

## **SUBMISSION ON APPLICATION A1030 CALCIUM LIGNOSULPHONATE (40-65) AS A FOOD ADDITIVE**

**Food Policy and Programs Branch, SA Health  
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Thank you for the opportunity to provide comments to the Assessment Report for A1030.

SA Health supports the introduction of permissions for the use of calcium lignosulphonate (40-65) into the Code as an alternative substance to assist in adding fat soluble vitamins and carotenoids to water-based foods. However it is questioned whether calcium lignosulphonate (40-65) is more appropriately classified as a processing aid rather than a food additive.

### *Technological Function*

Calcium lignosulphonate (40-65) is intended for use as a carrier for the production of encapsulated fat-soluble vitamins (A, D, E, and K), carotenoids and in preparations of food additives and nutrients to facilitate their introduction into water-based foods. The Assessment Report for A1030 has concluded that the technological function of calcium lignosulphonate (40-65) is an emulsifier or stabiliser. However the intended use is as a carrier.

The functional use of calcium lignosulphonate (40-65) would appear to be a carrier, consistent with the Codex Committee on Food Additives classification of calcium lignosulfonate INS number 1522 and functional class of being a carrier and encapsulating agent. Codex Alimentarius define a carrier as a food additive used to dissolve, dilute, disperse or otherwise physically modify a food additive or nutrient without altering its function (and without exerting any technological effect itself) in order to facilitate its handling, application or use of the food additive or nutrient.

The Food Standards Code does not have a functional class for carriers as food additives since they do not perform a technological function. Hence the Food Standards Code regulates carriers as processing aids.

Section 4 of the Food Technology Assessment in Supporting Document 1 describes the function of calcium lignosulphonate (40-65) as an emulsifier in the encapsulation process but does not demonstrate against any criteria that the function of the encapsulated vitamin is an emulsifier or stabiliser when added to a food.

Standard 1.3.1 Food Additives Schedule 5 describes the function of an emulsifier as facilitating the formation or maintenance of an emulsion between two or more immiscible phases. The function of adding calcium lignosulphonate (40-65) in a food is not to facilitate the formation or maintenance of an emulsion. Its only role is to carry the encapsulated vitamin. There also would be no technological function in the final food which is consistent with the definition of a processing aid.

### *Labelling*

If calcium lignosulphonate (40-65) is determined by FSANZ to be a food additive it will require listing on the food label of foods containing this compound. It is suggested that the number (40-65) at the end of the name may be misinterpreted as a food additive number and therefore may be better listed as simply 'calcium lignosulphonate' on food labels.

### *Other Issues*

Some concerns are raised regarding the nutritional aspects of this substance, in particular; the impact on vulnerable consumers of increased facilitation of fat soluble vitamins, particularly Vitamin A. Although the Assessment Report (Section 6.4) notes that the use of calcium lignosulphonate (40-65) is likely to result in the same gastrointestinal absorption of these nutrients as occurs with the use of other carrier agents, there still appears to be a risk that the levels of beta carotenes and other pre-cursor material will be increased in the general diet. This then raises the possibility of Vitamin A toxicity in some individuals. Has this been considered in the dietary modelling?

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