

## Mission Statement

Kia whakareia te ōranga o  
ngā tāngata o Aotearoa ma  
te whakamana i ngā wawātā  
hei tohu kai hauora, kai  
reka, hei oranga kakama.

To enhance the quality of life of  
New Zealanders by encouraging  
informed, healthy and  
enjoyable food choices, as  
part of an active lifestyle.

### 1-2

I've been thinking...  
about ageing gracefully

### 2

POWER OF 3: Workplace  
weight loss initiative

### 3-4

Culinary Oils - which ones  
should we use?

### 4

Australian and New Zealand  
Obesity Society Annual Meeting

### 5

What did I learn at the  
Nutrition Society conference?

### 6

Trans Fat - Natural vs Industrial

### 7

NZNF in the media  
Corporate Member Support

### 8

Nutrition for Older People  
in New Zealand

### 9

Being Healthy & Active -  
A Year from Launch  
Ministry of Health: 2011/2012  
NZ Health Survey

### 10-11

News from FSANZ  
and MPI

### 12

What's on

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## I've been thinking... about ageing gracefully



**This is a rare Friday. I got up and started my day with a quick breakfast of muesli and yoghurt and crunched an apple on the way to yoga.**

A number of us have turned 50 over the last year and lamenting the fact we have to tend our bodies a little more than previously. To stay fit and well means keeping the mind and body active and agile. I'd never classified myself as old until I was confronted with finding myself slotted into a new demographic for seniority while reading a discussion on healthy ageing - see box below!

### Demographic Segmentation

**Pre-seniors, 40-49:** Healthy, physically active but realisation and growing awareness of the ageing process from personal changes and from the ageing of parents.

**Young seniors, 50-60:** Mostly healthy and active but become aware of changes in their own capacity to do everyday things. Experience of contemporaries developing health issues which have to be managed (joints, heart, weakened immune system, digestive issues) or may develop at least one of these themselves.

**Middle seniors, 60-70:** Health issues beginning to increase in number and intensity. By the end of this decade everyone is managing one health issue. Awareness of importance of cognitive health increases.

**Seniors, 70-80:** Health issues increase in intensity and number, now have awareness of sarcopenia and its effects, experience acute illness and death among contemporaries.

**Grand seniors, 80+:** Fragility and managing illness is part of everyday life. Loss of independence and autonomy increases, dependence on others to do basic tasks, even getting out of bed, increases.

*New Nutrition Business,  
Ten Key Trends Dec/Jan 2012*

Being categorised now as a young senior has sent me into denial. I'm refusing to believe I'm not still 35! But I can't deny some of those early signs...my eyesight is not as it was a year ago. I now need to hold a book a little further away for the words to be in focus and understand why some books have large type!



I am fortunate to work with a relatively young team in my role as Nutrition & Claims Manager for a major NZ food company. Although I'm old enough to be a mother to most of these active Gen Yers, it's certainly their vitality I feed off, and hope I can share with them some wisdom I might have been afforded from my experiences while achieving my 'young senior' status. They have taught me a lot about myself and I am not too old to join in the activities about which they all enthuse! In fact I've even found myself encouraging some of my youthful colleagues to tackle the more physically and mentally challenging pursuits I attempt to throw myself at during our annual team building 'away days' - tramping, abseiling, white water rafting, tree climbing, caving, and other confidence-building pursuits. All this is accompanied by a shared love of food, wine and hilarity, with the occasional boogie! We never discuss the four letter word I loathe - DIET. I don't believe in punishing my body...just nurturing it in as many ways as possible.

I know it's not possible at times to achieve work-life balance when unplanned events throw us out of kilter, and they seem to have more prominence in our lives as we get older. The emotional stress of losing a loved

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## I've been thinking...about ageing gracefully continued

one, having an accident or a major operation, moving house and family, emptying nests and losing your financial security can all be extremely unsettling and turn your life and wellbeing on its head.

Fortunately, our bodies and minds have a tremendous propensity to cope when traumatic situations hit us. It's during these times the trifecta of eating well, getting plenty of exercise and good quality sleep play an enormous part in getting us back in the running.

I'm highly conscious now, as I come to terms with this stage of my life, that age-related health issues may not only affect myself but those around me who are also in their senior years. Although I can still hike up and down hills, I am conscious of what might happen should I take a sudden fall. Reminders for 'warrant of fitness' examinations are certainly a reality check on the increased risk at our coming of age. I leave you with my new mantra: live gracefully, live well, and keep moving!

**Best wishes for the festive season, Jenny Yee Collinson**



## Power of 3: Workplace weight loss initiative

**Dr Caryn Zinn is a Senior Lecturer and Dietitian at AUT University and on the Foundation's Scientific Advisory Group representing sports nutrition.** Caryn has recently published two adjoining articles in the October edition of the *Journal of Occupational & Environmental Medicine* detailing her PhD work around weight loss maintenance in the workplace setting.

The study was conducted in partnership with the corporate wellness company, Vitality Works Ltd., and was implemented in two worksites in New Zealand. The weight loss maintenance was developed based on a 'small changes' approach, the rationale being that small changes may be more feasible to implement and adhere to than larger and more restrictive changes, and more likely to result in sustained weight loss.

In brief, the programme was delivered over 12 months. The first 12 weeks was the weight loss phase (and the same in both worksites) and the remaining 9 months, the maintenance phase. This phase was implemented in only one of the worksites, the other was the control

worksite receiving no intervention during this time. The weight loss phase involved employees making small changes to three lifestyle areas: food, exercise and mindfulness of health behaviours. The initiative was called "Power of 3" to emphasise the integration of these three areas.

Employees formed teams, and gathered together on a weekly basis, conducting a weigh-in and a progress discussion. The maintenance phase consisted of five components staggered throughout the 9 months. Outcome measures were body weight, health parameters (lipid profile, blood glucose, blood pressure) and productivity outcomes (absenteeism and work performance).

Employees from both worksites lost a modest amount of weight at 12 weeks (3.8% on average), and managed to maintain this weight loss (3.5%) at 12 months, indicating successful weight loss maintenance irrespective of whether or not employees were exposed to a maintenance component. At 12 months, there were some improvements in the



health outcomes: HDL cholesterol, LDL cholesterol, total cholesterol: HDL ratio and diastolic blood pressure. The data is, however, only indicative of trends rather than of any clinical significance. There were small possible improvements in productivity (both absenteeism and work performance) at one worksite with little subsequent change during maintenance.

An expected finding from this research was small, but sustainable, losses in weight and indeed this was what was shown. However, perhaps the magnitude of the weight loss was too modest to result in any substantial change in both health and productivity outcomes. This was the first documentation of a 'small changes' weight-loss maintenance intervention to be conducted in a workplace setting. This approach needs to be explored more widely in future weight loss and maintenance interventions.

The Power of 3 continues to be offered as a weight loss maintenance initiative to workplaces along with Vitality Works' existing selection of workplace health initiatives.

**For a more in-depth insight into this research, or to request a copy of the publications, contact Caryn on: [caryn.zinn@aut.ac.nz](mailto:caryn.zinn@aut.ac.nz).**





# Culinary Oils – which ones should we use?

**With the recent focus on coconut oils, Councillor Laurence Eyres has provided a timely overview of all culinary oils, and separates fact from marketing hype about coconut oil.**

The original culinary oils in New Zealand, or cooking fats as they would be better described, were butter and animal fats such as lard or tallow produced from rendering meat tissue. Over the years these fats have been replaced in the home by a wide variety of vegetable oils, leading to questions about which are best.

These are three criteria for judging the best oil:

- Economics – cost remains a key consumer driver, often over-riding any other factors influencing purchasing patterns.
- Taste and stability - on frying, baking and other high heat cooking. 'Smoke point' is often talked about and is discussed further below.
- Nutritional properties – the proportion of saturated, mono- and poly- unsaturated fat within oil, and the presence of natural antioxidants.

The heat stability of oil is most commonly measured by the smoke point and the oil's tendency to go sticky and brown, called polymerization. Smoke point temperature in degrees Celsius is directly related to the acidity of the oil, not its origin. As a guide, an average temperature for baking in the oven is 180°C, shallow pan frying around 220°C and deep frying at 180°C, therefore smoke points have to be higher than these temperatures. The more unsaturated an oil the higher the tendency to oxidize and polymerize on heating. So the heat stability and suitability for cooking is almost the opposite of the nutritional desirability.

Refined or processed oils have reasonably good stability because the acidity has been removed by refining. They are usually cheaper but lack flavour and do not contain natural antioxidants.

Genuine extra virgin olive oil is minimally processed so is well described as cold pressed. Other oils such as avocado and some nut oils are also cold-pressed and the smoke point depends on the quality of the raw material which then determines the acidity of the oil. Good quality olive and avocado oils have reasonably high smoke points, around 190-200°C. In New Zealand, much of the available olive oil is imported. This imported extra virgin olive oil is usually high in acidity, making it cheaper and tends to smoke on heating.

These poor quality, imported extra virgin olive oils have a smoke point around 170°C. The refined and processed olive oils (called pure or light) have high smoke points, due to the low acidity, around 200°C. This is the bulk of the market.

Vegetable oils are mainly produced from oilseeds (e.g. rapeseed and sunflower seed) as well as from legumes (e.g. peanut and soybean), nuts (e.g. walnut and almond) and the flesh of some fruits (e.g. olives, avocado and palm oil). Vegetable oils are pressed at high temperatures from the plants and are then processed with chemicals and 'temperature-refined' to produce high-quality oils suitable for use as an ingredient in recipes, frying and cooking at high temperatures. Nearly all commercial, refined vegetable oils have smoke points around 230°C.

In 2008, the four main types of vegetable oil dominating the world market (in terms of production) were palm, soybean, rapeseed (canola) and sunflower seed. Vegetable oils mainly comprise triacylglycerides. The main nutrient they provide is fat with appreciable amounts of vitamin E (tocopherols and tocotrienols). Vegetable oils are also the main source of natural plant sterols in the diet and contain minor components, such as squalene and sphingolipids, all of which may provide a range of health benefits. The fatty acid composition of plant oils varies, but comprises a mixture of different fatty acids, in different proportions. Most culinary oils tend to be high in either monounsaturates or polyunsaturates, with the exception of palm, palm kernel and coconut oils, which are high in saturates. This is most easily seen in the nutrition information panel on a food label.

Culinary oils are usually categorized as 'saturated', 'monounsaturated' or 'polyunsaturated', based on the predominant fatty acid, providing a useful guide for consumers.

Monounsaturated oils include olive, avocado and canola oils. They are low in saturates and good for high temperature cooking.

Rice bran oil is becoming popular. It contains a balance of monounsaturates and polyunsaturates, with low saturates. It is reasonably stable for frying.

Polyunsaturated oils are soybean, sunflower and safflower. They are not at all suitable for high temperature cooking. Flaxseed oil has high levels of the polyunsaturated fatty acid ALA, making it totally unsuitable



for high temperature cooking as the oil oxidizes and polymerizes just like oils in paint or used for timber treatment.

Coconut oil is described as a saturated fat because it is 90% saturated and may raise blood cholesterol levels. Anyone who has high a blood cholesterol level should not be using coconut oil as their main culinary oil.

Overall there is little evidence to suggest one unsaturated vegetable oil should be promoted over any other on the basis of additional health effects. There are few good quality trials that have adequately compared the health outcomes of individuals consuming different oils. Indeed, because of the use of a variety of different vegetable-based oils in food manufacturing processes, most people are consuming a wide variety of different oils each day. Instead, the choice of oil often depends on its functionality for a particular food application, or on taste, personal preference and cost. The most important message for consumers to understand is that all oils, regardless of their fat composition, are almost 100% fat with approximately twice the energy density of carbohydrates and proteins. In New Zealand, it is recommended no more than 30-33% adult energy intake comes from total fat, no more than 12% saturated fat. The last adult nutrition survey showed total fat intakes to be around the upper limit of the recommended at 33.75%; 13.1% for saturated fat.

## HEALTH BENEFITS OF COCONUT OIL

In New Zealand, coconut oil should probably be described as 'fat', rather than oil, as it is solid in our temperate climate, being 90% saturated. Despite receiving a lot of positive publicity recently, it is unsuitable as a cooking fat given its high saturated fat content.

To reduce the risk of coronary heart disease, the scientific evidence indicates that replacing fats and oils high in saturated fat – including tropical oils such as palm and coconut – with those high in polyunsaturated fat will produce the greatest reduction in risk.

The medium chain triglycerides (MCTs) with possible beneficial effects are not the same as the ones present in coconut oil and there is no peer-reviewed clinical trial literature on other beneficial effects of coconut oil.

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## Culinary Oils – which ones should we use? continued

Believers say coconut oil is a healthy fat because it is like MCTs, but coconut oil is 90% saturated and raises serum cholesterol levels, so it is an unhealthy fat. It bears no resemblance to MCTs; the latter being made by distilling the esters of C8 and C10 fatty acids, then combining them back into triglycerides. Coconut oil is 47% C12 and while it does contain some C8 and C10, these are not the main components.

### SUMMARY

The most traditional high quality culinary oil is olive oil. It's been used for thousands of years and remains one of the most suitable for many cuisines. New Zealand's locally-produced, extra virgin olive oils are stable, have a superior flavour and are full of natural antioxidants (polyphenols)

- the main reason olive oil is nutritionally desirable – but tend to be expensive.

Also promoted for its nutritional properties, flaxseed oil should be kept cold, away from the light and used promptly, but is not strictly a 'culinary oil'. For shallow pan frying, or on the barbecue, use processed olive oil (house brands are good quality and economic), canola oil, rice bran oil or infused avocado oils.

For flavour, such as on salads, in addition to locally-produced extra virgin olive oils, try the New Zealand nut oils, such as walnut and hazelnut, but do not subject them to high heat.

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Laurence Eyres, PhD, FNZIFST  
NZNF Councillor

## Australian and New Zealand Obesity Society Annual Meeting

### FOR OUR CHILDREN'S CHILDREN Auckland 18 - 20 October 2012

For the first time in 22 years the ANZOS annual scientific meeting was held in New Zealand. This presented a unique opportunity for New Zealand researchers, health workers, NGO and government staff with an interest in obesity to hear from leading experts and engage in debate on the various approaches to the prevention and management of obesity. Speakers addressed the potential causes of obesity, the management of obesity and the impact of our obesogenic environment.

Keynote speaker Professor Barbara Rolls from Pennsylvania State University is well known for her work on volumetric eating, increasing the volume of high water foods like soups, vegetables and fruits to maintain or even increase the volume of food while lowering the energy value of meals. Professor Rolls' first presentation, *High satiety: Avoiding obesity in a super-sized world*, looked at the research supporting food-based strategies with the potential to promote satiety and moderate energy intake. Portion size is a critical component of this work. The full abstract is available at <http://linkinghub.elsevier.com/retrieve/pii/S1871403X12000439>.

Other keynote speakers were Professor Wayne Cutfield from the Liggins Institute and National Research Centre for Growth and Development, University of Auckland, Professor Jim Mann, University of Otago, Professor Herbert Herzog, Garvan Institute of Medical Research, Sydney and Professor Jacqueline Rowarth, University of Waikato. In her opening remarks the Associate Minister of Health, Jo Goodhew, made it very clear the Government was committed to putting nutrition funding into foetal and maternal health and nutrition as a strategy to combat obesity. Professor Cutfield's presentation explained the research supporting this change in direction. The full abstract is available at <http://linkinghub.elsevier.com/retrieve/pii/S1871403X12000440>.

There has been much debate in the media and press about the role of sugar in obesity. Professor Jim Mann's presentation titled *Sugar: a uniquely obesogenic nutrient?* generated many questions and debate but it is clear there needs to be some consistency around definitions of 'sugars'; this would be a

good step toward assessing the available data on the impact of sugar. The World Health Organisation (WHO) and the Food and Agriculture Organisation have adopted a classification of carbohydrates and clarified definitions of various groups of sugars which has enabled a more standardised approach for examining potentially adverse health effects. The WHO Nutrition Guidance Expert Advisory Group Subgroup on Diet and Health has commissioned formal systematic reviews to assess the strength of evidence on which to base recommendations. The results will be helpful in informing a New Zealand approach to sugar guidelines and policy. The full abstract is available at <http://dx.doi.org/10.1016/j.orcp.2012.08.003>

A highlight of the conference was the public lecture chaired by Dame Jenny Shipley. The lecture featured keynote speakers discussing their views on child obesity. Professor Rolls explained children can learn to like vegetables and presented evidence indicating portion size is a significant determinant in the amount of food consumed. She alluded to a study which revealed that when portion size increased the increase in food consumed was 37%. When the increase is in watery foods, such as vegetables and soups, the volume of food eaten is increased, calories reduced and nutrition improved.

Professor Mann said in dealing with the obesity epidemic it was pertinent to reflect on London's Broad Street Pump cholera outbreak of the mid-1800s. The epidemic led to many lost lives spurring public officials to act, dramatically changing public health policy to reduce the chance of a further outbreak. Professor Mann sees today's problems with obesity as analogous requiring action from Government. "You have to help move public opinion on this issue and Government will follow," he said. A robust question time indicated there really is no clear path to follow to reverse the obesity trend. We need to consider all the evidence and not be afraid to start a public debate and apply pressure to Government where we feel the evidence is being ignored. Referring to this in her summing up, Dame Jenny made the point governments have a history of not leading.

Sarah Hanrahan

# What did I learn at the Nutrition Society conference?

I have been a member of the Nutrition Society of New Zealand since the 1960s but have not attended the annual conferences as frequently as I should. This year, as it was being held in Auckland, I decided to seize the opportunity. So what did I learn to take back to the Nutrition Foundation?

## OBESITY

Muriel Bell Lecture, *Yesterday, today and tomorrow in obesity research – is there light at the end of the tunnel?*  
Professor Sally Poppitt, University of Auckland.

Control of intake is the key factor affecting the rise in obesity across the world and this is especially difficult in the current environment. This is not 'new news' but I was particularly interested in the section on satiety, which is affected by factors such as:

- Format and portion size.
- Macronutrients - high fat diets and energy dense diets are prone to lead to overeating, while protein is more satiating.
- Drinks and alcohol do matter.

"Today's most successful treatment of obesity is bariatric surgery, both invasive and expensive, which achieves better long term outcomes than current diet and exercise strategies. Whether we can reverse the obesity trend without significantly changing the environment is debatable, and a major challenge for tomorrow."

*Grow, Glow and Go: Energized children lead the way.*  
Professor Elaine Rush, AUT University.

'Project Energize' is a through-school initiative to address nutrition and physical activity, childhood obesity rates and cardiovascular risk factors in all primary schools in the Waikato DHB area. The nutrition programme is based on *Grow, Glow and Go* – 'Grow' being protein-rich foods, 'Glow' fruit and vegetables and 'Go' wholegrains and cereals. These simple food principles are well received by pupils and parents alike. After six years, there have been improvements in average weight, waist measurement, BMI and running speed.

## PORTION SIZES

*Typical food portion sizes consumed by New Zealand children and differences by age, gender and ethnicity.*  
Dr. Helen Eyles, University of Auckland.

Portion sizes can differ markedly from those recommended by the Ministry of Health. They also differ between genders, age groups and different ethnicities. The largest portion size ranges are in the flavoured milk, soft drink and fruit juice categories. These present key opportunities for targeted portion size interventions to potentially address obesity and related health inequalities.

*Establishing food serving sizes for New Zealand population based on energy content.*

J. Petrie and T Watson, New Zealand Nutrition Foundation and Baking Industry Research Trust.

A system of determining serving sizes for foods to meet the food and nutrition guidelines for New Zealanders has been developed. The eMark serving size and food group information is used on [www.emark.co.nz](http://www.emark.co.nz) and offers a practical way of assisting New Zealanders to choose healthy daily eating plans.

## NUTS AND HEALTH

*Cracking new frontiers on the health benefits of nuts.* Associate Professor Welma Stonehouse, Massey University.

and

*Effects of nut consumption in comparison to other energy-dense snack foods on energy balance and quality.*

R. Brown, S.L. Tey, A. Gray, A. Chisholm and C. Delahunty, University of Otago and CSIRO Australia.

Nuts are an excellent source of 'healthy fats', mostly mono-unsaturated fatty acids, though walnuts are high in poly-unsaturated fatty acids. They are also high in other nutrients, including fibre, folate, magnesium, selenium and potassium. Recent epidemiological evidence has shown inverse associations between nut consumption and type 2 diabetes, hypertension, metabolic syndrome and body mass index. We should aim to eat 30g per day – and this 'will not compromise body weight.'

## IODINE STATUS IN PREGNANT AND BREASTFEEDING WOMEN

*Iodine status of pregnant women pre-and post-initiatives to improve iodine status in Palmerston North, New Zealand.*  
Dr. Louise Brough and Ying Yin, Massey University.

and

*Improvement in the iodine status of New Zealand pregnant women, post-fortification.*  
Abbey Billing, Massey University.

Key findings of research conducted in Palmerston North on pregnant and breastfeeding women in 2009 and 2011 were:

- In 2009 only 20% of the pregnant women in the study sample achieved the estimated average requirement (EAR) for iodine.
- In 2011, after supplementation of bread had commenced, 75% achieved the EAR.
- Use of the subsidised iodine supplement for pregnant and breastfeeding women increased between 2009 and 2011, but many did not achieve the recommended WHO urinary concentration level.
- Only 15% were aware bread was being supplemented.
- Bread intake averaged less than 2 slices per day for these women.

## TRANS FATS

*Understanding the implication of ruminant trans fats to health and industry.*

Associate Professor Spencer Proctor, University of Alberta, Canada.

Recent research is showing industrial and ruminant trans fatty acids differ and have different health effects. Professor Proctor presented a perspective of the most recent literature on this topic. See the article, *Trans Fat – Natural vs Industrial*, in this edition for a more detailed account.



Sue Pollard, CEO



# Trans Fat – Natural vs Industrial

Last month's New Zealand Nutrition Society 46th Annual Conference in Auckland saw cutting edge topics meeting the theme of frontiers in nutrition.

One area of much interest was natural trans fat, where Associate Professor Spencer Proctor from the Alberta Institute for Human Nutrition and the Alberta Diabetes Institute in Canada presented on the implications of natural trans fat to health and industry, given most regulatory bodies currently do not differentiate between industrial and natural trans fatty acids.

He presented the most recent pre-clinical and clinical literature on the health implications of conjugated linoleic acids (CLA) and the distinction between CLA derived from ruminant food vs. supplemental sources, including the differential bioactivity of industrial and natural trans fat.

Further, natural trans fat research is led by scientists in the Department of Agricultural, Food and Nutritional Science at the University of Alberta in Canada with the development of an informative website, [www.naturaltransfats.ca](http://www.naturaltransfats.ca), with frequent research outcome updates.

Much public understanding of trans fats is based on industrial trans fat, produced in food through a manufacturing process called hydrogenation, which converts liquid fat into more stable solid fat, resulting in prolonged shelf-life and increased stability of a processed food. However advances in science have contributed to a growing body of

evidence there is a broader picture to consider – a separate family of trans fats produced naturally.

Natural trans fats are also produced through the process of hydrogenation, but occur naturally within ruminant animals with the resulting trans fats fundamentally different.

Most of the research on natural trans fats has focused on the types produced by beef and dairy cattle. The latest understanding is natural trans fats are created in the ruminant digestive system when microorganisms in the rumen forestomach break down plant material and a portion of the resulting components bond with hydrogen to form a trans fatty acid. There is also evidence looking at enzymes within the animal to support conversion of unsaturated fatty acid into natural trans fatty acid.

Today the body of evidence indicates that natural trans fats consumed at normal dietary levels are not detrimental to health, in fact pre-clinical studies indicate these unique trans fats have health-enhancing potential and new research will tell us more.

While this is excellent news for consumer health, it also adds another layer of complexity to the question on trans fats. For health professionals on the front line providing information and advice to the public on this issue, answering this question is not a simple task.

Which foods have them, which foods don't? What should consumers watch for on food labels? What's safe and what's not? How can people get the right

information and make the best decisions for managing their health?

The aim is to increase awareness of these differences and to provide interpretation on a variety of topics, including new knowledge from research, related developments in areas such as nutrition label information, food regulations and recommendations and health policy.

Here in New Zealand, FSANZ's dietary modelling has found Kiwis obtain an average 0.6% of their daily kJ from trans fatty acids (TFA), below the WHO recommendation of 1%. Natural trans fats (NTFs) contribute around 60-75% of this TFA intake.

In 2009 FSANZ reviewed the outcome of non-regulatory measures to reduce TFAs in the food supply. The 2009 review found intakes of TFAs from manufactured sources had decreased in Australia and New Zealand by around 25-45% since 2007, reflecting changes in industry practice to reduce TFA levels in manufactured foods. This decline is equivalent to around 0.1% of energy.

As a result of these findings, in October 2009, the Australia and New Zealand Food Regulation Ministerial Council agreed the non-regulatory approach should continue.

#### Sources:

[www.naturaltransfat.ca](http://www.naturaltransfat.ca)

To view journal articles on NTFs  
<http://naturaltransfats.ca/journal-articles-ntfs>  
[www.foodstandards.govt.nz](http://www.foodstandards.govt.nz)

**Fiona Greig**  
Nutritionist  
Beef + Lamb New Zealand



# NZNF in the media

Over the past three months the Foundation has been mentioned in 32 newspaper articles with a reach of 1.7 million including national, regional and local publications. The main themes were;

- The pointlessness of vitamin C supplementation in prevention of colds
- The value of eggs as an everyday food
- The health benefits of nuts
- The Weight Watchers Plate of your Nation report
- Food wastage (best before vs. use by dates)

It was very interesting to see our comment, "Taking large amounts of vitamin C is silly," was picked up by seven regional papers after first being published in the Herald on Sunday. There is clearly value in translating the science into a very basic attention-grabbing sentence and we will be looking at all our releases to make sure we have messages in a form attractive to media.



## LETTER TO THE EDITOR

In the November edition of North & South there was an article, "Sweet Misery" in which the notion, 'Sugar is the new fat and will it cause the next wave of heart disease?' was discussed and various viewpoints canvassed from academia, including our own Scientific Director, Professor Elaine Rush. This was followed by an article titled "Sugar free" on the efforts of an Auckland couple to lose weight by cutting out sugar. A letter to the editor in the December edition, which was judged as 'letter of the month', claimed these articles did not go far enough, and low carb, high fat is the way to go. In response to what we view as unbalanced reporting, we sent the following letter which was published in the January 2013 issue:

Dear Editor

We have been following with great interest the debate in your magazine regarding the role of sugar in health. However the New Zealand Nutrition Foundation believes to focus on a single nutrient like sugar, as described in the diet followed by the Auckland couple and in the letter to the editor in your December publication, masks the real issue.

There are many people who swear to having lost large amounts of weight by eliminating sugar from their diet. This is entirely to be expected; not only are they actually focussing on their food and reading labels, they are also usually cutting out quite a lot of energy. Less energy in, while maintaining or increasing energy out, will lead to weight loss.

For many people the struggle is not so much to lose weight, but to maintain weight loss. Extreme regimens that take you away from normal family food make maintenance difficult and, for many, ultimately unachievable. It's not sexy or headline grabbing but for most people, the best way to manage their weight is to be aware of portion sizes, eat plenty of fruits and vegetables, stay away from foods and drinks with little nutritional value like sugar sweetened soft drinks and be active.

Small changes to the food going on our tables and into our lunchboxes day after day will make the long term difference. Focussing on a single nutrient may well lead to a good initial weight loss but it will be difficult to sustain and may lead to other problems caused by an unbalanced diet.

## CORPORATE MEMBER SUPPORT

The Foundation continues to work alongside its corporate members, offering advice, nutrition information services and support. In the last quarter we have:

- Prepared a statement on the value of different breads, including white bread.
- Advised on nutrient content statements for a marketing campaign.
- Provided background information for media releases, to support the Unilever upcoming campaign, "Good Fork Week".
- Continued to work with Weight Watchers on 'Plate of our Nation.'

# NUTRITION FOR OLDER PEOPLE IN NEW ZEALAND: ISSUES, INTERVENTIONS AND IMPLICATIONS – WHAT DOES THE LITERATURE SAY?

Earlier this year, Charlotte Cooper and Sophie Oliff, University of Auckland final year BHSc (health science) students, carried out a project for the Foundation's Committee for Healthy Ageing, on the key nutrition issues for older people in New Zealand living in the community.

As discussed in the July edition of Nutrition News, the Foundation had already received a report on what local health professionals and others working in this area saw as the important nutrition issues for this group and the gaps in service delivery.

The students began with literature searches on the following topics:

- Current nutritional issues for New Zealanders aged 65 years and over
- Existing interventions to address these issues and their effectiveness

For current nutrition issues, data from the 2008/09 New Zealand Adult Nutrition Survey and the 2006/07 New Zealand Health Survey were compared with the Ministry of Health's Food and Nutrition Guidelines for Healthy Older People. They concluded:

- Almost a quarter of those 71 and over and over a third of those 51-70 years were obese.
- Older New Zealanders exceeded the guideline for saturated fat consumption.
- Older New Zealanders failed to meet recommendations for consuming fruits, vegetables, low-fat milk products and foods low in salt, and performing physical activity.
- Emerging issues for older people were vitamin D and food security.

The literature from randomised controlled trials of nutrition interventions in community-dwelling older people showed few recent systematic reviews on the results of nutrition-based interventions in this population. In the studies found, the most effective interventions were:

- Tailored nutrition interventions involving active participation by older adults to develop goals and self-efficacy.
- Educational initiatives for those people who have contact with older people – families, health workers and others.

## RECOMMENDATIONS

### 1. Initiatives to motivate and educate older people should include the following topics:

- The importance of healthy eating for maintaining good health and preventing disease.
- The Ministry of Health Food and Nutrition Guidelines for Healthy Older People.
- How to access local services that support healthy eating and physical activity.

### 2. For families

- Include older family members in family meals.
- Be aware of the importance of healthy eating for older people to maintain good health.
- Create an environment that supports older family members to put the Ministry of Health's Food and Nutrition Guidelines for Healthy Older People into practice (e.g. help with transport to supermarket, invite older family members to eat with the family on a regular basis, access nutrition information for the older family members).

### For community-based organisations and service providers

- Provide current, targeted nutrition information to community-dwelling older people.
- Create an environment that supports older family members to put food and nutrition guidelines into practice.
- Provide home-based tailored nutrition advice.
- Teach older people healthy cooking skills.
- Acknowledge the importance of nutrition in older people.
- Be aware of how to access information resources regarding nutrition amongst older people.
- Organise social events for older people that promote healthy eating (e.g. picnics, food tastings, trips to farmers' markets).
- Ensure food provided at social gatherings is healthy.

### For policy makers

- Recognise the current nutrition issues for older people in New Zealand (e.g. vitamin D).
- Regularly update the Ministry of Health's Food and Nutrition Guidelines for Healthy Older People, based on the most recent data.
- Fund research and contract service providers to help address nutritional issues in older people.
- Create health policy that increases older people's access to healthy and affordable foods.

### For researchers

- Evaluate and publish papers on New Zealand nutrition interventions targeting older people.
- Conduct on-going research into the current nutrition issues for older people in New Zealand.
- Use consistent age brackets to classify older people in databases, information sources, and statistics.
- Conduct further research into the nutrition concerns present in different age groups within older people, e.g. 'young-old' and 'old-old'.







## Being Healthy & Active – A Year from Launch



The free teaching programme *Be Healthy Be Active*, designed for students in years seven and eight, was developed by Nestlé, the Millennium Institute of Sport & Health and the New Zealand Nutrition Foundation. It is designed to align with the New Zealand curriculum for health and physical education.

The programme focuses on helping children understand the choices of what to eat, what activities to engage in and what values to use, to guide their

actions. The concept of Hauroa or wellbeing strongly underpins all aspects of the programme.

The programme has a number of components. The start point for teachers is the 32-page Teachers' Resource book which outlines the programme and modules and the 16 'Read and Respond' cards to stimulate classroom discussion. The website, [www.behealthybeactive.co.nz](http://www.behealthybeactive.co.nz), has an online journal where teachers can set and mark tasks for their students, plus it has some online activities such as the food plate where students can learn about the different food groups and design their own healthy meal and sandwich. There is also the *Be Healthy Be Active – Useful Tips* booklet,

to enable students to take these important messages into the home. Two versions of the Food Plate posters are available in both English and Maori.

A year since launch, over 5000 children and 400 teachers across the country are benefiting from using the on-line journal, with many more using some of the other components of the programme. More than 500 requests for additional resource material have been received.

*Be Healthy Be Active* is providing a structured programme for teachers enabling them to help their students' understanding of food, activity and a healthy lifestyle. The material is provided free of charge and we will continue to work to ensure as many teachers as possible are aware of and using the programme.



## The Ministry of Health has published key findings from the 2011/12 New Zealand Health Survey.

The survey contains information about smoking, nutrition, access to health care and oral health, based on data collected from 12,000 adults and 4000 children.

The survey shows that over the past five years, there have been a number of improvements, for example:

- Nearly nine out of ten adults say they are in good health and almost all parents believe their children are in good health
- There has been a significant drop in youth smoking – the rate of daily smoking for 15-17 year olds has dropped from 14 per cent in 2006/07 to 6 per cent
- More children under 6 years are seeing a GP for free – this has increased substantially from 67 per cent in 2006/07 to 83 per cent
- 90 per cent of school-aged children have visited a dental health care worker for basic oral health services in the past 12 months
- More people are able to get an appointment to see their GP within 24 hours compared to 2006/07

However, the health sector faces some challenges and could make further improvements in areas such as obesity and diabetes and ensuring everyone in New Zealand experiences the same level of good health.

In line with other developed countries, New Zealand's obesity rate continues to increase and is the same as Australia at 28%.

The information in the survey will be used by the Ministry of Health and other health providers for planning purposes to ensure they are delivering effective health services.

[www.health.govt.nz/news-media/media-releases/2011-12-new-zealand-health-survey-released](http://www.health.govt.nz/news-media/media-releases/2011-12-new-zealand-health-survey-released)

# News from FSANZ and the MPI

## NATURAL HEALTH PRODUCTS BILL

The Natural Health Products Bill was reported back to Parliament at the end of October. The bill will provide regulation of commercial natural health products, such as vitamin supplements, Echinacea and fish oil. "New Zealanders can continue to support and manage their own health as they do now, but the Bill will ensure the natural health products they buy are safe, the labels are accurate and the claims the products make, such as 'will improve your immunity', are true," said the Minister of Health, Tony Ryall. Only commercial products will be affected – people can continue to prepare home remedies. The detailed regulatory work will be undertaken in consultation with the industry and public.

### More details about the Natural Health Products Bill:

Part 1 of the Bill defines a natural health product according to how the product is consumed, its ingredients and the type of claim made. It also proposes the establishment of a regulatory authority within the Ministry of Health and requires the notifier of a natural health product to be resident in New Zealand.

Part 2 sets out the regulatory scheme. It proposes that before products can be marketed, they would have to be notified on an online database. This process would require the applicant to declare the product met the scheme's requirements, and the product notifier to hold evidence supporting any claim of health benefit. It provides for the authority to audit, suspend or cancel notifications; prohibit ingredients; issue export certificates and compliance notices; undertake safety assessments of ingredients; and prescribe fees. Part 2 would establish penalties, a code of manufacturing practice and mechanisms for appeal and the recall of products. It would also require product notifiers to inform the authority about any serious adverse reactions to products and any ingredients which were not previously notified.

Source: [www.legislation.govt.nz/bill/government/2011/0324/latest/versions.aspx](http://www.legislation.govt.nz/bill/government/2011/0324/latest/versions.aspx)

## HEALTH CLAIMS

On November 8 FSANZ, released what may become the final version of the proposed Health Claims Standard in early 2013.

Unlike five previous drafts of the Standard over the past decade, the proposed new Standard 1.2.7 permits not only pre-approved claims, but allows for self-substantiated health claims subject to numerous conditions. Under the new Standards, eligibility criteria also need to be met for a food to qualify for the making of a health claim or a nutrition content claim.

### More details about health claims:

Nutrition content claims and health claims are voluntary statements made by food businesses on labels and in advertising about a food.

**Nutrition content claims** are claims about the content of certain nutrients or substances in a food, such as '**low in fat**' or '**good source of calcium**'. These claims will need to meet criteria set out in the Standard. For example, with a '**good source of calcium**' claim, the food will need to contain more than the amount of calcium specified in the Standard.

Health claims refer to a relationship between a food and health rather than a statement of content. There are two types of health claims:

- **General level health claims** refer to a nutrient or substance in a food and its effect on a health function. For example: '**calcium is good for bones and teeth**'. They must not refer to a serious disease or to a biomarker of a serious disease.
- **High level health claims** refer to a nutrient or substance in a food and its relationship to a serious disease or to a biomarker of a serious disease. For example: '**Diets high in calcium may reduce the risk of osteoporosis in people 65 years and over**'. An example of a biomarker health claim is: '**Phytosterols may reduce blood cholesterol**'.

Food businesses wanting to make **general level health claims** will be able to base their claims on one of the more than 200 pre-approved food-health relationships in the Standard or self-substantiate a food-health relationship in accordance with detailed requirements set out in the Standard.

**High level health claims** must be based on a food-health relationship pre-approved by FSANZ. There are currently 13 pre-approved food-health relationships for high level health claims listed in the Standard.

All health claims are required to be supported by scientific evidence to the same degree of certainty, whether they are pre-approved by FSANZ or self-substantiated by food businesses. Food-health relationships derived from health claims approved in the European Union, Canada and the USA have been considered for inclusion in the Standard.

Health claims will only be permitted on foods meeting the nutrient profiling scoring criterion (NPSC). For example, health claims will not be allowed on foods high in saturated fat, sugar or salt.

**Endorsements** that are nutrition content claims or health claims will be permitted, provided the endorsing body meets requirements set out in the Standard.

Source: [www.foodstandards.gov.au/consumerinformation/nutritionhealthandrelatedclaims/](http://www.foodstandards.gov.au/consumerinformation/nutritionhealthandrelatedclaims/)

## FRONT-OF-PACK LABELLING

In December 2011, the Forum on Food Regulation decided there was scope to develop collaborative approaches to voluntary front-of-pack labelling. Given a lack of evidence about the effectiveness of front-of-pack labelling in improving nutrition across the population, and the potential costs, mandatory regulation was not considered appropriate.

In both New Zealand and Australia, advisory groups – consisting of members from industry, public health, consumer groups and academia – have been working in 2012 to establish workable approaches to voluntary front-of-pack labelling (FOP).

The New Zealand Group, of which the Foundation CEO is a member, met five times during 2012. The resulting report to the Minister of Food Safety provides a set of principles to guide any FOP system in New Zealand (see below) and outlines the steps

that should be considered in the implementation of a voluntary scheme. The report recommends ideally, any system developed for New Zealand should align with FOP developments in Australia. To see the complete report go to: [www.mpi.govt.nz/portals/0/documents/food/nz-front-pack-labelling-advisory-group.pdf](http://www.mpi.govt.nz/portals/0/documents/food/nz-front-pack-labelling-advisory-group.pdf)

At the same time the Australian Group has begun a process to develop a complete 'interpretive front-of-pack labelling system for food that would be easily understood by consumers'. It is expected the new system will be developed by June 2013.

#### PRINCIPLES FOR VOLUNTARY INTERPRETIVE FRONT-OF-PACK LABELLING

The principles listed below represent the outcome of consideration of the evidence, and considerable deliberation and discussion by the New Zealand Advisory Group.

##### General principles

- 1. Purpose:** A front-of-pack labelling system should provide nutrition information in a format easy for consumers to use and to help them make healthier food choices.
- 2. Scope:** An interpretive front-of-pack labelling system should be able to be applied to all foods, excluding alcoholic beverages, infant formula and foods for special medical purposes<sup>1</sup> (as front-of-pack labelling is not considered appropriate for these foods).
- 3. Interpretive:** a front-of-pack labelling system should present information in a non-linguistic and non-numeric form and be easy to understand by a wide range of consumers.
- 4. Support Government nutrition policy:** A front-of-pack labelling system should reflect the importance of the 'whole diet' to the health and wellbeing of consumers, and complement Government nutrition guidelines.
- 5. Placement:** The elements of a front-of-pack label should be displayed on the front of pack.
- 6. Meaningful within food categories:** A front-of-pack labelling system should provide for meaningful comparisons within food categories and be broadly consistent with the categorisation of foods under the Food Standards Australia New Zealand (FSANZ) Nutrient Profiling Scoring Criteria (NPSC) developed for the Nutrition, Health and Related Claims Standard.<sup>2</sup>
- 7. Focus on the whole food, not specific nutrients:** a front-of-pack labelling system should provide an interpretation of the whole food. Nutrient specific information may also be used in a way consistent with and not detract from the interpretative elements focused on the whole food.
- 8. Adoption of a single system:** only one interpretive front-of-pack labelling system should be used in the market. Endorsements<sup>3</sup> (e.g. the Heart Foundation Tick) and health and nutrition claims may be used where appropriate so long as they do not portray inconsistent messages.<sup>4</sup>
- 9. Consumer education:** promoting consumer recognition, understanding and use of the interpretive front-of-pack labelling system is crucial, and must be integral to the development of any front-of-pack labelling system.

##### Design principles

- 10. Positive marks:** a front-of-pack labelling system should provide positive 'marks' for healthier foods.
  - 11. Marks to start at zero:** It should be possible for a food to score zero positive marks. This provides a clear distinction between healthier choices within and across food categories.
  - 12. Scoring criteria to be based on 'positive' and 'negative' nutrients:** Calculations of both positive and negative nutrients should be used in determining the number, if any, of positive marks for which a food qualifies. Calculations should be based on the nutrient profiling scoring criteria developed for the FSANZ Nutrition, Health and Related Claims Standard, enhanced where appropriate for front-of-pack labelling according to detailed modelling.
  - 13. Scoring criteria to be based on amount of nutrients per 100g:** The scoring criteria used to determine the number of front-of-pack labelling 'marks' a food receives should be based on nutrients per 100g. If modelling indicates significant anomalies, system design could consider calculations of nutrients 'per serve' in specific cases if it provides for a more meaningful mark.
  - 14. Form of the food:** Scoring calculations should be based on either:
    - the form of the food as sold (if the food can be prepared with other food, or consumed as sold), or
    - the form of the food as prepared (if the food is required to be prepared and consumed according to directions provided on the food package).
- <sup>1</sup> Kava (Standard 2.6.3) should also be excluded from a front-of-pack labelling system.
- <sup>2</sup> However, categorisation should be contingent on modelling, such that significant anomalies are adequately managed, particularly in relation to core foods.
- <sup>3</sup> As per definition in the draft Standard 1.2.7 Nutrition, Health and Related Claims
- <sup>4</sup> The principle of a single system in the market is intended to encourage a best practice approach by food businesses, based on existing evidence which shows a single system is likely to be most useful to consumers. However, this does not limit the legal ability of businesses to promote their products in a manner compliant with relevant food regulation.

##### THE FOOD BILL

The Bill had its first reading in July 2010 and was reviewed in 2012. There is Cabinet support for progressing the Bill and a supplementary order paper has been prepared, with various technical changes. Examples of the changes are:

- The timeframe from enactment to commencement has been extended from six to eighteen months and the transition period has reduced from five to three years.
- Provision has been made to protect food donors and distributors from civil liability.

MPI will consult with industry in March 2013 and expects the Bill to be back to the house in April for the second reading.

Sue Pollard



# WHAT'S ON



## 2013

### **3rd International Conference on the Science of Nutrition in Healthcare: Modifying the price of progress**

**Date:** 3-5 May, 2013

**Venue:** Sheraton on the Park, Sydney, Australia

**For information:** [www.nutritionmedicine.org.au](http://www.nutritionmedicine.org.au)

### **2013 ANA National Conference**

**Date:** 8-9 May 2013

**Venue:** Rotorua Convention Centre, Rotorua

**For information:** [www.ana.org.nz/our-work/national-conference](http://www.ana.org.nz/our-work/national-conference)

### **International Society for Behavioural Nutrition and Physical Activity Annual Meeting**

**Date:** 22-25 May 2013

**Venue:** Ghent, Belgium

**For information:** [www.isbnpa.org/](http://www.isbnpa.org/)

### **Dietitians of Australia National Conference**

**Date:** 23-25 May 2013

**Venue:** Hyatt Hotel, Canberra, Australia

**For information:** [daa.asn.au/](http://daa.asn.au/)

### **NZIFST 2013 conference: Time for Action**

**Date:** 2-4 July, 2013

**Venue:** Hastings Opera House, Hawke's Bay

**For information:** [www.nzifst.org.nz/conference.asp](http://www.nzifst.org.nz/conference.asp)

### **Dietitians New Zealand conference**

**Date:** 1-4 September 2013

**Venue:** Sky City, Auckland

**For more information:** [www.dietitians.org.nz](http://www.dietitians.org.nz)

### **IUNS 20th International Congress of Nutrition: Joining cultures through nutrition**

**Date:** 15-20 September, 2013

**Venue:** Granada, Spain

**For information:** [www.icn2013.com](http://www.icn2013.com)



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