

**sacn**  
Scientific Advisory Committee on Nutrition

Annual Report 2008

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## Foreword

I am pleased to present the Scientific Advisory Committee on Nutrition's (SACN) annual report, covering the year 2008.

This year SACN published a report on *The Nutritional Wellbeing of the British Population* which summarises the analysis of the results of the British National Diet and Nutrition Surveys (NDNS). The Committee also published position statements on dietary fibre & health and the dietary fibre definition and genetic testing. In addition, position statements on the nutrition requirements for multiple pregnancies, the use of 'Good Night' Milks for infants aged over 6 months and a commentary on the key findings of the 2005 Infant Feeding Survey were prepared by the Subgroup on Maternal and Child Nutrition (SMCN).

This year also saw the continued work of several groups established in previous years: the Energy Requirements Working Group, the Iron Working Group and the Maternal and Child Nutrition Subgroup as well as the forming of two new groups: the Carbohydrates Working Group and the Folate/Cancer Working Group.

The SACN meeting in June was held in the Food Standards Agency's (FSA) office in Aberdeen and the Committee would like to thank all those at FSA Scotland for all their help in organising this meeting.

My thanks go to the members of the Committee and its Working Groups and Subgroups for their commitment and enthusiasm. I would also like to thank the Secretariat for their work throughout the year. Their efforts in ensuring the efficient conduct of Committee business are greatly appreciated.



Professor Alan Jackson

Chair

# Introduction

This is the seventh annual report of the Scientific Advisory Committee on Nutrition (SACN) and covers the calendar year 2008.

## Overview

The full Committee met three times in 2008 on 7 February, 10 June (Aberdeen) and 23 October. Professor Jackson chaired all the meetings.

The Energy Requirements Working Group met three times (23 May, 29 Sept and 1 December) and the Maternal and Child Nutrition subgroup met twice (19 May and 17 September) in 2008. The Iron Working Group met once (16 October), as did the Approaches to the Nutritional Assessment of Novel Foods Subgroup (20 November). The recently established Carbohydrates Working Group met three times (16 April, 30 May and 26 September) and the Folate/Cancer Working Group met once (21 January) in 2008.

## About the Committee

SACN is a UK wide advisory Committee set up to advise the UK Health Departments as well as the Food Standards Agency (FSA); it is supported by a joint Department of Health / FSA secretariat.

Its advice covers scientific aspects of nutrition and health with specific reference to:

- nutrient content of individual foods and advice on diet as a whole including the definition of a balanced diet, and the nutritional status of people;
- monitoring and surveillance of the above;
- nutritional issues which affect wider public health policy issues including conditions where nutritional status is one of a number of risk factors (e.g. cardiovascular disease, cancer, osteoporosis and/or obesity);
- nutrition of vulnerable groups (e.g. infants and the elderly) and health inequality issues; and
- research requirements for the above.

SACN's terms of reference are shown at Annex 1.

## Membership

The following Members were reappointed in 2008:

<b>For a further two years:</b>	<b>For a further three years:</b>	<b>For a further four years:</b>
Professor Peter Aggett	Professor Paul Haggarty	Professor Ian Macdonald
Dr Ann Prentice	Mrs Christine Gratus	
Dr Tony Williams	Dr David Mela	

Biographies of members can be found at Annex 3.

### **Remuneration and Committee finance**

Remuneration and Committee finances are shown at Annex 4.

### **Declaration of interests**

The Committee follows Government advice on declaration of interests. We are requested to declare an interest at meetings where there may be a conflict of interest with regard to the issue under scrutiny. We are also requested to provide the Secretariat with an annual declaration of interests, which have been detailed at Annex 5.

### **Procedures**

Meeting agendas were compiled from a number of sources including outstanding items from previous meetings, items suggested by the Committee, outside bodies including FSA and Department of Health Committees as well as items brought forward from the Committee work programme agreed in 2006. Updates from SACN Subgroups and Working groups were regular features on the agenda as were reports on nutrition related Government activities in the FSA, and Health Departments.

### **Forward Look**

The Committee did not hold a horizon scanning meeting in 2008. A horizon-scanning meeting will take place in October 2009.

### **Openness**

SACN is committed to a policy of openness and engagement with stakeholders. Papers for the Committee's meetings, agenda and minutes are posted on the Committee website at [www.sacn.gov.uk](http://www.sacn.gov.uk) (subject to certain exceptions on grounds of commercial or other sensitivity). As part of the policy on openness, all of the Committee's three main meetings are now held in public.



# The Scientific Advisory Committee on Nutrition's Work in 2008

The full Committee met three times in 2008. There are, in addition, a number of groups that develop recommendations and advice on specific subjects. They are:

The Approaches to the Nutritional Assessment of Novel Foods Subgroup  
The Carbohydrates Working Group  
The Energy Requirements Working Group  
The Folate/Cancer Working Group  
The Iron Working Group  
The Subgroup on Maternal and Child Nutrition

## **Approaches on the Nutritional Assessment of Novel Foods Subgroup**

### **Background**

A joint Subgroup has been established with the Advisory Committee on Novel Foods and Processes (ACNFP) to consider approaches to the nutritional assessment of novel foods, including those from genetically modified sources.

### **Terms of reference**

The Subgroup is reviewing the existing guidelines for the nutritional assessment of novel foods, and considering whether this guidance should be refined to provide applicants with specific details of the nutritional data required to support a novel food application.

It is intended that the resulting advice will be used by

- the ACNFP in its future evaluations of novel foods;
- applicants making novel applications through the UK; and
- the Food Standards Agency, which will circulate it to other EU bodies (including the European Food Safety Authority) in order to develop a consistent approach to the nutritional assessment of novel foods.

### **Activity**

The Subgroup met on 20 November 2008 to discuss the proposed guidance for nutritional assessment of novel and GM foods. The guidance will be finalised via correspondence and will be considered by SACN in 2009/10.

## Carbohydrates Working Group

### Background

This Working Group was set up in 2008 following a workshop convened by the Food Standards Agency (FSA) to discuss current government advice relating to carbohydrate intake. Dietary carbohydrate was last considered by COMA in 1989 in their report on Dietary Sugars and Human Disease, the 1991 report "*Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*" and the 1998 report "*Nutritional Aspects of the Development of Cancer*". It was agreed that under the remit of the Working Group a review of carbohydrate and its relationship to health outcomes should be undertaken in ensure that policy recommendations are kept up to date.

### Terms of reference

The Scientific Advisory Committee on Nutrition is requested by the Food Standards Agency and Department of Health to provide clarification of the relationship between dietary carbohydrate and health and make public health recommendations. To achieve this they need to review:

- The evidence for a role of dietary carbohydrate in colorectal health in adults (including colorectal cancer, IBS, constipation) and in infancy and childhood;
- The evidence on dietary carbohydrate and cardio-metabolic health (including cardiovascular disease, insulin resistance, glycaemic response and obesity);
- The evidence in respect to dental health that has arisen since the COMA report, Dietary Sugars and Human Disease (Department of Health 1989);
- The terminology, classification and definitions of types of carbohydrates in the diet.

### Activity

The Carbohydrates Working Group met in April, May and September 2008. At these meetings the final terms of reference for the review were agreed. The narrative synthesis on fibre commissioned by the FSA was discussed and led to SACN producing a statement on their definition of fibre to assist Agency negotiations in Europe. Details surrounding commissioning of the cardiometabolic health and disease review were also finalised in order to address the second part of the terms of reference.

## Energy Requirements Working Group

### Background

At the horizon-scanning meeting in 2003 it was agreed that SACN should review the Dietary Reference Values (DRVs) for energy set in 1991 in the COMA report *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*, as requested by FSA and the Department of Health.

The latest National Diet and Nutrition Survey of adults highlighted that although average energy intakes are less than the Estimated Average Requirement (EAR) for energy, there is a continuing increase in the incidence and prevalence of obesity and excessive body weight in the UK population. While some of the difference between energy intake and the reference requirements can be accounted for by underreporting of food intake, there is concern that the energy requirements as set in 1991 may be too high for the UK population. Early in 2004, the FAO/WHO/UNU Expert Consultation Report on Human Energy Requirements was released. In light of this report, SACN considered this an appropriate time to review the energy requirements for the UK. A Working Group was established in 2005 to look at the issue.

### Terms of reference

- review and agree on the interpretation of the methods, definitions and assumptions used by COMA (1991) and FAO/WHO/UNU (2004) to agree energy requirements;
- agree a framework by which to arrive at energy requirements for the UK population and its Subgroups;
- agree population based Dietary Reference Values for energy, and provide recommendations taking into account age, body size, levels of activity, gender and physiological state (i.e. growth, pregnancy and lactation); and
- consider the implications of these recommendations on the requirements for other nutrients.

### Activity

The Energy Requirements Working Group continued its work during 2008. Meetings were held on 23 May, 29 September and 1 December 2008.

The main focus of discussion at these meetings was the appropriateness of developing regression equations to predict energy expenditure in adults. The regression equations produced in earlier Working Group meetings for adults were based on doubly labelled water (DLW) studies of subjects that were not considered to be representative of the UK population, due to small study size and over-representation of physically active subjects. The Working Group therefore agreed to adopt a simple factorial approach to develop energy reference values for adults using physical activity levels derived from two large population based DLW studies which were more likely to be representative of the UK population. All chapters and appendices to the report have now been drafted.

## Folate/Cancer Working Group

### Background

This Working Group was set up in response to a request from the Chief Medical Officer (CMO), requesting SACN to further consider two papers (Cole *et al*, 2007<sup>1</sup> and Mason *et al*, 2007<sup>2</sup>) relating to folic acid and colorectal cancer (CRC) risk, which had been published after the SACN report on *Folate and Disease Prevention* (2006)..

### Activity

The Working Group met on 21 January 2008. The purpose of the meeting was to decide whether SACN's recommendation, for the introduction of mandatory fortification with controls on voluntary fortification and guidance on supplement use, should be revised following publication of the papers by Cole *et al* (2007) and Mason *et al* (2007).

The group agreed, on balance, with SACN's recommendation that mandatory fortification should only be introduced with controls on voluntary fortification and guidance on supplement use. However, it was agreed that the recommendation to restrict voluntary fortification should be strengthened. It was also noted that there were a number of ongoing trials investigating the effects of folic acid on CVD; as the trials were also collecting data on cancer risk, results from these trials could provide further insights on the association between folic acid and CRC risk.

Since data from most of these trials would be available for SACN's consideration by the end of 2008, it was agreed at the SACN meeting on 7 February 2008, to delay making a decision on mandatory folic acid fortification until the results from these trials could be considered.

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<sup>1</sup> Cole BF *et al*. Folic acid for the prevention of colorectal adenomas. *JAMA*. 2007; 297:2351-2359.

<sup>2</sup> Mason JB *et al*. A temporal association between folic acid fortification and an increase in colorectal cancer rates may be illuminating important biological principles: a hypothesis. *Cancer Epidemiol Biomarkers Prev*. 2007; 16:1325-29.

## Iron Working Group

### Background

UK national surveys have consistently shown that a proportion of the population, particularly young women and children, have low iron intake relative to recommendations, which has raised concerns that these subgroups of the population may be at risk of iron deficiency.

In their report, *Nutritional Aspects of the Development of Cancer* (DH, 1998), COMA highlighted possible links between red and processed meat consumption and risk of colorectal cancer. COMA recommended that people who eat large amounts of red and processed meat should consider reducing the amount they consumed. Since red meat is a rich dietary source of iron, a recommendation to reduce meat consumption could lead to an increase in the proportion of people with iron intakes below dietary recommendations. This concern was recognised by COMA which recommended that the implications of a reduction in meat intake on iron status should be reviewed.

### Terms of reference

To review the dietary intake of iron in its various forms and the impact of different dietary patterns on the nutritional and health status of the population, and to make proposals. It was agreed to consider both beneficial and adverse effects of an increase in iron intake, including the:

- effect of dietary components on iron absorption and utilisation in the body;
- interaction of infections and inflammation with iron metabolism and the possibility that this might affect the apparent incidence of iron deficiency;
- effect of iron deficiency on health and well being, for example, mental and physical development;
- potential adverse effects of excess iron, including free radical damage and the risk of cardiovascular disease and cancer.

### Activity

Progress on the report has been delayed because work on folic acid was given priority and took much longer than planned; however the Iron Working Group met again on 16 October 2008 to discuss a revised draft of the Iron report. The revised report will be considered by SACN in 2009 and will then go out for public consultation. The intention is for SACN to publish its advice and recommendations on iron towards the end of 2009.

## Subgroup on Maternal and Child Nutrition (SMCN)

### Background

Health Departments and the Agency need regular scientific advice for policy-making and regulatory issues. Sometimes this is needed at short notice, for example, providing advice to inform the UK position in international forums such as the European Commission, CODEX *Alimentarius* and the advice on the influence of maternal and early child nutrition on later development of disease.

### Terms of reference

The terms of reference for the Subgroup on Maternal and Child Nutrition are:

- to review the evidence on the influence of maternal, fetal and child nutrition including growth and development *in utero* and early childhood on the development of disease later in life;
- to identify opportunities for nutritional intervention that could influence the risk of disease later in life; and
- to consider such scientific aspects of nutrition of women of reproductive age, infants and children as are referred to it by the SACN, Health Departments and the Agency.

### Activity

The Committee met twice in 2008 on 19 May and 17 September. The Committee have:

- Reviewed key findings of the Infant Feeding Survey 2005, (the survey was published in May 2007), and subsequently published a review in January 2008 recommending actions for improving infant feeding policy and practice. This review also suggested areas for deeper exploration in future Infant Feeding Surveys;
- Advised the Department of Health on whether women with multiple pregnancies should be advised to consume more food than women with singleton pregnancy. The Committee's view was that the evidence provided (by TAMBA) does not support the assertion that women deliberately increasing their nutritional intakes beyond current recommendations for pregnancy can improve the outcome;
- Considered the place of "Good Night" milk products in the diet of infants aged six months and above. The Committee could not identify any published evidence to support a claim that "Good Night" milks offer nutritional or other health advantage over the use of infant formula or follow-on formula, and a change to these products is not necessary (as with other follow-on formula);

The Committee are also continuing to work on a report looking at the influence of maternal, fetal and child nutrition on the development of disease in later life and hope to publish in 2009.

## Further Highlights in 2008

### **The Nutritional Wellbeing of the British Population (National Diet and Nutrition Survey)**

SACN published its report, *The Nutritional Wellbeing of the British Population*, an analysis of British dietary surveys in 2008 which summarises the analysis of the results of the British National Diet and Nutrition Surveys (NDNS).

The report concludes that there is a general trend towards healthier eating patterns. However, some parts of the population, including young adults, people on benefits and elderly people in institutions, still have low intakes of some micronutrients, indicating a need for action.

A copy of the report is available on the SACN website:  
[sacn.gov.uk/pdfs/nutritional\\_health\\_of\\_the\\_population\\_final\\_oct\\_08.pdf](http://sacn.gov.uk/pdfs/nutritional_health_of_the_population_final_oct_08.pdf)

### **Narrative synthesis of health effects of potential dietary fibre components**

The Food Standards Agency commissioned a team at the MRC Human Nutrition Research unit Cambridge to undertake a "*Narrative Synthesis of Health Effects of Potential Dietary Fibre Components*" following the guidelines outlined in the SACN framework for the evaluation of evidence.

The Committee published a background paper that formed the basis for a SACN position statement on dietary fibre.

A copy of the background paper is available on the SACN website:  
[sacn.gov.uk/pdfs/narrative\\_synthesis\\_paper\\_final.pdf](http://sacn.gov.uk/pdfs/narrative_synthesis_paper_final.pdf)

### **Selenium**

The report on Selenium was revised during 2008 and will be published in 2009.

# Annex 1

## **SACN terms of reference**

The terms of reference of SACN are to advise the CMOs and/or the Agency, and thus, through the CMOs or Agency, the Government on scientific aspects of nutrition and health with specific reference to:

- nutrient content of individual foods, and advice on diet as a whole, including the definition of a balanced diet and the nutritional status of people;
- monitoring and surveillance of the above;
- nutritional issues which affect wider public health policy issues, including conditions where nutritional status is one of a number of risk factors (eg cardiovascular disease, cancer, osteoporosis and/or obesity);
- vulnerable groups (e.g. infants and the elderly) and inequality issues;
- research requirements for the above; and
- individual Members may be invited to serve on SACN's Subgroups.

All Members and the Secretariat regard it as part of their role to:

- examine and challenge if necessary the assumptions on which scientific advice is formulated and ask for explanations of any scientific terms and concepts which are not clear;
- ensure that SACN has the opportunity to consider contrary scientific views and the concerns and values of stakeholders before a decision is taken; and
- ensure that SACN's advice is clear and comprehensible.

## Annex 2

### Committee members

#### Chair

Professor Alan Jackson  
Professor of Human Nutrition, University of Southampton

#### Members

Professor Peter Aggett  
Head of School, Lancashire School of Health and Postgraduate Medicine,  
Professor of Child Health and Nutrition, University of Central Lancashire

Professor Annie Anderson  
Professor of Food Choice, Centre for Public Health Nutrition Research,  
University of Dundee

Professor Sheila Bingham  
Deputy Director, Medical Research Council's Dunn Human Nutrition Unit,  
Cambridge

Mrs Christine Gratus (lay member)  
Honorary Senior Research Fellow, University of Birmingham, School of  
Primary Care Clinical Sciences. Former advertising and marketing research  
director.

Dr Paul Haggarty  
Head of the Nutrition & Epigenetics Group at Rowett Research Institute.  
Honorary Senior Lecturer in Aberdeen University Medical School and  
Honorary Clinical Scientist in Grampian NHS Trust

Professor Timothy Key  
Professor in Epidemiology and Deputy Director of Cancer  
Epidemiology Unit, University of Oxford

Professor Peter Kopelman  
Principal, St George's, University of London

Professor Ian Macdonald  
Professor of Metabolic Physiology at the University of Nottingham and  
Director of Research in the Faculty of Medicine and Health Sciences

Dr David Mela  
Senior Scientist and Expertise Group Leader, Unilever Food and Health  
Research Institute, The Netherlands

Dr Ann Prentice  
Director, MRC Human Nutrition Research, Cambridge

Dr Anita Thomas  
Consultant Physician in Acute Medicine and Care of the Elderly, Plymouth  
Hospitals NHS Trust

	Mrs Stella Walsh Postgraduate Programme Leader, Leeds Metropolitan University
	Dr Anthony Williams Reader in Child Nutrition and Consultant in Neonatal Paediatrics, St George's Hospital, London
<b>Observers</b>	Dr Alison Tedstone Food Standards Agency
	Mr Geoff Dessent Department of Health
	Dr Fiona Bissett Scottish Government, Health Department
	Mrs Maureen Howell The Welsh Assembly, Health Promotion Division
	Dr Naresh Chada Department of Health, Social Services and Public Safety, Northern Ireland
<b>Secretariat</b>	<b>Department of Health</b>
	Dr Sheela Reddy (Scientific Secretary)
	Ms Rachel Coomber
	Ms Parminder Nijjar
	<b>Food Standards Agency</b>
	Dr Elaine Stone (Scientific Secretary)
	Mr Michael Griffin
	Ms Lynda Harrop
	Ms Emma Peacock
	Mrs Vicki Pyne
	Ms Mamta Singh

### **Membership of Approaches to the Nutrition Assessment of Novel Foods Subgroup**

**Chair** Professor Mike Gasson (Chair, ACNFP)  
Head of Food Safety Science Division, Institute of Food Research, Norwich

**Members** Professor Alan Jackson (SACN member)  
Professor of Human Nutrition, University of Southampton

Professor Ian Rowland (ACNFP member)  
Professor of Human Nutrition and Director of Northern Ireland  
Centre for Diet and Health, University of Ulster

Jill Brand (ACNFP lay member)  
Home Economist and Registrar for Births, Deaths and Marriages for  
Oxford County Council

Dr Paul Haggarty (SACN member)  
Head of the Nutrition & Epigenetics Group at Rowett Research Institute.  
Honorary Senior Lecturer in Aberdeen University Medical School and  
Honorary Clinical Scientist in Grampian NHS Trust

### **Membership of Carbohydrates Working Group**

**Chair** Professor Ian Macdonald  
Professor of Metabolic Physiology at the University of Nottingham and  
Director of Research in the Faculty of Medicine and Health Sciences

**Members** Professor Alan Jackson  
Professor of Human Nutrition, University of Southampton

Dr David Mela  
Senior Scientist and Expertise Group Leader, Unilever Food and Health  
Research Institute, The Netherlands

Professor Timothy Key  
Professor in Epidemiology and Deputy Director of Cancer Epidemiology  
Unit, University of Oxford

Professor Annie Anderson  
Professor of Food Choice, Centre for Public Health Nutrition Research,  
University of Dundee

Mrs Christine Gratus (lay member)  
Honorary Senior Research Fellow, University of Birmingham, School of  
Primary Care Clinical Sciences. Former advertising and marketing research  
director.

### **Membership of Energy Requirements Working Group**

<b>Chair</b>	Professor Alan Jackson Professor of Human Nutrition, University of Southampton
<b>Members</b>	Professor Marinos Elia (External Expert) Professor of Clinical Nutrition and Metabolism at the University of Southampton and Honorary Consultant Physician at Southampton General Hospital
	Professor Ian Macdonald Professor of Metabolic Physiology at the University of Nottingham and Director of Research in the Faculty of Medicine and Health Sciences
	Professor Joe Millward Head of Division of Nutrition Dietetics and Food, and Professor of Human Nutrition, University of Surrey
	Professor Andrew Prentice Head of MRC International Nutrition Group and Professor of International Nutrition at the London School of Hygiene and Tropical Medicine
	Professor Chris Riddoch (External Expert) Head of the London Sport Institute, Middlesex University. Professor of Sport and Exercise Science
	Dr Anita Thomas Consultant Physician in Acute Medicine and Care of the Elderly, Plymouth Hospitals NHS Trust
	Dr Anthony Williams Reader in Child Nutrition and Consultant in Neonatal Paediatrics, St George's Hospital, University of London
	Mrs Stella Walsh Postgraduate Programme Leader, Leeds Metropolitan University
<b>External Consultant</b>	Dr Peter Sanderson

### **Membership of Folate/Cancer Working Group**

<b>Chair</b>	Professor Alan Jackson Professor of Human Nutrition, University of Southampton
<b>Members</b>	Dr Paul Haggarty (SACN member) Head of the Nutrition & Epigenetics Group at Rowett Research Institute. Honorary Senior Lecturer in Aberdeen University Medical School and Honorary Clinical Scientist in Grampian NHS Trust  Professor Timothy Key Professor in Epidemiology and Deputy Director of Cancer Epidemiology Unit, University of Oxford  Professor David Phillips Professor of Environmental Carcinogenesis at the Institute of Cancer Research (University of London)  Professor Elio Riboli Head of the Division of Epidemiology, Public Health and Primary Care of the Faculty of Medicine at Imperial College London  Professor Alan Boobis Professor of Biochemical Pharmacology and Director of the Department of Health Toxicology Unit, Faculty of Medicine, Imperial College London
<b>External Contributor</b>	Dr Robert Clarke B-Vitamin Trialists' (BVTT) Collaboration, University of Oxford
<b>Observers</b>	Dr Diane Benford Mrs Frances Hill

### **Membership of Iron Working Group**

<b>Chair</b>	Professor Peter Aggett (SACN member) Past Head of School, Lancashire School of Health and Postgraduate Medicine, Emeritus Professor of Child Health and Nutrition, University of Central Lancashire
<b>Vice Chair</b>	Dr Ann Prentice (SACN member) Director, MRC Human Nutrition Research, Cambridge
<b>Members</b>	Professor Philip Calder (External Expert) Foetal Origins of Adult Disease Division, University of Southampton  Professor Sue Fairweather-Tait (External Expert) Head of Nutrition and Consumer Science Division, Institute of Food Research  Mrs Christine Gratus (SACN lay member) Honorary Senior Research Fellow, University of Birmingham, School of Primary Care Clinical Sciences. Former advertising and marketing research director.  Professor Joe Lunec (External Expert) Head of Cranfield Health, Cranfield University

Professor Timothy Key  
Professor in Epidemiology and Deputy Director of Cancer Epidemiology  
Unit, University of Oxford

Professor Sally Grantham-McGregor (External Expert)  
Centre for International Child Health, Institute of Child Health

Professor Kim Fleischer Michaelsen (External Expert)  
Research Department of Human Nutrition, The Royal Veterinary and  
Agricultural University, Denmark

Professor Martin Pippard (External Expert)  
Dean of the Medical School, University of Dundee

Professor Mark Worwood (External Expert)  
Emeritus Professor at Cardiff University and honorary Clinical Scientist in the  
Cardiff and Vale NHS Trust

### **Membership of Subgroup on Maternal and Child Nutrition (SMCN)**

**Chair**

Dr Anthony Williams (SACN member)  
Reader in Child Nutrition and Consultant in Neonatal Paediatrics,  
St George's Hospital, London

**Members**

Professor Peter Aggett (SACN member)  
Past Head of School, Lancashire School of Health and Postgraduate Medicine,  
Emeritus Professor of Child Health and Nutrition, University of Central  
Lancashire

Professor Annie Anderson (SACN member)  
Professor of Food Choice, Centre for Public Health Nutrition Research,  
University of Dundee

Dr Robert Fraser  
Reader in Obstetrics and Gynaecology in the University of Sheffield with an  
Honorary Consultant contract in Obstetrics and Gynaecology at the Sheffield  
NHS Foundation Trust

Professor Alan Jackson (SACN member)  
Professor of Human Nutrition, University of Southampton

Professor Timothy Key (SACN member)  
Professor in Epidemiology and Deputy Director of Cancer Epidemiology  
Unit, University of Oxford

Dr Ann Prentice (SACN member)  
Director, MRC Human Nutrition Research, Cambridge

Mrs Stella Walsh (SACN member)  
Postgraduate Programme Leader, Leeds Metropolitan University

## Annex 3

### Committee members' biographies

#### Professor Alan Jackson (Chair)

Professor of Human Nutrition, School of Medicine at the University of Southampton. Professor Jackson's current work explores the extent to which modest differences in maternal diet and metabolic competence influence fetal development, predisposing to chronic disease in adulthood. Professor Jackson was a member of the Committee on Medical Aspects of Food and Nutrition Policy (COMA) for ten years and was a Consultant Adviser to the Chief Medical Officer on Nutrition from 1989 to 2002. Professor Jackson is a member of the EFSA Panel on Dietetic Products, Nutrition and Allergies.

#### Professor Peter Aggett

Past Head of School, Lancashire School of Health and Postgraduate Medicine, Emeritus Professor of Child Health and Nutrition, University of Central Lancashire, Preston, Lancashire. Professor Aggett is interested in trace element metabolism in health and disease. He has served on national and international advisory committees relating to clinical nutrition, public health and preventative medicine including nutritional safety and risk assessment, including the EC Scientific Committee on Food, the COT, ACNFP and EVM. He was a member of COMA for 7 years, and is a past chair and secretary of the ESPGHAN Committee on Nutrition and is currently chair of the Standing Committee on Nutrition for the Royal College of Paediatrics and Child Health.

#### Professor Annie Anderson

Professor of Food Choice at the Centre for Public Health Nutrition Research, Department of Medicine, Ninewells Medical School, University of Dundee. Professor Anderson has represented the International Union against Cancer (UICC) on issues relating to diet and cancer prevention. In addition, she has participated as an expert advisor in a number of Department of Health, Food Standards Agency and Scottish Government Advisory Committees on topics ranging from nutrient standard of school meals to the Low Income Diet and Nutrition Survey. Her main research interests are dietary assessment methodologies, nutrition education and theory based, behaviourally focused dietary interventions in children and adults living in disadvantaged communities.

#### Professor Sheila Bingham

Director of the MRC Centre for Nutrition in Cancer Prevention and Survival at the University of Cambridge and Head of the Diet and Cancer Group of the Medical Research Council's Dunn Human Nutrition Unit. Professor Bingham is

recognized for her work in the prevention of cancer through diet. She is a principal investigator of the UK European Prospective Investigation into Cancer (EPIC) study, which is a European wide collaboration. She was a member of COMA for 9 years and has served on a number of other government sub-committees and working groups including the Food Standards Agency Committee on Toxicity of Chemicals (COT), Working Group on Phytoestrogens.

**Mrs Christine Gratus**

Mrs Gratus has a background in advertising, marketing and market research. She was a Director and International Vice-President of J Walter Thompson advertising agency until establishing her own Consultancy in 1990. As a qualitative researcher, Mrs Gratus has spent a lifetime listening to consumers talking about every aspect of their lives, with food high on the list and is now involved mainly with health and health research. She is an honorary Senior Research Fellow of the University of Birmingham, a member of the National Cancer Research Institute's Consumer Liaison Group, and a lay member of both the Herbal Medicines Advisory Committee and the London regional funding committee of the NIHR's Research for Patient Benefit programme.

**Dr Paul Haggarty**

Dr Paul Haggarty (BSc, PhD) is Head of Nutrition & Epigenetics and Senior Lecturer at Rowett Institute of Nutrition and Health, University of Aberdeen, and Honorary Clinical Scientist in Grampian NHS Trust. His research interest is in the way diet and environment interacts with genes to determine human health. This involves the study of epigenetics in pregnancy, cancer, cognition and cardiovascular disease. He has research experience in B vitamins, lipids and genetics and has an interest in the role of deprivation in the link between nutrition and health. He is a member of the Advisory Committee on Novel Foods and the North of Scotland Research Ethics committee.

**Professor Timothy Key**

Deputy Director, Cancer Epidemiology Unit, University of Oxford. Professor Key studied veterinary medicine, nutrition and epidemiology. He has special interests in the interactions between nutrition and hormones, cancer and cardiovascular disease. He is the lead investigator of the Oxford component of the European Prospective Investigation into Cancer (EPIC) which is a European-wide collaborative study, chair of the EPIC Working Group on Nutrition and Prostate Cancer, and chair of the Endogenous Hormones and Breast Cancer Collaborative Group.

**Professor Peter Kopelman**

Principal, St George's, University of London. Professor Kopelman has considerable experience, from a clinical perspective, in the delivery of diabetes care and the management of obesity to all age groups. He has worked closely with Health Authorities and national organisations in addressing nutritional matters and has chaired a large number of Committees within the university sector, the NHS, Health Authorities and the Royal College of Physicians.

**Professor Ian Macdonald**

Ian Macdonald is Professor of Metabolic Physiology at the University of Nottingham and Director of Research in the Faculty of Medicine and Health Sciences. His research interests are concerned with the nutritional and metabolic aspects of obesity, diabetes and cardiovascular disease, with additional interests in nutrition and metabolism in exercise. His research involves studies in healthy subjects and various patient groups, and combines whole body physiological measurements, molecular investigation of tissue samples, and dietary interventions. Ian Macdonald is presently President of the Nutrition Society, Editor to the International Journal of Obesity and Chair of the International Association for the Study of Obesity Finance Committee.

**Dr David Mela**

Senior Scientist and Expertise Group Leader, Unilever R&D Vlaardingen, The Netherlands. Dr Mela joined Unilever in 1998, following an academic research career in the US and UK. His main expertise is in the biological and behavioural aspects of food choice, eating behaviour and energy balance, from consumer research through energy metabolism. In Unilever, he manages a team responsible for identifying and substantiating the benefits of ingredients and products. He also contributes to strategic planning and acts as a scientific liaison with external academic and trade organisations.

**Dr Ann Prentice**

Director, MRC Human Nutrition Research, Cambridge. Dr Prentice's main research interests are nutritional aspects of bone health and osteoporosis; dietary requirements for human growth, pregnancy and lactation, and old age with particular reference to micronutrients. She has published extensive peer-reviewed articles, book chapters and reports. Dr Prentice was President of the Nutrition Society (from 2004 to 2007) and has served on a number of national and international advisory committees, including COMA's Subgroup on Nutrition and Bone Health.

**Dr Anita Thomas**

Consultant Physician in Acute Medicine Plymouth Hospitals NHS Trust. Dr Thomas is chair of the CMO's Venous Thromboembolism (VTE) Implementation Working Group and CMO's representative on the Human Genetics Commission. She is a Board member of the Postgraduate Medical Education and Training Board (PMETB) and a member of the UK Panel for Research Integrity in Health and Biological Science. Dr Thomas is a lead assessor for the GMC Fitness to Practise Procedures.

**Mrs Stella Walsh**

Mrs Walsh has a long-standing interest in the subjects of food and nutrition and is an experienced consumer representative having served on several government and industry Committees and replied to consultations on behalf of consumers. She was the Secretary of the National Federation of Consumers (NFC) and has been a representative for the NFC on the Institute of Grocery Distributors, and other FSA and Defra Committees. She has published several refereed articles for academic and professional journals, book chapters and conference papers on consumer issues linked to her role as a Postgraduate Programme Leader at Leeds Metropolitan University.

**Dr Anthony Williams**

Reader in Child Nutrition and Consultant in Neonatal Paediatrics, St George's University of London. Dr Williams was the Chair of COMA's Panel on Child & Maternal Nutrition and a member of COMA. He represented COMA/PCMN on the Welfare Food Review Group. He was a member of the Food Standards Agency's Expert Group on Vitamins and Minerals and cross-represented SACN on the Advisory Committee on Novel Foods and Processes between 2003 and 2007. Between 2006 and 2008 he chaired the NICE Centre for Public Health Excellence Programme Development Group producing guidance on maternal and child nutrition in low-income families.

## Members' biographies (not otherwise covered as SACN members)

### **Approaches to the Nutrition Assessment of Novel Foods Subgroup**

#### **Professor Mike Gasson**

Professor Mike Gasson BSc PhD is Head of the Food Safety Science Division and Deputy Director (Science) at the Institute of Food Research. He has been involved in gene technology research for more than twenty-five years with a particular interest in the genetics of food-relevant micro-organisms.

#### **Professor Ian Rowland**

Professor Rowland, BSc, PhD, is Professor of Human Nutrition at the University of Ulster and Head of the Northern Ireland Centre for Diet and Health.

#### **Ms Jill Brand**

Jill Brand, MPhil, FICSc, is a home economist with over 20 years of experience in product design, consumer issues and teaching.

### **Energy Requirements Working Group**

#### **Professor Marinos Elia**

Professor of Clinical Nutrition and Metabolism at the University of Southampton and Honorary Consultant Physician at Southampton General Hospital. He obtained a BSc (Hons) in Biochemistry and MB ChB degrees in Medicine from the University of Manchester, before undertaking research for an MD at the MRC Metabolic Research Laboratories, Oxford, headed by Sir Hans Krebs. He then moved to Cambridge, where he headed the Clinical Nutrition Group of the MRC Dunn Nutrition Unit, and the Nutrition Team at Addenbrooke's Hospital, and was Senior Research Fellow at Churchill College, University of Cambridge. He is currently an editor of five nutrition journals, and has been editor-in-chief of Clinical Nutrition. He has served on many national and international committees, and has chaired a number of them. He is currently chairman of the International Society of Body Composition Research, the British Association for Parenteral and Enteral Nutrition (BAPEN), and the Health Economic Committee of BAPEN. He has published extensively on various aspects of nutrition and metabolism.

#### **Professor Joe Millward**

Head of Division of Nutrition Dietetics and Food, and Professor of Human Nutrition, University of Surrey. Professor Millward has research interest in the regulation of growth and body composition with current research exploring metabolic demands for amino acids and essential fatty acids with a particular

interest in adaptive responses to variation in macronutrient intakes. He was a member of the Energy and Protein panel of COMA responsible for the 1991 Dietary Reference Values report and is currently co-chair of the FAO/WHO/UNU expert consultation on Protein and Amino Acids in Human Nutrition.

**Professor Andrew Prentice**

Head of MRC International Nutrition Group and Professor of International Nutrition at the London School of Hygiene and Tropical Medicine. Also Head of MRC Nutrition Programme in the Gambia, West Africa.

**Professor Chris Riddoch**

Professor of Sport and Exercise Science at the University of Bath. Professor Riddoch's work encompasses the extent to which physical activity levels affect health and how interventions aimed at individuals and environments can improve activity levels. His research focuses particularly on children's physical activity and how it relates to childhood obesity. Professor Riddoch was the Senior Scientific Editor of the Chief Medical Officer's 2004 report on Physical Activity and Health.

**Folate/Cancer Working Group**

**Professor David H Phillips**

Professor of Environmental Carcinogenesis at the Institute of Cancer Research (University of London). Professor Phillips obtained his first degree in Chemistry at the University of Oxford and his PhD in Biochemistry from the University of London and held postdoctoral fellowships at the University of Wisconsin and Stanford University, USA. He is currently chair of the Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC) and a member of its sister Committee on Mutagenicity (COM). He is also a member of the Food Standards Agency General Advisory Committee on Science (GACS). He is Editor-in-Chief of the scientific journal *Mutagenesis* and has chaired working groups evaluating carcinogenic risks to humans for the US National Toxicology Program (NTP) and the International Agency for Research on Cancer (IARC). His research interests are centred on mechanistic investigations into environmental causes of cancer and gene-environment interactions, and monitoring human exposure to carcinogens.

**Professor Alan Boobis**

Professor of Biochemical Pharmacology and Director of the Department of Health Toxicology Unit, Faculty of Medicine, Imperial College London. Professor Boobis is deputy chair of the Committee on Toxicity, a member of the Committee on Carcinogenicity, a member of the HPA Board Sub-Committee for Radiation, Chemical and Environmental Hazards, vice-chair of the European Food Standards Agency Panel on Plant Protection Products and their Residues and a regular member of the Joint WHO/FAO Expert Committee on Food Additives (residues of veterinary drugs) and the Joint WHO/FAO Meeting on Pesticide Residues. His current research interests currently include mechanistic toxicology, drug metabolism, biomarker discovery and increasingly the application of knowledge in these areas to risk assessment. Professor Boobis is joint editor-in-chief of *Food and Chemical Toxicology*.

### **Professor Elio Riboli**

Professor Riboli is Head of the Division of Epidemiology, Public Health and Primary Care of the Faculty of Medicine at Imperial College London. Professor Riboli has participated as chair, member or advisor to various international committees and panels including Committee on Cancer Prevention and Epidemiology, Europe Against Cancer Programme, European Community, Committee on Diet and Cancer, International Union of Nutritional Sciences (IUNS); the International Surveillance and Safety Committee of the SUVIMAX Intervention Trial on Antioxidants and Prevention of Cancer and Cardiovascular Disease (Paris), the Committee on Nutrition and Cancer, (CNRS ,National Scientific Research Council), Paris, the Scientific Council of the InVS, (National Institute of Health Surveillance of France), the Scientific Council of the AFSSA, (French Agency for Food Health & Safety), Scientific Grant Review Panel, World Cancer Research Fund, London-1998-2003 and the International Advisory Board, American Institute for Cancer Research, Washington – 1998-2000. Professor Riboli has co-authored over 310 peer-reviewed publications and over 100 book chapters and books and serves on editorial boards of major journals on nutrition, cancer and epidemiology.

### **Iron Working Group**

#### **Professor Philip Calder**

Professor of Nutritional Immunology, University of Southampton. Professor Calder's research interests include the identification of the influence of dietary fatty acids on the immune and inflammatory systems and understanding the mechanisms of action of specific fatty acids.

#### **Professor Sue Fairweather-Tait**

Personal chair in the School of Medicine, Health Policy & Practice, University of East Anglia, Norwich. Professor Fairweather-Tait's main interests are human mineral metabolism and micronutrient requirements for optimal health.

#### **Professor Kim Fleischer Michaelsen**

Professor of Paediatric Nutrition, Department of Human Nutrition, The Royal Veterinary and Agricultural University, Frederiksberg and Senior Consultant at the Paediatric Nutrition Unit, Rigshospitalet, University Hospital, Copenhagen. Professor Michaelsen is advisor to the Danish Health Agency on paediatric nutrition, a member of the Swedish Expert Committee on Paediatric Nutrition and President of the International Society of Research in Human Milk and Lactation. His research interests are nutrition during the first years of life including growth, breast-feeding, LCPUFA, probiotics and long-term effects.

#### **Professor Sally Grantham-McGregor**

Professor of International Child Health, Centre for International Child Health, Institute of Child Health, University of London. Professor Grantham-McGregor research has focussed on the effects of nutrition (energy and micronutrients) on child development, cognitive function and school achievement. She spent thirty years in Jamaica, where she has built up a strong research base looking at the effect of under nutrition on children's development and possible interventions. She is currently working on the effect of prenatal nutrition on child development in Bangladesh and Jamaica.

#### **Professor Joe Lunec**

Head of Cranfield Health, Cranfield University's newest School, Professor Lunec leads the School's activities that embrace diagnostics, smart materials, food environment and health and healthcare operations management. Professor Lunec is a graduate in Chemistry from Queen Mary College, University of London and has a PhD and DSc in Chemical Pathology from the University of London. He is a Fellow of the Royal College of Pathologists and periodically a government advisor on Medical Toxicology issues. Prior to joining Cranfield Health, Professor Lunec was Professor of Molecular Toxicology, Director of Genomics Centre, Kings College, London; Director of Medical Toxicology Laboratories, St Thomas' Hospital NHS Trust and Deputy Director of the Medical Toxicology Unit. His research interests are in three main areas; genotoxicity, atherosclerosis and inflammatory joint disease. He has lectured on Masters courses in Toxicology and Molecular Pathology. Professor Lunec has also supervised numerous PhD students and acted as external examiner throughout the UK and overseas. Professor Lunec was formerly a member of the Committee on Toxicology (until end March 2007) and is a member of the European Society for Free Radical Research.

#### **Professor Martin Pippard**

Professor of Haematology and Dean of the Medical School, University of Dundee. His main clinical and research interests are in disorders of iron metabolism, particularly iron overload, and abnormal erythropoiesis. He was a member of the 1995 British Nutrition Foundation Task Force on Iron. He is a scientific adviser to the UK Haemochromatosis Society and is an Associate Editor for the British Journal of Haematology.

#### **Professor Mark Worwood**

Professor Worwood is an Emeritus Professor at Cardiff University and an honorary Clinical Scientist in the Cardiff and Vale NHS Trust. He is lead Biochemist for Bowel Screening Wales. His interests have included iron absorption, genetic and functional studies of human ferritin, diagnostic methods for investigating iron status, and genetic haemochromatosis. He was editor of the British Journal of Haematology from 1986 to 1991. He was a member of the 1995 British Nutrition Foundation's Task Force on Iron, The Joint WHO/CDC Technical Consultation on Assessment of Iron Status at Population Level (2003-2004) and is scientific adviser to the Haemochromatosis Society. He is author of numerous articles on iron metabolism.

### **Subgroup on Maternal and Child Nutrition (SMCN)**

#### **Dr Robert Fraser**

Reader in Obstetrics and Gynaecology in the University of Sheffield with an Honorary Consultant contract in Obstetrics and Gynaecology at the Sheffield NHS Foundation Trust. Research interests include nutritional physiology of human pregnancy, normal and disordered fetal growth and public health aspects of nutrition in pregnancy and lactation. He also has a clinical research interest in pregnancy complicated by maternal diabetes.

## Annex 4

### **Remuneration and Committee finance**

The amount paid to committee members for fees increased in 2007. For Main Meetings the Chair received a total fee of £197 inclusive of attendance and reading fees. Members received £156 inclusive of attendance and reading fees.

For Working/Subgroups, Chair remuneration was £156 inclusive of attendance and reading fees. Members received £124 inclusive of attendance and reading fees.

The sponsor departments also met travel and subsistence costs for those attending Main Meetings and Working/Subgroups.

The cost of the Committee, excluding Secretariat resources, for 2008 was £110,492.78. Costs were met by the Department of Health and the FSA.

## Annex 5 SACN Main Committee - declaration of interests

Member	Personal interests			Non-personal interests			Any other interests		
	Company	Nature of Interest	Company	Nature of Interest	Company	Nature of Interest	Company	Nature of Interest	
Professor Alan Jackson	None	N/A	Nutricia Clinical Care Baxter Healthcare	Sponsors of Annual Nutrition Course				None	
Professor Peter Aggett	None	N/A	School Activities Astra-Zeneca Nestec ILSI Wellcome Yakult Individual: New Zealand Dairy Goat Council Cadbury Schweppes	1 – 8. Chairmanship (meetings) and lecture fees Departmental research and education in medicine and health, including food safety and metabolism.  Consultancy: Research Project Management Consultancy				None	
Professor Annie Anderson	None	N/A	None	N/A				None	
Professor Sheila Bingham	None	N/A	None	N/A				None	

Personal interests Non-personal interests				Any other interests	
Member	Company	Nature of Interest	Company	Nature of Interest	
Mrs Christine Gratus	None	N/A	None	N/A	None
Dr Paul Haggarty	Smith Nephew Diageo Cafe Direct	Shareholder Shareholder Shareholder	Pharmaton Editorial Consultant on the American College of Physicians' Information and Education Resource. Editorial Consultant on the Nutrition & Health conference and German Society for Reproductive Medicine.	Unpaid advisor on pregnancy study protocol. Consultation fee contributed to research funds.  Lecture fees contributed to research funds.	None
Professor Timothy Key	None	N/A	None	N/A	Member of Vegetarian Society of the UK Member of Vegan Society
Professor Peter Kopelman	Weight Watchers International	Medical Adviser	Alizyme Pharmaceuticals	Clinical trial sponsor	Member of Governing Board – Institute of Food Research.  Scientific Adviser, Foresight, Department of Innovation, Universities & Skills.
Professor Ian Macdonald	Mars Europe. CocaCola Europe.	Advisory Board. European Scientific Advisory Committee.	Mars Incorporated / Mars Europe. Inlever Nestle	Research project funding, PhD student funding Research project funding & PhD student funding. Research project	Board member, Obesity International Trading (trading company owned by International Association for the Study of Obesity).
Dr David Mela	Unilever	Employee and shareholder	None	N/A	None
Dr Anita Thomas	None	N/A	None	N/A	None

Personal interests Non-personal interests				Any other interests
Member	Company	Nature of Interest	Company	Nature of Interest
Mrs Stella Walsh	None	N/A	None	N/A
Dr Anthony Williams	None	N/A	None	N/A
Dr Ann Prentice	The Biosciences Federation	Honorary Officer /Director	As Director of MRC Human Nutrition Research responsibility for institutional interests as listed: BBC Institute of Brewing & Distilling Mars Ltd National Association of British and Irish Millers Optimal Performance Limited` Tanita UK Ltd. The Coca Cola Company The Beverage Institute for Health and Wellness Weight Watchers International Inc	Consumer representation for National Federation of Consumers. FSA and DEFRA Committees and working parties, including Cattle Movement, and Food Borne Disease. Trustee, Women and Children First. Fellow, UNICEF(UK).

# Annex 6

## SACN Working groups and subgroups - declaration of interests

Personal interests					Non-personal interests		Any other interests	
Member	Company	Nature of Interest	Company	Nature of Interest	Company	Nature of Interest		
<b>Working Group on Iron</b>								
Professor Philip Calder	Equazen Dutch Numico Mead Johnson Nutritionals B. Braun Melsungen Solvay Healthcare	Consultancy fees Consultancy fees Consultancy fees Lecture fees Lecture fees	B. Braun Melsungen	Research funding		None		
Professor Sue Fairweather-Tait	British Egg Information service	Consultancy fee	Coca-Cola GlaxoSmithKline British Egg Information Service Unilever	Research funding Research funding & Consultancy fees Research funding Consultancy fee		None		
Professor Kim Fleischer Michaelsen	None	N/A	Totus Medica None	Travel funds N/A		None		
Professor Sally Grantham-McGregor	None	N/A	None	N/A		None		
Professor Joe Lunec	None	N/A	None	N/A		None		
Professor Martin Pippard	None	N/A	None	N/A		None		
Professor Mark Worwood	Nelsonbach	Advice on Spatone (single occasion)	None	N/A		None		

Personal interests				Non-personal interests		Any other interests	
Member	Company	Nature of Interest	Company	Nature of Interest			
<b>Working Group on Energy</b>							
Professor Marinos Elia	None	N/A	None	N/A		None	
Professor Joe Millward	Innocent	Consultant	None	N/A		None	
Professor Andrew Prentice	None	N/A	Tanita UK Danone	Member of Medical Advisory Board One-off consultancy		None	
Professor Chris Riddoch	None	N/A	None	N/A		None	
<b>Working Group on Folate/Cancer</b>							
Professor David Phillips	Santander Aviva National Grid BG Group Centrica  Takeda Movetis Buller Jeffries	Shareholder Shareholder Shareholder Shareholder Shareholder  Consultant Consultant Consultant	AstraZeneca	Research collaboration		None	

Personal interests				Non-personal interests		Any other interests	
Member	Company	Nature of Interest	Company	Nature of Interest			
<b>Working Group on Folate/Cancer <i>continued</i></b>							
Professor Alan Boobis	Banco Santander SA Barclays BG Group BT Group Centrica PLC HBO Iberdrola SA National Grid Scottish Power Thus Astellas Pharma Sumitomo Chemical (UK) PLC Proctor & Gamble Howrey LLP	Shareholder	GlaxoSmithKline Food Standards Agency Department of Health Commission of the EU (FP6) ESRC ILSI HESI Elsevier JMPR JECFA (vet drugs) EFSA PPR Panel (Panel on Plant Protection Products and their Residues) ECETOC Task Force on Guidance for Classification of Carcinogens under GHS EFSA Scientific Committee Working Group on Risk-Benefit Assessment EFSA Scientific Committee Working group on the Benchmark Dose	Support by Industry Research Contract PhD Studentship Unpaid chair of Board of Trustees Editor-in-Chief, Food and Chemical Toxicology Member	None		
Professor Elio Riboli	None	N/A	None	N/A	None		
<b>Subgroup on Child Maternal and Nutrition</b>							
Dr Robert Fraser	None	N/A	None	N/A			

