



September 2006

Submission from the Dietitians Association of Australia (DAA)

Proposal P230 – Consideration of mandatory fortification with iodine

The Dietitians Association of Australia is the largest nutrition focused organisation in Australia representing a membership of over 3000 dietitians, dietetic students and Associate members.

Its mission is to *'support members'* and to advocate for *'Better food, Better health, Better living for all'*.

The Dietitians Association of Australia (DAA) supports mandatory fortification with iodine as given in option 2: The mandatory addition of iodised salt to bread, bread products, breakfast cereals and biscuits at the range of 20 – 45 mg iodine per kg salt.

DAA recognises that mandatory fortification of foods with iodine will reduce the mild to moderate deficiency in iodine intake for the population of Australia and New Zealand. DAA believes that the Tasmanian experience with iodine supplementation of bread has provided compelling evidence of improved iodine status in a population and that maintenance of the status quo cannot be supported.

There is a consensus amongst our members that a comprehensive monitoring and review program is essential for any mandatory fortification of the food supply to assess the effectiveness of, the continuing need for, and any adverse effects resulting from the mandating of fortification.

DAA wishes to highlight the difficulty many pregnant and lactating women will have in achieving iodine intakes consistent with the new NRVs for iodine. Additional iodine supplementation may be required by many women of child bearing age, particularly those living in the more iodine depleted areas of SE Australia and New Zealand. The new NRVs for pregnancy and lactation pose a challenge for many nutrients including folate even after the proposed mandatory fortification of bread with folate. There is a need for public health programs to highlight the importance of nutrition preconception and during pregnancy and lactation. There may be the need for a new formulation of a vitamin and mineral supplement to assist women to meet the increased nutritional needs of pregnancy and lactation. To ensure equity such a supplement would need to be widely available at low cost.

Specifically:

Monitoring and Review

Any agreement to require fortification should require that it be monitored and formally reviewed to assess the effectiveness of, and continuing need for, the mandating of fortification. DAA acknowledges that responsibility for monitoring health outcomes and nutrient intakes is beyond the role of FSANZ. However, since FSANZ is responsible for ensuring that food regulations protect public health and safety, this information is necessary in order for FSANZ to be able to evaluate the safety, effectiveness of and continuing need for fortification as well as any unintended consequences.

- DAA has significant concerns that appropriate monitoring will not be undertaken. A firm commitment from Commonwealth, State and Territory Governments in Australia and the New Zealand Government is required.
- Monitoring and review of any fortification of the food supply is desirable for all age groups. However, the DAA believes that this would be costly and difficult to implement. WHO recommends that school children be used as an indicator of population iodine status¹ and most of the current data in Australia is on school aged children. However, since pregnant and lactating women are at risk of having inadequate iodine intakes, DAA requests that consideration be given to monitoring women of child-bearing age, particularly in iodine depleted areas. In addition, children under the age of 3 are of concern as brain and nerve tissue changes due to iodine deficiency may not be fully reversible. Young children are most likely to exceed the recommended upper limits for iodine the DAA requests that consideration be given to monitoring this age group also. A monitoring program ideally would consider:
 - Health status, including but not limited to incidence of iodine deficiency disorders. Although most IDD's are subclinical and not detected, the incidence of clinically detected IDD would provide an indication of deficiency;
 - Urinary Iodine Excretion (UIE) in school aged children, women of child-bearing age and children under 3;
 - Nutrient intake and food consumption patterns as assessed by food frequency questionnaire;
 - Food composition data on iodine from major dietary sources.
 - Compliance monitoring for industry
- There is now relatively good baseline data on population iodine status in Australia and New Zealand with the NINS, the Tasmanian surveys (soon to be published in the MJA) and the NZ nutrition surveys. This data will form part of baseline data necessary for ongoing evaluation of any fortification program.
- Monitoring should be across all States and Territories of Australian and New Zealand due to the wide variation of naturally occurring iodine in the Australian and New Zealand food supplied.

Recommendations for women of child-bearing age

¹ WHO, UNICEF, ICCIDD. Assessment of iodine deficiency disorders and monitoring their elimination. Geneva, World Health Organisation, 2001 (WHO/NHD/01.1).

DAA believes that mandatory fortification of salt used in bread, bread products, breakfast cereals and biscuits at the range of 20 – 45 mg iodine per kg salt is only part of the solution to reducing iodine deficiency. In addition supplement promotion and broad-based education programs for women of child bearing age are essential because:

- The level of mandatory supplementation proposed will not enable many women to achieve an intake of the Australian recommended dietary intake of 220 micrograms per day for pregnancy and 270 micrograms per day for lactation.
- Women may incorrectly believe that they do not need to take an iodine supplement if there is mandatory fortification of some foods with iodine
- Some women will consume little or none of the foods that will have mandatory supplementation through use of iodised salt in production. Of particular concern will be women who avoid wheat based foods due to allergy or food intolerance, women who consume little bread, breakfast cereal or biscuits due to cultural practices or in an attempt to reduce their sodium intake by limiting processed food intake.
- Iodine is not the only nutritional consideration for healthy pregnancy and a healthy baby, folate in particular but many other nutrients are also essential.

Additional Comments

- Supplement promotion and education programs will require ongoing investment and DAA believes that this is a government responsibility which should be included in their cost/benefit analysis.
- DAA considers human development programs at secondary school to be a valuable and timely opportunity for targeting adolescent girls regarding this issue.
- People with existing thyroid disease may need change of management with increased iodine in food supply
- DAA recognises that mandatory fortification increases the regulatory burden on States and Territories, but believes that as this is a major public health and safety issue for a significant proportion of Australians the additional regulatory burden is justified as a core government responsibility.

DAA responses to questions in P230 Draft Assessment Proposal

- Q. *If manufacturers of breads, breakfast cereals and biscuits are required to use iodised salt, would iodised salt also be used in the processing of other food products? If so, please indicate which products.***
- A. DAA has no specific comments to this question as industry submissions will address this question

Q. *Should the voluntary iodine permission for the iodisation of salt be removed?*

A. DAA supports the current voluntary permissions as this will allow those who wish to bake their own wheat-based products to add iodised salt.

Q. *What impact, if any, would the mandatory requirement for the replacement of non-iodised salt with iodised salt in breads, breakfast cereals and biscuits have on the import of these foods into Australia and New Zealand?*

A. DAA has no comment on this question due to lack of relevance to dietitians.

Conclusion

The Dietitians Association of Australia (DAA) supports P230 – Mandatory supplementation of iodine.

- Monitoring and education will be needed to support this initiative
- Different geographical areas have different needs for supplementation. Number exceeding UL will be greater in Queensland and WA, especially for young children. Education programs may need to be tailored to consider iodine availability in local food supplies.
- Pregnant and lactating women in SE Australia and New Zealand may still need additional iodine supplementation as mandatory supplementation of the proposed foods will not increase intake to desired RDI levels many women
- People with existing thyroid disease may need change of management with increased iodine in food supply

Acknowledgement

This submission was developed by members of the DAA Food Standards Advisory Committee with contributions from DAA members with an interest in this area.