

Mozart strikes right chord in enhancing brain power: study

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LOS ANGELES: Those who hope to seem smarter by listening to Mozart might "be on to something. At least temporarily.

Researchers at the Centre for the Neurobiology of Learning and Memory at University of California, Irvine, have determined that 10 minutes of listening to a Mozart piano sonata raised the measurable IQ of college students by up to 9 points.

The effect on the intelligence of the college students in the study, however, barely lasted longer than the echo of the piano chords themselves. The IQ boost dissipated within 15 minutes, the team reports today in the journal *Nature*.

The researchers suggested that classical music may enhance abstract reasoning, such as that involved in

mathematics or chess, by reinforcing certain complex patterns of neural activity. They suspect that the complexity of the music itself is the key. Simpler, repetitive rhythms of grunge rock or minimalist New Age jazz may actually interfere with abstract reasoning.

Moreover, making music, rather than simply listening to it, may have a more permanent impact on intelligence, they said.

"Everybody is intrigued by this because it fits everyone's intuition about music and mathematics," said Frances H. Rauscher,; a research fellow at the UC Irvine centre involved in the study

Efforts to increase intelligence are as controversial as the IQ tests themselves. Breast feeding and increased income have been shown to raise IQ scores, while the disruption of

summer vacations has been shown to lower scores but none of those studies are conclusive

"It is remarkable, if it true" said Nicholas Christenfeld, a social psychologist at University of California, San Diego, whose research focuses on emotion and mental effort.

However provocative the new music study seems other psychologists warned it is still inconclusive and the researched themselves acknowledged. sheepish! open to misinterpretation or abuse by overanxious parents and educational hucksters.

"You can never control what the marketers will do. It is a very scary thought," said Rauscher.

Study offers proof sunscreen prevents cancer

Previous advice on using it had been based on circumstantial evidence

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BOSTON: Doctors have gathered the first direct, scientific proof that using sunscreen prevents skin cancer.

Rubbing on sun-blocking cream has long been recommended as a way to protect the skin from the sun's harmful effects, including cancer. But this advice had been based on circumstantial evidence, such as animal experiments.

Now, Australian researcher. have conducted a summer long experiment showing that people who used sunscreen before going outside cut their chances of developing the first signs of skin

"It's the first time we've been able to definitively show that sunscreen lowers the risk of getting skin cancer later in life,- said Dr. Darrell Rigel of New York University Medical School.

The study was done on 588 men and women. They were randomly assigned to use either SPF-17 sunscreen or a look-alike dummy lotion from September 1991 to the end of March 1992, one Australian summer.

Then they were checked for solar keratoses - small, wart-like growths that result from overexposure to the sun..

These growths are forerunners of squamous-cell skin cancer, a common, usually harmless form of skin cancer.

They also signal increased risk of melanoma, the much rarer and lethal skin cancer. although they do not directly lead to these cancers.

The researchers found that the sunscreen users averaged a net loss of about one keratosis and those in in the comparison group gained one.

The study was conducted by Dr. Sandra Thompson and colleagues from the Anti-Cancer Council of Victoria and the University of Melbourne.

It was funded by grants from several nonprofit Australian health organizations. The results are published in the latest *New England Journal of Medicine*.

In the study, the volunteers were told to put sunscreen on their heads, necks, arms and hands every morning and to reapply it during the day, if necessary.

They were also told to avoid the sun as much as possible by covering up with clothing and staying out of the midday sun.

They followed this advice so well that fewer than half could guess if they had been assigned to use a real sunscreen.

Even though the subjects' exposure was probably relatively modest, the sunscreen clearly cut down the risk of precancerous growths. And it turned out that the more diligently they applied it, the better it worked.

REDUCTION OF SOLAR KERATOSES BY REGULAR SUNSCREEN USE

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Abstract Background. The incidence of and mortality from skin cancer are increasing in many countries. In view of the added concern about ozone depletion, many organizations are promoting the regular use of sunscreens to prevent skin cancer, despite the absence of evidence that

these products have this effect. Solar (actinic) keratosis is a precursor of squamous-cell carcinoma of the skin.

Methods. We conducted a randomized, controlled trial of the effect on solar keratoses of daily use of a broad spectrum sunscreen cream with a sun-protection factor of 17 in 588 people 40 years of age or older in Australia during one summer (September 1991 to March 1992). The subjects applied either a sunscreen cream or the base cream minus the active ingredients of the sunscreen to the head, neck, forearms, and hands.

Results. The mean number of solar keratoses increased by 1.0 per subject in the base-cream group and decreased by 0.6 in the sunscreen group (difference, 1.53; 95 percent confidence interval, 0.81 to 2.25). The sunscreen group had fewer new lesions (rate ratio, 0.62, 95 percent confidence interval, 0.54 to 0.71) and more remissions (odds ratio, 1.53; 95 percent confidence interval, 1.29 to 1.80) than the base-cream group. There was a dose-response relation: the amount of sunscreen cream used was related to both the development of new lesions and the remission of existing ones.

Conclusions. Regular use of sunscreens prevents the development of solar keratoses and, by implication, possibly reduces the risk of skin cancer in the long term.

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