Summary of the 2005 Formulated Beverages Supermarket Surveys

In March/April 2005, FSANZ staff conducted surveys to determine the current product range of formulated beverages in both Australia and New Zealand. Using results from the 2003 FTDS Surveys as a base line, products were assessed in terms of availability, composition and claims. A summary of findings from the 2005 Formulated Beverages Surveys is presented below.

New Zealand

The 2005 New Zealand Survey identified a total of 10 products in the marketplace that would be classified as formulated beverages. The ingredients ranged from formulated beverages consisting of water, flavouring and no added sugar to formulated beverages with greater than 5% fruit juice and added sugar. These formulations have remained relatively constant compared with the ingredient listings of the 2003 Survey products.

The energy and macronutrient composition per 100 ml varies between formulated beverages, however it has not changed significantly since the 2003 Survey. The protein and fat contents of all formulated beverages surveyed were less than 1 g per 100 ml. FSANZ has classified formulated beverages into four categories and provided a summary of the energy and total sugar content in the Table below:

| Formulated Beverage Product Range | Total Sugar (%) | Energy (kJ per 100 ml) |
|------------------------------------|-----------------|------------------------|
| Water, flavouring + no added sugar | 0 | 2 |
| Water, flavouring + added sugar | 2.3 | 41 |
| 2-5% fruit juice +/- added sugar | 2.5-3.2 | 43-59 |
| > 5% fruit juice + added sugar | 9.7-11.3 | 171-196 |

In 2005, ten vitamins (vitamin A, thiamin, niacin, pantothenic acid, vitamin B₆, folic acid, vitamin B₁₂, biotin, vitamin C and vitamin E) are present in formulated beverages. The same vitamins were being used in 2003, except for biotin. There has been an increase in the use of thiamin, niacin, pantothenic acid, vitamin B₆, folic acid, vitamin B12 and vitamin E. The average number of vitamins added in 2005 is 5.7 per product, with niacin, pantothenic acid and vitamin B₆ being the most commonly used vitamins. In 2003, the most commonly added vitamins were vitamin C, together with niacin and vitamin B₆. The percentage of the RDI per serve of a formulated beverage ranged from 10-350% in the 2005 products. Most products contained between 10-40% of the RDI for a specific vitamin.

The addition of minerals to formulated beverages has increased slightly since 2003. In 2005 six different minerals (calcium, iron, magnesium, potassium, sodium, and zinc) are used, compared with three in 2003. All ten products contain added sodium in quantities ranging from 3-20 mg per 100 ml.

In 2003, three products contained herbal extracts (guarana, ginkgo leaf and echinacea), however these products have since been withdrawn from the market. One new product contains a green tea extract.

1

Serving sizes have increased from 200-400 ml in 2003 to 200-710 ml in 2005. Six of the products identified in 2005 stated a serving size of 200 ml, with five of these products sold in packages containing 800 ml or more. In addition five of the products provided maximum recommended daily intakes or serves on their product labels. The maximum intake range equated to 1600-4800 ml per day for adults and 800-1600 ml per day for children.

Many of the formulated beverages carry claims, the majority of these are vitamin content claims, while other claims pertain to the benefits with respect to antioxidant intake, hydration and energy.

Australia

The 2005 Australian Survey identified a total of 20 products in the marketplace that would be classified as formulated beverages, compared with only three products from the 2003 survey, two of which are still available. Like the New Zealand products, formulated beverages sold in Australia range from beverages consisting of water, flavouring and no added sugar to beverages with greater than 5% fruit juice and added sugar. The majority (14) contain 2-5% fruit juice with or without added sugar.

The energy and macronutrient composition per 100 ml varied between the beverages, however it has not changed significantly since the 2003 Food-type Dietary Supplements Survey. The protein and fat contents of all formulated beverages surveyed were less than 1 g per 100 ml.

| Formulated Beverage Product Range | Total Sugar (%) | Energy (kJ per 100 ml) |
|------------------------------------|-----------------|------------------------|
| Water, flavouring + no added sugar | 0 | 2 |
| Water, flavouring + added sugar | 2.3 | 41 |
| 2-5% fruit juice +/- added sugar | 2.2-5.4 | 38-94 |
| > 5% fruit juice + added sugar | 10.8-11.0 | 182-194 |

Ten different vitamins make up the vitamin profile of the formulated beverages sold in Australia in 2005 (vitamin A, thiamin, niacin, pantothenic acid, vitamin B_6 , folic acid, vitamin B_{12} , biotin, vitamin C and vitamin E) with the addition of vitamin A and biotin since 2003. Niacin, pantothenic acid, vitamin B_6 and vitamin B_12 are the most commonly added vitamins, with an average of 4.8 vitamins added per product. Biotin is added by three manufacturers to ten products. The percentage of the RDI provided per serve of a formulated beverage ranged from 10-350% in the 2005 products, with vitamin C, niacin and vitamin B_6 provided in some products in amounts greater than 100% per serve.

Seven minerals are added to formulated beverages currently sold in Australia. These are calcium, potassium, sodium, magnesium, zinc, iron and iodine. All twenty formulated beverages contain added sodium in quantities ranging from 2-25 mg per 100 ml.

Herbal extracts have not been commonly added to formulated beverages sold in Australia. In 2003, no product contained herbal extracts, and in 2005, only one formulated beverage has added Aloe extract.

The serving size range has remained constant between 2003 and 2005 at 200-710 ml, however the average serving size has increased from 370 ml in 2003 to 480 ml in 2005.

Five products provided maximum recommended daily intakes or serves on their product label, ranging from 600-3600 ml per day for adults. Only one product provided a recommendation for children, which equated to 800 ml per day.

Like the New Zealand products, many of the formulated beverages sold in Australia make claims, the majority being vitamin content claims. While other claims pertain to benefits of the beverages with respect to antioxidant intake, glycaemic index rating, healthy body, hydration and energy.