

Another grape excuse to hit the bottle

June 16 2006

Scientists in Italy say they have discovered that the grapes used to make some of the most popular red wines contain high levels of the sleep hormone melatonin.

Melatonin is naturally secreted by the pineal gland in the brain, especially at night. It tells the body when it is time to sleep.

The discovery of melatonin in grape skin could explain why so many of us hit the bottle in the evening to wind down after a day's hard slog. 'The melatonin content in wine could help regulate the circadian rhythm [sleep-wake patterns], just like the melatonin produced by the pineal gland in mammals,' says researcher Iriti Marcello at the University of Milan.

Until recently, melatonin was thought to be exclusively produced by mammals but has recently been discovered in plants. It is thought to have antioxidant properties. Iriti's study discovered high levels of melatonin in Nebbolo, Merlot, Cabernet Savignon, Sangiovesse and Croatina grape varieties.

Iriti's team have also shown that melatonin content can be enhanced in grapes by treating vines with a plant vaccine Benzothiadiazole.

Richard Wurtman of the brain and cognitive science department at MIT is unconvinced, however, and believes further research is needed to determine whether the compounds discovered are melatonin, or something very similar.



Citation: *Journal of the Science of Food and Agriculture*, DOI 10.1002/jsfa2537

Source: Society of Chemical Industry

Citation: Another grape excuse to hit the bottle (2006, June 16) retrieved 20 April 2024 from https://phys.org/news/2006-06-grape-bottle.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.