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## **LEFT- HANDEDNESS LINKED TO LOW BIRTH WEIGHT**

Left-handedness is established or 'programmed' during early development in the womb by the same factors that also determine birth-weight, according to new research conducted by the University of Southampton to be presented at the BAPEN Conference (1<sup>st</sup> November 2006).

212 children, with well documented antenatal and birth history (participants in the long-term Wessex Growth Study, UK), were analysed for their 'handedness' at ages 14-16.

20% of children born at the lowest third of birth-weights (the lowest tertile) were left-handed, whilst only 6% of those at the highest third of birth-weights (the upper tertile) were left-handed.

"There is some controversy about the relationship between birth-weight (an indicator of fetal growth influenced by nutrition) and handedness (an indicator of brain development and function) due to being able to assess the impact of other factors such as birth order, gender and smoking in pregnancy," states research lead Professor Marinos Elia of the Institute of Human Nutrition, University of Southampton. "Our analysis has shown that handedness is not significantly related to these factors. In addition, the relationship between birth weight and handedness persists even when these factors are taken into account."

"This is a significant finding and needs further investigation," continues Professor Elia, "as it suggests a link between fetal nutrition and growth and the aspects of early brain development and function responsible for handedness in late childhood."

Bapen06-2 Handedness

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***Interviews available – contact as above:***

- ***Professor Marinos Elia***

***Request a copy of the poster text: Relationship between birth weight and handedness, M. Elia, J. Mulligan, P. Betts, R. J. Stratton, BAPEN poster 2006***

**Supplementary information also available on request.**

**Notes to Editors follow ....**

## **Notes to Editors**

### **What is BAPEN?**

The British Association for Parenteral and Enteral Nutrition is a multi-professional association and registered charity. Established in 1992, BAPEN is committed to improving nutritional care and treatment in hospital, care and the community.

### **What are BAPEN's objectives?**

- Increase awareness of and enhance understanding and management of malnutrition
- Establish a clinical governance framework to underpin the nutritional management of all patients, residents and individuals
- Enhance knowledge and skills in clinical nutrition and nutritional care and treatment for doctors, nurses, dietitians, pharmacists and patients through education & training
- Communicate the benefits of clinical and cost-effective optimal nutritional care to all healthcare professionals, policy makers, patients and the public

### **Who are Members?**

BAPEN meets the needs and interests of doctors, specialist clinicians, pharmacists, dietitians, nurses, care managers and professionals, academics, patients, researchers, public health & policy advisers, service and support providers and commercial organisations with an interest in nutrition and nutritional support.

### **What activities & projects are run by BAPEN?**

- Annual Conference & Regional meetings
- BANS - British Artificial Nutrition Survey
- 'MUST' Malnutrition Universal Screening Tool & its implementation
- MAG – Malnutrition Advisory Group
- NICE and intercollegiate liaison
- Training courses & materials
- Newsletter, Reports, Website

### **BAPEN Conference**

The BAPEN Conference is being held at the Brighton Hilton Metropole Hotel on the 1<sup>st</sup> & 2<sup>nd</sup> November 2006 attended by 500 doctors, dietitians, nurses, pharmacists, policy makers, community and care professionals and representatives from industry.

**[www.bapen.org.uk](http://www.bapen.org.uk)**