should eat a diet that's low in fat, sugar and salt.

Regular exercise, not smoking and keeping to an ideal weight also help prevent the complications of diabetes, such as heart disease. Keeping blood pressure at a safe level is important.



People with type 1 diabetes are allowed to drive, but must inform the DVLA that they have diabetes. If blood sugar goes too low, they may develop hypoglycaemia.

Most wear an identity bracelet to inform people they have diabetes in case they black out and need help.

Fortunately, diabetes can be managed well, so people can live a normal lifestyle.



*Information from [www.BBC.co.uk/Health](http://www.BBC.co.uk/Health). All content within BBC Health is provided for general information only, and should not be treated as a substitute for the medical advice of your own doctor or any other health care professional. The BBC is not responsible or liable for any diagnosis made by a user based on the content of the BBC Health website.*

The Bastows Health and Wellbeing programme has been designed to support, enable and empower our Family

- to offer support when needed to help our Family members in times of crisis, anxiety or ill-health

- to enable us all to work towards the prevention of ill-health, and to take responsibility for our own health and wellbeing, in the knowledge that Bastows will listen, care and empathise with genuine need

- and to empower us all, so we each have a voice in how Bastows health and wellbeing programme develops and is shaped in future

## SUPPORTING - ENABLING - EMPOWERING

Bastows are a responsible, caring company, but ultimately the responsibility for health and wellbeing rests with us all as individuals; without personal reflection, change and investment in ourselves, we cannot reap the benefits of any programme.



Your ideas, thoughts and suggestions are crucial to the success of the programme get involved, have a say... and have a healthy New Year with your families!

### DON'T FORGET

Health & Wellbeing queries can be sent in confidence  
to Niki at [niki@bastows.co.uk](mailto:niki@bastows.co.uk)  
or to our external advisor Steve McGrane at  
[healthandwellbeing@orangehome.co.uk](mailto:healthandwellbeing@orangehome.co.uk)