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Another grape excuse to hit the bottle

NOTE: The embargo has been lifted for this press release.

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. (Journal of the Science of Food and Agriculture DOI 10.1002/jsfa2537). 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.