

Volunteer Newsletter

September 2016 | Newsletter #3

Many thanks for your continued interest and participation in our nutrition studies – our research would not be possible without your help!

In this newsletter, we include research highlights from some of our completed studies and details of our involvement in a BBC documentary as well as recent and upcoming public events.

Nutrition Study Bites



Public health guidelines advise us to reduce the amount of saturated fat we eat to help prevent heart (cardiovascular) disease. Milk and dairy products are major sources of saturated fat but cutting these out of our diets would be counter-productive as they are also good sources of essential nutrients, such as calcium and protein. Dairy fat (**RESET**) and protein (**Whey-2-Go**) were a focus of two of our recently completed studies in the nutrition unit.



Using a food-chain approach, the **RESET** ('Replacement of saturated fat in dairy on total cholesterol') study replaced some of the saturated fat in milk with monounsaturated or 'good' fat by changing the feed of the cows. Early results show that consuming the fat-modified dairy products (UHT milk, cheese and butter) for 12-weeks resulted in a smaller rise in

LDL-cholesterol ('bad cholesterol') when compared to conventional dairy products. Future analysis will reveal their impact on other risk factors for heart disease, including blood vessel function and stiffness.

People who consume the highest quantities of milk in their diet are considered to have the healthiest blood pressures. The **Whey-2-Go** study team determined whether milk proteins (casein and whey) could improve the health of our blood vessels and reduce blood pressure.



Compared with the placebo, dairy proteins, in particular whey proteins, lowered blood pressure and improved blood vessel health. These changes could potentially reduce our risk of developing heart disease, suggesting we may benefit from consuming milk and other dairy products.

There is currently much interest in polyphenols because growing evidence suggests they may be protective against chronic diseases, such as heart disease and cancer. Sources of these naturally-occurring

compounds include fruit, vegetables, nuts, dark chocolate, wholegrains, tea, coffee and red wine. Another research team investigated the health benefits of drinking **hibiscus flower extracts**, which are a rich source of 'anthocyanins' (a type of polyphenol that gives flowers, fruits and vegetables their purple colour). In this nutrition study, our researchers found that within 4 hours of consuming the hibiscus drink (equivalent to 15 cups), there was an improvement in blood vessel function when compared to drinking water alone. Further research at lower doses are now required.



A second research group reported that a smoothie containing **Açai berries** also improved blood vessel health for up to 6 hours in male volunteers and these findings



have been accepted for publication in the American Journal of Clinical Nutrition. The findings from both of these studies add further support to the current evidence that consuming polyphenols may help to reduce a

person's risk of developing heart disease.

BBC Documentary

The term 'superfood' is used frequently in the media but are these foods really healthier for us? As part of the BBC documentary 'The Truth About Healthy Eating' that was broadcast in June, presenter Fiona Phillips visited us at the Hugh Sinclair Unit, where Dr Gunter Kuhnle compared a selection of 'superfoods' with cheaper



alternatives. A number of foods were compared including berries (goji vs strawberries), grains or plant-based protein (quinoa vs pearly barley), oils (coconut vs rapeseed), seeds (chia vs linseed) and vegetables (kale vs white cabbage) but differences in their nutritional contents were small. Despite the media hype about 'superfoods', it should be remembered that 'everyday' foods are important sources of nutrients too, e.g. omega-6 polyunsaturated fat and vitamin E in sunflower oil, and fibre, vitamin C and polyphenols in oranges.



Events

Findings of our RESET study were a highlight of a recent public event held to mark the 90th Anniversary of the University of Reading. Entitled 'RESET 2016: Leading Directions in Dairy Foods and Health', the event presented preliminary findings

from the RESET study and included talks from leading researchers in the dairy field.



This event attracted over 150 delegates from around the UK and Europe, including some of the RESET volunteers. As part of the University's continuing celebrations, Professors Julie Lovegrove and Ian Givens will discuss the RESET study at a **public lecture on 12th October at 8 pm**. Admission to the event is free but places are limited. Please book your place at: <http://www.reading.ac.uk/15/about/newsandevents/Events/Event688277.aspx>. All are welcome.

'Music and Food' was the theme of the second annual 'Big Band, Big Lunch' held on the 5th June that brought together members of the University and the local community at the historic London Road Campus. The Hugh Sinclair Unit of Human Nutrition was involved in the event, which included live music and a 'Ready, Steady, Nutritional Cook' demonstration. Healthy meals were prepared by Ben Smith, a chef and final year student from the Department of Food & Nutritional Sciences. Professor Julie Lovegrove and Dr Daniel Commane then discussed the health benefits of the ingredients used, which included beetroot, olive oil and orange juice. Members of the research group were



also on hand to discuss the findings of our nutrition studies.

Join us in the University of Reading's 'Food Chain and Health' marquee at the **Royal County of Berkshire Show** in Thatcham on **17th and 18th September**. As well as showcasing the cutting edge research being undertaken across the University, there will be fun activities for adults and children. Learn how to make cheese and taste what foods our researchers predict we will be eating in the future!



Volunteering opportunities:

We have a number of exciting new food and nutrition studies that are in the recruitment phases.

If you would like to take part in another study, please contact us for details of our current studies:



nutritionvolunteers@reading.ac.uk



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We look forward to seeing many of you in the unit soon!

We always welcome new volunteers onto our studies. If you know of somebody over the age of 18 years who might like to take part, we would love to hear from them.

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