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Scientific Committee on Food **SCF/CS/ADD/NUT/55 Final**
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Statement of the Scientific Committee on Food on L-serine and some amino acid-amino acid salts for use in foods for particular nutritional purposes

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On 19 May 1999 the Committee adopted an opinion on substances for nutritional purposes which have been proposed for use in the manufacture of foods for particular nutritional purposes ('PARNUTS').
(http://europa.eu.int/comm/food/fs/sc/scf/out31_en.pdf)

Since then the Commission has received a request to add a number of nutritional substances in view of an amendment of Commission Directive 2000/15/EEC (http://europa.eu.int/comm/food/fs/sfp/df/df02_en.pdf) on substances that may be added for specific nutritional purposes in foods for particular nutritional uses. Of these the Committee has now evaluated the following substances:

L-Serine
This amino acid was not included in the original list of non-essential and semi-essential amino acids in the opinion. As L-serine is a normal constituent of food and it is being synthesised in the body, the Committee has no objection to the use of this amino acid, its sodium, potassium, calcium and magnesium salts and its hydrochlorides in foods for special medical purposes.

Salts of individual amino acids: L-arginine -L-aspartate; L-lysine-L-aspartate; L-lysine-L-glutamate dihydrate
These three salts have been requested as sources of the amino acids L-arginine, L-aspartic acid, L-lysine and L-glutamic acid. According to the petitioner they shall be used to replace the individual amino acids to enhance the palatability and solubility of dietetic products, without compromising the biological value of the formulation.
The Committee has received satisfactory technological data concerning the identity, chemical structure, specification, manufacturing process and methods of analysis.
These salts do not contain a peptide bond and so do not require hydrolysis to yield the individual amino acids. The pairs of amino acids are linked electrostatically via their negatively charged carboxyl group and their positively charged amino group. The salts will therefore dissociate in solutions such as hydrochloric acid in the stomach and will then be absorbed as the individual L-amino acids. Their bioavailability and metabolism will therefore be equivalent to that of the individual amino acids already included in the list of acceptable nutrients.
The Committee therefore has no objection to the use of L-arginine-L-aspartate, L-lysine-L-aspartate, and L-lysine-L-glutamate dihydrate in foods for special medical purposes.