Conclusions: The spiral vein-graft technique is a suitable and durable method to treat PAA in cases that have an increased infection risk or are lacking an autologous vein for traditional bypass. It may also be a therapeutic option in cases of graft infection following PAA surgery.

P601 / #267, E-POSTERS TOPIC: *4. CLINICAL VASCULAR DISEASE / 4.07 NUTRITION, NUTRACEUTICALS.*
MATERNAL CARBOHYDRATE INTAKE MODULATES THE POLYOL PATHWAY AND THE RESPONSE TO A FRUCTOSE SUPPLEMENTATION IN FEMALE ADULT OFFSPRING

C. Donis [1], E. Fauste [1], L. Rodríguez [1], J.J. Álvarez [2], M.I. Panadero [1], P. Otero [1], C. Bocos [1]. [1] *CEU San Pablo University. Faculty of Pharmacy, Chemistry And Biochemistry, Madrid, Spain;* [2] *CQS Lab, Lab, Madrid, Spain*

Background and Aims: Fructose consumption has increased considerably, similar the expansion of obesity and metabolic syndrome. Further, maternal intake is a key factor involved in the development of diseases in offspring. Present work studies the effect of maternal carbohydrate intake on lipids and glucose metabolism in adult offspring.

Methods: Two experiments were performed to study: 1) the effects of maternal liquid carbohydrate consumption on female offspring; and 2) the effect of a fructose supplementation in this offspring. Biochemical and gene expression parameters related with lipids and glucose metabolism were analyzed.
Results: Maternal glucose intake increased hepatic lipids in offspring due to an augmented expression of ACL. Maternal fructose intake lowered hepatic glucose content due to an increased expression of AR and SDH, being both polyol pathway enzymes and TonEBP-target genes. Expression of other targets of TonEBP, such as taurine (SLC6A6) and betaine (SLC6A12) transporters, was also increased on them. Subsequent consumption of fructose by females from fructose-fed mothers increased liver lipids content and expression of ACL, whereas in females from control mothers increased hepatic glucose and lactate and lowered expression of AR and SDH. According to this, SLC6A12 expression resembled the one of other TonEBP-target genes, although SLC6A6 expression was decreased by fructose in the three groups.
Conclusions: Fructose consumption in the offspring differentially alters lipids and glucose metabolism depending on maternal intake. A key role of TonEBP, which could be epigenetically affected, cannot be ruled out. This work was supported by a grant from Programa Estatal de I+D+i RETOS (SAF2017-89537-R) and co-funded by FEDER funds.

P602 / #580, E-POSTERS TOPIC: *4. CLINICAL VASCULAR DISEASE / 4.07 NUTRITION, NUTRACEUTICALS.*
ACTIVITIES OF PLATELET-ACTIVATING FACTOR (PAF) ENZYMES AFTER DAILY CONSUMPTION FOR TWO MONTHS OF A YOGURT ENRICHED WITH NATURAL ORIGIN PAF INHIBITORS

M. Detopoulou, A. Ntzouvani, E. Fragopoulou, F. Petsini, L. Gavriil, T. Nomikos, S. Antonopoulou. *School of Health Science and Education, Harokopio University, Nutrition And Dietetics, Athens, Greece*

Background and Aims: Platelet-activating factor (PAF), a pro-inflammatory lipid mediator, plays a crucial role in the formation of the atherosclerotic plaque. Therefore, the inhibition of endothelium inflammation by nutraceuticals, such as PAF inhibitors, is a promising alternative for preventing cardiovascular diseases. The aim of the present study is to evaluate the impact of a new functional yogurt enriched with natural origin PAF inhibitors from olive oil by-products on PAF metabolism.

Methods: Ninety-two apparently healthy volunteers (35-65 years) were randomly allocated into three groups by block-randomization. The volunteers in Group A (n=30) did not consume any yogurt, whereas participants in Groups B (n=28) and C (n=30) consumed one yogurt, every day, either plain or enriched. Biological samples were collected before the intervention, 4 and 8 weeks after the intervention. The activity of PAF's biosynthetic and catabolic enzymes were measured, specifically two isoforms of acetyl-CoA:lyso-PAF acetyltransferase (LPCATs), cytidine 5'-diphospho-choline:1-alkyl-2-acetyl-sn-glycerol cholinephosphotransferase (PAF-CDP) and platelet-activating factor– acetylhydrolase (PAF-AH) in leucocytes and lipoprotein associated phospholipase-A2 ($LpPLA_2$) in plasma.
Results: No differences were observed regarding, lipid and glycemic parameters measured among the three trials. A significant time effect was observed on PAF-AH, while a trial effect was observed concerning the acetyltransferase activity in the presence of Ca^{2+} (p=0.022).
Conclusions: In conclusion, consumption of a yogurt enriched with PAF inhibitors may exert favorable anti-inflammatory properties by modulating PAF metabolism. This research is co-financed by Greece and the European Union through the Operational Programme «Human Resources Development, Education and Lifelong Learning 2014-2020» in the context of the project MIS 5049017.

P603 / #599, E-POSTERS TOPIC: *4. CLINICAL VASCULAR DISEASE / 4.07 NUTRITION, NUTRACEUTICALS.*
EFFICACY AND SAFETY OF ARMOLIPID PLUS®: AN UPDATED PRISMA COMPLIANT SYSTEMATIC REVIEW AND META-ANALYSIS

A.F.G. Cicero [1], C. Kennedy [2], P.P. Toth [3], T. Kneževi'c [4], C.M.G. Georges [5], A. Šatrauskiene [6], F. Fogacci [1]. [1] *University of Bologna, Medical And Sugical Sciences Department, Bologna, Italy;* [2] *Trinity College Dublin and St James Hospital, Department Of Pharmacology And Therapeutics, Dublin, Ireland;* [3] *Johns Hopkins University School of Medicine, Department Of Medicine, Ciccarone Center For The Prevention Of Cardiovascular Disease, Baltimore, United States of America;* [4] *University Hospital Centre Zagreb, Department Of Nephrology, Hypertension, Dialysis And Transplantation, Zagreb, Croatia;* [5] *Université Catholique de Louvain, Department Of Cardiology, Cliniques Universitaires Saint-luc, Brussels, Belgium;* [6] *Vilnius University, Faculty Of Medicine, Vilnius, Lithuania*

Background and Aims: The aim of this PRISMA compliant systematic review and meta-analysis was to globally evaluate the efficacy and safety of Armolipid Plus®, on the basis of the available randomized, blinded, controlled clinical trials (RCTs).

Methods: A systematic literature search in several databases was conducted in order to identify RCTs assessing the efficacy and safety of dietary supplementation with Armolipid Plus®. Two review authors independently identified 12 eligible studies and extracted data on study characteristics, methods and outcomes.
Results: Meta-analysis of data suggested that dietary supplementation with Armolipid Plus® exerted a significant effect on body mass index [Mean Difference (MD)= -0.25 Kg/m^2, P= 0.008] and serum levels of total cholesterol (MD= -25.07 mg/L, P< 0.001), triglycerides [MD= -11.47 mg/L, P< 0.001], high-density lipoprotein cholesterol (MD= 1.84 mg/L, P< 0.001), low-density lipoprotein cholesterol (MD= -26.67 mg/L, P< 0.001), high sensitivity C reactive protein (MD= -0.61 mg/L, P= 0.022) and fasting glucose (MD= -3.52 mg/L, P< 0.001), being overall well tolerated.
Conclusions: Then, the present findings suggest that dietary supplementation with Armolipid Plus® is associated with an advantageous improvement in lipids and glucose profile and high sensitivity C reactive protein, suggesting the possible use of this nutraceutical compound in order to promote cardiometabolic health.

P604 / #602, E-POSTERS TOPIC: *4. CLINICAL VASCULAR DISEASE / 4.07 NUTRITION, NUTRACEUTICALS.*
ANTITHROMBOTIC PROPERTIES OF DIFFERENTLY FED FARMED GILTHEAD SEA BREAM: IN VITRO AND IN VIVO STUDIES

S. Antonopoulou, M. Detopoulou, E. Fragopoulou, T. Nomikos, M. Kontogianni, F. Petsini, M. Choleva. *School of Health Science and Education, Harokopio University, Nutrition And Dietetics, Athens, Greece*

Background and Aims: During the last years, the replacement of fish oil, by plant oils in compounded fish feeds, is under investigation. Platelet-Activating Factor (PAF) is a potent inflammatory mediator implicated in