



# Healing gac fruit

**T**HE red spikes of the oddly named gac fruit hide a world of medicinal potential. Ever heard of the gac fruit?

Most people haven't, but University of Queensland (UQ) researchers are investigating a protein within the seeds of the fruit that could lead to the development of more affordable medicines made from plants.

The protein, called MCoTI-2, has a circular shape and a stability that makes it ideal as a basis for drugs. Producing protein-based drugs with traditional synthetic methods is prohibitively expensive on a large scale.

UQ's Institute for Molecular Bioscience (IMB) and Harvard University, led by IMB's Dr Joshua

Mylne and Professor David Craik, discovered the genes that produce MCoTI-2.

"Knowing how these genes, which we named TIPTOP, manufacture MCoTI-2 naturally in gac could allow us to co-opt this process and use it to grow protein-based drugs in plants," Dr Mylne said. "We've already moved the system to seeds of the model plant Arabidopsis, where it worked remarkably well."

Plant production is cheap and seeds do not require specialised distribution channels – factors that make plant-grown drugs an attractive proposition, particularly for developing nations.



The bright red and spiky exterior of the gac fruit hides a seed which contains a protein that could change the production of medicines. – Picture: [iStockphoto.com/TommyIX](http://iStockphoto.com/TommyIX)

## Boost backs free fruit day

By JEWEL TOPSFIELD

**A**N international fruit-juice chain has offered to supply free fruit to Victorian schools for a month following a furore over the axing of state government funding for Free Fruit Friday.

Under the program, which ended in July, children in prep to year 2 at about 300 schools received free fruit every Friday to promote healthy eating.

Boost Juice Bars founder Janine Allis said when she became aware the initiative was being discontinued, there was a "universal Boost sentiment that we wanted to assist".

"I have heard some shocking anecdotes from teachers who say some children have never seen fruit, which is unacceptable."

Boost Juice will supply the schools originally involved in the program with free fruit for a month, while working with its suppliers and local communities to find a long-term solution.

Victorian Principals Association president Gabrielle Leigh said the delivery of free fruit to schools was a fantastic way of giving young children a practical education about good nutrition, while actively battling the state's childhood obesity epidemic.

"Free Fruit Friday allows children to taste fruit they may never have experienced and go home and tell their parents about the fruit, which may encourage them to buy it," Ms Leigh said.

A Facebook page has been set up for people to register as a sponsor to support a local school.

● [www.facebook.com/FreeFruitFriday](http://www.facebook.com/FreeFruitFriday)

## VFF disappointed with decision

**T**HE Victorian Farmers Federation (VFF) Horticulture Group expressed its disappointment at the decision to axe the Free Fruit Friday program.

VFF horticulture president Sue Finger said the program should have been extended, not cancelled.

"Getting kids to eat a healthy diet is all about fighting the obesity crisis we hear so much about," Ms Finger said.

"The Free Fruit Friday program could have helped save us

money in the long term by laying the foundations of a healthy diet at an early age."

Ms Finger said the program had widespread support from fruit and vegetable growers as it highlighted the value of fresh, nutritious food in the Australian diet and was supported by a range of educational materials.

"From all reports, this was a program which was having good success in Victorian schools and I'm disappointed the government has chosen to get rid of it."

## GINGER COULD BE DIABETES HELPER

**A**BIT of ginger zing could do wonders for those suffering diabetes, a study has found.

A University of Sydney study on Buderim Ginger samples revealed that by assisting muscle cells, ginger could help control the blood glucose levels that create complications for long-term

diabetic patients.

Pharmaceutical chemistry Professor Basil Roufogalis, who led the research, said extracts from Buderim Ginger-grown ginger were able to increase the uptake of glucose into muscle cells to allow them to operate independently of blood insulin levels.



Part of the Eating My Colourful Veges and Fruit campaign involves getting kids to identify fresh produce with tastes and appearance.

## A splash of fruit & veg

**A**VEGETABLE and fruit rainbow might seem a bit hippy, but the concept is set to be launched into childcare centres across the country.

Developed by Avocados Australia in conjunction with nutrition and education experts Shelley Woodrow and Nadine McCrea, the acclaimed 'Eating My Colourful Veges and Fruit' resource kit has touched the lives of over 60,000 preschoolers since its launch in 2010, with thousands more set to benefit this year.

Registrations for 2012 are now open and packs containing teacher information, props and activity ideas to get kids trying a wide range of plant-based foods and establishing healthy eating habits for life will be distributed this October, along with a tray of nutritious Australian avocados.

Education consultant Shelley Woodrow said the key to the program's success is the development-focused activities which encourage children aged three to five to use all their senses in the exploration of new flavours and textures.

"Taste preferences are established at a very young age,

so experiences at day care play an important role in laying the foundations for a good relationship with food and ensuring a diverse diet later in life," she said.

"This resource gives educators the necessary tools to engage kids and help them develop healthy, varied food preferences in fun and positive ways.

"The Eating My Colourful Veges and Fruit program also addresses key curriculum markers such as development of language, social, science and food literacy skills."

John Tyas, CEO of Avocados Australia Limited, said the industry is proud to fund the program, which will be run in hundreds of preschools across Australia along with 10 primary schools this year.

"The avocado growers of Australia are committed to playing their part in improving the well-being of future generations, so we see this as a valuable way to work towards this," Mr Tyas said.

"Since its inception just three years ago, demand for this kit has grown exponentially, and as a result of all the positive feedback, we are now looking to develop the concept further for school-aged children in the coming years."



results ... can be examined further in human clinical trials."

### TO DO!

- Plant Broccoli Cabbage & Cauliflower
- Apply Baron
- Irrigate
- Relax !!

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