



Position Statement for Healthcare Professionals

Eggs and Children

Updated May 2012

Recent statistics from the Australian Institute of Health and Welfare indicate that in general, Australian children are in excellent or very good health ¹. However the high rates of childhood overweight and obesity, poor quality diets and the impact of low physical activity levels remain areas of concern that may affect children's health both now and later in life ². Childhood is a time of growth and development so nutrition needs are particularly important during this time.

The 2007 Australian Children's Nutrition and Physical Activity Survey ³, conducted among over 4000 children and teenagers from all around Australia, provides information about the dietary patterns and measurements of children aged 2-16 years and activity patterns of children aged 5-16 years.

Overweight and obesity

The Children's Survey reports 17% of children are overweight and 6% are obese ³. Similarly the 2010 NSW School Physical Activity and Nutrition Survey (SPANS) also found 17% of all students were overweight and 6% were obese ⁴. These numbers have decreased since the 2004 report ⁵. Reports from the World Health Organisation (WHO) show that Australia is the only country in the world where the rate of childhood obesity is climbing faster than among adults ⁶.

Diet Quality

While data from previous nutrition surveys show Australian children may be significantly falling short of optimal vitamin and mineral intakes ⁷, the 2007 Children's Survey shows children generally consume sufficient energy and key nutrients to maintain good health. However inadequate intake of foods from key food groups, particularly fruits and vegetables, remains an area of concern, as well as the excessive intakes of sodium in children of all ages. Children aged 3-4 years also had reported kilojoule intakes that exceeded the upper limit of the estimated energy requirement range. The few key nutrients found to be low in children's diets compared to estimated average requirements (EARs) are calcium, phosphorus, folate and vitamins D and E. Other studies also estimate that many children have an inadequate intake of omega-3s ⁸. With the exception of calcium, eggs provide useful amounts of each of these nutrients and can therefore play a useful role in meeting nutritional requirements during childhood.

Inadequate nutrient intakes may be due to a number of factors including fussy eating, vegetarian eating patterns or food allergies. For further details, refer to ENC's *Eggs and Allergy statement*. Inappropriate food choices also play a role, as shown by the regular consumption of low nutritional value foods like potato crisps, corn snacks and confectionery ⁷. Higher intakes of energy dense, nutrient poor foods are associated with lower intakes of key nutrients, indicating snack foods can displace more nutritious foods in the diets of children ⁹.

The Contribution of Eggs to Children's Diets

Eggs are an ideal food for inclusion in children's diets as they are nutritious and provide useful amounts of folate, vitamin A, iron, zinc, iodine and omega-3s in particular. Eggs are also a good source of protein for children to support growth during this time ¹⁰.

Table 1 highlights key nutrients of importance to children that are found in eggs.

Table 1

Nutrient	Amount in 2x60g eggs*	% RDI# for children ¹¹			Functions
		4-8 yrs	Boys 9-13 yrs	Girls 9-13 yrs	
Protein	12.7g	64%	32%	36%	Synthesis of body cells, tissues, enzymes, hormones and antibodies
Vitamin A	239µg	60%	40%	40%	Essential for growth; cell differentiation and eyesight development
Folate	97µg	49%	32%	32%	Growth and maintenance of healthy cells
Zinc	0.5mg	13%	8%	8%	Building and developing muscle tissue and internal organs; immune function
Iron	1.7mg	16%	20%	20%	Healthy blood cells and promoting growth
Iodine	43µg	48%	36%	36%	Proper mental development; metabolism
Long chain omega-3s	114mg	207%	163%	163%	Infant growth and development; behaviour, attention and learning in children

Recommended Dietary Intake

Eggs are included within government guidelines that promote healthy eating habits to children. Eggs are a core food within the 'meat and alternatives' group of the Australian Guide to Healthy Eating ¹², while within the Dietary Guidelines for Children and Adolescents ¹⁰, eggs are recommended as a highly nutritious food that can add variety to the diet. They provide essential nutrients for growth and development such as protein, unsaturated fats, and vitamins and minerals and are naturally low in salt. Eggs are also versatile and form the basis of many recipes acceptable to children's tastes, which can be especially important in the diets of fussy eaters who may refuse to eat other nutrient-rich foods. Around 10% of children reported eating eggs in the National Nutrition Survey ¹³.

Overall, eggs are a highly nutritious food that can play an important role in the diets of children. Eggs are recommended as part of a healthy eating pattern that also includes wholegrain breads and cereals, fruits, vegetables, low fat dairy foods, lean meat, fish and poultry and unsaturated fats.

This statement is for healthcare professionals only.

**One serve = 2x60g eggs (104g edible portion)*

Useful Links

2007 Australian Children's Nutrition and Physical Activity Survey:
<http://www.health.gov.au>



References:

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9. Kant, A.K. Consumption of energy-dense, nutrient-poor foods by adult Americans: nutritional and health implications. The third National Health and Nutrition Examination Survey, 1988-1994. *Am J Clin Nutr* **72**, 929-936 (2000).
10. National Health and Medical Research Council. Dietary Guidelines for Children and Adolescents in Australia. (Commonwealth Department of Health and Ageing, Canberra, 2003).
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