In the news

ENGINEERINGA BETTER DIET

We are all told to eat our "five a day" of fruit and vegetables, but wouldn't it be easier if the food we eat more often were even better for us? As a step in this direction, researchers have enriched a common fruit with anthocyanins — resulting in the headline-grabbing purple tomato.

Anthocyanins are associated with protection from certain cancers, among other diseases, and are found at high levels in various berries.

Similar levels of this pigment were achieved in transgenic tomatoes by introducing the genes for two transcription factors that cause its expression in snapdragons.
p53-deficient mice fed with the strikingly coloured fruit showed a significant increase of lifespan.

Although this preliminary study is a long way from application in humans, the researchers were positive about its implications. "This is...the first example of a GMO with a trait that really offers a potential benefit for all consumers," says Professor Cathie Martin (ScienceDaily 27 Oct 2008). "At the very least, it suggests that what you eat can really make a contribution towards preventing disease" (The Guardian 27 Oct 2008). Dr Paul Kroon, of the Food Research Institute in Norwich, UK, highlighted the potential for extension to other fruit and vegetables: "The technology offers great scope for altering...their content of potentially health-protective compounds."

Some, however, were more cautious. Dr Lara Bennett, science information officer at Cancer Research UK, said, "It's too early to say whether anthocyanins obtained through diet could help to reduce the risk of cancer" (Cancer Research UK 27 Oct 2008). Erik Millstone, professor of science policy at the University of Sussex, was also sceptical, saying, "What we need is good diets, not high-tech products that let people think they can keep on eating bad diets." (The Sunday Times 26 Oct 2008).

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