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music

AFFECTS ON THE CIRCULATION

hypertension

OCCUPATIONAL STATUS AFFECTS BLOOD PRESSURE OUTCOMES

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how music affects the circulation

DOCTORS HAVE SUSPECTED FOR A WHILE THAT MUSIC CAN BE GOOD FOR THE HEART - NOW A STUDY PUBLISHED IN THE JOURNAL *CIRCULATION* HAS GIVEN NEW EVIDENCE.



Music appears to induce a continuous, dynamic — and to some extent predictable — change in the cardiovascular system. A study of classical music pieces (both vocal and orchestral) suggests that a soaring crescendo of music can both set the pulse racing and raise blood pressure. In contrast the soothing sound of a reduction in volume (a decrescendo) with uniform emphasis has the opposite effect of slowing the heart rate and reducing blood pressure.

Researchers said it might be possible to find new ways of using music to treat diseases such as stroke and rehabilitate patients. The study of 24 healthy young adults in their 20s found that crescendos invariably led to vasoconstriction (narrowing of blood vessels) in the skin and increased blood pressure. Half the volunteers were experienced singers while the other 12 had no special musical interests; there was no difference in response between the two groups.

improved survival figures for bowel cancer

PEOPLE DIAGNOSED WITH BOWEL CANCER AT AN EARLY STAGE NOW HAVE A 90 PER CENT CHANCE OF SURVIVAL IN THE UK, RESEARCHERS REPORTED LAST WEEK. THIS FIGURE REPRESENTS A BIG IMPROVEMENT IN PROSPECTS FOR PEOPLE WITH THE DISEASE.

The finding comes from the first ever analysis of national figures for bowel cancer, performed by the UK National Cancer Intelligence Network (NCIN). Between 1996 and 2006 a total of over 300,000 cases of bowel cancer were diagnosed in the UK. Of those, 26,727 were found at an early stage and 93 % were still alive 5 years later.

This figure is very encouraging but it emphasises the importance of early diagnosis since overall, only half of all people with bowel cancer will survive. The NCIN urged the public to take advantage of screening opportunities - as these can help to detect the disease in good time. Only 13 per cent of cases of the disease currently are diagnosed in the earliest stage (known as Dukes A), which is a small polyp that can be easily removed.

Surgeon Paul Finan, who chairs

the NCIN bowel cancer group, said: "The reason why more people are surviving early stage bowel cancer than ever before is mostly because of many improvements in surgery. This includes using less invasive techniques, and patients receiving better care around the time of surgery - like more sophisticated anaesthetic care and better care during hospital admission and recovery."

Advances have also been made in treating later stage bowel cancers (Dukes D) with some remarkable results from chemotherapy, which is often able to shrink large secondary tumours. This may enable the subsequent surgical removal of both the primary bowel tumour and metastatic tumours in the liver.

The NHS bowel cancer screening programme using stool tests is currently being rolled out for people aged 60-69. This faecal occult

blood (FOB) test has been shown to improve the outlook for bowel cancer in population groups but it is insensitive in diagnosing bowel polyps or early stage bowel cancer. The "gold standard" screening method for bowel polyps and cancer is by colonoscopy. This entails the examination of the colon with a small flexible camera, which is very accurate in diagnosing polyps and cancer. Any bowel polyps can be removed at the same time, thereby preventing future development into cancer. "Virtual" colonoscopy by CT scan is becoming more widely used and is an accurate and simple method of screening for bowel abnormalities, but any polyps would have to be removed by a follow-up "real" colonoscopy.

Roodlane Medical recommends screening for men and women after the age of 50, or earlier if there is a family history of bowel cancer.

education level strong predictor of incident hypertension in women

THERE IS NO DOUBT THAT A WOMAN'S SOCIO-ECONOMIC STATUS (SES) AFFECTS HER HEALTH.

Often SES is measured by determining education, income, occupation, or a composite of these. A recent publication from the Harvard University Team has compared components of SES with the risk of developing hypertension (high blood pressure) in life.

The study found a strong inverse relationship between a woman's educational level and her risk of developing hypertension. Over 27000 women were grouped into 5 educational categories attained beyond high school. They followed them up for a mean period of 9.8 years.

	Education Categories	Incidence of hypertension per 1000 person-years
1	<2 years of health professional education	47.8
2	2-4 years of health professional education	39.7
3	bachelor's degree	35
4	master's degree	34.9
5	doctoral degree	27.7

Interestingly the same study compared women of 6 different income categories but this did not show a statistically significant difference in incidence of hypertension. The researchers wrote: "Income can fluctuate over time and thus is susceptible to bias. Furthermore, income does not necessarily reflect an

individual's wealth, which may influence health behaviour. In contrast, education is typically determined relatively early in life, is less subject to fluctuation thereafter, and therefore much less susceptible to misclassification bias."

occupational status affects blood pressure outcomes; but it's not what you might expect.....

A study led by Professor Paul Leigh, showed that higher-status occupations are associated with less hypertension than lower-status occupations and this finding extended beyond retirement. The relationship appeared stronger in men than women. Their review included a vast range of occupations - from managers and white-collar professionals to clerical and blue-collar workers.

"For a long time, the conventional wisdom was that the people at the top would be more likely to have hypertension, but just the opposite is true," said Leigh. "Hypertension is more common among people on the lowest rungs of the occupational ladder." "Unlike executives and professionals like architects and engineers, Leigh explained, workers in positions such as sales, administrative support,

construction and food preparation have little control over decision-making, are under pressure to get a specified amount of work done in a certain amount of time and may feel inadequate about their positions in the workplace hierarchy. Consequently, their stress levels tend to be higher, which can lead to high blood pressure and, eventually, hypertension."

other interesting gender defined associations between environmental factors and hypertension:

A recent themed issue 'Hypertension: Journal of the American Heart Association' features more than 45 studies and editorials related to women and hypertension. It outlines the following diet and environmental risk factors for hypertension development:

1. Red meat was found to be related to increased risk of hypertension in women, but poultry seemed to have no association with risk of hypertension. A significant prospective study of over 28 000 women found that 35.6% of woman who ate 1.5 or more servings of red meat daily developed hypertension compared to 21.7% of those who ate no red meat.

2. Caffeine consumption does not increase your risk of developing hypertension, however fizzy drinks did. A study analysed data from the Nurses' Health

Studies (NHSs) which followed up 155,594 U.S. women over 10 years. No linear association between caffeine consumption and risk of incident hypertension was observed. Interestingly enough, consumption of cola beverages was associated with an increased risk of hypertension, independent of whether it was sugared or diet cola.

3. Women appear to be more at risk of developing hypertension related to sustained sleep deprivation than men. Professor Francesco Cappuccino from Warwick Medical School led the research; he declared that "women sleeping less than 5 hours were more than twice as likely to develop hypertension than those who slept 7 hours a night". No association between sleep deprivation and hypertension was found in the male cohort.

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