A choral work in which the musical parts are derived from the singers’ own genetic codes will receive its London premiere at the Royal Society of Medicine on 13 July. Allele has been composed by Michael Zev Gordon, with text written by poet Ruth Padel. It will be performed by the New London Chamber Choir and is part of a public event entitled Music from the Genome. The project combines the composition of Allele with original scientific research investigating the genetic determinants of musical ability. The results of the research will be announced at the event and may suggest that musical ability depends in part on brain biochemistry. For tickets contact sophie.baettig@rsm.ac.uk.

Happy music on prescription? Researchers asked 10 healthy volunteers to choose music that evoked joy and anxiety for them. Their endothelial function was assessed by brachial artery flow mediated dilation (FMD) and measured as a percentage diameter change after an overnight fast. Compared with baseline results, music that evoked joy was associated with increases in mean upper arm FMD, whereas reductions in FMD were observed after listening to music that elicited anxiety. Joyful music produced a dilation of a magnitude previously observed with aerobic or statin therapy (Psychosomatic Medicine 2010;72:354-6, doi:10.1097/psy.0b013e3181da7968).

We like to think we control our own destinies by setting goals and pursuing them. But results of recent research indicate that our sense of free will is not so free after all. A review in Science concludes that our subconscious thoughts could manipulate our goals and motivations much more than scientists have previously imagined (2010;329:47-50, doi:10.1126/science.1188595). The authors demonstrate that although conscious decisions to act always seem to precede our actual actions, the human brain is often a few steps ahead of its owner, preparing the action well before any conscious thoughts instruct it to do so. This process makes us willing to control on how to deal with the opportunities and challenges posed by our environments.

A population based study of behaviour immediately after a transient ischaemic attack shows that about 70% of patients do not correctly recognise their attack and that 30% delay seeking medical attention for over 24 hours, regardless of age, sex, social class, or educational level. On top of that, about 30% of early recurrent strokes occur before seeking attention (Stroke 2010;41:1108-14, doi:10.1161/strokeaha.109.576611). More effective public education is needed to achieve acute prevention.

Cardiac patients who are resistant to aspirin—a problem that occurs in about 10% of those presenting with suspected acute coronary syndrome—are probably at increased risk of further cardiac events. A study that conducted bedside tests for aspirin resistance in 314 patients currently taking daily aspirin who presented to the emergency department with chest pain found aspirin resistance in 9.6% of them (QJM 2010;103:405-12, doi:10.1093/qjmmed/hcq038). Of the 312 hospital survivors, aspirin resistant patients had more adverse events over six months with an overall hazard ratio of 10 (95% CI 4.6 to 22).

Specially trained sniffer dogs are being introduced into the lives of a few people with brittle diabetes to warn them of impending hypoglycaemic attacks. Another less likely early warning sign in development is a tattoo that is usually invisible but turns orange when blood sugar levels dip too low, and bright yellow as blood glucose rises. The dye in the tattoo contains hundreds of tiny nanosensors that absorb glucose from under the skin. The dye is not permanent, and researchers are working on a pen-like device that allows the patient to top up the tattoo weekly (Daily Mail 29 June 2010, http://bit.ly/9vtjaj).

The notion that eating dark chocolate might prevent high blood pressure appeals to Minerva. But results of research into the subject are conflicting, not only because the numbers involved are small, but also because of secrecy surrounding the production of chocolate. Future questions to address include: does the brand of chocolate account for differences in blood pressure effects? What are the dose and time dependent effects on blood pressure? And would people at risk of hypertension be willing to eat therapeutic doses of chocolate? (Hypertension 2010;55:1289-95 doi:10.1161/hypertensionaha.110.151522).

Representatives of multinational food companies have claimed that they are responding to the crises of obesity and chronic disease and of food insecurity and undernutrition. But an article in the American Journal of Public Health says there’s no evidence to suggest that they are improving food supplies or public health (2010;100:975-81, doi:10.2105/AJPH.2009.187666). The companies enjoy subsidies on processed oils, starches, and sugars, lobby vigorously for laws that regulate the public interest to be abandoned, and spend huge amounts on advertising and marketing. Such companies, says the article, are on a mission to teach the world to snack, not to sing.

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