

3rd International Conference and Exhibition on **Food Processing & Technology**

July 21-23, 2014 Hampton Inn Tropicana, Las Vegas, USA

Determination of essential fatty acids and long chain polyunsaturated fatty acids in complimentary infant foods in the UK

Nazanin Zand and Emma Loughrill
University of Greenwich, UK

The study reported herein was conducted to establish the concentration of two essential fatty acids; linoleic acid (LA) 18:2 n-6 and α -linolenic acid (ALA) 18:3 n-3; and three long chain poly unsaturated fatty acids (LCPUFA); eicosapentaenoic acid (EPA) 20:5 n-3, docosahexaenoic acid (DHA) 22:6 n-3 and arachidonic acid (AA) 20:4 n-6 in fish based commercial infant foods in the UK. Quantitative analyses were conducted on four different products using charged aerosol detection HPLC. The total daily intake of fatty acids from the consumption of such products was estimated based on the standard menu by Zand et al. The LA:ALA ratio was found to be higher than the recommended ratio. Furthermore the concentrations of DHA and AA were found to be lower than recommended adequate intakes, which may have negative effects vision and brain development of infants.

Biography

Emma Loughrill received a first class honors for BSc in Bioscience at the University of Greenwich in June 2012, where she was also awarded the Best Performing Student in Bioscience Award by the Society of Biology. She is currently undertaking a PhD under the Vice Chancellor's scholarship scheme at the University of Greenwich in the analysis and development of infant foods in the UK. Prior to her postgraduate studies she worked for four years at Pfizer's pharmaceutical company in Allergy and Respiratory.

N.ZandFard@gre.ac.uk; emma.loughrill@hotmail.co.uk