

# HEINZ SIGHT

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## EDITORIAL

For parents of children with food allergies and intolerances, the food label, with its detailed ingredient list, is a "must read". From it, parents can decide if the food is 'safe', and if so, increase food variety in a diet that is often quite restrictive. Since December 2002, Food Standards Australia New Zealand (FSANZ) has required foods, food ingredients or components of an ingredient that can cause a severe reaction in some individuals – such as peanuts and other nuts, seafood, fish, milk, gluten, eggs and soybeans- to be declared on food labels.

In this issue of Heinz Sight, Jenni Cooper and Lisa Warren who have been instrumental in implementing allergen labelling on all Heinz foods, discuss the challenges faced by the food industry and in particular Heinz, in ensuring that food labels meet the FSANZ requirements for allergen labelling. Also in this issue, Heather Ferguson discusses briefly the importance of prebiotics and probiotics for good health.

## Food Allergen Labelling An Industry Perspective



Jenni Cooper

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*working in the food industry for 13 years in a number of roles including product development, sensory analysis, nutrition and food legislation.*

In response to the increasing incidence of food allergy there have been dramatic changes to food labels throughout Australia and New Zealand. Since 2002, mandatory declaration of specific allergens has been required by law, governed by Food Standards Australia New Zealand (FSANZ).

Food allergic consumers have found the revised labels to be useful, as they can now identify with some confidence which foods to avoid. Some foods and ingredients previously thought to be allergen free, now reveal hidden allergens.

However, food allergic consumers have also found allergen labelling to be unhelpful because:

- how allergens are declared can vary from label to label, and from manufacturer to manufacturer
- "May contain" statements can be confusing or misinterpreted and
- highly processed ingredients where allergic proteins have been removed must still be declared, resulting in consumers avoiding foods that may not trigger reactions.

Heinz has always recognized the importance of declaring food allergens on labels and fully supports the allergen labelling standard.

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Here we explain how Heinz declares food allergens, what challenges face the food industry and what is being done to improve allergen labelling in the future.

### How is allergen labelling regulated?

Food labelling is governed by The Australia New Zealand Food Standards Code (the Code) which states that if any of the substances listed in Table 1 are present in foods, ingredients, processing aids or additives they must be declared on the product label.

Most of these substances contain proteins that can provoke allergic (immunological) reactions and are true food allergens. However, gluten and sulphites are not strictly allergens.

**Gluten**, found in wheat, rye, barley, oats, spelt, triticale and foods containing them, cause adverse reactions in people with coeliac disease. **Sulphites** (a preservative) when present at concentrations of more than 10mg/kg can provoke asthma in some sensitive individuals.

For the purpose of this article all substances in this table will be referred to as 'allergens'.

Table 1. Allergens to be declared on labels

Cereals containing gluten and their products, namely, wheat, rye, barley, oats and spelt and their hybridised strains including triticale
Crustacea (e.g. prawns, crabs, lobsters, shrimps, yabbies, crayfish) and their products
Egg and egg products
Fish and fish products
Milk and milk products
Tree nuts (e.g. almonds, brazil nuts, cashews, pecans, walnuts, hazelnuts, chestnuts, macadamias, pinenuts, pistachio) and their products
Sesame seeds and their products
Peanuts and their products
Soybeans and their products
Added sulphites in concentrations of 10mg/kg (10ppm) or more

To identify allergens, each ingredient is assessed on a case-by-case basis by Heinz product development technologists and nutritionists. Working closely with the ingredient suppliers ensures that all allergens present in the recipe are identified and declared. If an allergen can be removed or a suitable alternative allergen-free ingredient can be sourced, it will be.

Heinz ingredient database has details on more than 2000 ingredients, including:

- ingredient composition
- nutrition information
- presence/absence of an extended list of allergens
- presence/absence of colours, flavours and other additives
- other consumer requirements such as whether the ingredient is suitable for vegetarians, and whether halal or kosher certification has been obtained.

This information is used to confidently generate labelling information such as ingredient lists and nutrition information panels for new and existing products.

### Allergen labelling challenges faced by the food industry

Difficulties for consumers and food manufacturers have arisen, with differing interpretation of the allergen labelling standard amongst manufacturers.

### *Food Allergy and Food Intolerance are not the same.*

**Food Intolerance** is a sensitivity to various natural or chemical components of food and does not involve the immune system. The reaction may not be immediate and small amounts of the food may be tolerated. Symptoms vary but can include stomach aches, headaches, irritability and hives. Asthmatic reactions to sulphites, or intolerances to gluten or lactose are examples.

**Food Allergy** is an immunological reaction to specific proteins. The most common foods causing allergic reactions are peanuts, milk, egg, soy, sesame, tree nuts, crustaceans and fish. Food allergy reactions may include eczema, hives and swelling with more severe reactions including anaphylaxis. Food allergy is serious and can be life threatening.

The Code doesn't state where or exactly how allergens are to be declared on labels. Food manufacturers determine this, which has resulted in varying styles of ingredient lists and allergen statements on food labels.

See Standard 1.2.3 on the FSANZ website: [www.foodstandards.gov.au](http://www.foodstandards.gov.au)

### How does Heinz label food allergens?

Heinz always declares allergens in the ingredient list as this is the first place consumers look for them.

The language used is simple and concise so it can be easily understood. For example the term milk protein is used rather than whey or casein.

Heinz does not emphasise allergens in bold print or use an allergy summary at the end of the ingredients list as this has been found to confuse non-allergic consumers.

Table 2. Examples of hidden allergens and how Heinz declares them.

<ul style="list-style-type: none"> <li>• <b>Grated Cheese</b> often contains wheat flour as a free flowing agent, Heinz will state Cheese (contains Wheat)</li> <li>• <b>Pasta</b> often contains added egg albumin as a binding agent. The pasta used in Heinz infant food is prepared in a factory that also makes adult pasta with egg albumin. Although the infant pasta does not have added egg, the supplier cannot guarantee the pasta is completely free from traces of albumin. In this case the infant pasta is labelled as Wheat Pasta (Contains Traces of Egg)</li> <li>• <b>Malt</b> is derived from barley, a cereal containing gluten. The Little Kids Cheese Breadsticks label declares Malt Extract (from Barley)</li> <li>• <b>Little Kids Yoghurt Muesli Fingers</b> labels state after the ingredient list: "Contains Preservative (Sulphur Dioxide) &amp; Traces of Barley, Peanuts, Nuts (Almonds, Cashews, Macadamia, Hazelnuts, Walnuts, Pecans) &amp; Seeds (Sesame, Sunflower)". These fingers are made in a factory that also makes products containing nuts and seeds etc. Risk assessments show that that traces of the allergens could contact the muesli fingers.</li> </ul> <p><i>Note: Heinz infant foods without "traces of" statements are prepared in factories where there is no risk of allergen cross-contact. e.g. Heinz Teething Rusks, Cans and Jars.</i></p>
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### Highly refined ingredients

Particular wording of the allergen sections within the Code has caused confusion. The Code states ‘the presence of an allergen must be declared’ but there is no provision for tolerance limits where allergens do not need declaring. If an ingredient is highly refined so no allergenic protein is present (or the protein levels are extremely low) it still must be declared. In this situation Heinz declares the allergen in a style indicating that the ingredient is refined. This allows the consumer to make an informed decision.

For example, Glucose Syrup which is made from wheat is a highly refined ingredient where wheat proteins have been removed. To comply with the Code the ingredient list must state the presence of wheat and Heinz would label it as Glucose Syrup (from Wheat).

### ‘May contain’ (Cross-Contact) Statements

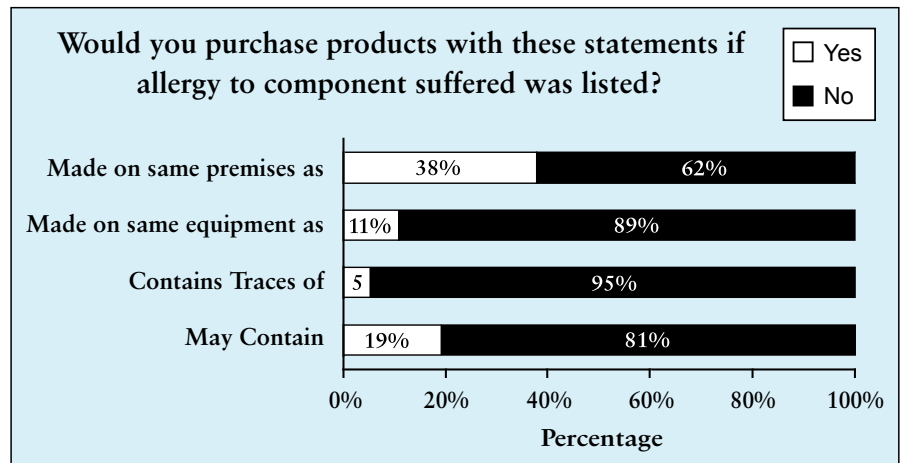
‘May contain’ statements warn of potential cross-contact with allergenic ingredients. The Code does not specify their use. There is a vast array of these statements on food products such as ‘May contain...’, ‘May contain traces of...’, ‘Manufactured on the same line as...’, ‘Made in a facility that also processes...’. A recent survey of over 500 Australian foods found 46 different statements (Australian Food and Grocery Council Allergen Labelling Working Group Survey, 2005).

Manufacturers use these statements for a variety of reasons including:

- to minimise risk of litigation
- as a blanket allergen statement as many allergenic ingredients are used in the factory,
- risk assessments and audits have identified a true risk of allergen cross-contact.

Hence it can be difficult for the food allergic consumer to determine the reason for the statement.

Graph 1: Food allergic consumers prepared to purchase foods with cross-contact statements.



(Data from J. Henderson, N. Mann & J. Cooper (2003). The impact of FSANZ labelling changes on knowledge and use of food labels by consumers, health professionals and allergen sufferers. Unpublished data, Heinz Australia”).

Allergic individuals are taking risks by consuming foods with ‘may contain’ statements ( Graph 1). Results from a survey undertaken by Heinz, of members from Anaphylaxis Australia who suffer from one or more allergies, found that:

- 60% of respondents thought ‘May contain’ statements were not useful.
- 63% believed there was inadequate information on food labels for allergen sufferers to make an informed choice.
- Nearly 1 in 5 allergic consumers would consume foods with a ‘May contain’ statement even if the allergen they should avoid was listed e.g. May contain peanuts. These consumers may be assuming the food has always been safe and the level of risk or recipe hasn’t changed. This could lead to consuming the allergen.

Heinz will state “Contains traces of...” if there is a likelihood of allergen cross-contact and all reasonable measures cannot avoid this eg. pasta used in some infant foods (Table 2). Heinz research in 2003 showed our statement to be most preferred by allergic consumers. We were concerned to find that a small percentage of

allergic consumers were still prepared to give food with “Contains traces of...” to their allergic child (Graph 1).

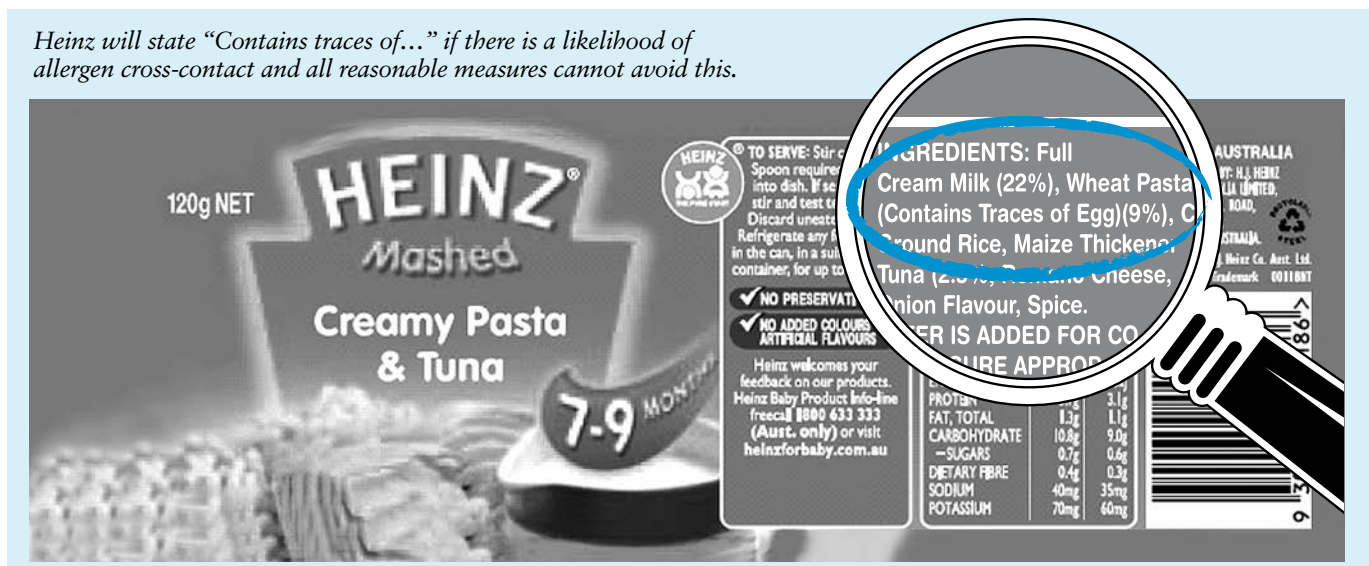
### How has the food industry reacted to the inconsistent labelling?

A consistent approach to allergen management and regulation across all food categories and within the food supply chain is needed. Heinz is working with the Australian Food and Grocery Council’s Allergen Forum to facilitate a more consistent approach to be used by manufacturers and suppliers in labelling and managing allergens. This will make food choices easier (and safer) for the food allergic consumer. For further information visit [www.allergenbureau.net](http://www.allergenbureau.net)

### Where to from here for Heinz?

Heinz continues to work closely with ingredient suppliers to ensure that allergen information for each ingredient remains accurate and up-to-date. Allergen management and training is a priority within our factories. Heinz strives to ensure the allergen information on food labels is accurate and easy to read, so consumers can make informed purchases with confidence.

Heinz will state “Contains traces of...” if there is a likelihood of allergen cross-contact and all reasonable measures cannot avoid this.



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## Managing Allergens at the Heinz Infant Food Plant

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The Heinz infant food plant is located in Echuca, Northern Victoria. It is specially designed to make Heinz and Wattie's infant foods and has stringent processes and procedures in place to ensure the best quality. Over 100 million jars and cans of baby food are produced each year for local and export markets.

Food allergen management is a priority. Below are the key allergen management precautions taken.

1. Dietitians and nutritionists are involved in designing the infant range so allergen free varieties are available (see [www.heinzforbaby.com.au](http://www.heinzforbaby.com.au) for a list of allergen free varieties).
2. Trained staff have a strong focus on managing food allergens.
3. Our vendor (ingredient supplier) assurance programs and audits have a major focus on food allergens.
4. All ingredients and their components are checked for allergens before being approved.
5. Allergens are considered where ingredients are stored.
6. The manufacturing order is determined by a carefully designed schedule that considers food allergens. For example, egg free custards will always be made before custard with egg.
7. Only one variety is made at a time so that two recipes or the ingredients of two recipes cannot be mixed together.
8. The cleaning and validating systems are designed with consideration towards food allergens.
9. Strict quality controls are implemented at each stage in the food manufacturing process.
10. The plant operates under a HACCP (Hazard Analysis Critical Control Plan) system ensuring product quality and safety guidelines are always met.
11. The site is peanut free, including employee meals and vending machines in the canteen.
12. When food allergens are present, the label declares them in the ingredients list.

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## Probiotics, Prebiotics and Good Health

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Pre and probiotics work together to improve gut health and help boost immunity. In our next HeinzSight, Dr Susan Prescott will outline the importance of probiotics and health. But what are probiotics?

### Probiotics

Probiotics are "friendly" bacterial cultures found in our gut which encourage healthy digestion and support natural defenses against harmful bacteria. To be recognised as "probiotic", cultures must survive digestion, reach the large bowel alive and be able to colonise or flourish there.

Bifidobacteria or Bifidus represent the most numerous bacteria in the gut of breastfed infants, but not generally in bottlefed infants. Bifidus survives digestion by the infant and helps restore the balance of good bacteria in an infant's gut. Bifidus is thought to be the reason that breastfed infants suffer less gastrointestinal infections. <sup>(1)</sup>

### Benefits of Probiotic Cultures

The gut is the body's first line of defense against ingested pathogens. A healthy balance of microflora or cultures in the gut protects against harmful bacteria and is important for

the development of the infant immune system. <sup>(2)</sup>

Specific actions of probiotic cultures include:

- Competing specifically or hindering adherence of pathogens in the gut
- Strengthening the gut barrier
- Metabolism of nutrients which would otherwise be eliminated in faeces
- Release of by-products of metabolism which nourish the bowel
- Stimulating the immune system through activation of immunological cells
- Providing bulk and softness of faeces

### Prebiotics

Prebiotics are components of foods, usually a type of fibre, that resist digestion. They reach the large bowel where they provide 'food' for bacteria. Prebiotics help nourish the friendly probiotic cultures in the gut, boosting their growth.

Breastmilk contains galacto-oligosaccharides which are prebiotics that stimulate the growth of bifidobacteria in the infant gut.

These oligosaccharides are sometimes called the "bifidus factor".

Bifidobacteria can be added to foods we eat, to help maintain a healthy gut flora. Eating foods with probiotic cultures helps maintain healthy digestion and gut function. Probiotics and prebiotics work together to provide a healthy balance of cultures in our gut.

### Prebiotic Inulin

Prebiotic Inulin, a natural vegetable fibre from chicory, is a key ingredient in Heinz Nurture Toddler™. Inulin promotes the growth of beneficial bacteria in the intestine and improves the digestion and absorption of nutrients.

**Heather Ferguson**  
Nutritionist /Dietitian APD

### References

1. JP Langhedries. Effect of a Fermented Infant Formula Containing Viable Bifidobacteria on the Fecal Flora Composition and pH of Healthy Full-Term Infants. *Journal of Pediatric Gastroenterology and Nutrition* 1995; 21:177-181
2. Salminen Seppo J et al. Probiotics That Modify Disease Risk. *J. Nutr.* 2005; 135:1294-1298

## Small Talk



### 1. FSANZ Study on Preservatives in Food

FSANZ has released the results of the 21st Australian Total Diet Survey (ATDS) which looked at preservatives in the food supply. The study focussed on 3 types of preservatives - sulphites, benzoates and sorbates (1).

It found that young children aged 2-5 years who ate large quantities of sausages, dried apricots and cordials exceeded the recommended safe level of sulphite intake. Sulphites and other sulphur containing preservatives are a concern as they can trigger asthma attacks in some children.

Children who drank large volumes of non cola soft drinks, orange juice and cordial also had high intakes of benzoates. Sorbate intake was not a problem. In contrast to young children, adult intakes fell within acceptable daily limits.

As a result of this survey, FSANZ has decided to undertake a review of sulphites and benzoates in foods (2).

Heinz Baby's Own Juices and Heinz infant foods in jars and cans do not contain preservatives. Sulphur dioxide is found in Little Kids™ Fruit Bars and Little Kids™ Yoghurt and Muesli fingers as it is present in the dried fruit ingredients eg. dried apricots.

To limit children's preservative intake, it is important that their diet contains a wide variety of foods, and least processed foods where possible. Water should be encouraged rather than juices, soft drinks and cordials.

### 2. Treating Iron Deficiency in Young Children with Follow On Infant Formula.

Iron deficiency is major nutritional problem in infants and young children. Its adverse effects on health include impaired learning, reduced weight gain, impaired absorption of nutrients and decreased ability to exercise.

A recent study in New Zealand has found infant follow on formula (12mg/L ferrous iron) to be just as effective as iron medicine (ferrous gluconate at 3 mg/kg of elemental iron once daily) in reducing iron deficiency anaemia in

infants aged 9-23months, hospitalized because of infections such as pneumonia and gastroenteritis (3). The follow-on formula was effective because besides iron, it contained other important nutrients the sick children needed and easily became part of the child's normal diet. There were also less adverse gastrointestinal side effects such as stomach upsets, diarrhoea and constipation in the children using follow on formula compared with the iron medicine.

### 3. Fortification Update –Folic Acid and Iodine

As a matter of priority FSANZ is considering the mandatory fortification of foods with folic acid and also iodine (4). Folic acid is important as it can reduce the incidence of neural tube defects, and iodine because recent studies indicate mild iodine deficiency in some population groups. For further information on iodine refer to Heinz Sight March 2004, Number 66.

Penelope Stone - Editor

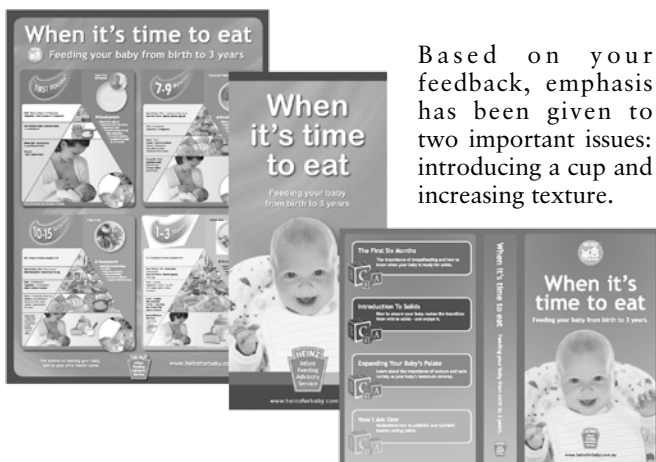
### References

1. FSANZ. 21st Australian Total Diet Study. A total diet study of sulphites, benzoates and sorbates [www.foodstandards.gov.au/mediareleasespublications/publications/publications/21staustraliantotald2963.cfm](http://www.foodstandards.gov.au/mediareleasespublications/publications/publications/21staustraliantotald2963.cfm)
2. FSANZ. Review of Sulphites and Benzoates in the Food Supply (Proposal P298) [www.foodstandards.gov.au/standardsdevelopment/proposals/proposalp298benzoate2973.cfm](http://www.foodstandards.gov.au/standardsdevelopment/proposals/proposalp298benzoate2973.cfm)
3. Wall CR, Grant CC, Tava N, Wilson C, Thompson JMD. Milk versus medicine for the treatment of iron deficiency in hospitalised infants. Published Archives of Disease in Childhood "Online First" June 14th 2005, In press Archives of Disease in Childhood 2005 <http://adc.bmjournals.com/onlinefirst.shtml>
4. FSANZ. Consideration of Mandatory Fortification with Folic Acid (P295) and Consideration of Mandatory Fortification with Iodine (P230) [www.foodstandards.gov.au](http://www.foodstandards.gov.au)

*Please note: Breast feeding is best for babies. Maternal nutrition requirements increase during breastfeeding. Before introducing infant formula, always seek professional advice. Once bottle feeding has been commenced it is difficult to reverse the decision. Partial bottle feeding may adversely affect breast feeding. Always use infant formula as directed because improper use can affect the health of the infant. Always consider the social and financial implications before selecting a method of infant feeding.*

## Heinz Update

The Heinz Infant Feeding Advisory Service has just released an educational "kit" entitled "When it's time to eat". Designed specifically to assist nurses to teach carers about feeding baby from the introduction of solids to healthy eating in the toddler years, the kit includes a comprehensive brochure, colourful poster and video/DVD.



Based on your feedback, emphasis has been given to two important issues: introducing a cup and increasing texture.

- 1) We know that many babies are drinking milk from a bottle well past 12 months. We encourage drinking from cup by around 7 months. We hope that this will help reduce risks associated with extended bottle use.
- 2) Also, mothers appear to delay introduction of more textured foods for fear of their baby choking. We encourage babies to move on from pureed to mashed textures at around 7 months as they develop. This will help stimulate chewing and promote jaw and speech development.

Available now from your Heinz Infant Feeding Advisor. Alternatively, complete the Resource Order Form below or contact the Heinz Product Info Line on 1800 633 333 if you would like to receive copies.

Heather Ferguson,  
Dietitian/Nutritionist APD



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## Resource Order Form

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The following Nutrition Education Resources are available from the Heinz Infant Feeding Advisory Service. (You may wish to photocopy this page).

PLEASE SEND	1 copy	10 copies
• <b>When it's time to eat</b> - brochure	<input type="checkbox"/>	<input type="checkbox"/>
• <b>When it's time to eat</b> - poster (1 poster per order)	<input type="checkbox"/>	
• <b>When it's time to eat</b> - video or DVD <small>(PLEASE CIRCLE)</small> (1 copy per order)	<input type="checkbox"/>	
• <b>Pamphlets</b>		
What parents need to know about Cereals	<input type="checkbox"/>	<input type="checkbox"/>
What grandparents may need to know about Feeding Babies	<input type="checkbox"/>	<input type="checkbox"/>
What parents need to know about Cow's Milk	<input type="checkbox"/>	<input type="checkbox"/>
What parents must know about Iron	<input type="checkbox"/>	<input type="checkbox"/>
What parents need to know about the Unsettled Baby	<input type="checkbox"/>	<input type="checkbox"/>
• <b>A guide to bottle feeding safely</b>	<input type="checkbox"/>	<input type="checkbox"/>
• <b>I would like to be put on the Heinzsight Mailing List</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

PLEASE PRINT CLEARLY (Please do not give a Post Box Address)

Name:.....

Address:.....

..... Postcode:.....

Phone: (     )..... Date:.....

Send to: **Heinz Infant Feeding Advisory Service, Locked Bag 19057, Southbank, VIC 3006**

Or FAX to **(03) 9861 5608**

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## Correction

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In the July issue of Heinz Sight the amount of vitamin D in Pentavite Liquid Multivitamins for Infants 0-3 years, given on page 3 was incorrect. The correct amount is 900 IU/ml or 22.5ug/ml.

The recommended dosage of this preparation for breast fed babies at risk of vitamin D deficiency was also incorrect. The correct dose is 0.45mls/day.

We apologise for these errors.

**The Heinz Product Info Line 1800 633 333**

provides information to callers on Heinz Baby Food products.

All callers are asked to contact the child health service in their state for individual advice.

*Opinions expressed in Heinzsight are those of the authors and do not necessarily reflect the views of Heinz Watties Australasia.*