MOSCOW STATE ACADEMY OF APPLIED BIOTECHNOLOGY

33 Talalikhin St.
Moscow, Russia 109316

Announcing An International Conference on Food, The Ecology and Mankind

1995

For Immediate Release

Contact: Dr. Iosof Rogov, Academician
Organizing Committee Chair for International Conference on Food, The Ecology and Mankind
The Moscow State Academy of Applied Biotechnology
33 Talalikhin St.
Moscow, Russia 109316
Phone: 7-095-276-22[illegible]8
FAX: 7-095-276-1423
Email: postmaster@ibiot.msk.su

For all Scientists interests in the

- Chemistry of Food, Ingredients and Additives
- Processes for manufacture of High Quality Foods
- Advances in New Food Technology,
- Food Packaging Technology
- Integration of Food Technology and Biotechnology

Participation in the conference will be in Russian and English with simultaneous translation provided. The proceedings will be published. The Organizing Committee will select the papers for oral presentation at the sessions and poster sessions. In conjunction with this Conference, there will be an exhibition of new food technology, seminars of foreign firms active in this arena, and roundtable discussion of intentional technology transfer and intellectual property. Also available will be an excellent cultural program for international participants to experience Russia.

Call for papers and advanced registration.:

For those wishing to submit papers, please forward them to Dr. Rogov. The specifications are two copies, typed, 1.5 spacing of a one page abstract of the paper. The two copies of the abstract must be received no later than October 1, 1995.

Early registration is now being accepted. Registration fees are only $150 (USD) for this meeting. Costs for room and board will be announced shortly. Those interested in providing a paper and registering for this conference should contact: Dr. Rogov. From the United States, Email, private overnight service and Fax are the most dependable methods of contacting this office.

POLYUNSATURATED FATTY ACIDS AS INGREDIENTS FOR NUTRACEUTICAL FOODS: SUITABILITY OF ANALYTICAL METHODS FOR FISH OIL STUDIES

Ana P. Carvalho and F. Xavier Malcata, Escola Superior de Biotecnologia, Universidade Católica Portuguesa, Rua Dr. António Bernardino de Almeida, 4200 Porto, Portugal

SUMMARY:

Nutraceuticals are food products with pharmacological effects. Polyunsaturated fatty acids (PUFA) of the ω-6 and ω-3 types are essential to human nutrition because they are building blocks in membrane lipid biogenesis and play important roles in the structure and function of biological membranes. The proportion of such PUFA in the diet has also attracted increasing interest because of their unique biological activities, such as lowering plasma cholesterol levels and prevention of coronary heart diseases. Animals require (but do not have the capacity to synthesize) some of the ω-3 and ω-6 PUFA, and must therefore rely solely on dietary sources; the most common source is fish oil.

Analysis of PUFA in fish oil can be performed via gas chromatography (GC). Resolution is achieved following preliminary derivatization, which transforms the PUFA into more volatile compounds, fatty acid methyl esters (FAME). Studies pertaining to the reliability and accuracy of analytical methods are useful to find out the best method for a given sample; in particular, studies of factors that affect each step of FAME preparation are rather important, viz. studies on the influence of the polarity medium in the reaction/extraction step.

In this research work, three alternative direct transmethylation methods were used to produce FAME from cod liver oil. The influence of the polarity of the reaction/extraction media used before and after transmethylation was also tested.