12th September 2005

Food Standards Australia New Zealand
PO Box 7186
Canberra BC ACT 2610
Australia

Dear Sir/Madam,

RE: Submission on Initial Assessment Report: Proposal P298 – Benzoate and Sulphite Permissions in Food

Thank you for the opportunity to provide comments on the Initial Assessment Report concerning Benzoate and Sulphite Permissions in Food.

Preservatives such as benzoates and sulphites play an important role in ensuring the safety of our food supply. Changing lifestyles and eating habits, less and less people consuming balanced diets, have all lead to an increase in the demand and consumption of foods that are not only safe and convenient, but also have relatively long shelf lives. We recognise that it is of some concern that the recent "21st Australian Total Diet Study" found the "95th percentile dietary exposure to benzoates and sulphites for some population groups (particularly children) exceeded the relevant ADIs".

we support further research and gathering of information to determine viability and impact of any lowering of limits for benzoates and sulphites, and the effect of higher intakes of benzoates/sulphites on children, as a review of the feasibility of *Option2 – Review and reduce permissions for benzoates and/or sulphites for certain foods.* Such a review should focus on foods making a significant contribution to the intake of benzoates and sulphites of children – foods of poor nutritional content, where the current role of benzoates/sulphites in that food relate to quality aspects as opposed to a Food Safety role.

It may be that there is another option, our preferred option, - *Option 5 –Promote voluntary reduction of the use of benzoates and/or sulphites for all foods with current permissions.* This option would be heavily influenced by the consumer for uptake and provide choice. This option would allow the incorporation of the goal of safely reducing benzoates and/or sulphites in products (particularly those popular with children) into the New Product Development process.

We believe that *Option 4 – Encourage consumers to eat a balanced diet and not over-consume foods with high levels of benzoates and/or sulphites,* should run in parallel with any other option. Consumer education would support the uptake of our proposed option 5.

Issues

The main issues around reducing the permissions for benzoates and/or sulphites are the difficulty in replacing them or alternatively, the compromise to the quality of the product. Given the long distances food may be transported in Australia and the climate, it is likely that replacing benzoates and/or sulphites is going to be the most viable of option for most food producers. Replacement is likely to involve cost as products will have to be redeveloped, alternatives are likely to be more expensive and that cost will be passed onto the consumer. Any reduction in permission is also likely to lead to the necessity of increased product testing by regulators, importers and businesses with overseas suppliers to ensure reduced permissions are being observed, again at a cost. The long shelf life of a number of products would mean any change over to reduced permissions would require a long lead time.

Acceptance by the consumer of products which taste and appearance are affected by reduced sulphites and benzoates may be difficult. Appearance of food is very important to consumers, particularly children and poor appearance may result in rejection of the food thereby potentially affecting categories of food manufacturers and increasing product cost to find an alternative. Many of the products that contain benzoates/sulphites that are popular with children are a preferred purchase by their carers because they are reasonably priced.

Another issue to be considered is the potential creation of a similar intake issue with an alternative to benzoates/sulphites that may become widely used if permissions were to be reduced. Alternative methods of preservation are likely to have the greatest impact on the qualities of any product and also the cost to the manufacturer as this may involve differing plant and equipment, staffing levels and energy inputs, all involving increased cost, ultimately which will passed on to the consumer.

Alternatives

In recent years in response to increasing demand from consumers for decreased food additives but still retaining product shelf life and quality there has been considerable activity and innovation in the development of alternative technologies and "natural solutions". The "Organics Industry" has driven much of this.

High Pressure Processing technology has been developing and used for beverages including juices. Other newer technologies include – developments in membrane filtration, high intensity light, electron beam processing, ultrasound, modified atmosphere packaging, pulsed electric fields, smart packaging, air ion bombardment, laser light, oscillating magnetic fields, ozone, uv light and high hydrostatic pressure.

Natural Antimicrobials for developing new preservation systems that extend the shelf-life of foods without compromising safety or sensory qualities include:- Nisin, Bacteriocins other than nicin such as the pediocin-like cystibiotic of lactic acid bacteria, natamycin, organic acids, lysozyme, lactoferrin, iron-cheltores, enzymes, immunoglobulins, chitosan, chitosan-glutamate, plant antimicrobials, anti microbials extractives derived from herbs and spices (such as rosemary, sage, cinnamon, turmeric, oregano etc) vanillin, citral , citronellol, geraniol, menthol, eugenol, thymol, allicin, tannins, allyl isothiocyanate grape pomace extract, and essential oils. Some of these products also function as natural anti-oxidants. Other alternative antioxidants include ascorbic acid and tocopherols, others derived from tea and fruits such as cherries, raisins and cranberries.

These technologies and products are now available for commercial application. However there are issues around cost, flavour contribution, product characteristics and formulation balances. Natural alternatives are also being used in combination with synthetic/traditional antioxidants, colour enhancers and antimicrobials and achieving good results. Other issues for the use of natural alternatives relate to lack of data on known quantities required to achieve a safe and stable product, use generally involves considerable testing at cost to the product manufacturer.

For many natural alternatives there are no limits applied to their use and due to being relatively new to the market there is little information on acceptable daily intakes or upper limits for use in food. It must be remembered when choosing natural alternatives that Pharmacy today is derived from herbs and spices by isolating the active components, exactly what is happening with the development of natural food antimicrobials. Benzoic acid is a naturally occurring substance in some foods but yet there is concern over intake from benzoates added to processed foods.

Considerations

Health and Safety are of paramount importance and it is important to consider not only the health implications of high intakes of benzoates/sulphites by children, but also the food safety implications of removing them or using alternatives.

Though there are many alternatives to benzoates and sulphites these are costly in comparison, and would be best introduced as part of New Product Development rather than requiring businesses to reformulate their products. We currently do not have sufficient data to establish safe ADI's for many natural additives and we do not have the regulatory framework to manage their use in product manufacturing.

Summary

More information/data is required to be gathered on the effect of high intakes of benzoates and sulphites on children. Further use of alternative technologies and natural antimicrobials needs to develop within the food industry along with further research and data gathering on safe use. Further regulatory framework needs to be developed to cover the use of alternative technologies and natural antimicrobials/antioxidants by food manufacturers. Consumer demand will continue to drive the uptake of acceptable alternatives to benzoates and sulphites.

We propose another option - *Option 5 –Promote voluntary reduction of the use of benzoates and/or sulphites and the uptake of alternatives for all foods with current permissions,* in conjunction with *Option 4 – Encourage consumers to eat a balanced diet and not over-consume foods with high levels of benzoates and/or sulphites.*

This will allow and encourage food manufacturers to incorporate the aim of reducing sulphite/benzoate use and the use of alternatives into the New Product Development process. This will also provide consumers with choice and the ability to influence the uptake of alternatives there by possibly reducing cost factors involved due to increased scale, and increasing the efficiency of application and use.

Such an option will provide more clarity and benefits for both consumers and manufacturers in terms of safety and cost.

Yours sincerely

[redacted]
Manager QC Projects
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