



[www.diogenes-eu.org](http://www.diogenes-eu.org)

The Diogenes Project – Diet, Obesity & Genes  
*Targeting the obesity problem: seeking new insights & routes to prevention*  
Project Co-ordinator:  
Prof Wim Saris, University of Maastricht  
EC funded Sixth Framework Project Contract No: FP6-513946  
Priority 5: Food Quality & Safety

## MEDIA RELEASE

Issued: 9 May 2008

3 pages

**Embargoed until 00.01am Wed 14 May 2008**

**Key words:** Glycemic Index (GI), protein intake, prevention of obesity, weight gain, weight regain, European Congress of Obesity 2008, Diogenes project

## INCREASED DIETARY PROTEIN HELPS KEEP THE WEIGHT OFF – LOW GI FOODS NO ADVANTAGE

- Preliminary results from the Diogenes study clearly show that increased protein intake helps prevent weight regain after weight loss
- Diet low in glycemic index (GI) shows no advantage
- Diogenes Dietary Intervention Study (RTD1) preliminary results presented at a Pre-Congress of Obesity Satellite Symposium, Geneva 14 May by Professor Arne Astrup<sup>1</sup> (Co-ordinator of Diogenes RTD1) and as a Hot Topic abstract by Marleen van Baak<sup>2</sup>

**Professor Arne Astrup states:** “The first results from the Diogenes dietary intervention study clearly show that increasing protein in the diet decreases weight regain after weight loss, whereas glycemic index foods did not play any detectable role.

Consequently, we conclude that increased protein content is important for prevention of weight regain, whereas a diet low in glycemic index foods provides no advantage.”

The preliminary results presented of the Diogenes study focus on the results from the 2 supermarket model study centres (at Copenhagen and Maastricht) where 205 adult subjects successfully completed an initial weight loss phase and six months of dietary intervention, during which time subjects had access to free food supplies at a supermarket provided by each Centre.

**Professor Astrup continues:** “The 6 month dietary intervention phase consisted of the 205 subjects randomised to one of 5 diets – high protein/low GI, high protein/ high GI, low protein/high GI, low protein/low GI and a control diet based on national guidelines. Analysis of

<sup>1</sup> A. Astrup, ‘Diet, Obesity and Genes’ presentation in the ‘Food based approaches to body fat reduction’ Unilever-sponsored symposium at ECO2008, Geneva

<sup>2</sup> M.A. van Baak, T.M. Larsen, S.A. Jebb, A. Kafatos, A. Pfeiffer, J.A. Martinez, S. Handjiev, M. Kunesova, A. Astrup, W.H.M. Saris. Weight loss maintenance on ad libitum diets varying in protein content and glycemic index: first results of the DIOGENES highly controlled shop-based intervention. Hot topic abstract presented at the ECO 2008, Geneva.

our results shows a significant positive effect on controlling weight regain with high protein intake but no such effect with GI or interaction between protein and GI.

The feasibility and efficacy of these dietary changes where subjects did not have access to supermarkets but did have dietary instruction is currently being analysed in the 6 other centres participating in the study in Bulgaria, Crete, Czech Republic, German, Spain & UK.”

**Professor Astrup concludes:** “Most of us can lose weight if we set our minds to it – but we are not so good at keeping it off, a factor fuelling the current global obesity epidemic.

The Diogenes study is designed to provide clear messages to European consumers on which diet is likely to be most successful for weight control – and our preliminary data point clearly to high protein intake rather than low or high GI food intake.”

The full results of the Diogenes project will be presented at the Diogenes satellite meeting 5/6 May 2009 as part of ECO 2009 in Amsterdam.

**Ends**

**Further Media enquiries:**

Minerva PRC Ltd [info@minervaprc.com](mailto:info@minervaprc.com) +44(0)1264 710428 +44(0)7887 714957 +44(0)7553 821525

**Media Resources**

1. Full texts for Astrup ‘Diet, Obesity & Genes’ presentation and van Baak Hot Topic abstract available on request from [info@minervaprc.com](mailto:info@minervaprc.com)
2. Interviews available with  
Professor Arne Astrup, Co-ordinator RTD1: Dietary Intervention Study  
To organise interview please contact:  
Christina Cuthbertson [ccu@life.ku.dk](mailto:ccu@life.ku.dk), +45 353 32477  
Professor Wim HM Saris – Executive Director, Diogenes Project  
To organise interview please contact:  
Desiree Morales [desiree.morales@hb.unimaas.nl](mailto:desiree.morales@hb.unimaas.nl), +31 43 3881743  
Other Research Study participants available for interview from all participating countries.
3. Available on the Diogenes website at [www.diogenes-eu.org/News/FILM.asp](http://www.diogenes-eu.org/News/FILM.asp)  
DVD describing and illustrating the 8 country Dietary Intervention Study of Diogenes.

**Notes to Editors**

1. Diogenes [www.diogenes-eu.org](http://www.diogenes-eu.org) managed by Professor Wim Saris (Maastricht) is an EC-funded pan-European Research Programme targeting the obesity problem from a dietary perspective: seeking new insights and new routes to prevention. It is an Integrated Project of the EU Sixth Framework Programme for Research and Technological Development (2005-2009). The name Diogenes is an acronym for the project and stands for ‘Diet, Obesity and Genes’. Diogenes is integrating dietary, genetic, physiological, psychological/behavioural and food technology studies
2. The 8 countries taking part in the dietary intervention study (RTD1) are Denmark, Greece (Crete), Spain, Czech Republic, Netherlands, Bulgaria, UK and Germany.
3. Further information on RTD1 - **Obesity and macronutrient composition of the diet** (Co-ordinator: Professor Arne Astrup, Copenhagen, Denmark)

The macronutrient composition of the diet appears to play a role in determining the total energy intake. Proteins have been shown to produce a higher degree of satiety and to have a higher stimulating effect on energy expenditure compared with fat and carbohydrates. In addition carbohydrates with a low glycaemic index (GI) have been suggested to have a higher satiating power than carbohydrates having a high GI. However, so far this evidence, which has led to some widely promoted dietary recommendations, has come only from studies limited in duration, subject numbers and types, and dietary variables.

The core of RTD1 is a 6-12 months dietary intervention study involving some 350 families (obese/overweight parents and their children) across 8 European centres. All adults completed an 8-week weight loss phase with a fixed low energy intake. Afterwards the families were randomised to one of 5 diet groups differing in carbohydrate GI and protein content. The aim of this controlled intervention study is to address the efficacy of these diets in preventing weight (re)gain. The intervention study is generating information and materials for RTDs 2, 3 and 4, and may test new food concepts from RTD5.

4. Illustration below is copyright free to use. Please credit the Diogenes project and include the website address when utilised. © Diogenes [www.diogenes-eu.org](http://www.diogenes-eu.org)

**Caption:** Four adult male elephants weigh 8,500kg, the amount of weight lost by 743 adults participating in the Diogenes weight loss/weight regain study.



Notes end/