

7th Danone International Prize for Nutrition An important discovery rewarded

Bangkok, Thailand. October 6th, 2009 – **Belgian research scientist Johan Auwerx from the Federal Polytechnic School of Lausanne (Switzerland) has just received the Danone International Prize for Nutrition for his discoveries concerning the mechanisms by which certain foods "communicate" with our cells by issuing them with orders in similar fashion to hormones. The research work by Johan Auwerx has concentrated in particular on the mechanisms of shedding of fat by adipose tissue.**

This "weighty" discovery paves the way for new preventive and therapeutic strategies to combat obesity and cardiometabolic diseases, such as type 2 diabetes and hypertension. "I was delighted to learn that I had been awarded this prize, particularly since I was not expecting it. I am extremely honoured to receive this prestigious prize, following in the footsteps of previous prize winners including Professors David Barker and Jeffrey Friedman, two internationally recognised leaders in the field of nutritional research."

Molecular nutrition and the fight against obesity

Johan Auwerx is thus actively working on nutrition at the cellular, and indeed the molecular, levels. We are talking in this case about molecular nutrition. "I have been working for a number of years on the mechanisms by which cells react to the nutrients present in the cellular environment," explained Prof. Auwerx. "My studies show that the effects of these nutrients may in certain cases be more potent than those of hormones. This discovery completely changes our understanding of nutrition since it highlights the degree to which our body in general, and more particularly our cells, are able to adapt to their environment according to what we eat. The nutrients we absorb each day through our diet constitute a number of signalling factors able to trigger hormonal-like reactions within our bodies."

A concrete example of the application of this discovery is provided by resveratrol, a polyphenol naturally present in grapes and wine and involved in the famous French Paradox. Consumption of resveratrol leads the body to burn up its reserves, in essence adipose tissue. "However, the concentrations in natural products are extremely low, and in any case too low to produce any visible results on obesity," stated the Belgian research scientist. "We therefore began work on developing a synthetic compound and a capsule containing high concentrations of this substance."

Applications concerning the discoveries made by Johan Auwerx are not restricted to medicines: "Today, we are changing from a curative medical approach via drugs to a preventive approach via foods. This is good news, given that once obesity has developed, it is frequently too late to act. We are therefore working increasingly with food manufacturers in order to have a positive impact on public health."

A 120,000 € prize

In addition to the renown associated with the prize, currently recognised as the most prestigious in the field of nutrition, the Danone International Prize for Nutrition carries a cash reward of 120,000 €. "This financial prize will allow us to continue our research work," explained Professor Auwerx. "In particular, I will be working on vitamin B3, which has long been known for its beneficial effects with regard to obesity. I have high hopes for this substance, which could turn out to be even more interesting than resveratrol since lower concentrations are required to combat obesity effectively."

Now that several years have gone by, previous prize winners such as Prof. David Barker (University of Southampton, UK, prize winner 2005) and Prof. Jeffrey Friedman (Rockefeller University, New York, USA, prize winner 2007), can attest to the research advances resulting from the Danone International Prize for Nutrition. "I used the 120 000 € donation to establish a new research group in the University of Southampton whose aim is to determine the barriers to good food choices among young women," explained Prof. Barker, the 2005 prize winner. 2007 prize winner Prof. Jeffrey Friedman was equally enthusiastic: "The Danone International Prize for Nutrition [120 000 €] allowed us to begin several novel lines of research that would not have been possible without these funds."

"The equivalent of a Nobel Prize for nutrition"

Set up by Danone in 1997, with the support of the Medical Research Foundation, the Danone International Prize for Nutrition is part of one of the initiatives undertaken by the Danone Institute International in support of nutritional research. It should be noted that the Danone Institutes, set up by Danone as of 1991, are designed to promote public health by developing and sharing knowledge concerning nutrition, diet and health.

The Danone International Prize for Nutrition has been awarded every two years since 1997 to a research scientist or research team conducting outstanding studies in human nutrition. The candidate selection procedure, based on that used for the Nobel Prize, is rigorous, objective and transparent. The Danone International Prize for Nutrition committee initially brings together an "electoral college" comprising several hundred representatives of leading institutions that promote nutritional research worldwide. Each member of the committee is asked to propose the election of one or two research scientist (or research teams). An independent international jury comprising eight renowned scientists then chooses the prize winner on a majority basis. According to Professor Serrano Rios, President of the International Danone Institute, "In my view, the Danone International Prize for Nutrition is nothing less than the equivalent of a Nobel Prize for nutrition." This notion is shared by Danone CEO Franck Riboud: "Today, we are very proud to see that the Danone International Prize for Nutrition is helping to promote research conducted by foremost research teams in the fields of health and nutrition, and that it is viewed by scientists as one of the most prestigious awards. This prize and the Danone Institute International offering this reward are both naturally in line with the Group's initiative to provide health through nutrition."