



June 2008

## Kiwi E-News

### Dietitian Update

#### In This Issue

**Kiwifruit Antioxidants are Top Performers on Bioavailability**

**'Go Green' with ZESPRI™**

**Boost NYC Patients' Fruit Intake with Family-Friendly Events**

**Featured Recipe: Kid-Friendly Tropical ZESPRI™ Kiwifruit Pops**

#### We're Back!

Welcome to the June 2008 issue of Kiwi E-News, the newsletter created by ZESPRI™ Kiwifruit to keep registered dietitians in-the-know about research and nutrition surrounding kiwifruit. With the GREEN and GOLD kiwifruit season now in full swing, we look forward to another year of providing you with reliable information you can use and share with your clients. For the latest on kiwifruit, including recipes and activities, please visit [www.zesprikiwi.com/dietitians](http://www.zesprikiwi.com/dietitians).

#### Kiwifruit Antioxidants are Top Performers on Bioavailability



While there are many richly colored fruits high in antioxidants, not all fruits are created equal when it comes to their antioxidant powers in the body.

According to a recent human study conducted by researchers at the USDA's Arkansas Children's Nutrition Center in Little Rock, the antioxidants in certain fruits and berries are more efficiently metabolized

and absorbed into the bloodstream than others. A comparison study between kiwifruit, red grapes and strawberries showed the antioxidants in kiwifruit to be the most easily absorbed by the body.

Dr. Ronald Prior and his team measured the antioxidants in the body by noting increases in plasma hydrophilic (H-) or lipophilic (L-) antioxidant capacity (AOC) measured as Oxygen Radical Absorbance Capacity (ORAC). To test kiwifruit's antioxidant capacity, seven healthy women were given two servings of Hayward kiwifruit (300 g) per day. Blood samples were taken from the participants after an overnight fast before fruit ingestion and at 1.5, 3.0 and 4.5

*Continued on page 2...*

## **Kiwifruit Antioxidants are Top Performers on Bioavailability**

(continued from page 1...)

hours after fruit ingestion. The results found that kiwifruit provided for an AOC intake of 12.5, as compared to grapes (4.2) and strawberries (1.7). Kiwifruit was the only fruit that produced a significant ( $p < 0.05$ ) increase in hydrophilic AOC AUC.

This study makes an important first step in understanding how antioxidants function in vivo, but more studies are needed to pinpoint which phytochemicals in foods are responsible for which beneficial effects. For example, Prior notes that volunteers' increased blood antioxidant capacity can, in part, be attributed to the high vitamin C content of kiwifruit, but further studies are still needed to determine the full explanation.

Nonetheless, while scientists may not yet know the exact mechanism that causes certain high-antioxidant fruits to perform better in the body than others, they do know that antioxidants are paramount to good nutrition. As Dr. Prior asserts, "We're learning that antioxidants should be consumed with every meal, and if you routinely skip antioxidants in your diet, over time, the excess number of free radicals being produced may begin damaging cellular components, ultimately leading to atherosclerosis, cancer, and other diseases."

While one cannot necessarily translate increased plasma AOC into a potential decreased risk of chronic degenerative disease without further long-term clinical studies, kiwifruit has once again given good reason to suggest it is a top performer in terms of health and nutrition.

\* Journal of the American College of Nutrition, Vol. 26, No. 2, 170–181 (2007) Authors: Prior R, Gu L, Wu X, et al.

### **'Go Green' with ZESPRI™**



Not only do your patients and clients consider personal health benefits when choosing which produce to buy, many also contemplate the health of the planet. As a result, consumers increasingly demand information from produce companies, such as ZESPRI Kiwifruit, about their environmental practices.

ZESPRI has taken several steps to ensure all our kiwifruit is of excellent quality, while giving high regard to the environment. These precautions have helped earn our conventionally-grown kiwifruit a spot on the "clean 12" - a list of non-organic produce that contain the least amount of pesticides.<sup>1</sup> And, we offer organics too.

ZESPRI's key environmental efforts include:

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## 'Go Green' with ZESPRI™ (continued from page 2...)

### Progress in the orchard

- Limited use of fertilizers, irrigation, herbicides and pesticides to ensure a healthy and environmentally-friendly fruit
- Growers take extra steps to minimize waste and optimize recycling
- There is no use of any genetically modified organisms

### Post-harvest advancements

- All ZESPRI packaging is recyclable or reusable
- No post-harvest chemicals are applied to the kiwifruit, with the exception of a naturally-occurring gas found in some fruits called ethylene, which may be used to ripen early shipments

### Additional quality considerations

- ZESPRI monitors the kiwifruit throughout the shipment in order to ensure a consistently enjoyable product
- Its sophisticated distribution system can track "bad" fruit back to the grower, which ensures good quality even further

Knowing all the facts is important when suggesting healthy, environmentally-friendly options to your patients. More details about kiwifruit nutrition are available at [www.zesprikiwi.com/dietitians](http://www.zesprikiwi.com/dietitians). Please e-mail [simon.bowers@publicis-pr.com](mailto:simon.bowers@publicis-pr.com) for more information about ZESPRI's environmental practices.

1 This study was conducted by the Environmental Working Group. It analyzed results of nearly 43,000 tests for pesticides on produce collected by the U.S. Department of Agriculture and the U.S. Food and Drug Administration between 2000 and 2004.

## Boost NYC Patients' Fruit Intake with Family-Friendly Events



Advising moms and kids in your dietetic practice? If you are based in New York City, you or your clients may be interested in attending fun, interactive events hosted by Big City Moms, a social group based in New York City, with sponsorship and lots of kiwifruit samples from ZESPRI.

Please sign up directly with Big City Moms to attend:

Data from the American Academy of Pediatrics show that kids who have early eating experiences with a variety of fruits and vegetables are more likely to eat a variety of fruits and vegetables with varying flavors, colors and textures later in life, when they begin to make their own choices. ZESPRI Kiwifruit's events with Big City Moms will illustrate why kiwifruit is such a nutritious and easy choice for busy families. Please visit [www.zesprikiwi.com](http://www.zesprikiwi.com) for more event information.

## Featured Recipe: Kid-Friendly Tropical ZESPRI™ Kiwifruit Pops

Cool summer treats like the Tropical Kiwifruit Pops are an easy way for moms to ensure that their kids receive the recommended servings of fruit per day. Made with 100 percent fruit and high in fiber, each kiwi-licious pop gives kids more than one serving of fruit...with no added sugar! Excellent sources of vitamins C and K, as well as good sources of vitamins A and E, they're easy to make in paper cups and even more fun to freeze in wacky-shaped Popsicle molds.



Prep time: 5 minutes | Makes: 4 pops

- 4 (about 2 cups) ZESPRI™ GOLD Kiwifruit, peeled, chopped
- 4 wooden craft sticks
- 1 cup pineapple juice or mango nectar
- 4 wooden craft sticks

Divide kiwifruit between paper cups. Pour pineapple juice into cups. Place stick in center of mixture. Freeze for 4 hours or until firm. To remove pops from cups, carefully run warm water over side of cup to loosen.