

THE WEEK

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Deborah Smith

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Judy Adamson

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Emma Young

Make sure you eat your reds

PAULA GOODYER

If you haven't heard of anthocyanins yet, you will soon. Shaping up as star nutrients of the 21st century, the health benefits of these antioxidants are one reason the National Cancer Institute in the US is urging Americans to eat not just their greens every day, but red and pink fruit and vegetables, too.

Anthocyanins (antho-sy-a-nins) are the pigments that give some of our more neglected vegies, such as beetroot, eggplant, red cabbage, radish and radicchio, their deep red and purple colours. Found also in berries, grapes, plums, red apples, red pears and rhubarb, these plant chemicals are hard workers, acting as antioxidants, anti-inflammatories and antibacterials against a range of common diseases.

One effect is to help reduce the risk of heart disease and stroke by helping to control clot formation and high blood pressure. They're now considered so valuable that US scientists are trying to make a more nutritious tomato by developing a purple variety containing anthocyanin. In Japan, anthocyanins are used widely in functional foods, while closer to home, CSIRO researchers at Food Science Australia have extracted a natural food colouring from purple sweet potato with the potential to not only replace synthetic colouring, but to add extra health benefits to foods too.

"We've been told for years to eat our green and orange vegetables, but reds and purples just don't get the same airplay," says Sue Radd, consultant nutritionist and co-author of *Eat to Live* (Hodder Headline). "But there are a lot of good reasons to eat these foods. Studies suggest cranberry juice has an anti-bacterial effect that helps reduce urinary tract infections by keeping *E. coli* off the bladder wall.

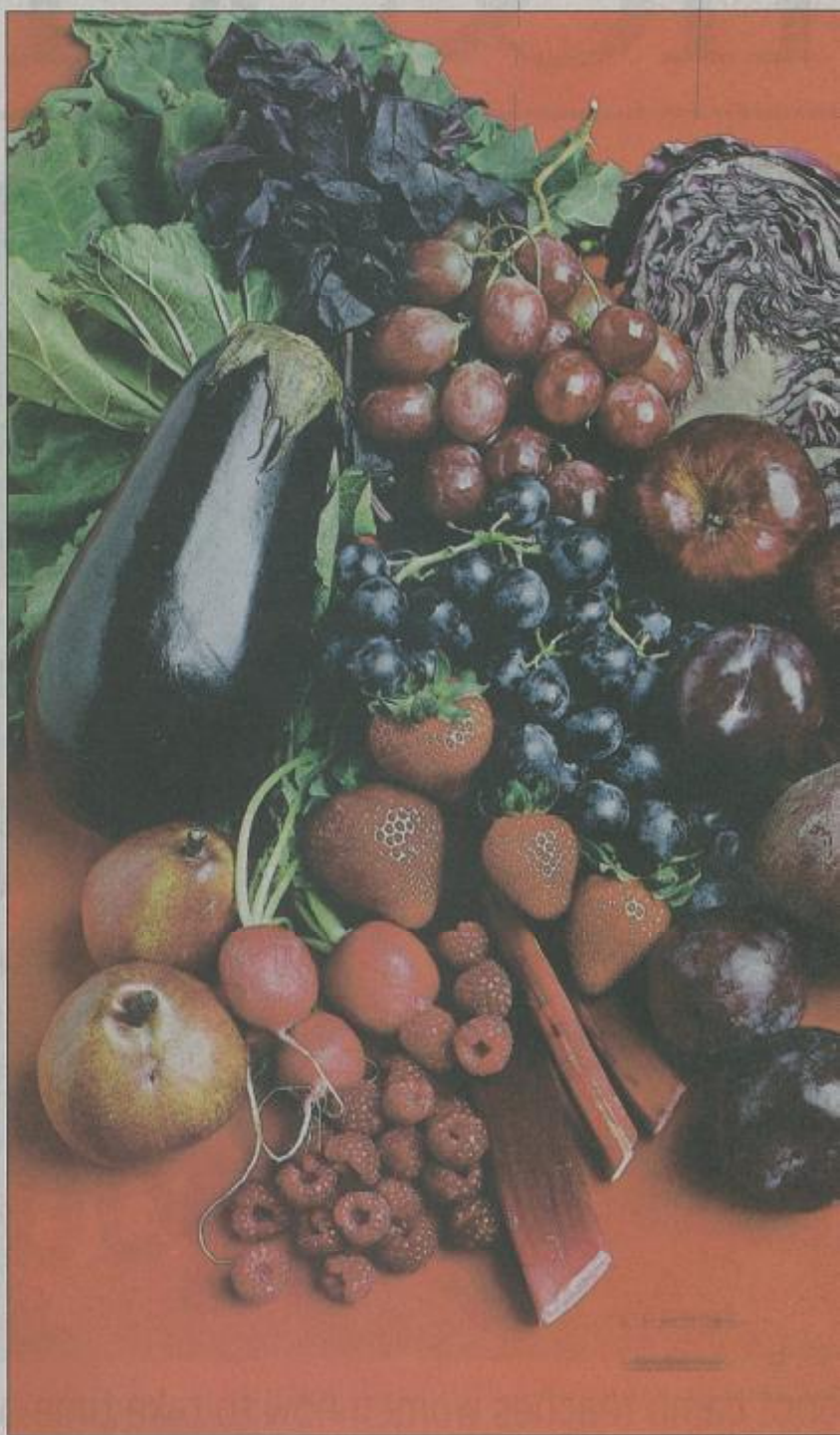
"That's important for a lot of people - young, sexually active women, as well as older people who are more prone to UTIs. It's why some nursing homes now serve cranberry juice to help prevent these infections. There's also preliminary evidence that sour cherries - popular in Europe and the US - may have an anti-inflammatory effect that helps arthritis," she adds.

But much of the buzz around anthocyanins comes from their potential to reverse some of the effects of ageing on the brain, thought to be caused by free radicals.

When scientists at Tufts University in Boston developed a test to measure a food's antioxidant ability to fight free radicals, blueberries ranked the highest, with prunes, raisins, blackberries and strawberries close behind. There's now growing evidence that blueberries may improve balance and co-ordination, while both blueberries and strawberries may improve memory. While most studies have been done on rats - whose brains are surprisingly similar to ours - preliminary research on humans found people who ate a cup of blueberries a day did better than a control group at tests of motor skills.

But there's more to red fruit and veg than anthocyanins, Sue Radd points out. Raspberries and strawberries also contain ellagic acid which boosts the effectiveness of some of the body's detoxifying enzymes, she says, while tomatoes - like pink fruits such as watermelon, pink grapefruit and guava - are high in lycopene, the antioxidant that may protect against prostate, breast, lung and cervical cancer, as well as helping prevent "bad" LDL cholesterol oxidising and sticking to artery walls. Lycopene in cooked tomatoes and tomato-based products (paste etc) is better absorbed if it's cooked, especially with olive oil.

Even a glass of red can help. Research suggests that resveratrol, an antioxidant in some red grape skins, can help stop the spread of cancer cells (but don't go overboard: too much alcohol can promote some cancers).



Vegetables with anthocyanins help reduce the risk of heart disease.

Photo: Marco Del Grande. Styling:

Easy ways to increase intake

- Roast whole scrubbed beetroot in the oven. Peel, slice and toss with olive oil, vinegar and black pepper or a dollop of tzatziki.
- Stock up with berries (frozen are fine) for fast desserts.
- Roast thin slices of purple sweet potato (white fleshed, purple-skinned and available now), drizzled with oil. Toss in salads.
- Shred red cabbage and toss with cider vinegar, olive oil and black pepper. (Make it softer and easier to eat by pressing shredded red cabbage down firmly with a spoon to release the juice, suggests Sue Radd).
- Add thin slices of baby eggplant to
- Add radicchio to salads or stir into
- Use red onions instead of brown.
- Make a bowl of red soup - puree co-canned beetroot with steamed sweet tomatoes, with fresh herbs, garlic a
- Snack on raisins and prunes - dried and plums contain concentrated an
- Stir blueberries or raspberries into porridge or add to breakfast cereal
- Look out for more unusual red and when they're in season - purple asp
- red basil both contain anthocyanins