Press Release

Obesity and excessive weight gain during pregnancy increase risk of obesity in childhood

(Barcelona, October 26, 2015) Overweight and obese women who gain excessive weight during pregnancy may be putting their babies at risk of a lifetime of obesity. Today, experts from United European Gastroenterology are calling for women of childbearing age to aim to maintain a normal body weight, and for expectant mothers to stay physically active and consume a balanced diet to avoid permanent damage to their child’s health.

Speaking at the 23rd United European Gastroenterology Week (UEG Week 2015) in Barcelona, Spain, Professor Berthold Koletzko from Hauner Children’s Hospital at the University of Munich, Germany, explains that evidence is mounting that excessive weight gain as well as early nutrition play a vital role in many aspects of future health. “We know that a sedentary lifestyle and poor diet in pregnancy increase the risk of children becoming overweight and obese, but we now also think that babies in the womb can have their genetic make-up permanently altered depending on the mother’s diet,” he said.

Childhood obesity epidemic

The incidence of obesity among children is rising at an alarming rate. According to the World Health Organisation, between 1990 and 2013, the number of obese children aged less than 6 years increased from 32 million to 44 million globally – an increase of almost 40%. If current trends continue, by 2025, it has been estimated there will be 70 million obese young children worldwide.

Many factors contribute to the development of obesity in childhood, including the child’s genetic make-up, the consumption of energy-dense, high-fat, high-sugar and high-salt foods, and a lack of physical activity. Studies have also suggested that overweight and obese women at the time when they become pregnant are much more likely to have fatter children than those who are not overweight before or during pregnancy. According to Prof. Koletzko, exposure of the unborn child to an excess of fuels such as glucose and fatty acids may cause permanent metabolic reprogramming in the child that leads to life-long obesity after birth.

“Perhaps even more worryingly, these metabolic and epigenetic changes can be passed from generation to generation, which has major public health implications,” he said.

Lifestyle during pregnancy and optimized infant feeding

Maintaining physical activity and following a balanced diet with limited sugar and saturated fat during pregnancy can be effective in reducing a very high birth weight of babies, a key risk factor for obesity in later life. After birth, improved infant feeding is an effective tool for obesity prevention. In a large controlled study including children in five European countries, Prof. Koletzko and his team demonstrated that an improved infant formula, with lowered protein content - more similar to the protein level in breast milk – lowered the rate of obesity at the early age of 2 by 9 fold, as compared to
conventional protein-rich bottle milk. He comments “These results demonstrate that improving nutrition and lifestyle during the first 1,000 days of life, including pregnancy and the first two years of childhood, provide enormous opportunity for improving lifelong health and well-being”.

**The Early Nutrition Project**

Prof. Koletzko and researchers from 12 European countries, the USA and Australia have launched the Early Nutrition Project ([http://www.project-earlynutrition.eu/eneu/](http://www.project-earlynutrition.eu/eneu)) to study how early nutritional programming and lifestyle factors impact the rates of obesity and related disorders, with a budget of more than 11 million Euros. “We believe that if we can understand how metabolic reprogramming in early life alters an individual’s susceptibility to becoming overweight, we might be able to intervene to prevent or even reverse the process,” he said.

**References**


**Notes to Editors**

For further information, or to arrange an interview with Professor Koletzko, please contact a member of the UEG Media Team in the UEG Week Press Office or contact Luke Paskins on +44 (0)1444 811099 or [media@ueg.eu](mailto:media@ueg.eu)

**About UEG Week**

UEG Week is the largest and most prestigious gastroenterology meeting in Europe and has developed into a global congress. It attracts over 14,000 participants each year, from more than 120 countries, and numbers are steadily rising. UEG Week provides a forum for basic and clinical scientists from across the globe to present their latest research in digestive and liver diseases, and also features a two-day postgraduate course that brings together top lecturers in their fields for a weekend of interactive learning.

**About UEG**

UEG, or United European Gastroenterology, is a professional non-profit organisation combining all the leading European societies concerned with digestive diseases. Together, its member societies represent over 22,000 specialists, working across medicine, surgery, paediatrics, gastrointestinal oncology and endoscopy. This makes UEG the most comprehensive organisation of its kind in the world, and a unique platform for collaboration and the exchange of knowledge.
To advance standards of gastroenterological care and knowledge across Europe and the world, UEG offers numerous activities and initiatives, including:

- **UEG Week**, the biggest congress of its kind in Europe, and one of the two largest in the world.
- **UEG Education**, the universal source of knowledge in gastroenterology, providing online and classroom courses, a huge online library and delivering the latest GI news, fostering debate and discussion.
- **Training Support**, funding for innovative training and educational programmes, as well as international scientific and professional co-operations.
- **UEG Journal**, published bi-monthly, covering translational and clinical studies from all areas of gastroenterology.
- **EU Affairs**, promoting research, prevention, early diagnosis and treatment of digestive diseases, and helping develop an effective health policy for Europe.

Find out more about UEG’s work by visiting [www.ueg.eu](http://www.ueg.eu) or contact:
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