

## ISAFRUIT

### Two apples a day keep the doctor away

*Current research on rats demonstrates that 300gr of apples a day reduces cholesterol rate by 10%*

Two apples (300gr) a day reduce cholesterol rate by 10%. This is one of the findings of the European research project "ISAFRUIT", financed by the European Commission Sixth Research Framework Programme by 13.8 million euro. The project findings include also ways to reduce allergic components in fruits, developing new environmental friendly and safer technologies to fight against fruits pests and diseases without using pesticides or diminishing their use.

ISAFRUIT goal is to increase fruit consumption in Europe in order to contribute to improve consumers' health. It is well documented that a regular consumption of fruit and vegetables contributes to good health, preventing several diseases such as the cardiovascular ones.

According to project's findings tested on rats and preliminary results on humans, a regular consumption of apples can help to drop the cholesterol rate and lower the risks of suffering of cardiovascular disorders. Researchers participating at ISAFRUIT underlined that a regular consumption of fruits decreases the cardiovascular diseases risk by 4-11% per 100 Gram. Scientists do not know yet all the factors responsible for this positive effect, but the EU project's findings will contribute to improve knowledge in this regards.

Another breakthrough of the project studies is the identification of some key components of apples and peach responsible for allergic reactions, and this will facilitate the attempt to create an "allergy free" variety of apple, so giving consumers with allergy the possibility to safely eat apples. A dedicated web site on fruit and allergy with a simple test to evaluate own allergy risk has been created at this purpose by a project partner (<http://www2.warwick.ac.uk/fac/sci/whri/fruitallergy>).

The ISAFRUIT project developed also a new protocol to control postharvest fruit rots using an existing technique, the so called "hot water treatment". This technique is safer for consumers and will enable them to eat fruit's skin, by reducing use of pesticides and environment's contamination. The technique and the new protocol, already industrially tested in Spain and Italy, are based on the simplest tool: hot water. Researchers demonstrated that dipping peaches for 20 second in hot water at 60 degrees can reduce the brown rots by 80%. For apples the treatment is 40 seconds at 50-52 degrees. The treatment shows its efficiency for removing fruits rot agents, human pathogens such as *Escherichia coli*, salmonella and listeria and allowing energy saving by heating water with hot gas from cooling plants.

Finally, ISAFRUIT's researches focused also on the development of new dried fruits appealing products to increase fruit consumption among young people.

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