A photograph of three onions on a wooden surface. In the foreground, a large yellow onion is in sharp focus. Behind it, a white onion is slightly out of focus, and in the background, a red onion is also out of focus. The lighting is warm and directional, creating highlights and shadows on the onions' skins.

HEALTH AND NUTRITION OVERVIEW 2017

AUSTRALIAN
onions

THE SECRET SERVE

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Onions are an unsung health hero and are often the forgotten vegetable. With less than 7% of the Australian population meeting the daily recommended intake for vegetables, it's important to find ways to help Aussie families to reach this daily goal.¹ A staple in most shopping trolleys, the humble onion is added to a variety of common dishes, but many of us don't think of it as part of the recommended five serves of vegetables each day.

Good news – it is! From boosting the immune system to improving gut health, onions are a reliable, versatile and affordable staple that can be easily 'disguised' for fussy eaters in your favourite family meals.

With a young family of my own, we enjoy onions across a variety of dishes and it's exciting to share the latest nutritional information, along with usage tips, so all Australian's can enjoy the benefit of more onions in their diet.

Whether blended, sautéed, baked or caramelised, go ahead, toss in an onion and reap the benefits. It's the everyday veggie that helps keep you and your kids healthy on the inside and out.

Bon Appetit!

THE FACTS

Onions are naturally low in energy density with many health benefits:



100g of onion provides between 15% and 20% of an adult or child's recommended daily intake of Vitamin C. This essential nutrient is important for normal growth and development and immunity.

GOOD FOR YOUR GUT:

Onions contain prebiotics in the form of fructans, which help with digestion.



PLANT POWER

Onions deliver a unique bundle of vitamins and phytochemicals with potent health properties that help protect against environmental pollutants, fight inflammation and protect against some cancers:



Finely chop and slowly cook onions to make them softer and sweeter. Cooking onions does not significantly alter its nutritional value so they can be a perfect secret serve of vegetables for your kids.



SERVES AND PORTIONS

This report refers to brown, white and red onions, which are members of the allium cepa family of plants.

The Australian Dietary Guidelines define a serve of vegetables as 75g or ½ cup (diced) or ½ a medium onion.² The recommended amount of

vegetables serves for adults (aged between 19–50 years) is six serves for men and five serves for women. The recommendation for daily vegetable intake for children (aged 2–3 years) is two and half a serves a day or between four and a half and five and for ages 4–18.³

NUTRIENT SUMMARY TABLE

	Average Quantity per Serving (75g)	% Daily Intake for adults [#]	Average Quantity per 100g
Energy	96kJ (24cal)	1%	128 (30cal)
Protein, total	1.3g	2.6%	1.7g
Fat, total	<1.0g	0.1%	<1.0g
- Saturated Fat	<1.0g	0%	<1.0g
Carbohydrates, total	3.5g	1.1%	4.7g
- Sugars	3.5g	3.9%	4.7g
Sodium	9mg		12mg
Potassium	130mg		173mg
Vitamin C	5.2mg	13%	6.9mg
Quercetin	15.2mg		20.3mg
Anthocyanins (red onions only) [^]	5.38mg		7.17mg

*NUTTAB average for brown and white onions only

[^] USDA data for red onions. Anthocyanins as defined by cyanidin, delphinidin, pelargonidin and peonidin

[#] Percentage daily intakes are based on the average adult diet of 8700kJ. Your daily intakes may be higher or lower depending on your energy needs.

ONIONS & KIDS (4-8 YEARS)

100G OF ONION CONTAINS 19% OF VITAMIN C NEEDS FOR CHILDREN 4-8 YEARS, THIS CONTRIBUTES TO NORMAL GROWTH AND DEVELOPMENT.



THE FORGOTTEN VEG

JUST 1/2 AN ONION EACH DAY COUNTS TOWARDS YOUR FIVE SERVES OF VEGETABLES.



PHYTONUTRIENT PROFILE

Onions deliver a unique bundle of vitamins and phytonutrients with potent health properties, such as vitamin C and flavanoids (quercetin and anthocyanins), which can act as antioxidants to help protect against free radicals that damage to our cells, fight inflammation and boost immunity.

Quercetin is particularly abundant in onions and has been deeply researched for its potential anti-inflammatory, anti-ageing, anti-viral and anti-cancer effects.⁵

In vitro and in vivo studies have revealed various mechanisms through which quercetin could reduce the risk of metabolically associated chronic diseases, including cardiovascular disease and certain types of cancers. These effects are due to the physiological activity of flavonoids in the reduction of oxidative stress, inhibiting low-density lipoprotein oxidation (an important reaction in the atherosclerosis and coronary heart disease), and platelet aggregation (associated with heart attack and stroke).⁶

The anthocyanin content (also found in blueberries) is a unique attribute to red onions. Anthocyanins are responsible for the red pigment and have been found to play a positive role in protecting against heart disease via their effects on reducing inflammation and enhancing capillary strength.⁷

Onions also contain organosulfur compounds, which are largely responsible for their distinct taste and smell. These compounds are also reported to have several potential health benefits, including preventing tumors and some cancers, however further research is needed.⁸

HEALTHY WEIGHT

A 75G SERVE OF ONION PROVIDES ONLY 96KJ. THIS MAKES ONION A GREAT CHOICE FOR WEIGHT MANAGEMENT EATING PLANS.

HEALTH BENEFITS

Gut Health

Onions contain prebiotics in the form of fructans, which pass undigested food through the stomach and small intestine. When prebiotics arrive in the large intestine, they stimulate the growth and activity of beneficial probiotic bacteria. The proliferation of probiotic bacteria favoured by fructans has been termed the “prebiotic effect”. This effect may improve gut flora that in turn favours increased mineral absorption, including calcium, magnesium and iron.^{9,10,11}

Scientific evidence attributed to the health-promoting potential of prebiotics, such as those found naturally in onions, is rapidly growing and suggests that prebiotic fibres have a rightful place in a healthy diet. The research base includes findings for improved blood glucose and insulin profiles, improved immune function and lowered risk of developing colorectal cancer.^{12,13}

Immunity

The most researched role for phytonutrients in helping the immune system is their ability to act as antioxidants to fight free radicals. Free radicals are generated when the body is exposed to internal and environmental pollutants such as tobacco smoke, poor diet, stress or an infection.¹⁴ Research has indicated that quercetin and other flavonoids such as hesperetin may inhibit the infectivity of various viruses, including herpes, polio, parainfluenza and respiratory viruses. This is an emerging area and further research is needed.¹⁵

A regular supply of Vitamin C, found naturally in onions, helps boost iron and zinc absorption, which are vital minerals known to play a role in strengthening the immune system by increasing resistance to infection.^{16,17,18}

Heart Health

Epidemiological studies have shown that the risk of heart disease can be reduced through the consumption of flavonoid-rich diets.¹⁹ This effect has been demonstrated via quercetin’s anti-inflammatory and antihistamine properties, which act to stabilise the cells that release histamine - compound produced as part of a local immune response to cause inflammation.²⁰ Other research has proven that quercetin can decrease oxidative stress and improve dyslipidemia (abnormal levels of blood fats).²¹

The role of anthocyanins in the protection of cardiovascular disease is strongly linked to oxidative stress protection. Anthocyanins have also demonstrated effects on reducing inflammation in the arteries and enhancing capillary strength.²²

Healthy Skin

There is a growing level of evidence that Vitamin C, flavonoids and polyphenols can protect the skin from sun damage and help reduce skin damage and ageing caused by harmful free radicals.^{23,24} Vitamin C helps keep the skin healthy through its essential role in collagen synthesis, the major protein that provides support and elasticity to skin.

SLOWLY COOK FINELY CHOPPED ONIONS TO MAKE THEM SOFTER AND SWEETER. COOKING ONIONS DOES NOT SIGNIFICANTLY ALTER THE NUTRITIONAL VALUE SO THEY CAN BE A SECRET SERVE OF VEGETABLES FOR YOUR KIDS.

PAIR AN ONION WITH MEAT IN MEATBALLS, PATTIES OR BOLOGNESE TO BOOST THE ZINC AND IRON UPTAKE OF THE MEAL FOR YOUR CHILDREN (THROUGH VITAMIN C).

BOLSTER YOUR KIDS’ IMMUNE SYSTEM.

THE VITAMIN C AND QUERCETIN HELP TO FIGHT INFECTIONS.⁴



SELECTING & ENJOYING

Best pick

- Choose onions that clean with shiny tissue-thin loose skins. The loose skin means they have dried correctly.
- The 'necks' should be tight and dry
- If they are overly dry, discoloured or have soft wet spots on them - they aren't fresh

Store alone and in the dark

- Onions are best kept in a cool, dark, dry area. Keep them in a mesh bag (or similar) so they get good air circulation
- Storing onions and potatoes together accelerates the spoiling of each vegetable – store separately
- Don't keep onions in the refrigerator for long periods of time as the cold temperature softens them

No more tears

- Onions release an enzyme that when combined with water creates acid. To avoid tearing up while cutting onions:
 - Refrigerate or freeze your onions an hour before cutting them
 - Peel the onion under cold running water
 - Cut the bottom core of the onion first (the part that releases the gas)
 - Slice and dice with a sharp knife

In the kitchen

- Chop up some onion and add it to your Asian stir fry or fresh salad
- Add diced onion into your salsa or guacamole for an extra kick
- Caramelised onions make a delicious topping for pizza or steak
- Include finely chopped onion into fried rice or San Choy Bau for delicious flavor
- Mix onion into meat balls, bolognese or rissoles for an extra hit of veg

Undercover onion facts

- Cooking onions does not significantly alter their nutritional value
- The distinctive smell and taste comes from the healthy organosulfur compounds



THE SECRET TO A GOOD DICE

1. Cut the onion in half lengthways



3. Peel off outer skin & make parallel cuts from end



2. Slice off one end



4. Make cuts across onion



FOR MORE TIPS AND HEALTH BENEFITS VISIT
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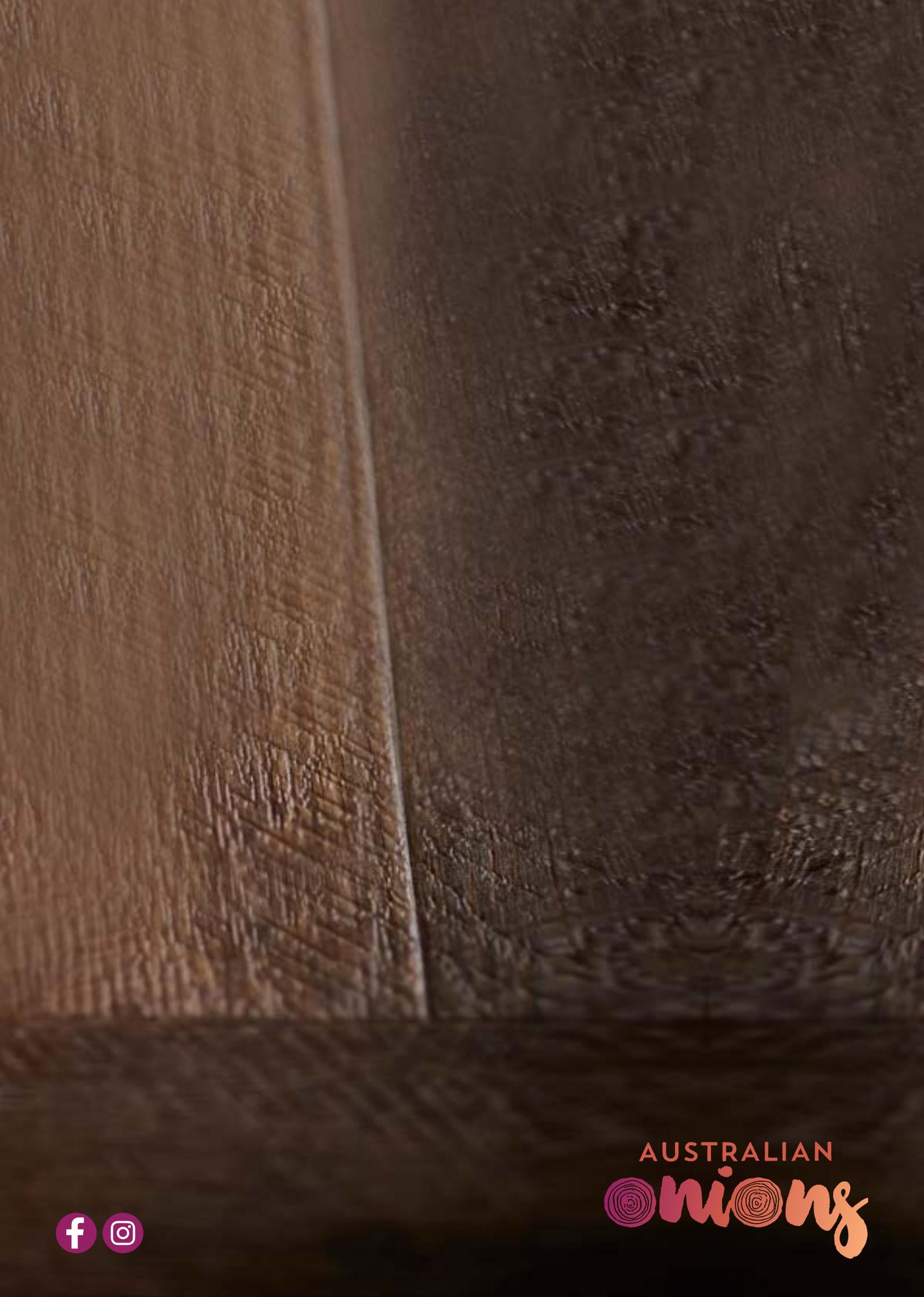
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