SA HEALTH SUBMISSION ON -

A1186 – Soy Leghemoglobin in meat analogue products

February 2020

SA Health welcomes the opportunity to provide comment on A1186 – Soy Leghemoglobin in meat analogue products.

SA Health is of the view that the Application draft amendment does not provide any regulatory certainty for enforcement purposes if it is assessed only as a Genetically Modified (GM) food and not as a food additive, nutritive substance or a novel food. It is recommended that Soy Leghemoglobin in addition to it being assessed as a GM food that its use as a food additive, nutritive substance or novel food be also assessed.

1. The A1186 report refers to novel soy leghemoglobin and that the application is being assessed as a Genetically Modified (GM) food rather than a novel food. The report does not explain adequately the reason for this, and there are differences in the assessment process and drafting outcome if assessed as a GM food and not as a food additive, nutritive substance or a novel food. It would be more appropriate for the soy leghemoglobin to be assessed as a Food additive as it has a **technological function** as described by the applicant in the application. In section 2.1.2 (page 2 of supporting document 1 of A1186 report) states “The applicant indicates the primary purpose of adding soy leghemoglobin to meat analogue products is to replicate the flavour and aroma of myoglobin’. This is clearly the technological function of a Flavouring of leghemoglobin as listed in schedule 14 of the Food Standards Code. Schedule 14 describes a flavouring as intense preparations which are added to foods to impart taste or odour, which are used in small amounts and are not intended to be consumed alone, but do not include herbs, spices and substances which have an exclusively sweet, sour or salt taste. Soy leghemoglobin proposed use meets this definition, in that it imparts flavour, is used in small amounts, and is not intended to be consumed alone.
2. The assessment is not consistent with how leghemoglobin is regulated internationally. The US has assessed the soy leghemoglobin as a flavour optimiser and as a colour additive. By regulating leghemoglobin as a food additive, products containing the leghemoglobin will require the food additive labelling regulations that require its disclosure so that the consumer is informed of it being present in a food. By regulating as a GM food, the presence of leghemoglobin would not be disclosed to the consumer unless the GM leghemoglobin is not substantially equivalent to leghemoglobin that is non-GM.
3. It is important that leghemoglobin be assessed as a food additive so that the technological justification for its addition to food is determined. This may not be considered if assessed as a GM food. There is potential for leghemoglobin to be added to food not in accordance with Good Manufacturing Practice (GMP) which food additives are subject to by regulation. There is potential for

misuse of leghemoglobin to be added to a meat analogue to extend shelf life and to mask poor manufacturing practices. There is potential to deceive consumers by disguising poor quality product by adding leghemoglobin to make the product look redder and smell fresher. The masking of spoilage of poor quality products should not be allowed to be practiced. There may be health implications from consuming an extended shelf life product containing high levels of microorganisms without showing evidence of colour change or by having it flavour masked. The addition of leghemoglobin will also change the appearance of a cooked product so proper labelling is required to avoid any hazards associated with undercooking.

4. Any permission for the addition of leghemoglobin to a meat analogue should also consider the “carry over” of the additive to another food. Could the leghemoglobin be found in mixed meat products such as a mixture of sausage meat and meat analogue containing leghemoglobin by carry over?
5. If the soy leghemoglobin is added to a meat analogue for a nutritive purpose, then it should be assessed as a nutritive substance if it meets the definition of “Used as a nutritive substance” in Standard 1.1.2—12.
6. If soy leghemoglobin meets the requirements of Standard 1.5.1- Novel foods, then it should be assessed as a novel food.
7. At the 15 November 2019 Australia and New Zealand Ministerial Forum on Food Regulation (the Forum) meeting Ministers agreed to refer the matter of ‘synthetic’ foods to the Food Regulation Standing Committee (FRSC) for its consideration of regulatory and labelling issues, with a view to developing a policy guideline. If the scope of the policy guideline includes meat analogue products and their ingredients, then this application should consider any relevant policy guideline developed.