

NEW WINE RECIPE PROTECTS AGAINST CANCER

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A new technique for preserving grapes could lead to the production of wines that protect drinkers from heart disease, cancer and brain degeneration. Mass-marketed grapes are traditionally kept fresh in cold storage using sulphur dioxide, a technique that is highly effective against decay but causes allergic reactions in some consumers and corrodes metal machinery. But Francisco Artes-Hernandez and colleagues at the Technical University of Cartagena, in Spain, developed a new method using the ozone.

In tests it was found to preserve the fruit 90 per cent as effectively as the use of sulphur dioxide without the added sulphites that can trigger asthma and other allergic reactions in some people. The ozone-treated grapes also contained up to four times more polyphenols – antioxidant compounds that could reduce the risks of cancer, cardiovascular disease and brain function degeneration according to research.

The technique is described in the Journal of the Science of Food and Agriculture and highlighted in this week's Chemistry and Industry magazine. Dr Artes-Hernandez said it was not clear why the ozone preservation method increased levels of the antioxidant chemicals. He said the compounds are usually produced in plant cells in response to environmental stress or attack. Andrew Waterhouse, of the Department of Viticulture at University of California, said the ozone process could be used to replace the problematic sulphites added to wine during the liquefying process.

Wines using grapes that had been through the new method would be more expensive, but there could be a niche market for people willing to pay extra for allergic reaction-free, healthier varieties. Polyphenols are natural compounds found in red wine, chocolate, coffee and many fruits.



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