FIRST REVIEW REPORT

APPLICATION A424

FORTIFICATION OF FOODS WITH CALCIUM
1. **Objectives of Review**

The Australia and New Zealand Food Regulation Ministerial Council (Ministerial Council) has requested a First Review of a draft variation to Standard 1.3.2 – Vitamins and Minerals of the *Australia New Zealand Food Standards Code* (the Code). Food Standards Australia New Zealand (FSANZ) is required to notify the Ministerial Council on the outcome of this Review by May 2005.

Application A424 – Fortification of Foods with Calcium seeks to amend Standard 1.3.2 – Vitamins and Minerals of the Code to permit the voluntary addition of calcium to fruit- and vegetable juices and drinks, soups and savoury biscuits.

In May 2004, the Ministerial Council adopted a Policy Guideline on *Fortification of Food with Vitamins and Minerals* (Policy Guideline), which provides guidance on the addition of vitamins and minerals to food. In accordance with the section 10 objectives of the *Food Standards Australia New Zealand Act 1991* (FSANZ Act), FSANZ in developing or reviewing food standards must have regard to Ministerial policy guidance.

Therefore, the objective of this Review is to reconsider the draft variations to Standard 1.3.2 taking into account the Ministerial Council’s concerns as outlined in Section 2, and the recently adopted Policy Guideline.

2. **Review on Grounds Requested by the Ministerial Council**

The Ministerial Council has requested a First Review of Application A424 on the grounds that the draft Standard:

- is not consistent with the objectives of the legislation which establishes FSANZ;
- does not protect public health and safety;
- does not promote consistency between domestic and international food standards where these are at variance;
- does not provide adequate information to enable informed choice; and
- places an unreasonable cost burden on industry or consumers.

3. **Background**

In December 2001, FSANZ received an Application from Food Liaison Pty Ltd on behalf of Arnott’s Biscuits Limited and Nutrinova Pty Ltd to amend Standard 1.3.2 – Vitamins and Minerals of the Code, to permit the voluntary addition of calcium to fruit- and vegetable juices, fruit- and vegetable drinks, fruit cordial, soups and savoury biscuits. During the assessment process the Applicant notified FSANZ that fruit cordials were withdrawn from the requested list of foods. Consequently the scope of Application A424 was narrowed to fruit- and vegetable- juices and drinks, soups and savoury biscuits.
In September 2003, the FSANZ Board approved the Final Assessment of Application A424, including the draft variations to Standard 1.3.2 and notified the Ministerial Council. This decision permitted the voluntary addition of calcium to the foods as requested by the Applicant. As policy guidance on fortification was still pending, Application A424 was assessed against FSANZ’s *Regulatory Principles for Vitamin and Mineral Addition to Foods* (Regulatory Principles).

In December 2003, the Ministerial Council sought a First Review of the draft variations to Standard 1.3.2 and agreed to allow FSANZ until May 2005 to complete the review in anticipation of the completed Policy Guideline.

In May 2004, the Ministerial Council adopted the new Policy Guideline that provides guidance on the addition of vitamins and minerals to food. The Policy Guideline is divided into ‘High Order’ Policy Principles, which are based on FSANZ’s statutory objectives, and separate ‘Specific Order’ Policy Principles for both mandatory and voluntary fortification. A copy of the Policy Guideline is at Attachment 1. With the release of the Policy Guideline, the Regulatory Principles are now superseded.

4. Options

There are three options proposed for consideration under this review:

1. re-affirm approval of the draft variations to Standard 1.3.2 of the Code as notified to the Ministerial Council; or

2. re-affirm approval of the draft variations to Standard 1.3.2 of the Code subject to any amendments FSANZ considers necessary; or

3. withdraw approval of the draft variations to Standard 1.3.2 of the Code as notified to the Ministerial Council.

5. Ministerial Council Review Grounds

The First Review of the draft variations to Standard 1.3.2 has been undertaken addressing the matters stated in the Ministerial Council’s request (as listed above) and also having regard to the new Policy Guideline. Any issues relevant to the Policy Guideline that are not dealt with directly in the Ministerial Council’s grounds for review have been included in Section 5.6 of this report.

5.1 Inconsistency with the objectives of the legislation which establishes FSANZ

FSANZ commenced work and completed its assessment of Application A424 prior to the adoption of the Policy Guideline. Consequently this Review of the draft variations to Standard 1.3.2 will be undertaken in accordance with section 10 objectives of the FSANZ Act, which includes having regard to the new Policy Guideline.

Accordingly this review will address the Policy Guideline’s ‘Specific Order’ Policy Principles for voluntary fortification as they relate to Application A424 and by so doing, will seek to address the ‘High Order’ Policy Principles, which reflect the FSANZ statutory objectives as set out in section 10 of the FSANZ Act.
5.2 Protection of public health and safety

5.2.1 Risk of calcium inadequacy/deficiency

The first ‘Specific Order’ Policy Principle for voluntary fortification requires that the permission to voluntarily add vitamins and minerals to food should only be permitted if one or more of five prerequisites is met (see Attachment 1). The first ‘prerequisite’ states that the voluntary addition of vitamins and minerals to food can be permitted where there is a need for increasing the intake of a vitamin or mineral in one or more population groups demonstrated by actual clinical or sub-clinical evidence of deficiency or by data indicating low levels of intake.

FSANZ has assessed the adequacy of calcium intakes of the total population and population subgroups by reference to the United Kingdom estimated average requirement (EAR) for calcium in the absence of Australian or New Zealand official EAR reference values.

Nutritional inadequacy can be defined as more than 3% of the population having nutrient intakes below the EAR. National data indicates that 28.4% and 33.9% of the Australian and New Zealand populations respectively, do not meet the EAR for calcium. Particular population groups with low calcium intakes include adolescent and adult females in Australia and New Zealand, New Zealand Maori, Australians of Asian ethnicity and non-dairy consumers in Australia and New Zealand.

5.2.1.1 Conclusion

There is considerable evidence to indicate that there is an inadequate intake of calcium in the Australian and New Zealand populations, which meets one of the five prerequisites for permitting voluntary fortification in accordance with the first ‘Specific Order’ Policy Principle of the Policy Guideline.

5.2.2 Potential to address deficit

The second ‘Specific Order’ Policy Principle for voluntary fortification is that the permitted fortification has the potential to address the deficit or deliver the benefit to a population group that consumes the fortified food according to its reasonable intended use.

The Final Assessment Report for Application A424 demonstrated that the addition of calcium to all proposed food categories has the potential to increase the calcium intake for the population or subgroups of the population whose intakes were assessed as inadequate. Increasing the calcium intake of the population is consistent with national dietary guidance and has the potential to improve current inadequate calcium intakes. The extent of the potential benefit, however, will depend on the uptake of this voluntary permission by industry.

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1 EARs have not yet been established for the Australian and New Zealand populations and so the United Kingdom EAR has been selected, as it is more compatible with the current range of Australian and New Zealand RDIs.


The issue of bioavailability was also examined at Final Assessment and it was concluded that the addition of calcium to the proposed food categories has the potential to address the deficit. It was noted that bioavailability is a complex issue and is affected by different factors, including long term nutrient intake imbalances, nutrient interactions at a single meal and individual variations in the ability to absorb and use various nutrients in the body. It was also recognised that various calcium salts have different bioavailabilities in different foods.

In relation to this matter, the Final Assessment Report concluded that recent research had shown that the particular forms of calcium salts suitable for addition to fruit- and vegetable-based beverages were as bioavailable as the calcium in milk, although the effect of calcium-fortified beverages on bone health appeared not to be as beneficial as that gained from milk consumption due to intrinsic factors in milk.

5.2.2.1 Conclusion

The potential exists to improve the calcium intake of population subgroups whose current intakes are assessed as inadequate and so meets the requirement of the second ‘Specific Order’ Policy Principle for voluntary fortification.

5.2.3 Risk of excess calcium intake

The sixth ‘Specific Order’ Policy Principle states that permissions to fortify should ensure that the added vitamins and minerals are present in the food at levels which will not have the potential to result in detrimental excesses or imbalances of vitamins and minerals in the context of total intake across the general population. The first part of this policy principle that relates to detrimental excesses will be discussed in this section (5.2.3) whereas the second part relating to dietary imbalances is discussed in Section 5.2.4.

At Final Assessment, FSANZ assessed the risk to the population of consuming excess calcium by estimating the total consumption of calcium from both natural and the proposed added sources and then comparing this to the Tolerable Upper Intake Level (UL) for calcium (2500 mg/day). The dietary intake assessment indicated that there is little risk of consumers exceeding the UL for calcium over a long period.

5.2.3.1 Conclusion

There is minimal risk to the population of consuming excessive amounts of calcium from a diet containing the calcium-fortified food requested in Application A424 and so this assessment meets, in part, the requirements of the sixth ‘Specific Order’ Policy Principle for voluntary fortification.

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5.2.4  Risk of dietary displacement

The remaining part of the sixth ‘Specific Order’ Policy Principle is that permissions to fortify should ensure that the added vitamins and minerals are present in the food at levels which will not have the potential to result in imbalances of vitamins and minerals in the context of total intake across the general population.

At Final Assessment, FSANZ concluded that the risk of dietary displacement from consuming calcium fortified soup and/or biscuits would be minimal. The main risk identified by permitting calcium-fortified foods, as requested by Application A424, is that fruit- and vegetable- juices and drinks could displace milk in the diet. This does not apply to those individuals who, for whatever reason, do not consume milk.

However, an independent survey of 1200 Australians6 (see Attachment 2) and overseas data indicated that there is minimal risk of long-term substitution of calcium-fortified beverages for milk. These beverages are considered to be sufficiently different in nutrient profile, taste and use from milk and so are not considered to be an ongoing substitute food.

Although both the United States and the United Kingdom consumption trends show a decline in milk consumption and an increase in fruit juice intake, there is no evidence to suggest that these trends are the result of calcium-fortified beverages being available in the market place.

Using a worst-case modelling scenario, FSANZ undertook dietary modelling assuming a 50 % reduction in milk consumption due to substitution with calcium-fortified beverages. The results showed a small decrease in riboflavin and zinc intakes. It was noted, however, that the scenario modelled was theoretical, highly unlikely based on consumer research and included data based on one-day intakes only. It is therefore expected that the proposed amendments to the Code would have minimal adverse effects on the micronutrient intake, supplied by milk, of the Australian and New Zealand populations.

5.2.4.1 Conclusion

There is minimal risk to the population of dietary displacement as a result of substitution with calcium-fortified products proposed by Application A424. This fulfils the remaining part of the sixth ‘Specific Order’ Policy Principle for voluntary fortification.

5.2.5  Overall conclusion in relation to public health and safety

In terms of public health and safety, the overall conclusion is that:

- there is potential to improve the calcium intake of population subgroups whose current intakes are inadequate;
- the risk to the population of consuming excessive amounts of calcium is minimal; and
- the risk of dietary displacement as a result of substitution with calcium-fortified products of current milk drinkers proposed by Application A424 is also minimal.

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5.3 Inconsistency between domestic and international food standards

Although Codex has not established a standard for voluntary fortification, it has established guidelines that define a set of General Principles\(^7\). (Codex does not distinguish between voluntary and mandatory fortification). There is alignment between the Codex General Principles and the Policy Guideline with respect to fortification on the basis of inadequacy. The FSANZ Board’s decision on Application A424 is consistent with international guidance which asserts that the addition of essential nutrients to foods should be on the basis of ‘demonstrated need’ which includes ‘estimates indicating low levels of intake of nutrients’.

As the permissions for the addition of calcium to the products in Application A424 are voluntary, they do not create an inconsistency between domestic and international food standards.

5.3.1 Conclusion

While there are no international standards for voluntary fortification, only guidelines per se, the Policy Guideline is consistent with these guidelines with respect to fortification on the basis of inadequacy. Permitting the voluntary addition of calcium to foods as proposed by Application A424 would therefore not create inconsistency between domestic and international food standards.

5.4 Provision of adequate information to enable informed choice

The seventh ‘Specific Order’ Policy Principle for voluntary fortification states that the fortification of a food, and the amounts of fortificant in the food, should not mislead the consumer as to the nutritional quality of the fortified food.

Under current labelling requirements, an added vitamin or mineral must be listed in the ingredient list and if a nutrition content claim is made in relation to a food, the nutrient is required to be listed in the Nutrition Information Panel on the label.

‘Source’ or ‘good source’ calcium claims for fortified foods can be made provided that a reference quantity of the proposed food for fortification contain at least 10% or 25% of the recommended dietary intake (RDI) respectively for calcium. The above requirements would provide consumers with factual information as to the amounts of fortificant in the food. These labelling requirements are also in accordance with the additional policy guidance for voluntary fortification which states:

\[
\text{An added vitamin or mineral is required to be listed in the Nutrition Information Panel only if a claim is made about it and the vitamin or mineral is present at a level for which a claim would not be misleading. An added vitamin or mineral must be listed in the ingredient list under current labelling requirements.}
\]

There is a risk that the inclusion of a ‘source’ or ‘good source’ content claim for calcium may mislead consumers as to the nutritional quality of fortified foods.

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The ‘Halo Effect Component’ has been described where respondents underestimate the level of risk-increasing nutrients in products (e.g. sugar) that also carry claims about beneficial nutrients (e.g. calcium).

To help mitigate this risk, FSANZ supports and acknowledges the role nutrition education can play in providing information in relation to the role of calcium-fortified products in the overall diet.

5.4.1 Conclusion

FSANZ considers that current labelling requirements provide consumers with adequate information as to the presence and amount of calcium in the food and in doing so, meets the requirement of the seventh ‘Specific Order’ Policy Principle for voluntary fortification.

Given the extent of calcium deficiency in the overall population, FSANZ considers that the potential benefit derived from the additional calcium sources significantly outweigh any possible risks of consumer deception and any associated consequences.

5.5 Cost burden on industry or consumers

The proposed variations to Standard 1.3.2 – Vitamins and Minerals leave the decision whether to fortify certain foods to industry. Such decisions would necessarily take account of any increased costs and whether a more highly priced product would be sustainable in the market place. Consumers would be financially disadvantaged only if the price of calcium-fortified food rose significantly compared to non-fortified counterparts, and all manufacturers chose to fortify their respective products thus denying consumer choice. Experience from overseas indicates that this is unlikely.

Industry would be permitted to voluntarily add calcium to the proposed products which may potentially open up new markets or increase market share both domestically and internationally.

5.5.1 Conclusion

Amending the Code to permit the voluntary addition of calcium in fruit- and vegetable juice, fruit- and vegetable drinks, savoury biscuits and soups is unlikely to increase the cost burden on industry or consumers.

5.6 Other issues relevant to the Policy Guideline

5.6.1 Consistency with National Nutrition Policies and Guidelines

The third and fourth ‘Specific Order’ Policy Principles for voluntary fortification respectively state that permission to fortify should not promote consumption patterns inconsistent with the nutrition policies and guidelines of Australia and New Zealand; and permission to fortify should not promote increased consumption of foods high in salt, sugar or fat.

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The dietary guidelines recommend consuming only moderate amounts of sugars and foods containing added sugars; limiting saturated fat and moderate total fat intake; and choosing foods low in salt\textsuperscript{9,10}.

At Final Assessment, FSANZ utilised compositional criteria in relation to the fat, sugar and salt content of the proposed food categories to determine consistency with nutrition policies and guidelines. It was concluded that the majority of products met the compositional criteria and so fortification of these products would be consistent with general dietary guidance.

FSANZ is unaware of any evidence to indicate that the fortification of these products with calcium would result in an increased consumption that is inconsistent with national nutrition policies and guidelines. On the contrary, survey data\textsuperscript{11} (see Attachment 2) indicates that it is more likely that fortified products would be substituted for non-fortified counterparts.

5.6.1.1 Conclusion

The above findings are in accordance with the third and fourth ‘Specific Order’ Policy Principles for voluntary fortification.

5.6.2 Alcoholic beverages

The fifth ‘Specific Order’ Policy Principle states \textit{fortification will not be permitted in alcoholic beverages}. As the categories of food being considered for fortification by Application A424 do not include alcoholic beverages, this policy principle is not relevant to this Review.

6. Impact Analysis

This First Review has not identified issues that are likely to change the impact analysis as presented at Final Assessment. Specific considerations in reaching this conclusion are:

- there are benefits to consumers of additional and/or alternative food sources of calcium;
- dietary intake assessment indicates that there is very little risk of excess consumption of calcium; and
- the potential exists to improve the calcium intake of population subgroups whose current intakes are assessed as inadequate. This potential benefit is estimated to outweigh any risks associated with inappropriate use of the calcium-fortified products as substitutes for dairy foods.

\textsuperscript{10} Food and Nutrition Guidelines for Healthy Adults – a background paper (April 2002) Sourced from: http://www.moh.govt.nz/moh.nsf/ea6005dc347c7bd44c2566a40079ae6f/f01ce3552a33c9f3ec256b9600147891?OpenDocument
\textsuperscript{11} Beanham S \textit{et al} (2003) Australian Dairy Corporation Issues Research: Calcium-fortified Drinks Executive Summary
7. Conclusion and recommendation

The First Review concludes that the preferred option is Option 1 as supported by the Statement of Reasons below. This reaffirms the approval of the draft variations to Standard 1.3.2 of the Code (at Attachment 3) as notified to the Ministerial Council.

7.1 Statement of Reasons

- Permitting the voluntary addition of calcium to foods as proposed by Application A424 has been assessed as being consistent with the objectives of the FSANZ Act, which are mirrored in the ‘High Order’ Policy Principles of the Policy Guideline, as well as satisfying all seven ‘Specific Order’ Policy Principles for voluntary fortification.

- In terms of public health and safety, calcium can be considered eligible for voluntary fortification of fruit- and vegetable juices and drinks, soups and savoury biscuits because:
  - there is considerable evidence to indicate inadequate intakes of calcium in the Australian and New Zealand populations;
  - the addition of calcium to all the proposed foods has the potential to increase the calcium intake for the population or subgroups of the population with a current intake assessed as inadequate;
  - the dietary intake assessment estimates that there would be negligible risk of excess calcium intake based on the addition of calcium at the levels requested assuming conservative 100% uptake of the permission for all the proposed food;
  - overseas experience and Australian surveys indicate that there would be minimal risk to the population of dietary displacement as a result of substitution with calcium-fortified food; and
  - it is unlikely that the food categories selected for voluntary fortification with calcium would promote consumption patterns inconsistent with nutrition policies and guidelines.

- As the permissions for the addition of calcium to the products proposed by Application A424 are voluntary, they do not create an inconsistency between domestic and international food standards.

- Current labelling requirements would provide consumers with adequate information as to the presence and amount of calcium added to the proposed food categories to enable them to make an informed choice.

- The permissions for the addition of calcium to the products proposed by Application A424 are voluntary and so any uptake by industry will be based on a business decision and consumers will be able to choose whether to select calcium fortified foods, as it is highly unlikely that all the food categories proposed by Application A424 will be fortified.
Attachments

1. Ministerial Council’s Policy Guideline on Fortification of Food with Vitamins and Minerals
2. Excerpt from FSANZ Final Assessment Report for Application A424 - Fortification Of Foods With Calcium detailing Newspoll survey data.
3. Draft variations to the *Australia New Zealand Food Standards Code*. 
ATTACHMENT 1

Policy Guideline

Fortification\(^1\) of Food with Vitamins and Minerals

This Policy Guideline provides guidance on development of permissions for the addition of vitamins and minerals to food.

The Policy Guideline does not apply to special purpose foods the formulation and presentation of which are governed by specific standards in Part 2.9 of the Australia New Zealand Food Standards Code (the Food Standards Code).

The policy should only apply to new applications and proposals. There is no intention to review the current permissions.

The policy does not apply to products that should be or are regulated as therapeutic goods. This should not lead to a situation were generally recognised foods, through fortification, become like or are taken to be therapeutic goods.

The policy assumes the continuation of a requirement for an explicit permission for the addition of a particular vitamin or mineral to particular categories of foods to be included within the Food Standards Code. Currently the majority of permissions are contained in Standard 1.3.2 – Vitamins and Minerals.

Regard should be had to the policy in development of regulatory measures applying to the mixing of foods where one, or both of the foods may be fortified.

The policy for regulation of health and nutrition claims on fortified food is covered by the Policy Guideline on Nutrition, Health and Related Claims. Claims should be permitted on fortified foods, providing that all conditions for the claim are met in accordance with the relevant Standard.

‘High Order’ Policy Principles

The Food Standards Australia New Zealand Act 1991 (the Act) establishes a number of objectives for FSANZ in developing or reviewing of food standards.

1. The objectives (in descending priority order) of the Authority in developing or reviewing food regulatory measures and variations of food regulatory measures are:
   (a) the protection of public health and safety
   (b) the provision of adequate information relating to food to enable consumers to make informed choices; and
   (c) the prevention of misleading or deceptive conduct.

2. In developing or reviewing food regulatory measures and variations of food regulatory measures the Authority must also have regard to the following:

\(^1\)Within the context of this policy Fortification is to be taken to mean all additions of vitamins and minerals to food including for reasons of equivalence or restoration.
(a) the need for standards to be based on risk analysis using the best available scientific evidence;
(b) the promotion of consistency between domestic and international food standards;
(c) the desirability of an efficient and internationally competitive food industry;
(d) the promotion of fair trading in food; and
(e) any written policy guidelines formulated by the Council for the purposes of this paragraph and notified to the Authority.

These objectives apply to the development of standards regulating the addition of vitamins and minerals to food.


<table>
<thead>
<tr>
<th>Specific Order Policy Principles - Mandatory Fortification</th>
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</thead>
</table>

The mandatory addition of vitamins and minerals to food should:

- Be required only in response to demonstrated significant population health need taking into account both the severity and the prevalence of the health problem to be addressed.
- Be required only if it is assessed as the most effective public health strategy to address the health problem.
- Be consistent as far as is possible with the national nutrition policies and guidelines of Australia and New Zealand.
- Ensure that the added vitamins and minerals are present in the food at levels that will not result in detrimental excesses or imbalances of vitamins and minerals in the context of total intake across the general population.
- Ensure that the mandatory fortification delivers effective amounts of added vitamins and minerals with the specific effect to the target population to meet the health objective.

<table>
<thead>
<tr>
<th>Additional Policy Guidance - Mandatory Fortification</th>
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</table>

Assessment of alternative strategies – consideration must be comprehensive and include for example assessment of voluntary fortification and education programs.

Requirement to label – no mandatory requirement to label as fortified however, consideration should be given, on a case by case basis, to a requirement to include information in Nutrition Information Panel.
Monitor/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.

### Specific order policy principles – Voluntary fortification

- The voluntary addition of vitamins and minerals to food should be permitted only:
  - Where there is a need for increasing the intake of a vitamin or mineral in one or more population groups demonstrated by actual clinical or sub-clinical evidence of deficiency or by data indicating low levels of intake.
  - Where data indicates that deficiencies in the intake of a vitamin or mineral in one or more population groups are likely to develop because of changes taking place in food habits.
  - Where there is generally accepted scientific evidence that an increase in the intake of a vitamin and/or mineral can deliver a health benefit.
  - To enable the nutritional profile of foods to be maintained at pre-processing levels as far as possible after processing (through modified restoration²).
  - To enable the nutritional profile of specific substitute foods to be aligned with the primary food (through nutritional equivalence).
- The permitted fortification has the potential to address the deficit or deliver the benefit to a population group that consumes the fortified food according to its reasonable intended use.
- Permission to fortify should not promote consumption patterns inconsistent with the nutrition policies and guidelines of Australia and New Zealand.
- Permission to fortify should not promote increased consumption of foods high in salt, sugar or fat.
- Fortification will not be permitted in alcoholic beverages.
- Permissions to fortify should ensure that the added vitamins and minerals are present in the food at levels which will not have the potential to result in detrimental excesses or imbalances of vitamins and minerals in the context of total intake across the general population.
- The fortification of a food, and the amounts of fortificant in the food, should not mislead the consumer as to the nutritional quality of the fortified food.

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² The principle of Modified Restoration as derived from The FSANZ document *Regulatory principles for the addition of vitamins and minerals to foods.* (Canberra, 2002) is as follows:

Vitamins and minerals may be added, subject to no identified risks to public health and safety, at moderate levels (generally 10-25% Recommended Dietary Intake (RDI) per reference quantity) to some foods providing that the vitamin or mineral is present in the nutrient profile, prior to processing, for a marker food in the food group to which the basic food belongs. The vitamin or mineral must be naturally present at a level which would contribute at least 5% of the RDI in a reference quantity of the food. This regulatory principle is based on the restoration or higher fortification of the vitamin or mineral to at least pre-processed levels in order to improve the nutritional content of some commonly consumed basic foods.
Labelling – There should be no specific labelling requirements for fortified food, with the same principles applying as to non-fortified foods. An added vitamin or mineral is required to be listed in the Nutrition Information Panel only if a claim is made about it and the vitamin or mineral is present at a level for which a claim would not be misleading. An added vitamin or mineral must be listed in the ingredient list under current labelling requirements.

Monitoring/Review - A permission to voluntary fortify should require that it be monitored and formally reviewed in terms of adoption by industry and the impact on the general intake of the vitamin/mineral.
Excerpt from FSANZ Final Assessment Report for Application A424 – Fortification of Foods with Calcium detailing Newspoll survey data.

<table>
<thead>
<tr>
<th>Purchase intention</th>
<th>Definitely would buy</th>
<th>Possibly would buy</th>
<th>Total would buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit Juice</td>
<td>14.7%</td>
<td>30.5%</td>
<td>45.2%</td>
</tr>
<tr>
<td>Fruit juice drink</td>
<td>9.1%</td>
<td>20.6%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Fruit juice cordial</td>
<td>10.1%</td>
<td>22.2%</td>
<td>32.3%</td>
</tr>
</tbody>
</table>

**Product substitution**
Depending on the product, around 50-60% of purchasers would replace an existing beverage.

<table>
<thead>
<tr>
<th>Replacement purchase</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Fruit juice</td>
<td>61.0%</td>
</tr>
<tr>
<td>Fruit juice drink</td>
<td>50.6%</td>
</tr>
<tr>
<td>Fruit juice cordial</td>
<td>63.2%</td>
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</tbody>
</table>

As anticipated, fortified fruit juice will mainly replace fruit juice, fortified fruit drink would replace fruit juice drink and fruit juices, fortified fruit juice cordial will replace cordials – both fruit and non-fruit juice.

<table>
<thead>
<tr>
<th>Dairy Substitution</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Milk substitution (total)</td>
<td></td>
</tr>
<tr>
<td>Fortified fruit juice</td>
<td>5.8%</td>
</tr>
<tr>
<td>Fortified fruit juice drink</td>
<td>12.2%</td>
</tr>
<tr>
<td>Fortified fruit juice cordial</td>
<td>6.1%</td>
</tr>
</tbody>
</table>
DRAFT VARIATIONS TO THE AUSTRALIA NEW ZEALAND FOOD STANDARDS CODE

To commence: on gazettal

[1] **Standard 1.3.2** of the Australia New Zealand Food Standards Code is varied by –

[1.1] *omitting from the Table to clause 3, the entry for* Biscuits containing not more than 200 g/kg fat and not more than 50 g/kg sugar, *substituting* -

<table>
<thead>
<tr>
<th>Biscuits containing not more than 200 g/kg fat and not more than 50 g/kg sugars</th>
<th>thiamin</th>
<th>0.55 mg (50%)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>riboflavin</td>
<td>0.43 mg (25%)</td>
</tr>
<tr>
<td></td>
<td>niacin</td>
<td>2.5 mg (25%)</td>
</tr>
<tr>
<td></td>
<td>vitamin B6</td>
<td>0.4 mg (25%)</td>
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<tr>
<td></td>
<td>vitamin E</td>
<td>2.5 mg (25%)</td>
</tr>
<tr>
<td></td>
<td>folate</td>
<td>100 µg (50%)</td>
</tr>
<tr>
<td></td>
<td>calcium</td>
<td>200 mg (25%)</td>
</tr>
<tr>
<td></td>
<td>iron</td>
<td>3.0 mg (25%)</td>
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<tr>
<td></td>
<td>magnesium</td>
<td>80 mg (25%)</td>
</tr>
<tr>
<td></td>
<td>zinc</td>
<td>1.8 mg (15%)</td>
</tr>
</tbody>
</table>

[1.2] *inserting in the Table to clause 3, Columns 3 and 4, under the entry for* Fruit juice, reconstituted fruit juice, concentrated fruit juice –

| calcium | 200 mg (25%) |

[1.3] *inserting in the Table to clause 3, Columns 3 and 4, under the entry for* Tomato juice, concentrated tomato juice –

| calcium | 200 mg (25%) |

[1.4] *inserting in the Table to clause 3, Columns 3 and 4, under the entry for* Vegetable juice –

| calcium | 200 mg (25%) |

[1.5] *omitting from the Table to clause 3, the entry for* Fruit drinks containing at least 250 mL/L of the juice, puree of comminution of the fruit; fruit drink concentrate which contains in a reference quantity at least 250 mL/L of the juice, puree or comminution of the fruit, *substituting* –
Fruit and/or vegetable drinks containing at least 250 mL/L of the juice, puree of comminution of the fruit and/or vegetable; fruit and/or vegetable drink concentrate which contains in a reference quantity at least 250 mL/L of the juice, puree or comminution of the fruit and/or vegetable

[1.6] *inserting in the* Table to clause 3 -

**Composite products**

<table>
<thead>
<tr>
<th>200 mL</th>
<th>folate</th>
<th>refer to clause 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>vitamin C</td>
<td>carotene forms of vitamin A</td>
<td>refer to clause 8</td>
</tr>
<tr>
<td>calcium</td>
<td>200 mg (25%)</td>
<td>refer to clause 8</td>
</tr>
</tbody>
</table>

Soups, prepared for consumption in accordance with directions

<table>
<thead>
<tr>
<th>200 mL</th>
<th>calcium</th>
<th>200 mg (25%)</th>
</tr>
</thead>
</table>