



Egg-

cyclopaedia

Nutrition, recipes,
tips, and more...

Contents

How many eggs?	3
Eggs-actly what's in an egg...	4
Asparagus, sweet corn and cottage cheese omelette	5
At the heart of a healthy diet...	6
On the flip side...	7
Healthy lentil and tuna frittata with tomato salad	8
Diabetes – a surprisingly common condition...	9
Vegetable and rice tart	10
Weighing up the facts...	11
Smoked trout patties with soft boiled egg and cucumber, dill and caper salad	12
Vital pre-egg-nancy information...	13
Beef, mixed bean and spinach soup with poached eggs	14
Googy eggs are great for kids...	15
Wholemeal date and walnut loaf	16
Some senior wisdom...	17
Creamed mushroom soup with poached egg, thyme and chives	18
Eggs for vegetarians...	19
Mild egg korma with chickpeas and spinach	20
Australian egg safety...	21
About the Australian egg nutrition council...	22
Helpful hints and time-saving tips...	23
The perfect poached eggs...	24
Online resources	25
References	26



How Many Eggs?



Leading Australian dietitian and member of the Egg Nutrition Council (ENC), Sharon Natoli, unscrambles concerns about egg nutrition and answers the question on everyone's mind – how many eggs should we be eating each week?

EGG-CITING NEWS...

Eggs are not only a delicious, cost-effective and convenient snack, but also one of nature's true superfoods!

They provide a nutritious contribution to a healthy and well balanced diet.

Despite their impressive credentials, eggs have long been the subject of lingering misconceptions regarding links with health issues such as high cholesterol and heart disease.

The good news is these myths have finally been busted, with years of scientific research showing eggs have little to no impact on blood cholesterol levels or the risk of heart disease. As a result, eggs are firmly back on the menu.

According to the recently released Australian Dietary Guidelinesⁱ, eggs are an economical, versatile source of protein and nutrients which can be enjoyed regularly as part of a healthy balanced diet. These recommendations support a recent study published in the British Medical Journalⁱⁱ which found that eating up to an egg a day does not increase the risk of coronary heart disease or stroke in a healthy person.

ALL-NATURAL NUTRITION...

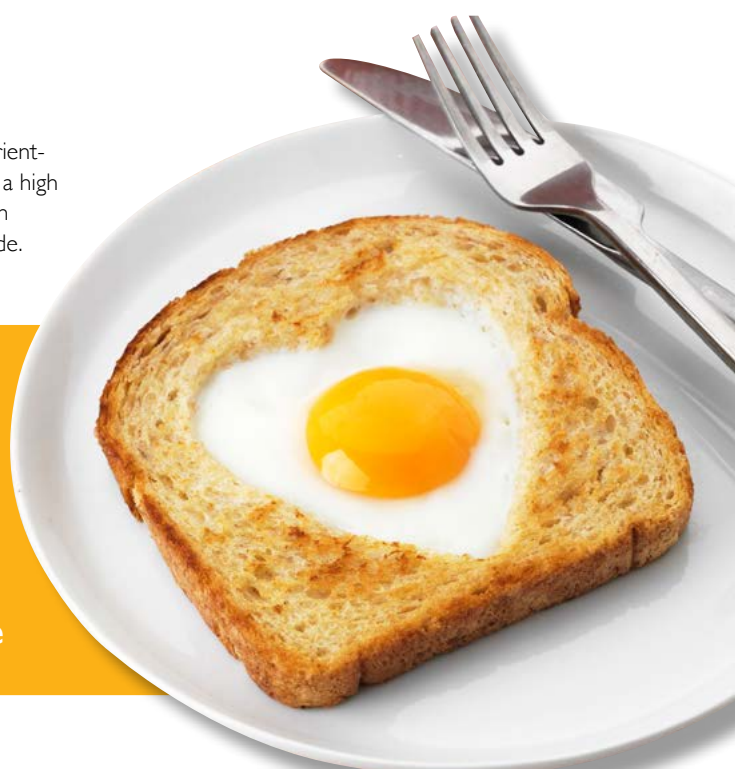
Eggs are one of the few naturally nutrient-dense foods. This means eggs contain a high percentage of vitamins and minerals in comparison to the energy they provide.

In fact, just one serve of eggs contains more than 10% of the recommended dietary intake (RDI) for over 11 essential vitamins and minerals, including vitamins A, B1, B2, B12, and E, iodine, selenium, iron, and folate.

One serve of eggs (120g, 2 large eggs) also provides 25% of the RDI for protein for adults and a useful amount of long chain omega 3 fatty acids – or 'good' fats – as well as the antioxidants lutein and zeaxanthin, which have been shown to be linked to the prevention of eye diseaseⁱⁱⁱ.

To top it off, eggs are all natural, free from the preservatives and chemicals often found in processed foods, making them the perfect meal base for any occasion.

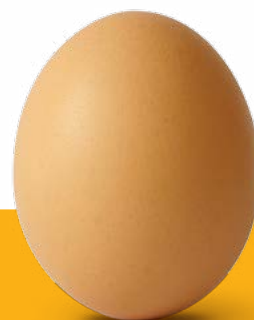
A cracking fact!
The Australian Dietary Guidelines maintain that the everyday consumption of eggs is not associated with increased risk of coronary heart disease



Eggs-actly what's in an egg...

Listed below are the majority of vital nutrients found in just one serve of eggs:

NUTRIENTS	RDI*	PER SERVE OF 2 LARGE EGGS (104G) WHOLE EGG (NEW VALUES)		CLAIMS
		Tested	%RDI	
Energy (kJ)	8,700	581	7%	
Protein (g)	50	12.7	25%	
Fat (g)	70	10.3	15%	
Sat fat (g)	24	3.4	14%	
Mono fat (g)	n/a	5.3	n/a	
Poly fat (g)	n/a	1.7	n/a	
Cholesterol (mg)	n/a	398	n/a	
Carbohydrate (g)	310	1.4	0%	
Sugars (g)	90	0.3	0%	
Sodium (mg)	2,300	141	6%	
Potassium (mg)	n/a	138	n/a	
Magnesium (mg)	320	13	4%	
Calcium (mg)	800	49	6%	
Phosphorus (mg)	1,000	208	21%	Source
Iron (mg)	12	1.7	14%	Source
Selenium (µg)	70	41	59%	Good source
Zinc (mg)	12	0.5	4%	
Iodine (µg)	150	43	29%	Good source
Thiamine (mg)	1.1	0.12	11%	Source
Riboflavin (mg)	1.7	0.50	29%	Good source
Vitamin B12 (µg)	2	0.85	40%	Good source
Vitamin B5 (Pantothenic acid) (mg)	5	2.1	42%	Good source
Folate (µg)	200	97	49%	Good source
Vitamin A (Retinol) (µg)	750	239	32%	Good source
Vitamin D (µg)	10	0.8	8%	
Vitamin E (Alpha-tocopherol) (mg)	10	2.4	24%	Source
Short chain Omega-3 (ALA) (g)	0.8 (f), 1.3 (m)^	0.06	5-8%	
Long chain Omega-3 (DHA/DPA) (mg)	90 (f), 160 (m)^	114	71-127%	
Omega-3 (total) (g)	0.89 (f), 1.46 (m)	0.18	12-20%	
Omega-6 (g)	8 (f), 13 (m)^	1.42	11-18%	
Lutein (mg)	n/a	0.40	n/a	
Zeaxanthin (mg)	n/a	0.14	n/a	
Lutein + zeaxanthin (µg)	n/a	530	n/a	
Choline (mg)	425 (f), 550 (m)^	tbc	n/a	



YOUR GUIDE TO THE EGG...

Our panel of eggs-perts at the Egg Nutrition Council have developed this booklet to assist you in gaining a greater understanding about why eggs are such a valuable part of a healthy eating plan.

To help you create easy and delicious egg dishes, we've also provided a selection of our favourite recipes and handy tips.

We hope you enjoy the egg - one of nature's most versatile, affordable and nutritious foods - as much as we do.

Enjoy!
Sharon Natoli

Accredited Practising Dietitian
Food and Nutrition Australia



Asparagus, sweet corn and cottage cheese omelette

\$4.35 per serve

Preparation time: 5 minutes

Cooking time: 10 minutes

INGREDIENTS

4 Eggs
1 Bunch asparagus
½ Cup corn kernels
(canned and drained or frozen and defrosted)
250g Low fat cottage cheese or ricotta
Season with pepper
Canola oil spray

1. Crack the eggs into bowl, season with pepper and whisk.
2. Heat a non-stick pan over medium heat, spray with oil.
3. Snap the bottom part of the asparagus off and discard, wash the top part and place into the pan. Cook lightly, then set aside.
4. Wipe the pan clean with kitchen towel, set back onto the heat, spray with oil and pour in half of the egg mixture tilting the pan to cover the base.
5. Cook lightly while lifting and moving the egg around to cook more evenly.
6. Just before the omelette is cooked, add half the asparagus, corn and cottage cheese.
7. Fold the omelette in half and slide onto a plate. Repeat the process for the second omelette.
8. Serve with toasted wholemeal bread.

Serves 2

One serve of Asparagus, Sweet Corn and Cottage Cheese Omelette is a source of fibre, iron and vitamin A and is high in folate.

NUTRITIONAL ANALYSIS

per omelette (not including sides)

Serving size: 320g

	Quantity per serve	%DI / RDI*
Energy	1470kJ	17%
Protein	37.5g	75%
Fat, Total	16.7g	24%
- Saturated	4.5g	19%
Carbohydrate	11.6g	4%
- Sugars	5g	6%
Dietary Fibre	2.2g	7%
Sodium	510mg	22%
Folate	160µg	80%
Iron	2.4mg	20%
Vitamin A	180µg	24%

* Reference source: FSANZ Standards 1.2.8 and 1.1.1 for labelling purposes
DI = Daily Intake
RDI = Recommended Dietary Intake





An Eggs-Pert Opinion

Cardiologist Associate Professor Karam Kostner of the Egg Nutrition Council recommends that foods containing dietary cholesterol, such as eggs, should not be excluded from the diet as they have little to no effect on the development of CVD. “Eggs should be considered in a similar way as other protein-rich foods and selected as part of a varied diet that is low in saturated fat and contains a variety of cardio-protective foods such as fish, wholegrains, fruit, vegetables, legumes and nuts”



At the heart of a healthy diet...

While eggs were once blamed for contributing to LDL or ‘bad’ cholesterol levels in the blood – a major risk factor for cardiovascular disease (CVD) – they have now been cleared for regular consumption. Recent research shows that eating up to one egg a day is not associated with an increased risk of coronary heart disease or stroke in healthy people.^{iv}

The Heart Foundation maintains that the dietary cholesterol, such as that found in eggs, has only a small or insignificant effect on blood cholesterol levels, and that saturated fats and trans fats are the types of fats which can lead to heart disease by raising blood cholesterol levels.^v

To put this into perspective, an egg contains approximately 5g of fat, almost 70% of which is the healthy unsaturated fat needed by the body for good health. An egg contains only about 1.5g of saturated fat and no trans fats, which are the type that raise blood cholesterol and increase the risk of heart disease.

On the flip side...

Research confirms many of the nutritional components of eggs - such as omega-3 fatty acids, protein, folate, and vitamin E - can actually help protect against risk factors of heart disease^{vi} and play a role in the maintenance of good health.

Omega-3s: The health benefits of foods rich in omega-3 fats have been well established. An increased intake of omega-3 fats is known to protect against heart disease^{vii}, some inflammatory diseases and autoimmune disorders such as arthritis^{viii} inflammatory bowel diseases^{ix} and emerging evidence in the treatment of depression^x. Omega-3 fats also play a major role in infant growth and brain development, as well as behaviour, attention and learning in children^{xi}. One serve of eggs can provide men with 12% of the total omega-3 adequate intake (AI) and 20% for women, and up to 127% of the adequate intake (AI) for specific long-chain omega-3 fats.

Protein: Research indicates a diet containing moderate amounts of lean protein, such as that found in eggs, can reduce cholesterol levels as much as a very low fat vegetarian diet^{xii}. Eggs contain the highest quality protein of all food sources, with just one serving providing over 25% of the RDI for protein. Research has also shown that high protein diets can be an effective weight loss strategy^{xiii}.

Folate: Essential for developing and maintaining healthy cells, diets high in folate have been found to be associated with better health^{xiv}. Eggs have a particularly high concentration of folate, with one serve containing over 48% of the RDI.

Vitamin E: Studies have indicated foods containing significant quantities of vitamin E can help protect against the risk of heart disease^{xv}. Eggs contain 24% of the RDI for vitamin E.

Iodine: One serve of eggs provides 29% of the recommended daily intake (RDI) of iodine. Iodine contributes to thyroid function and is particularly important during pregnancy and childhood to ensure normal brain and physical development.

Vitamin D: Research has shown that 31% of Australians have a marginal vitamin D deficiency^{xvi}. Eggs are one of the few foods naturally containing vitamin D, and one serve of eggs provides 8% of the RDI.

These nutrients, combined with other vitamins and minerals found in eggs, play an important role in maintaining a balanced diet.



An Eggs-Pert Opinion

Heart Foundation Cardiovascular Health Director Dr Robert Grenfell says:

“It is important to remember that it is never too late to start improving the way you eat. The Heart Foundation recommends eating a variety of foods for heart health including vegetables, whole grains, lean meats, oily fish, fruit, low and reduced or no fat dairy, and vegetable and seed oils. Remember to also include nuts, seeds and legumes.



Now the links between eggs and heart disease have been well and truly fried, why not try this Lentil and Tuna Frittata with Tomato Salad – a delicious way to maintain your heart health!

Healthy lentil and tuna frittata with tomato salad

\$2.90 per serve

Preparation time: 10 minutes

Cooking time: 15 minutes



FRITTATA

8 Eggs

½ Cup low fat milk

1 Can lentils

1 Onion, diced

½ Red capsicum, diced

1 Can tuna in spring water

Pepper to taste

Spray canola oil

TOMATO SALAD

4 Tomatoes, medium sized, cut into wedges (use different colours and shapes if available)

½ Red onion, diced

½ Bunch chives, chopped

1 Tsp balsamic vinegar

3 Tsp extra virgin olive oil

Pepper to taste

1. Preheat oven to 180°C.
2. Crack the eggs into a bowl add milk and whisk.
3. Spray an ovenproof pan or dish with oil. Place onto the stovetop and heat.
4. Add onions and capsicum and sauté lightly.
5. Add tuna and lentils, stir and then add the egg mixture.
6. Stir and place into the oven for around 15 minutes or until cooked.
7. In the mean time place tomatoes onto a plate, sprinkle with onions, chives and drizzle with oil and vinegar. Season with pepper.
8. Remove frittata from oven, leave to cool for 5 minutes then remove from pan and cut into portion size triangles.

Serves 4

TIP: Use fresh basil leaves instead of chives.

A serve of Healthy Lentil and Tuna Frittata with Tomato Salad is a good source of fibre, folate, iron and vitamin A

NUTRITIONAL ANALYSIS

Serving size: 439g

	Quantity per serve	%DI / RDI*
Energy	1200kJ (287Cal)	14%
Protein	24.5g	49%
Fat, Total	14.5g	21%
- Saturated	3.8g	16%
Carbohydrate	12.5g	4%
- Sugars	7.7g	9%
Dietary Fibre	4.6g	15%
Sodium	356mg	15%
Folate	109mcg	55%
Iron	3.8mg	32%
Vitamin A	315ug	42%

* Source: FSANZ Standards 1.2.8 and 1.1.1 for labelling purposes

Diabetes – a surprisingly common condition...

Diabetes rates in Australia are rising, with 1.7 million people currently living with the disease and most of those falling into the type 2 (lifestyle-related illness) category^{xvii}.

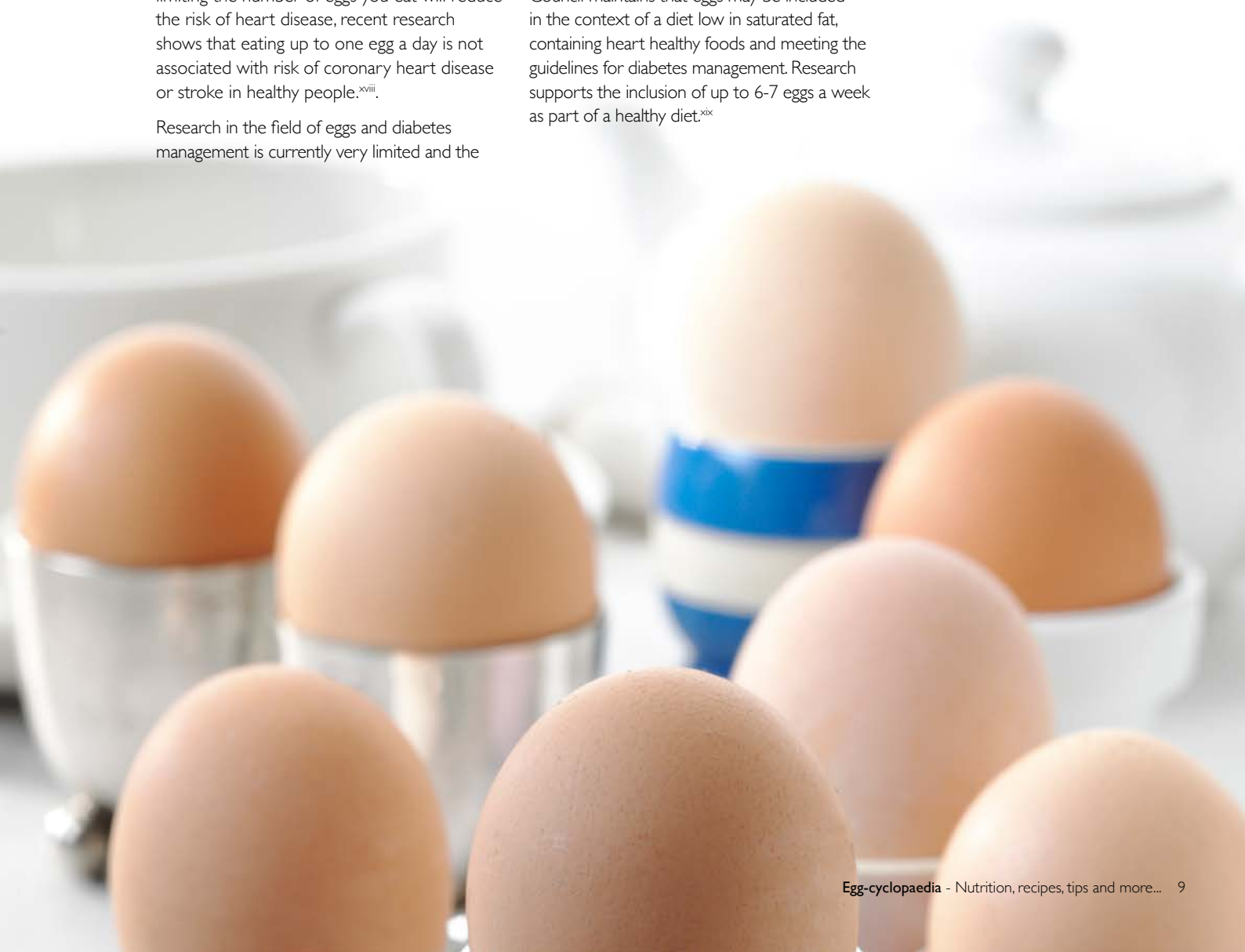
Diabetes is a strong risk factor for the development of cardiovascular disease so it is important for people with diabetes to closely monitor all other risk factors, including blood cholesterol levels.

THE IMPACT OF EGGS...

Although it was previously assumed that limiting the number of eggs you eat will reduce the risk of heart disease, recent research shows that eating up to one egg a day is not associated with risk of coronary heart disease or stroke in healthy people.^{xviii}

Research in the field of eggs and diabetes management is currently very limited and the

findings are often inconclusive. The Egg Nutrition Council maintains that eggs may be included in the context of a diet low in saturated fat, containing heart healthy foods and meeting the guidelines for diabetes management. Research supports the inclusion of up to 6-7 eggs a week as part of a healthy diet.^{xix}





If you are looking for more ways to include eggs in your diet, try this delicious Vegetable and Rice Tart. Combining nutrient-packed eggs and a range of fresh vegetables, it is a great choice for a light lunch or dinner.

Vegetable & feta rice tart

INGREDIENTS

1/2 Cup long grain rice, cooked
1 Egg, lightly beaten
2 Teaspoons olive oil
1 Small onion, finely chopped
75g Button mushrooms, sliced
50g Baby spinach leaves, shredded
100g Reduced fat feta, crumbled
250g Pumpkin, cut into 2cm cubes and steamed
4 Eggs, extra, lightly beaten
6 Cherry tomatoes, halved
Salad, to serve

1. Preheat the oven to 180°C and lightly grease a 23cm pie dish. Combine the rice and egg and using the back of a spoon, smooth into the pie dish. Bake for 20 minutes.
2. Heat the oil in a large deep frying pan and cook the onion for 3 minutes, then add the mushrooms and cook for another 3 minutes, until soft. Add the spinach and stir through until wilted slightly.
3. Arrange half the feta into the pie shell, and top with the pumpkin. Spread the onion mixture over the top, then the remaining feta. Pour the eggs over, and nestle the tomatoes, cut side up, into the filling. Bake for 45 minutes, until set and golden.
4. Stand for 5 minutes, before cutting into wedges to serve.

Serves 6

TIP: Use fresh basil leaves instead of chives.

NUTRITIONAL ANALYSIS

Serving size: 348 grams

	Quantity per serve	%DI / RDI*
Energy	880kJ	10%
Protein	14g	28%
Fat, Total	9g	13%
- Saturated	3g	13%
Carbohydrate	20g	6%
- Sugars	5g	6%
Dietary Fibre	3.5g	12%
Sodium	340mg	15%
Folate	117mcg	59% RDI
Iron	426mcg	57% RDI
Vitamin A	2mg	17% RDI

* Source: FSANZ Standards 1.2.8 and 1.1.1 for labelling purposes



Weighing up the facts...

Over the past two decades, there has been a dramatic rise in overweight and obese Australians. Recent figures show that Australia is one of the fattest nations in the developed world, with over 14 million Australians overweight or obese^{xx}.

It is important to choose the right foods in our everyday diets in order to achieve and maintain a healthy weight.

FORGET THE FADS, EGGS ARE THE ANSWER...

Research reveals eggs can play a fundamental role in weight management and have great potential as an inclusion in a weight loss diet due to their high protein content.

The results of a recent review^{xxi} show foods high in protein contribute much more to satiety (the feeling of fullness) than carbohydrates and fat. This means high protein foods, such as eggs, leave us with a satisfied feeling, which can help limit the amount of food we consume throughout the day.

A study^{xxii}, involving twenty-one men aged 20-70 years, assessed the effect of

consuming eggs for breakfast. It found that those who had eggs for breakfast felt full for longer periods and ate less at the next meal in comparison to those who didn't consume the eggs. This study helps to demonstrate the mechanism as to why eggs may help people to lose weight.

Eggs can also be eaten at lunch or dinner, and may reduce the temptation for unhealthy snacking between meals or late at night. Eggs also make for a nutritious and filling snack which will limit your tendency to over-indulge.

FUEL YOUR EGGS-ERCISE...

Weight management doesn't depend on diet alone! Regular exercise is a crucial part of maintaining a healthy weight. Eggs are a great post-exercise option - not only are they easy to prepare, but the protein found in eggs will help to maintain and build muscle.^{xxiii}



A cracking fact!

In Australia we do not import eggs from overseas. This means every single egg you find in the supermarket, grocery store or markets is produced by Australian farmers, for Australian consumers.





After your next workout, why not try this quick and easy Smoked Trout Patties with Soft Boiled Egg and Cucumber, Dill and Caper Salad which is a good source of folate and iron, is high in fibre and source of Vitamin A

Smoked trout patties with soft boiled egg and cucumber, dill and caper salad

\$3.65 per serve

Preparation time: 15 minutes

Cooking time: 20 minutes

PATTIES

- 8 Eggs, 2 egg yolks for mix,
- 6 Eggs for boiling
- 500g Potatoes
- 400g Boneless hot smoked trout fillets
- ¼ Bunch chives, chopped
- Pepper to taste
- 1 Cup flour
- 1 Cup breadcrumbs or panko crumbs
- Olive oil for frying

SALAD

- 2 Lebanese cucumbers, peeled and thinly sliced
- ¼ Red onion, finely diced
- ¼ Bunch dill, chopped
- 1 Tsp small capers
- 1 Tsp white balsamic or white wine vinegar
- 1 Tbsp extra virgin olive oil
- Pinch of sugar, Pepper to taste



1. Peel and boil potatoes until cooked. Drain well and mash.
2. Flake the smoked trout into the mash and season. Separate two eggs, adding the egg yolks and chives to the mash mix. Keep the egg whites for crumbing.
3. Mix well and form into eight patties.
4. Roll patties in flour, lightly whisked egg whites and bread crumbs then set aside.
5. Combine all salad ingredients, checking pepper seasoning and adjusting if necessary.
6. Soft boil the eggs, refresh under running water and peel. Cut eggs in half and set aside.
7. Add oil to frying pan and heat. Gently fry patties on both sides.
8. Place patties onto a plate, serving with boiled egg and garnish with cucumber salad.

Please note that smoked trout can be substituted for smoked salmon.

Serves 6

One serving of Smoked Trout Patties with Soft Boiled Egg and Cucumber, Dill and Caper Salad is a good source of folate and iron, is high in fibre and a source of vitamin A.

NUTRITIONAL ANALYSIS

(not including sides)

Serving size: 295g

	Quantity per serve	%DI / RDI*
Energy	1810kJ	21%
Protein	31.5g	63%
Fat, Total	17g	24%
- Saturated	3.6g	15%
Carbohydrate	36.4g	12%
- Sugars	2.6g	1%
Dietary Fibre	3.6g	12%
Sodium	280mg	12%
Folate	80µg	40%
Iron	3.8mg	32%
Vitamin A	135µg	18%

* Source: FSANZ Standards 1.2.8 and 1.1.1 for labelling purposes

Vital pr-egg-nancy information...

Our bodies require a certain amount of nutrients everyday to maintain optimum health. When you factor in an extra person, this need increases, which is why it is vital to ensure you are eating the right foods and getting enough nutrients for yourself and your growing baby while pregnant or lactating.

NUTRIENTS FOR TWO...

Research has identified specific nutrients found in eggs that are particularly beneficial for both mother and baby, including:

Protein: One serve of eggs provides 100% of the additional RDI for protein during pregnancy. Protein helps build and develop body enzymes, tissues and muscles and forms antibodies, plus supports growth and development.

Choline: Research shows choline plays an important role in foetal and infant brain development, as well as the maintenance of nerve and brain function in adults^{xxiv}. It is important for pregnant women to include choline-rich foods in their diet and ensure adequate choline requirements are met. Eggs provide a significant amount of the Adequate Intake (AI) recommendations for choline during pregnancy.

Folate: Folate is a particularly important nutrient for pregnant women, especially just prior to conception and in the first few weeks of pregnancy. Folate is essential for the growth and maintenance of healthy foetal cells and is vital to help prevent neural tube defects such as spina bifida^{xxv}. One serve of eggs contains 16% of the additional RDI for folate during pregnancy.

Iodine: Iodine is an essential mineral needed for the production of thyroid hormones which are important for growth and development. Inadequate iodine intake during pregnancy increases the risk of mental impairment and cretinism in the newborn baby^{xxvi}. One serve of eggs contains 20% of the RDI for iodine in pregnant women.

Vitamin A: One serve of eggs provides more than 100% of the additional RDI for Vitamin A during pregnancy. Vitamin A supports cell differentiation, helps strengthen the immune system and plays a role in healthy skin and eyes for both mother and baby.

Vitamin B12: Eggs also provide over 100% of the additional RDI for vitamin B12 during pregnancy. This nutrient assists with growth and development, manufacturing DNA, functioning of the nervous system and production of red blood cells.



Eggs are a great source of more than 11 essential nutrients and contain high amounts of the vitamins and minerals needed throughout pregnancy and lactation. Eggs also contain the highest quality protein of all food sources, helping to meet your additional needs during this time.



This Beef, Mixed Bean and Spinach Soup with Poached Egg combines eggs, legumes and vegetables to provide expecting mums with a healthy source of protein and at least 11 different vitamins and minerals!

Beef, mixed bean and spinach soup with poached egg

Cost per serve: \$4.35

Preparation time: 10 mins

Cooking time: 20 mins

INGREDIENTS

- 8 Eggs
- 3 Cups reduced salt beef stock
- 1 Cup water
- 200 g Lean beef, thinly sliced
- 1 Cup mixed vegetables (carrot, celery, onion, leek, parsnip) chopped into small dice
- 1 Can (400g) three bean mix (no added salt)
- 4 Cups baby spinach leaves, washed
- 2 Tbsp chopped parsley
- Freshly ground pepper



1. Place beef into a saucepan, add stock and simmer until almost tender then add the vegetables.
2. Drain and rinse the beans well under running water before adding to the stock. Bring back to a boil.
3. Add the spinach, simmer for one minute and season with pepper.
4. Poach the eggs and set aside.
5. Place into bowls, add the egg and garnish with parsley, seasoning with freshly ground pepper.

COOKING TIPS: Use cheaper cuts of beef, which tend to have more flavour but do take longer to cook, and use a pressure cooker to speed up the process.

SERVE WITH: Crusty toasted bread or garlic or herb bread.

Serves 4

One serving of beef, mixed bean and spinach soup with poached egg is a good source of protein, folate, iron and vitamin A and is low in sodium. It is also an excellent source of dietary fibre.

NUTRITIONAL ANALYSIS

(not including sides)

Serving size: 585g

	Quantity per serve	%DI / RDI*
Energy	1540kJ	18%
Protein	38.5g	77%
Fat, Total	14.2g	20%
- Saturated	4.6g	19%
Carbohydrate	20.0g	7%
- Sugars	3.4g	4%
Dietary Fibre	7.4g	25%
Sodium	530mg	23%
Folate	191µg	96%
Iron	6.3mg	53%
Vitamin A	495µg	66%

* DI = Daily Intake; RDI = Recommended Dietary Intake



Googy eggs are great for kids...

Children have very specific nutritional needs to ensure proper growth and development and meet the requirements of daily mental and physical activity.

The challenge for parents is to give their children nutritious meals as part of a healthy, balanced diet, while also providing delicious, filling, and fun foods they wouldn't dare trade in the playground.

Eggs are a great option for kids because they contain a vast array of the vitamins and minerals needed for growing bodies, plus have a high satiety factor to provide kids with long lasting energy to get through their busy days.

INTRODUCING THE EGG...

Eggs are a nutritious food that can be introduced from around six months of age as long as the texture is suitable to that of an infant's development stage.^{xxvii}

Approximately 8.9% of infants aged one year will experience an allergy to eggs.^{xxviii} Egg white allergies are more common; however children may also have adverse reactions to egg yolks. The good news is approximately two thirds of infants will grow out of their egg allergy by the age of five^{xxix}.

If there is a family history of food allergies, parents should consult a health care professional for specific advice.

Healthy habits for life...

Statistics show that almost 25% of children in Australia aged 5 – 17 are overweight or obese^{xxx}, so it is now more important than ever to teach children about nutrition and help them develop lifelong healthy eating habits.

Studies show the largest single influence in developing a child's long-term eating habits is their parent's attitude towards food.

A great way to teach kids about food and nutrition is to get them in the kitchen for some hands-on learning. There are so many quick and easy egg-based recipes available for your kids to try at home!



This nutritious and delicious Wholemeal Date and Walnut Loaf is a sure-winner with the family! Get the kids involved to create this perfect snack to add to lunchboxes.

Wholemeal date and walnut loaf

\$4.15 per loaf

Preparation time: 15 minutes

Cooking time: 50 minutes

INGREDIENTS

2 Eggs, lightly beaten

1 Cup dates, pitted and chopped

3 Tbsp margarine spread

1 Cup brown sugar

1 Cup water

½ Cup unsalted walnuts, chopped

1 Cup self raising flour

1 Cup wholemeal flour

1 Tsp baking powder

Canola oil spray

Icing sugar for dusting



1. Preheat oven to 180°C.

2. Place dates, margarine spread, sugar and water in a saucepan and stir over medium heat, gently bringing to a boil. Remove from heat and set aside to cool.

3. Place mixture into a bowl and add eggs, walnuts and wholemeal flour; then sift over the self raising flour and baking powder.

4. Spray a 15cm x 25cm loaf tin with spray oil, line with baking paper and spoon in the mixture.

5. Place into the oven and bake for 45 – 50 minutes or until fully cooked. Remove from the oven to cool for 10 minutes before turning out onto a cooling rack.

6. Dust with icing sugar; slice and serve.

Makes 1 loaf (approximately 10 serves)

TIP: Great served with ricotta or reduced fat cream cheese.

NUTRITIONAL ANALYSIS

(not including toppings)

Serving size: 112g

	Quantity per serve	%DI / RDI*
Energy	1345kJ	20%
Protein	5.7g	29%
Fat, Total	11.6g	n/a
- Saturated	3.8g	n/a
Carbohydrate	47.8g	n/a
- Sugars	29.0g	n/a
Dietary Fibre	4.3g	24%
Sodium	220mg	10%
Folate	25µg	13%
Iron	1.6mg	16%
Vitamin A	80µg	20%

* Source: Recommended Dietary Intakes and Adequate Intakes for 4-8 years, NHMRC Nutrient Reference Values for Australia and New Zealand, 2006.

Some senior wisdom...

Older Australians need a higher intake of nutrients to maintain a healthy, balanced diet due to age-related changes in the functioning of the digestive system. Eggs are a nutritious option for seniors and can play a valuable role in maintaining healthy habits.

Many Australian seniors are susceptible to low intakes of nutrients including vitamin A and vitamin E. Vitamin A is needed to maintain a strong immune system and especially for wound healing. Low levels of vitamin A in older people can lead to poor vision, dry skin, lowered immunity and could contribute to increased cancer risk^{xxxii}.

Eggs are a great source of vitamin A, providing almost 32% of the RDI for adults per serve. Better still, eggs contain the perfect mix of other nutrients to maximise absorption of vitamin A into the body, which can be hindered in older Australians due to changes in the digestive system.

Eggs are also a significant source of vitamin E, containing 24%-34% of the AI for older Australians^{xxxiii}. Vitamin E is necessary to maintain healthy cell membranes, red blood cells and nerves, stimulate the immune response and for antioxidant activity.

Antioxidants lutein and zeaxanthin are also found in eggs, and according to the Macular Disease Foundation Australia, these nutrients are important for eye health and prevention of macular degeneration which is the leading cause of blindness in people aged 65 and over^{xxxiii}.

BUT WAIT, THERE'S MORE...

70 percent of deaths in Australians aged 65 to 84 are due to cardiovascular disease or cancer, both of which have diet related risk factors. Ensuring adequate nutrient intake therefore becomes increasingly important for people over 65 years^{xxxiv}. Omega-3 fatty acids, such as those found in eggs are proven to have significant benefits for the heart and blood vessels.



An easy and in-egg-spensive option...

Practically, eggs are a great meal-base for older Australians because they are quick and simple to prepare, as well as a cost-effective protein option. They are also soft in texture, making them easy to consume and digest.



This Creamed Mushroom Soup with Poached Egg, Thyme and Chives is a nutritious dish which is perfect for dinner and packed full of hearty goodness!

Creamed mushroom soup with poached egg, thyme and chives

\$3.45 per serve

Preparation time: 10 minutes

Cooking time: 20 minutes

INGREDIENTS

- 4 Eggs
- 1 Tbsp white vinegar
- 1 Tbsp polyunsaturated margarine
- 1 Onion, diced
- 1 Clove of garlic, sliced
- 600g Mushrooms, roughly chopped
- ½ Cup dry white wine
- 2 Large potatoes, peeled and diced
- 3 Cups salt reduced chicken stock, plus one cup water
- 6 Sprigs fresh thyme, stalks removed
- 1 Cup reduced fat evaporated milk
- ½ Bunch chives, chopped
- Season with pepper

1. Heat saucepan and add olive oil, sweat the onions and garlic until translucent.
2. Add mushrooms and thyme; gently cook while stirring occasionally for 2 -3 minutes.
3. Add the wine and continue to simmer until liquid has reduced by half, then add chicken stock, water and potatoes. Simmer for 20 minutes or until mushrooms and potatoes are fully cooked.
4. With a hand blender; blend to a smooth consistency and add evaporated milk. Adjust pepper seasoning.
5. For the poached eggs, bring a pot of water and vinegar to the boil, reduce heat to a simmer (about 80°C).
6. Crack each egg into a small bowl and check for any shell.
7. Slowly lower the eggs into the water and cook for 4 minutes or to your liking.
8. Remove eggs from water and place onto kitchen paper.
9. Ladle soup into bowls and place one egg into each soup bowl.
10. Garnish with chopped chives.
11. Serve with crusty wholegrain bread.

Serves 4

One serving of Creamed Mushroom Soup with Poached Egg, Thyme and Chives is a source of folate, vitamin A, vitamin D and iron.

NUTRITIONAL ANALYSIS

(not including sides)

Serving size: 646g

	Quantity per serve	%DI / RDI*
Energy	1400kJ	16%
Protein	19.5g	39%
Fat, Total	16.3g	23%
- Saturated	6.3g	26%
Carbohydrate	20.5g	6%
- Sugars	10.3g	11%
Dietary Fibre	5.3g	18%
Sodium	655mg	29%
Folate	130µg	65%
Iron	1.9mg	16%
Vitamin A	160µg	21%
Vitamin D	1.3µg	13%

Eggs for vegetarians...

Some vegetarians can experience low levels of certain nutrients, or even deficiency in some cases, due to the various foods excluded from their diets. Vegetarians can benefit from the inclusion of nutrient-dense foods such as nuts, seeds, wholegrains, legumes, and leafy green vegetables. These can provide sufficient vitamins, minerals and essential amino acids needed in the diet.

For lacto-ovo vegetarians, the inclusion of eggs and dairy foods will assist in providing good quality protein, calcium, and essential fatty acids such as omega-3s.

AN EGG-CELLENT SUBSTITUTE...

Eggs can play a significant role in a vegetarian diet as they provide high quality protein, vitamin B12, long chain omega-3s and iron – nutrients often low in a vegetarian eating pattern.

Most plant sources of protein (such as nuts, legumes and grains) alone do not provide all the essential amino acids needed by the body, meaning it is important for vegetarians to eat a variety of these foods daily.

Eggs are an exceptional source of vitamin B12, vital for healthy red blood cells. Just one serve of eggs provides almost half (43%) the recommended dietary intake for vitamin B12.

In addition to providing 14% of the RDI for iron in a serving, eggs also provide small amounts of zinc, both of which are particularly useful in a vegetarian diet where sources of these nutrients are often low.

Vegetarian omega-3s

Other than micro-algae, eggs are the only vegetarian source of the long chain omega-3 fatty acids DHA and EPA which assist in the prevention of cardiovascular disease.

Eggs also contain the shorter chain omega-3 called ALA which can be converted to some extent into the important long chain omega-3s. For vegans, ALA can also be found in foods such as walnuts, canola oil, chia seeds, linseeds and soybeans.

It is important for those with vegetarian diets to be aware of food sources containing these essential nutrients to ensure they are meeting daily requirements for a healthy, balanced diet.





For a delicious vegetarian meal, try this Mild Egg Korma with Chickpeas and Spinach. This Indian inspired dish is a great source of folate, iron and vitamin A and is guaranteed to be a flavoursome dinner winner.

Mild Egg korma with chickpeas and spinach

\$1.90 per serve

Preparation time: 15 minutes

Cooking time: 10 minutes

INGREDIENTS

8 Eggs, hard boiled, shelled and set aside

2 Tbsp canola oil



1 Onion, peeled and diced

4 Tbsp Indian butter chicken or korma curry paste

4 Tbsp no added salt tomato paste

300ml Water

4 Tbsp light coconut cream

1 Can chickpeas, drained and washed

150g Baby spinach, washed and well drained

4 Tbsp reduced fat natural yoghurt

½ Bunch coriander, chopped



1. Place a saucepan over medium heat and add oil and onion. Fry gently without colour.
2. Add curry and tomato pastes, fry gently for a minute then add water and coconut. Bring to a simmer.
3. Add chickpeas and spinach.
4. Once the spinach is wilted add the eggs.
5. Serve in a bowl and top with yoghurt and coriander.

Serves 4

TIP: Plain Indian naan bread and steamed rice are great on the side.

One serving of Mild Egg Korma with Chickpeas and Spinach is a source of fibre and a good source of folate, iron and vitamin A.

NUTRITIONAL ANALYSIS

(not including sides)

Serving size: 112g

	Quantity per serve	%DI / RDI*
Energy	2030kJ	23%
Protein	24.0g	48%
Fat, Total	32.0g	46%
- Saturated	6.7g	28%
Carbohydrate	21.6g	7%
- Sugars	6.4g	7%
Dietary Fibre	9.6g	32%
Sodium	1185mg	52%
Folate	100µg	50%
Iron	6.8mg	57%
Vitamin A	390µg	52%

* Source: FSANZ Standards 1.2.8 and 1.1.1 for labelling purposes

Australian egg safety...

With high quality standards and a food safety regulation system on par with the world's best, Australian egg farmers pride themselves on providing families with the highest quality eggs around.

Like all perishable foods, eggs need to be handled and stored correctly to maximise their safety, quality and freshness. It's important to follow these simple rules:

- Always keep eggs in their original carton as an egg shell can have as many as 17,000 pores over its surface, allowing it to absorb surrounding flavours and odours.
- Allow no more than two hours at room temperature for preparation and serving.
- Always use eggs within the 'best before' date on the carton.
- Always wash your hands, utensils and counter top before and after preparation to avoid cross contamination.
- Never separate eggs using their shells because although eggs are cleaned, quality tests cannot control the bacteria on the outside of the shells. Always use an egg separator or slotted spoon to separate the egg yolks from the whites.



About the Egg Nutrition Council...

The Egg Nutrition Council (ENC) is an independent group of influential and respected health and nutrition professionals who are recognised as experts in their field with specialties including cardiology, endocrinology, dietetics and nutrition.

There has been much confusion in recent years about egg consumption, its impact on people's health and the 'right' number of eggs to eat. As there have also been many myths about the impact of eggs on health and in particular cardiovascular disease and cholesterol, the role of the ENC is to assist in overcoming the myths and confusion about healthy egg consumption.

The ENC continues to provide Australians with the most up-to-date dietary information on eggs and the positive impact good nutrition can have on people's lives.



If you'd like more information on the Egg Nutrition Council, head to www.enc.org.au and sign up to the bi-monthly email newsletter.

Helpful hints and time-saving tips...

It's always the seemingly simple stuff that proves the most difficult, so here are some tips and tricks to help you become an egg connoisseur in the kitchen!

TRICKS OF THE TRADE...

It's best to use eggs that are a few days old for hard boiling as the fresher the egg, the more likely the white will stick to the shell.

Fresher eggs are best for poaching or frying, as they are more likely to hold their shape.

Older eggs are best for boiling, scrambling and making omelettes.

Your oldest eggs can be used in quiches, frittatas and cakes.

The freshness test...

The fastest way to check for freshness in uncooked eggs is to put them in a bowl of water – a fresh egg stays at the bottom of the bowl, while a stale egg floats.

To tell if an egg is raw, spin it! If it spins easily it's hard-boiled but if it wobbles, it is raw.

EVERYDAY EGG IDEAS...

Scramble eggs with finely chopped vegetables and serve with lean ham, tomatoes and mushrooms for the perfect Sunday morning breakfast feast.

Mash boiled egg with canned salmon and reduced fat ricotta cheese for a sandwich filling, or as a topping for wholegrain crackers.

Mix beaten eggs with reduced-fat grated cheese, cracked pepper and parsley and stir through cooked wholemeal pasta for a fast and healthy dinner.

For healthy fried rice mix cooked chopped vegetables, lean ham, and boiled egg with cooked rice. Stir fry in sesame oil and add a splash of reduced salt soy sauce.



The Perfect Poached Eggs...

A poached egg makes a great addition to any meal – be it in pasta, a salad, on a burger or of course, eggs on toast. Poaching an egg reduces the amount of saturated fat in the meal by removing condiments such as oil or butter. Try these simple tips for the perfect poached egg next time you're whipping up a meal for the family.

1. Leave your freshest eggs out of the refrigerator, until they reach room temperature.
2. Bring 5cm of water to the boil in a pan, then reduce the temperature to the lowest simmering point.
3. Add one teaspoon of vinegar or lemon to the boiling water.
4. Break the egg into a small bowl or saucer.
5. Either create a whirlpool or wait for all the bubbles on the side of the pan to disappear, before gently sliding the egg into the water.
6. Cook the egg for 3-4 minutes, lift the egg out with a slotted spoon and drain on paper towel, then serve immediately.

Online Resources

Australian Eggs

www.eggs.org.au

www.facebook.com/AustralianEggs

The home of Australian Eggs online. Find the latest news, further information on the Australian egg industry, egg nutrition, tips, recipes and a dedicated kids section!

Egg Nutrition Council

www.enc.org.au

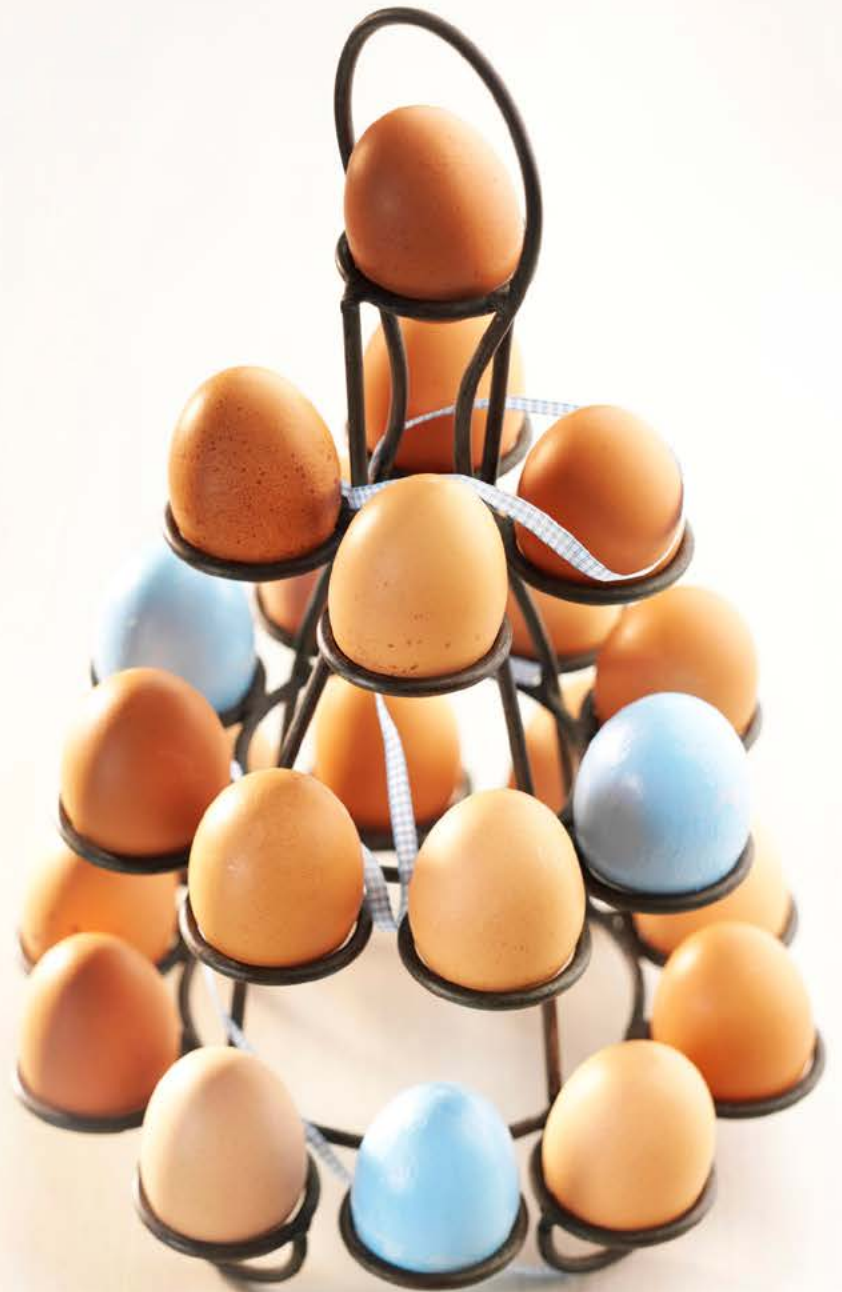
www.twitter.com/AustralianEggs

Check out all of the latest information about eggs and health for Healthcare Professionals.

The National Heart Foundation of Australia

www.heartfoundation.org.au

For further information about the Heart Foundation, the Heart Foundation Tick, or about research and recommendations on egg usage and consumption.



References

- i. National Health and Medical Research Council, Australian Dietary Guidelines 2013, viewed 30 August 2013. Available from: <http://www.nhmrc.gov.au/guidelines/publications/n55>
- ii. RONG, Ying, et al. Egg consumption and risk of coronary heart disease and stroke: dose-response meta analysis of prospective cohort studies. *British Medical Journal* (online). January 2013, 346:e8539. (Viewed January 17, 2013). Available from: doi:10.1136/bmj.e8539.
- iii. Stringham, J.M., Bovier, E.R., Wong, J.C. & Hammond Jr, B.R. The Influence of Dietary Lutein and Zeaxanthin on Visual Performance. *J Food Sci* 9999(2009).
- iv. RONG, Ying, et al. Egg consumption and risk of coronary heart disease and stroke: dose-response meta analysis of prospective cohort studies. *British Medical Journal* (online). January 2013, 346:e8539. (Viewed January 17, 2013). Available from: doi:10.1136/bmj.e8539.
- v. The National Heart Foundation 2013, Fats and cholesterol, viewed 6 November 2013. Available from: <http://www.heartfoundation.org.au/healthy-eating/fats/Pages/default.aspx>
- vi. National Heart Foundation of Australia. Position statement. Dietary fats and dietary sterols for cardiovascular health (2009).
- vii. National Heart Foundation of Australia. Position statement. Dietary fats and dietary sterols for cardiovascular health (2009).
- viii. Rennie, K. L., Hughes, J., Lang, R. & Jebb, S. A. Nutritional management of rheumatoid arthritis: a review of the evidence. *J Hum Nutr Diet* 16, 97-109 (2003).
- ix. Belluzzi, A. N-3 fatty acids for the treatment of inflammatory bowel diseases. *Proc Nutr Soc* 61, 391-5 (2002).
- x. Sinclair, A. J., Begg, D., Mathai, M. & Weisinger, R. S. Omega 3 fatty acids and the brain: review of studies in depression. *Asia Pac J Clin Nutr* 16 Suppl 1, 391-7 (2007).
- xi. Omega-3 Centre. Omega-3 fatty acids - essential nutrients for our children. Scientific Consensus Workshop (2007).
- xii. Miller, M., et al. Comparative Effects of Three Popular Diets on Lipids, Endothelial Function, and C-Reactive Protein during Weight Maintenance. *J Am Diet Assoc* 109, 713-717 (2009).
- xiii. National Health and Medical Research Council, Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults. Canberra, 2003.
- xiv. National Health and Medical Research Council, Australian Dietary Guidelines 2013, viewed 30 August 2013. Available from: <http://www.nhmrc.gov.au/guidelines/publications/n55>
- xv. Mente, A., de Koning, L., Shannon, H.S. & Anand, S.S. A Systematic Review of the Evidence Supporting a Causal Link Between Dietary Factors and Coronary Heart Disease. *Arch Intern Med* 169, 659-669 (2009).
- xvi. Daly, R. M. et al. Prevalence of vitamin D deficiency and its determinants in Australian adults aged 25 years and older: A national, population-based study. *Clinical Endocrinology* (2011)
- xvii. Diabetes Australia 2013, Diabetes in Australia, viewed 6 November 2013. Available at: <http://www.diabetesaustralia.com.au/understanding-diabetes/diabetes-in-australia/>
- xviii. RONG, Ying, et al. Egg consumption and risk of coronary heart disease and stroke: dose-response meta analysis of prospective cohort studies. *British Medical Journal* (online). January 2013, 346:e8539. (Viewed January 17, 2013). Available from: doi:10.1136/bmj.e8539.
- xix. Egg Nutrition Council 2013, Eggs and Diabetes: Position Statement, Australian Egg Corporation Limited, viewed 30 January 2014. Available at <http://www.enc.org.au/position-statements/eggs-and-diabetes/>
- xx. Australian Bureau of Statistics 2013, Australian Health Survey 2011-13 (AHS). (Viewed January 09 2014). Available at <http://www.abs.gov.au/websitedbs/d3310114.nsf/home/australian+health+survey>
- xxi. Anderson, G.H. & Moore, S.E. Dietary proteins in the regulation of food intake and body weight in humans. *J Nutr* 134, 974S-979S (2004). Westerterp-Plantenga M.S. et al. Dietary Protein – its role in satiety, energetic, weight loss and health. (Viewed January 09 2014). Available at <http://www.ncbi.nlm.nih.gov/pubmed/23107521>
- xxii. Ratliff, J., et al., Consuming eggs for breakfast influences plasma glucose and ghrelin, while reducing energy intake during the next 24 hours in adult men. *Nutrition Research*, 2010. 30(2): p. 96-103.
- xxiii. Moore, D.R., et al. Ingested protein dose response of muscle and albumin protein synthesis after resistance exercise in young men. *Am J Clin Nutr* 89, 161-168 (2009).
- xxiv. Zeisel, S.H. & da Costa, K.A. Choline: an essential nutrient for public health. *Nutr Rev* 67, 615-623 (2009).
- xxv. Scholl, T.O. & Johnson, W.G. Folic acid: influence on the outcome of pregnancy. *Am J Clin Nutr* 71, 1295S-1303S (2000).
- xxvi. Delange, F. The role of iodine in brain development. *Proc Nutr Soc* 59, 75-79 (2000).
- xxvii. National Health and Medical Research Council 2013, Infant Feeding Guidelines, (viewed 10 January 2014). Available at <http://www.nhmrc.gov.au/guidelines/publications/n56>
- xxviii. Osborne, N., et al., HealthNuts Investigators Prevalence of challenge-proven IgE-mediated food allergy using population-based sampling and predetermined challenge criteria in infants. *J. Allergy Clin. Immunol.*, 2011. 127(3): p. 668-672.
- xxix. Kids Health, the Children's Hospital at Westmead, 2010, Fact Sheet: Egg Allergy, viewed 6 November 2013. Available at: <http://kidshealth.schn.health.nsw.gov.au/sites/kidshealth.schn.health.nsw.gov.au/files/fact-sheets/pdf/egg-allergy.pdf>
- xxx. Department of Health, 2013, Overweight and Obesity in Australia, viewed 6 November 2013. Available at: <http://www.health.gov.au/internet/healthyactive/publishing.nsf/Content/overweight-obesity>
- xxxi. Mann, J. & Truswell, A.S. *Essentials of Human Nutrition*, (Oxford University Press, New York, 2002).
- xxxii. National Health and Medical Research Council 2013, Nutrient Reference Values, (viewed 06 January 2014), Available at <http://www.nrv.gov.au/>
- xxxiii. Macular Disease Foundation 2013, Nutrition and supplements for Macular Degeneration, viewed 6 November 2013. Available at: http://www.mdfoundation.com.au/resources/1/factsheets/MDFA_Nutrition-Supplements_WEB_2013-09.pdf
- xxxiv. AIHW. Australia's Health 2010: twelfth biennial health report: Australian Institute of Health and Welfare 2010.





CERT TM used under licence. People with health concerns should seek dietary advice from their doctor or dietitian.