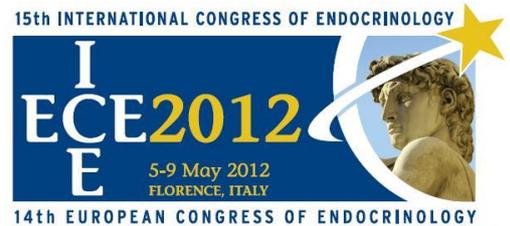


# International Congress of Endocrinology/ European Congress of Endocrinology media release



Embargoed until 00:01CEST, Tuesday 8 May 2012

## Eating fast increases diabetes risk

People who wolf down their food are *two and a half times* more likely to suffer from type 2 diabetes than those who take their time according to new research presented at the joint International Congress of Endocrinology and European Congress of Endocrinology in Florence, Italy.

While numerous studies have linked eating quickly to overeating and obesity, this is the first time eating speed has been identified as an independent risk factor for type 2 diabetes.

A Lithuanian research team led by Dr Lina Radzeviciene compared 234 newly diagnosed type 2 diabetes patients to 468 people who were free from the disease. Cases and controls (ratio 1:2) were matched by gender and age ( $\pm 5$  years). The participants filled out an in-depth questionnaire designed to collect information on possible diabetes risk factors in which they rated their eating speed compared to others (slower, the same, faster). Body measurements (height, weight, waist and hip circumference) were also taken according to World Health Organisation recommendations.

After adjusting for other risk factors (a family history of diabetes, education, morning exercise, body mass index, waist circumference, cigarette smoking and plasma triglyceride levels) the researchers found a more than two-fold increase in the risk of type 2 diabetes associated with faster eating habits (odds ratio (OR) = 2.52, 95% confidence interval (CI) 1.56-4.06). Additional findings showed the cases had a higher body mass index and significantly lower education level compared to the controls.

Diabetes mellitus is a very common disorder caused by high levels of sugar in the bloodstream. It affects 6.4% (285 million) of the worldwide population and is associated with an increased risk of heart attacks, stroke and damage to the eyes, feet and kidneys. In type 2 diabetes, which accounts for 90% of all cases, insulin – a hormone that allows cells to take sugar from the bloodstream and store it as energy – does not work properly.

**Researcher Dr Lina Radzeviciene from Lithuanian University of Health Sciences said:**

*“The prevalence of type 2 diabetes is increasing globally and becoming a world pandemic. It appears to involve interaction between susceptible genetic backgrounds and environmental*

factors. It's important to identify modifiable risk factors that may help people reduce their chances of developing the disease.”

Dr Radzeviciene's team previously found that coffee consumption (four or more cups a day) significantly decreased risk of type 2 diabetes. They also found that smoking and egg consumption (more than five eggs a week) increased the risk. They now hope to perform a larger study looking at how particular types of food, calorie intake, physical exercise, and psychological and emotional wellbeing affect diabetes risk factors.

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#### Notes for editors

The talk (OC12.6) will be presented at the International Congress of Endocrinology/European Congress of Endocrinology at 10:45-11:00, Tuesday 8 May 2012.

The joint 15<sup>th</sup> International Congress of Endocrinology/14<sup>th</sup> European Congress of Endocrinology, Europe's biggest scientific meeting on hormones, is taking place in Florence, Italy on 5-9 May 2012. For the full programme, see <http://www.ice-ece2012.com/>.

### **Please mention the International Congress of Endocrinology/European Congress of Endocrinology in any story**

**For more information:** please contact the European Society of Endocrinology press office

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The International Society of Endocrinology aims to become the premier international organisation for endocrinologists and associated scientific professionals, advancing the profession and improving the efficiency and effectiveness of endocrinology information exchange at international level.

<http://www.endosociety.com/>

#### **ABSTRACT**

#### **Eating speed and the risk of type 2 diabetes mellitus: a case-control study**

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**Introduction.** Diabetes mellitus is one of the main public health issues. It is becoming a world pandemic. Type 2 diabetes appears to involve interaction between susceptible genetic backgrounds and environmental factors. It's important to identify modifiable risk factors that may help reduce the risk of type 2 diabetes. For the meantime no data in scientific literature or eating speed could influence on the risk of developing type 2 diabetes mellitus. Therefore the aim of the study was to assess the relationship between eating speed and the risk of type 2 diabetes mellitus.

**Subjects and methods.** A case-control study included 234 cases with newly confirmed diagnoses of type 2 diabetes mellitus and 468 controls those who were free of the disease. Cases and controls (ratio

1:2) were matched by gender and age (+5 years). A specifically designed questionnaire was used to collect information on possible risk factors of type 2 diabetes mellitus. Anthropometrical measurements were made according to WHO recommendations. The odds ratios (OR), and 95% confidence intervals (CI) for type 2 diabetes mellitus were calculated by a conditional logistic regression.

**Results.** The cases had higher body mass index and significantly lower education level, compared to the controls. Variables such as a family history on diabetes, education, morning exercise, body mass index, waist circumference, cigarette smoking and plasma triglycerides level were retained in multivariate logistic regression models as confounders because their inclusion changed the value of the OR by more than 5% in any exposure category. After adjustment for possible confounders more than two-fold increased risk of type 2 diabetes mellitus was determined for subjects eating faster (OR=2.52; 95% CI 1.56-4.06) vs. subjects eating slower.

**Conclusions.** Our data support a possible relationship between faster eating speed and the increased risk of type 2 diabetes mellitus.