WHAT'S NEW?

A CONFERENCE FOR HEALTH AND EDUCATION PROFESSIONALS

FRIDAY 8 MAY 2015
W5, AT THE ODYSSEY, BELFAST

THE DAIRY COUNCIL FOR NORTHERN IRELAND

WHAT'S NEW ?

Conference Programme

09.30 REGISTRATION AND COFFEE

10.00 Professor Sean Strain OBE
Ulster University
Chairperson's introduction

10.15 Professor Barbara Livingstone
Ulster University
Overweight and obesity -
portion . . . . . size matters!

10.50 Dr Ciara Rooney
Queen's University Belfast
Changing dietary behaviour in schools -
what does the evidence show?

11.25 COFFEE

11. 45 Professor Domhnall MacAuley
Ulster University
Physical activity and health -
is sedentary behaviour the 'new smoking'?

12.20 Professor Julie Lovegrove
University of Reading
The challenge of healthy and sustainable diets -
the place of dairy foods

12.55 LUNCH

2.00 Dr Anne Nugent
University College Dublin
Cheese and health -
an update on the evidence

2.35 Professor Jason Ellis
Northumbria University
Overweight and obesity -
the role of sleep

3.10 CLOSE

Overweight and obesity: portion . . . . . size matters!

Professor MBE Livingstone

EMERITA PROFESSOR OF HUMAN NUTRITION, SCHOOL OF BIOMEDICAL SCIENCES,
ULSTER UNIVERSITY

Portion size is a key environmental driver of energy intake, and consumption of larger than appropriate portion sizes could increase the risk of weight gain. Multiple well controlled laboratory studies, supported by data collected in free-living settings have demonstrated that portion size has a powerful effect on the amount consumed. Of particular importance is that bouts of overeating associated with large portions are sustained and not followed by a compensatory reduction in intake. The positive effect of portion size on energy intake has been demonstrated for different types of foods and beverages and is particularly pronounced with energy dense foods. The predisposition to overeat in response to large portions is pervasive and occurs regardless of demographic characteristics such as socio-economic status, age, BMI and sex.

Secular tends towards greater availability of large portions, coupled with value size pricing have effectively distorted consumption norms and perceptions of what is an appropriate amount to eat. While many strategies have been proposed to counter the deleterious effects of portion size, there are few data indicating which are likely to be acceptable in the medium-to-long term. Consumer behaviour in relation to portion size is complex and getting consumers to consider not just what they eat but also how much they eat is a formidable challenge for health professionals. While consumers may be amenable to portion size interventions these must be tempered with the caveat that they are only going to be feasible and acceptable if palatability and convenience are not compromised and value-for-money and individual freedom of choice are guaranteed. Unfortunately at present there is a lack of national serving size (the amount of food/beverage recommended to be consumed at a single eating occasion) guidance which has led to a plethora of inconsistent and confusing information from various sources on appropriate serving sizes. Authoritative serving size guidance which is realistic, easy-to-understand and which resonates with consumers is urgently required to counter the deleterious impact of portion size distortion.

Changing dietary behaviour in schools: what does the evidence show?

Dr Ciara Rooney

RESEARCH FELLOW, CENTRE FOR PUBLIC HEALTH,
QUEEN'S UNIVERSITY BELFAST

Diet is a key, modifiable determinant of health. However, despite this, the diet of UK children is currently suboptimal; typically high in fat and sugar and low in fruit and vegetables, fibre and some micronutrients. Unhealthy food habits during childhood can have a detrimental impact upon a child's health, but have also been shown to continue into adulthood, posing additional health problems in later life. Indeed, it is well established that an unhealthy diet is strongly associated with an increased risk of developing a number of chronic illnesses including cardiovascular disease, diabetes and other conditions related to obesity. Therefore, there is an urgent need to develop effective and sustainable ways of encouraging young people to adopt and maintain healthier diets.

Schools play a crucial role in improving the health of children, and represent an ideal setting for public health interventions. Children spend a considerable amount of their time at school which provides a unique opportunity to engage with a large population of pupils of various ages. Furthermore, school meals make a vital contribution towards the dietary intake of school children, and are estimated to contribute 25-35% of a child's daily intake of energy, fat, fibre and other nutrients. Consequently, an increasing number of school-based interventions have attempted to positively modify children's dietary behaviours, and to reduce associated levels of overweight and obesity. This evidence will be reviewed in order to determine the effectiveness of existing interventions. The presentation will also highlight emerging research on novel strategies to improve children's dietary behaviours including the use of incentives. Finally, the challenges, gaps and areas for future development with regards to school-based dietary interventions will be discussed.

Physical activity and heath: is sedentary behaviour the new smoking?

Professor Domhnall MacAuley

ASSOCIATE EDITOR CANADIAN MEDICAL ASSOCIATION JOURNAL AND PLOS MEDICINE,
VISITING PROFESSOR, ULSTER UNIVERSITY

There are some parallels with how our knowledge has evolved about smoking but, while the hazards of physical inactivity are well known, there hasn't yet been the enormous culture change that we have seen in attitudes towards smoking. Research continues to underline the benefits of physical activity and some recent research studies made a significant media impact.

How much physical activity is needed? In April 2015, a paper in JAMA Internal Medicine showed a 31% lower mortality risk at x1-2 times the recommended minimum and a dose response relationship until the upper threshold for mortality benefit of 39% lower risk at 3 to 5 times the recommended level. But, the greatest gain is by undertaking any activity. One might argue that the incremental benefit above the recommendations is modest and a linked editorial pointed out that "a lot of the mortality reductions were seen in people only one step away from doing no leisure time physical activity." The message seems to be- just do something.

When can you stop? The bad news for middle aged couch potatoes comes from a study of Australians aged 45 years plus, published just a few days later, which showed a dose-response (inverse) relationship between proportion of vigorous activity (of all moderate and vigorous) and mortality. Their take home message was that activity guidelines should endorse vigorous activity.

Is there a link with cancer? A major systematic review published in the Journal of the National Cancer Institute in 2014 found an increased risk for colon cancer of 1.54 for TV viewing time, 1.24 for occupational sitting time, and 1.24 for total sitting time. For endometrial cancer the risk was 1.66 for TV viewing time and 1.32 for total sitting time and, for lung cancer was 1.21 with overall sedentary behaviour. More recently, in March 2015, a study in published in JAMA Oncology found the hazard ratios for lung, colorectal, and prostate cancer incidence among men with high cardiorespiratory fitness were 0.45, 0.56, and 1.22 respectively.

What is the role of doctors? Epidemiologists identify the risks and clinicians see the results. Like smoking cessation, however, medical advice is not enough and increasing population physical activity requires more than doctors alone.

A full and more detailed abstract with links to these and other papers mentioned in the talk is available on CMAJblogs **http://cmajblogs.com/physical-activity-and-its-effect-on-health/**

The challenge of healthy and sustainable diets: the place of dairy foods

Professor Julie Lovegrove

PROFESSOR OF HUMAN NUTRITION, HEAD OF HUGH SINCLAIR UNIT OF HUMAN NUTRITION, UNIVERSITY OF READING

Diet is playing an increasingly important role in promoting health by reducing co-morbidity associated with obesity and the ageing population. The UK food system generally provides a safe, nutritious and consistent food supply, but also places significant strain on land, water, air and other natural resources, and is responsible for around 20% of all green-house gas emissions (GHGE) in the UK. In global terms, the provision of nutrition in its current form may soon breach the finite capacity of the planet to provide an adequate supply of food. In urgent recognition of this situation, there is now a general consensus that the food system should be a top priority in global environmental sustainability.

In the UK, meat and dairy products are the largest individual contributor to GHGE. However, dairy products contribute nutrients to the diet that are essential for health, including calcium, phosphorus, iodine, vitamin B12 and protein, and are consumed by the majority of the UK population. This presentation will consider the role of dairy products in sustainable diets within the context of nutritional adequacy, financial costs and impact on the environment.

Cheese and health: an update of the evidence

Dr Anne Nugent

UCD INSTITUTE OF FOOD AND HEALTH, SCHOOL OF AGRICULTURE AND FOOD SCIENCE,
UNIVERSITY COLLEGE DUBLIN

Although consumed since ancient times, information regarding the relationship between cheese and health has, at times been contentious. Cheese is naturally rich in a number of nutrients but its composition of fat, saturated fat and salt which has drawn most attention. Globally, dietary guidelines typically recommend restriction of dietary saturated fat intakes as a key measure to prevent cardiovascular disease. Hence, dietary guidance relating to cheese has, at times, been accompanied by caveats to moderate intakes and/or to choose lower fat versions. This has been especially true for individuals with elevated blood lipid profiles. In response, considerable emphasis has been placed on developing reduced fat and/or salt products and on educating consumers about dietary fat.

In contrast, more recent scientific studies have questioned the nature and strength of this relationship. Although the majority of published studies to date have been observational in nature and focused on 'dairy products' rather than cheese per se, there is a growing body of evidence which suggests that there is no evidence to link cheese consumption and increased risk of cardiovascular disease. Key considerations include the quality of the evidence base involved, the types and amounts of cheese studied, characteristics of the study groups involved, putative mechanisms and interpretation of results in the context of public health guidance.

Overweight and obesity: the role of sleep

Professor Jason Ellis

PROFESSOR IN PSYCHOLOGY AT NORTHUMBRIA UNIVERSITY AND DIRECTOR OF THE NORTHUMBRIA CENTRE FOR SLEEP RESEARCH

Sleep is one of the central pillars of human health and is fundamental to both physical and psychological wellbeing. That said, it is often the first thing we sacrifice in order to keep up with the demands of the increasingly hectic 24hour lifestyle. The reason for this is that traditionally sleep has been viewed, especially in popular culture, as a luxury with statements such as '. . . you snooze, you loose' and '. . . I'll sleep when I am dead'. However, research now provides a compelling case to suggest that if you don't snooze, you will loose and you are also significantly more likely to develop a variety of acute and chronic illnesses.

The aim of this talk is to discuss the relationship between sleep and health using the example of obesity. The talk will begin by introducing the audience to the basic mechanisms of 'the sleep process' (the sleep homeostat and the circadian rhythm), then to identify how a mismatch between sleep need, sleep opportunity and sleep ability can result in the development of a sleep disorder.

We will then provide an overview of the literature which identifies links between sleep and obesity, looking at both population-level data and clinical-level data. We will then go on to discuss the potential mechanisms at biological (chronotype), behavioural (food preference), and psychological (mood dysregulation and decision making) levels that may underlie this link. Finally, we will discuss some simple strategies to address the issue of poor sleep in modern society and future directions in terms of research and practice.

notes

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