## Melatonin might help in controlling weight gain and preventing heart diseases associated to obesity

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Melatonin is a natural hormone produced by the body that can also be found in some fruits and vegetables as mustard, Goji berries, almonds, sunflower seeds, cardamom, fennel, coriander and cherries. University of Granada researchers have analyzed the effects of melatonin on obesity, dyslipidimia and high blood pressure in young diabetic obese rats

University of Granada researchers have proven that melatonin –a natural hormone produced by the body– helps in controlling weight gain –even without reducing the intake of food–, improves blood lipid profile –as it reduces triglicerids–, increases HDL cholesterol and reduces LDL cholesterol.

Melatonin is found in small quantities in some fruits and vegetables as mustard, Goji berries, almonds, sunflower seeds, cardamom, fennel, coriander and cherries. Thus, the intake of this kind of food might help in controlling weight gain and preventing heart diseases associated to obesity and dyslipidemia.

Trials with rats

University of Granada researchers have analyzed in young Zucker diabetic obese rats the effects of melatonin on obesity, dyslipidemia and high blood pressure associated to obesity. Melatonin was found to be beneficial for young rats that had not still developed any methabolic or heart disease. Researchers think that melatonin might help in preventing heart diseases associated to obesity and dyslipidemia.

Finally, authors state that, if this finding is confirmed in humans, administration of melatonin and intake of food containing melatonin might be a useful tool to fight obesity and the risks associated to it.

A collaborative study

This study was partially funded and supported by the Research Plan of the University of Granada, by the research group CTS-109 (Junta de Andalucía), Spain and the Erasmus Mundus programme (European Council). University of Granada researchers—from the Institute for Neuroscience of the Department of Pharmacology of the Faculty of Medicine—, conducted this research in collaboration with the Clinical Trial Service of the University Hospital San Cecilio, Granada, the department of Physiology and Pharmacology of the University of Salamanca, the department of Pharmacology of the University of Jordan and the Service of Endocrinology of the Hospital Carloss III, Madrid.

The authors of this study are professors Ahmad Agil, Miguel Navarro, Rosario Ruiz, Sausan Abuamada, Yehia El-Mir and Gumersindo Fernández. They are certain that, in the light of the results obtained, a reduction of conditions associated to obesity and diabetes (heart diseases mainly) can be expected, which are good news, since these conditions reduce obese patients' quality of life and life expectancy.

The results obtained in this study have been partially published in the prestigious Journal of Pineal Research.

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