**P057**  
ECOSAPENTANOIC ACID (EPA) DOES NOT AFFECT CELL KINETICS IN PERIPHERAL LYMPHOCYTES FROM PATIENTS WITH CROHN’S DISEASE (CD) ACCORDING TO IL6−174G/C POLYMORPHISM

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**Rationale:** Omega 3 fatty acids have been shown to be of potential benefit in patients with CD. The aim of the present study was to evaluate whether EPA can modulate the inflammatory response according to different genotypes of IL6G174G/C polymorphism.

**Methods:** Peripheral blood cells were collected from CD patients with different genotypes for IL6−174G/C (GG, n = 16, GC, n = 8, CC, n = 7), and lymphocytes were established in culture media. Replicates with the addition of EPA (25 μM) were analysed in a period of 24h, 48h and 72h. Expression of IL6 e a PGE2 was assessed by ELISA. Apoptosis and cellular proliferation was determined by flow cytometry.

**Results:** We observed a significant difference in IL6 production between the 3 genotypes with or without addition of EPA (GG, 1392 pg/ml, GC, 1256, CC 999, p = 0.01). No significant differences were observed in IL6 production with EPA addition, however a slight decrease in IL6 production was detected for CC genotype IL6 production with EPA addition, however a slight decrease in IL6 production was detected for CC genotype.

**Conclusion:** The results suggested that EPA addition of EPA (25 μM) did not affect the inflammatory response as assessed by ELISA. However, a decrease in IL6 production was observed for CC genotype with EPA addition, which may indicate a potential role for IL6G174G/C polymorphism in the modulation of the inflammatory response.

**Disclosure of Interest:** None declared

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**P059**  
GENE EXPRESSION IN MICROGRAVITY CULTURED OSTEOBLASTS APROPOS NUTRITIONAL INTERVENTION

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**Rationale:** Increased bone resorption and reduced bone formation are two major risk factors in ageing, microgravity and other stressful milieu. Nutritional compounds via specific mechanisms might reverse these risks by different magnitudes and mechanisms.

**Methods:** Human osteoblasts cultured in microgravity as a stressor over a period of three weeks were nourished with curcumin, specific plant extracts and nucleotides to observe their effects on the growth, and mineralization abilities of these cells. Corresponding in vitro correlates such as gene expression pertaining to the particular compounds by immunohistochemistry and real time PCR. Results: Curcumin nourishment revealed increased expression of osteocalcin a late differentiation marker, in microgravity cultured osteoblasts compared to controls while nucleotides revealed similar expression of osteocalcin but elevated levels of TGF-β. Plant extracts showed reduction in antiapoptotic genes such as bax. Overall the growth of osteoblasts was enhanced more by curcumin and nucleotides followed by plant extracts (curcumin, nucleotides, plant extracts). Mineralization was promoted more by nucleotides.

**Disclosure of Interest:** None declared