



▶ TEACHING TEAM FOR 2009.....2



▶ DIABETES CAMP.....2



▶ HONOURS PROJECTS FOR 2009.....5

Dietetics@Deakin

**SCHOOL OF EXERCISE AND NUTRITION SCIENCES
DEAKIN UNIVERSITY**



DEAKIN
UNIVERSITY AUSTRALIA

What's new in dietetics 2009?

Last year was a busy year for the dietetics program at Deakin. The year saw the introduction of Clinical Schools, piloting of Objective Structured Clinical Examinations (OSCEs), development of an assessment of competency tools and an ongoing project around support for culturally and linguistic diverse (CALD) students. Over 2009, the focus of course staff will be on consolidating these projects and innovations.

Already it has been a busy year for our final year students. The hectic timetable and multiple streams has meant students have had the focus of their first trimester (Deakin has now moved from a semester system to a trimester system) either on clinical or community professional practice with the streams changing roles in second trimester.

This year marks the last full cohort of Bachelor of Nutrition and Dietetics (BND) students going through the final-year of the program. The Master of Dietetics has now moved to trimester 1 intake with students completing this degree in June of

the following year.

We also have some staff changes with Sharleen O'Reilly on maternity leave and Sally Girvan joining the program. See page 2 for the staff line-up for 2009.

Rather than just be all about our staff, it is great to see some of the experiences students are discovering outside of the traditional dietetics program. One of our final-year BND students Nicole Boyer presents her summer experience in volunteering for a Diabetes Camp. Details on page 2.

The BND honours program is now into its fourth and final year, and is proving successful with demonstrated project outcomes and publications arising from past students' projects. See pages 5 to 9 for details of this year's projects.

Happy reading

Dr Tim Crowe, APD
Dietetics Course Director

Deakin's Dietetic Teaching Team for 2009

In 2009 there have been some changes to the dietetics teaching team. In January we said temporarily farewell to Sharleen O'Reilly as she commenced maternity leave with the early arrival of a New Year's day baby boy called Cormac — congratulations to Sharleen and her husband Rory. Sharleen will be joining the team again near the end of 2009.

In January we welcomed on board Sally Girvan. Sally will be coordinating the Community Nutrition program whilst Sharleen is on maternity leave and will also be involved with the Food Service Management program and the Faculty's off-campus diabetes units.

Sally comes to us after working for nine years in the community with children with disabilities at Specialist Children's Services. Sally also works in private practice with a special interest in paediatrics, disability and sports dietetics.

Sally has contributed to a number of books and articles on Sports Nutrition and worked as a consultant to the AIS golf program. Over her extensive 25 year career Sally has worked in a number of hospitals as a clinical dietitian, including the Royal Children's Hospital, Austin, St Vincent's and Mercy hospitals. She has also worked as a research dietitian in studies on gestational diabetes, mental health and CHD.

Deakin's dietetics team for 2009 is:

Dr Tim Crowe	Course Director
Claire Margerison	Deputy Course Director and Elective Placement Coordinator
Judy Appleton	Food Service Coordinator
Dr Susan Torres	Honours Coordinator
Sally Girvan	Community Nutrition Coordinator
Adam Walsh	Clinical Placement Coordinator

Volunteer's Experience at Diabetes Kids' Camp

In January this year I attended Diabetes Camps Victoria Senior Camp in Anglesea. More than 60 campers between 12 and 14 years attended, with the supervision of 30 leaders including volunteers, diabetes educators, a doctor and a dietitian.

Campers participated in a wide variety of activities including swimming, surfing, mountain biking, trying out the giant swing and high ropes course. We also held a concert, a disco and a trivia night and took a trip to the Geelong Adventure Park. Needless to say we were all exhausted by the end of the week!

This was the second camp I attended as a volunteer; my first camp was Autumn Camp

which runs in the Easter school holidays for 8 – 10 year olds. My two camp experiences were very different and I will share a little of them both.

Autumn Camp was an extremely new experience for most of the campers as they had not been on a school camp yet and some had not spent a night away from their parents before. This meant many of them had never injected their own insulin as their parents had taken that responsibility. As such, one of the main priorities for this camp is educating campers about injecting their own insulin and encouraging them to do it themselves. For those that continually injected the same site we also discussed (and

(Continued on page 3)

Diabetes Kids' Camp-Continued

(Continued from page 2)

demonstrated) site rotation. Volunteering on this camp was both challenging and rewarding

I found Senior Camp at Anglesea easier as the campers were a bit older, which meant they had a better understanding of their role in their diabetes management and were usually aware of their own habits.

The education still revolved around site rotation and correct injecting techniques, but due to the large number of campers on insulin pumps there was more dietary information about carbohydrates offered. Having campers talk openly to me about their experience of diabetes, without my asking, and listening to them interact with each other and appreciate the company of other teenage diabetics was a highlight for me.

Many campers who come from rural areas have met many others their age with diabetes so the social networking aspect of camp is very important for them.

Although I do not have diabetes, volunteering on Diabetes Camps enabled me to gain an understanding of what it feels like to live with diabetes. It also gave me a greater insight into diabetes management from a child and youth perspective. I would highly recommend volunteering on Diabetes Camps Victoria.

For more information about volunteering call Beth Dunlop at Diabetes Australia – Vic on (03) 9667 1791 or email bdunlop@diabetesvic.org.au

Nicole Boyer
Final Year BND Student



'The education still revolved around site rotation and correct injecting techniques, but due to the large number of campers on insulin pumps there was more dietary information about carbohydrates offered'



Clinical Placements in 2009

In 2009, our final year BND and Master of Dietetics students will complete a total of 9 weeks of clinical placement at various sites throughout metropolitan Melbourne and regional Victoria. Some students will also undertake placements interstate for a portion of their clinical time.

As in previous years, the nine weeks will be performed in a three and six week block. Whilst all students will undertake their 3-week block in first trimester, the 6-week block may be undertaken in either first or second trimester. We are grateful for the ongoing participation of a number of sites in the 2009 program. These sites include:

Austin Health (Clinical School)
Bendigo Health
Eastern Health
Goulburn Valley Health
Launceston General Hospital
Melbourne Health (Clinical School)
Peter MacCallum Cancer Centre

Royal Hobart Hospital
Western District Health Service
Western Health (Clinical School)

One of Deakin's core commitments is to rural and regional engagement and again this year we have placed students in regional areas for those who were interested in this opportunity.

The Student Portfolio has undergone some major changes for 2009 including the incorporation of a clinical competency tool (CCT) to assist in student assessment. The CCT will be evaluated at the end of each major placement block. Copies have been sent to all participating sites.

I'm sure 2009 will be a rewarding year for all final year dietetic students. I know experiences will be wide and varied and I look forward to hearing of these throughout the year.

Adam Walsh, APD
Clinical Placement Coordinator

Community Nutrition Program in 2009

Some of our students will commence their community placements after Easter. We have been fortunate again to place them in a wide variety of community settings around Victoria.

While on their community nutrition placement, the students will work with community dietitians on a project relevant to their particular establishment such as food security, benchmarking the dietetic service, evaluating a men's cooking class. etc.

We are still looking for a number of sites interested in having Deakin students work with them on a community related project in the second half of the year, starting in the middle of August for 6 weeks.

Thank you also to our dietitians and organisations that currently are involved in the Community Nutrition Professional Practice Program and supervise Deakin students

If there is a project you would like to do and never seem to have time to do it, why not take advantage of having some students to assist you. If you are interested please contact me on (03) 9244 6778 or sally.girvan@deakin.edu.au

Sally Girvan
Community Nutrition Coordinator



DEAKIN

Honours Program

The BND honours program is now into its fourth and final year and is proving successful with demonstrated project outcomes and publications arising from past students' projects.

Carley Grimes, who completed honours during 2008, presented the findings from her research on the "Consumer understanding of salt: effects on health and food labelling" during the Nutrition Society of Australia meeting, December 2008. Carley is continuing on with this research and has commenced a PhD in the School of Exercise and Nutrition Sciences. Carley was also awarded a National Heart Foundation PhD scholarship. She currently has two manuscripts from her honours project under review.

In 2009, there are ten honours students enrolled in the program and they are well underway with their research projects. They have all

commenced a literature review of their project and will shortly present an overview of this literature with their research proposals to their peers, supervisors and other interested parties on Tuesday 26 May.

Over the next few months the students will complete their data collection and begin to analyse their results.

The BND honours program is concluding this year, but we are evaluating the introduction of a Master of Dietetics with Honours. We will keep you updated with the proposed development of this new course.

If you would like more information about the honours program, then please contact the honours program coordinator **Dr Susan Torres** on (03) 9244 6189 or susan.torres@deakin.edu.au

Examining the relationship between intended infant's diets, maternal diets and socioeconomic position: An exploration of first-time mothers

This study involves statistical analyses of cross-sectional baseline data from a larger cluster RCT, the Infant Feeding Activity and Nutrition Trial (InFANT). The baseline data consists of information gathered from first-time mothers, including data on their own dietary intake, socioeconomic information, as well as information regarding their intended infant feeding behaviours for when their babies are eating solids.

The current study will use this baseline data to examine the diets of first-time mothers and its relationship to socioeconomic

position (SEP), mothers intentions for their infants diets and how that relates to SEP, and also the relationship of mothers' diets to their infant's intended diet. Examining mothers intentions is an important aspect when considering infant health, as it may help to identify where in the process disparities arise, for example whether mothers start of with the best intentions but are faced with external barriers that prevent the actual behaviour occurring..

Emily McLeod
Supervisors: Dr Karen Campbell and Dr Kylie Hesketh



DEAKIN

Honours Projects-Continued

Does nutritional status at the commencement of radiotherapy treatment or weight loss during treatment affect treatment outcomes/ toxicities in gastro-intestinal cancer patients?

Gastrointestinal (GI) cancers include tumours of the oesophagus, stomach, pancreas, liver, gall bladder, small bowel, colon, rectum and anus. Patients with GI cancers are often malnourished at presentation due to the physical effect of the tumour. Pre-existing malnutrition is further compounded by the side effects of chemotherapy and radiotherapy, such as oesophagitis, anorexia, nausea, vomiting and bowel dysfunction.

This project will investigate if there is an association between nutritional status at the commencement of radiotherapy and treatment

outcomes/toxicities, and determine if weight loss during radiotherapy treatment affects treatment outcomes/toxicities in GI cancer patients. The results of this project would be used to inform development of a new model of care including the feasibility of a dietitian/nurse led clinic in GI cancer patients, as well as to inform the direction of future research.

Amanda Hill

Supervisors: Adam Walsh (Deakin) and Nicole Kiss (Peter Mac)

Energy deficiency, menstrual disturbances and low bone mass: what do female athletes know about the female athlete triad?

The female athlete triad refers to the co-presentation of low-energy availability (with or without disordered eating), menstrual disturbances and low bone mineral density in female athletes. The triad is particularly prevalent in sports emphasising a lean physique such as ballet, gymnastics and figure skating. Consequences of the triad include infertility, increased risk of stress fractures, irreversible loss of bone mineral density leading to osteoporosis and impaired endothelium-dependant vasodilation.

No research to date has been conducted in Australia, and very little internationally, that

investigates the level of knowledge female athletes have about this condition. This project aims to investigate the level of knowledge and awareness that adult Australian female athletes and exercisers have in regards to the female athlete triad using a survey. We hope to provide the necessary information to allow the development of an educational program for athletes and exercisers with the intent to more effectively prevent and detect this condition in the future.

Stephanie Kyriazis

Supervisors: Dr Gaele Ducher, Dr Sonja Kukuljan and Dr Anne Turner

Are there policy contraindications for folic acid intake recommendations that are resulting in risk to women of childbearing age being exposed to unsafe levels of folic acid?

This project involves assessing policies on folic acid fortification and recommendations for folic acid intake in Australia before mandatory fortification of bread-making flour with folic acid becomes official in September 2009.

The project will involve auditing the current availability and dosage of folic acid supplements and fortified food products in the marketplace and undertaking dietary modelling of data previously collected on folic acid intake among Australian

women of childbearing age to compare this with current policy recommendations (NRVs and special recommendations for the periconceptual period) and assess any risk of overexposure in this target group. This data is important to collect to enable monitoring of the effectiveness of mandatory food fortification policy in the future.

Jessica Emmett

Supervisors: A/Prof. Mark Lawrence and Dr Malcolm Riley

Honours Projects-Continued

A pilot study of branched-chain amino acid supplementation in patients awaiting liver transplant

Protein-energy malnutrition is a common consequence of chronic liver disease (CLD), and is associated with increased morbidity and mortality, independent of liver function.

Supplementation with branched chain amino acids (BCAAs) has been proposed to improve nutritional status in patients with CLD, by stimulating hepatic protein synthesis, and enhancing protein synthesis in peripheral tissues. The advantage of BCAAs is that they can be utilised locally by skeletal muscle, without hepatic metabolism. This means that if supplied in sufficient amounts, BCAAs are readily available within the circulatory system for protein synthesis, and may reduce the rate

of protein catabolism associated with CLD.

This project aims to assess the benefit of BCAAs on clinical and nutrition related outcomes in patients awaiting liver transplant. Patients being worked up for transplant will be recruited into the study to consume four teaspoons of BCAAs each day. A retrospective audit of the patients worked up during the same time frame last year will be conducted, and nutrition and clinical outcomes compared between the two groups.

Cara Brockbank

Supervisors: Kate Hamilton (Austin), Brooke Chapman (Austin) and Dr Tim Crowe (Deakin)

Iodine Status in Melbourne Adults in the early 1990s and 2007-8

Iodine is required for thyroid hormone production, and deficiency is a major problem worldwide, causing a spectrum of effects across the lifespan, including goitre, cretinism, thyroid abnormalities and impaired cognition.

Regional data is important because iodine levels in the food supply can vary considerably. Studies conducted over the last decade in New South Wales and Victoria indicated mild-to-moderate iodine deficiency in groups surveyed. Prior

to this, little data is available. This project will investigate iodine status in Melbourne adults in the early 1990s and 2007/8, using urine samples from The Melbourne Collaborative Cohort Study, and provide further data about the long term prevalence and degree of iodine deficiency in this population.

Janet Baxter

Supervisors: Dr Kate Huggins, Dr Lynn Riddell and Prof. Caryl Nowson



DEAKIN

Honours Projects-Continued

Salt intake in Australia: are we getting closer to our targets?

A high salt diet is associated with high blood pressure, which is a major risk factor for cardiovascular disease. The current recommendation for salt intake in Australian adults is 6 grams per day.

The last time salt intake was accurately measured in Australia was in the early 1990s and it was well above this recommendation. Since that time, there has been increased efforts to try and reduce population salt intake and as a result, this project will look at if there has been a change in intake

over the last fifteen years.

A comparison will be made between urine samples taken in the 1990s and samples collected in 2007/2008. These results will demonstrate if we are getting closer to current recommendations or if more work needs to be done.

Georgia Rossetto

Supervisors: Dr Kate Huggins, Dr Lynn Riddell and Prof. Caryl Nowson

Absorption of sorbitol in healthy individuals and patients with IBS

Irritable bowel syndrome (IBS) is a functional disorder of lower gastrointestinal tract characterised by chronic and recurrent abdominal complaints such as pain, bloating, diarrhoea and constipation. FODMAPs (Fermentable Oligo-, Di-, and Mono-saccharides And Polyols), a group of poorly absorbed short-chained carbohydrates, has been claimed to cause those symptoms experienced by IBS patients.

Sorbitol is a type of polyol emerging as a FODMAP. It is found naturally in pears, apples and stone fruits and widely used as a sugar

substitute in confectionaries, soft drinks, as well as diabetic foods. Previous studies have shown around 30% of healthy individuals experience sorbitol intolerance and subsequent abdominal distress; however, evidence is lacking in the IBS population. This project aims to investigate if there is a difference in absorption of sorbitol between healthy individuals and those with IBS.

Hsu Ling Tan

Supervisors: Dr Stuart Smith (Deakin) and Dr Jain Muir (Box Hill Eastern Health)

The absorption and tolerance of mannitol in healthy individuals and patients with Irritable Bowel Syndrome

Irritable Bowel Syndrome (IBS) is a functional bowel disorder that affects around one in five Australians and is manifested through symptoms of abdominal pain and abnormal bowel patterns which often results in reduced quality of life.

A group of researchers at Box Hill Hospital have identified a group of short-chain carbohydrates called 'Fermentable, Oligo-, Di-, Monosaccharides & Polyols' (FODMAPS) which can exacerbate symptoms of IBS. Of particular interest, mannitol, a sugar polyol occurring naturally in a wide variety of foods has been

shown to be poorly absorbed in healthy individuals. Hence, the purpose of this research is to investigate the gastrointestinal tolerance of a mannitol solution in IBS individuals compared to healthy individuals. Information gathered from this study will be used to identify whether a need exists to exclude mannitol-containing foods for patients who are malabsorbers as part of their dietary management of IBS.

Chu Kion Yao

Supervisors: Dr Jane Muir (Box Hill Eastern Health) and Dr Stuart Smith (Deakin)

Honours Projects-Continued

The Na:K ratio of first-year university students

One of the fundamental characteristics of the human diet that has been greatly altered over time is the sodium to potassium ratio, which has in fact been inverted over time.

Although there has been radical evolution of our diet, insufficient time in evolutionary terms has passed for our physiology to adapt to a change in eating habits, resulting in hypertension, a leading factor in the development of cardiovascular disease.

This project aims to assess average sodium and potassium intake and

investigate whether factors such as body mass index, smoking status and alcohol consumption, or the consumption of more foods from such categories as fruit and vegetables and processed foods affect the ingestion of these nutrients. Findings from this study will help to enable the identification of factors related to high sodium and low potassium intake and possible interventions to reduce sodium and increase potassium intake in the population.

Megan Glenister

Supervisors: Dr Russell Keast and Ms Claire Margerison

Dietetics Staff in the Media

Dietetics teaching staff within the School of Exercise and Nutrition Sciences are active in giving media comment on a wide range of nutrition issues. Below is an overview of recent interviews featuring dietetics staff.

Date	Source	Topic	Interviewee
8/01/09	3AW	Salt in foods	Tim Crowe
16/02/09	Curtin FM	Dark chocolate	Tim Crowe
17/02/09	Melbourne Weekly Times	Meal replacements	Tim Crowe
8/03/09	Today Tonight	Weight gain and health	Tim Crowe
27/03/09	Australian Doctor	Nutrition in the elderly	Caryl Nowson
April 09	Weight Watchers Magazine	Artificial sweeteners	Tim Crowe
April 09	Good Medicine Magazine	B-group vitamins	Tim Crowe



DEAKIN

Recent Publications by our Team

Roberts NJ, Brockington S, Doyle E, Pearce LM, Bowie AJ, Simmance N, Evans S, Crowe TC. An innovative model for clinical education in dietetics. Nutr Diet 2009;66:33-39

Roberts NJ, Brockington S, Doyle E, Pearce LM, Bowie AJ, Simmance N, Evans S, Crowe TC. A pilot study of an innovative model for clinical education in dietetics. Nutr Diet 2009;66:40-47

Sanders KM, Nowson CA, Kotowicz MA, Briffa K, Devine A, Reid IR. Calcium and bone health: position statement for the Australian and New Zealand Bone and Mineral Society, Osteoporosis Australia and the Endocrine Society of Australia. Med J Aust. 2009;190:316-20.

Grieger JA, Nowson CA, Ackland LM. Nutritional and functional status indicators in residents of a long-term care facility. J Nutr Elder. 2009;28:47-60.

Nowson CA, Wattanapenpaiboon N, Pachett A. Low-sodium Dietary Approaches to Stop Hypertension-type diet including lean red meat lowers blood pressure in postmenopausal women. Nutr Res. 2009;29:8-18.

Daly RM, Nowson CA. Long-term effect of calcium-vitamin D(3) fortified milk on blood pressure and serum lipid concentrations in healthy older men. Eur J Clin Nutr. 2009 Jan 21. [Epub ahead of print]



Conference Presentations

Nowson C. Men need it too: Calcium. Speaker Osteoporosis and Men, Parliamentary Breakfast, Parliament House, Canberra 11th March 2009 www.osteoporosis.org.au/news.php?osteoneews_id=31

Deakin University would like to extend an invitation to all our former students and staff to become members of the online Deakin University Alumni Community. Go to www.deakin.edu.au/alumni to register your free membership application. Once you are registered you can take advantage of the many benefits available to our Alumni members. A list of the benefits are available at www.deakin.edu.au/alumni

Editor: Dr Tim Crowe
School of Exercise and Nutrition Sciences
Faculty of Health, Medicine, Nursing and Behavioural Sciences
221 Burwood Highway
Burwood 3125
Phone: 03 9251 7266
Email: tim.crowe@deakin.edu.au

