Plenary Lecture
Impact of dietary fat on the development of non-alcoholic fatty liver disease in Ldlr−/− mice
R. A. Kemp, G. M. Davies, S. Tripathy & A. D. Lebo
1
Symposium 2: Macronutrients, gene expression and metabolic disease
Vitamin D modulates adipose tissue biology: possible consequences for obesity?
J.-P. Landreux, E. Karkani, J. Mercier-Chomlon, L. Baulet & P. Thibault
20
Polyphenols and non-alcoholic fatty liver disease: impact and mechanisms
I. Rodriguez-Ramiro, D. Vauzour & A. M. Minihane
35
Insulin secretion in health and disease: nutrients dictate the pace
R. Regazzi, A. Rodriguez-Trejo & C. Jacovetti
49
Dietary restriction and Sirtuin 1 in metabolic health: connections and divergences
C. Cantó
63
Developmental programming of energy balance regulation: is physical activity more "programmable" than food intake?
S. Zhu, J. Eclarinal, M. S. Baker, G. Li & R. A. Waterland
73
Symposium 3: Nutrition, epigenetics and the fetal origins of metabolic disease
Transgenerational epigenetic inheritance of diabetes risk as a consequence of early nutritional imbalances
J. C. Jimenez-Chillarón, M. Rabin-Krauel, S. Ribo & R. Diaz
90
Maternal folate deficiency and metabolic dysfunction in offspring
J. A. McKay & J. C. Mathers
96
Symposia featured in this issue:
Plenary Lectures
Macronutrients, gene expression and metabolic disease
Micronutrients, phytochemicals, gene expression and metabolic disease
Nutrition, epigenetics and the fetal origins of metabolic disease
Irish Section Postgraduate Meeting
Irish Postgraduate Winners
Personalised nutrition: the role of new dietary assessment methods
H. Forster, M. C. Walsh, M. J. Gibney, L. Brennan & E. R. Gibney
90
Can metabolotyping help deliver the promise of personalised nutrition?
100
Available online at www.journals.cambridge.org

PROCEEDINGS OF THE NUTRITION SOCIETY
Volume: 75   |   Number: 1   |   February 2016

Published on behalf of The Nutrition Society by Cambridge University Press — ISSN 0029-6651
Downloaded from https://www.cambridge.org/core. IP address: 54.70.40.11, on 09 Nov 2018 at 22:08:01, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms.

PNS
PROCEEDINGS OF THE NUTRITION SOCIETY
Volume: 75   |   Number: 1   |   February 2016

Available online at www.journals.cambridge.org

Symposia featured in this issue:
Plenary Lectures
Macronutrients, gene expression and metabolic disease
Micronutrients, phytochemicals, gene expression and metabolic disease
Nutrition, epigenetics and the fetal origins of metabolic disease
Irish Section Postgraduate Meeting

Downloaded from https://www.cambridge.org/core. IP address: 54.70.40.11, on 09 Nov 2018 at 22:08:01, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms.
Robert Gordon University, 25–26 March 2015

Conference on ‘Diet, gene regulation and metabolic disease’

Plenary Lecture
Impact of dietary fat on the development of non-alcoholic fatty liver disease in Ldlr⁻/⁻ mice
D. B. Jump, C. M. Depner, S. Tripathy & K. A. Lytle
1–9

Symposium 1: Macronutrients, gene expression and metabolic disease
Dietary carbohydrate and control of hepatic gene expression: mechanistic links from ATP and phosphate ester homeostasis to the carbohydrate-response element-binding protein
L. Agius
10–18
Insulin secretion in health and disease: nutrients dictate the pace
R. Regazzi, A. Rodriguez-Trejo & C. Jacovetti
19–29
Dietary restriction and Sirtuin 1 in metabolic health: connections and divergences
C. Cantó
30–37

Symposium 2: Micronutrients, phytochemicals, gene expression and metabolic disease
Vitamin D modulates adipose tissue biology: possible consequences for obesity?
J.-F. Landrier, E. Karkeni, J. Marcotorchino, L. Bonnet & F. Tourniaire
38–46
Polyphenols and non-alcoholic fatty liver disease: impact and mechanisms
I. Rodriguez-Ramiro, D. Vauzour & A. M. Minihane
47–60
Intracellular zinc in insulin secretion and action: a determinant of diabetes risk?
G. A. Rutter, P. Chabosseau, E. A. Bellomo, W. Maret, R. K. Mitchell, D. J. Hodson, A. Solomou & M. Hu
61–72

Plenary Lecture
Developmental programming of energy balance regulation: is physical activity more ‘programmable’ than food intake?
S. Zhu, J. Eclarinal, M. S. Baker, G. Li & R. A. Waterland
73–77

Symposium 3: Nutrition, epigenetics and the fetal origins of metabolic disease
Transgenerational epigenetic inheritance of diabetes risk as a consequence of early nutritional imbalances
J. C. Jimenez-Chillarón, M. Ramon-Krauel, S. Ribó & R. Díaz
78–89
Maternal folate deficiency and metabolic dysfunction in offspring
J. A. McKay & J. C. Mathers
90–95

Nutrition Society Irish section postgraduate meeting
Ulster University 12–13 February 2015

Irish Postgraduate Winners
Personalised nutrition: the role of new dietary assessment methods
H. Forster, M. C. Walsh, M. J. Gibney, L. Brennan & E. R. Gibney
96–105
Can metabotyping help deliver the promise of personalised nutrition?
106–114
Forthcoming topics to be featured in *Proceedings of the Nutrition Society* for 2016 (vol. 75):

- Nutrition at key life stages: new findings, new approaches  
  *(Above proceedings were presented at the NS meeting at University College Cork, 17–19 June 2015)*
- The future of animal products in the human diet: health and environmental concerns  
  *(Above proceedings were presented at the NS meeting at the University of Nottingham, 6–9 July 2015)*
- Sustainable diet and public health  
  *(Above proceedings were presented at the 12th European Nutrition Conference in Berlin, Germany, 20–23 October 2015)*
- Roles of sleep and circadian rhythms in the origin and nutritional management of obesity and metabolic disease  
  *(Above proceedings were presented at the NS meeting at the Royal Society of Medicine, London, 8–9 December 2015)*

**Original Communications**

- Roles of sleep and circadian rhythms in the origin and nutritional management of obesity and metabolic disease  
  *(Above proceedings were presented at the NS meeting at the Royal Society of Medicine, London, 8–9 December 2015)*
- Phytochemicals and health: new perspectives of plant based nutrition  
  *(Above proceedings to be presented at the NS meeting at the Royal College of Physicians, Edinburgh, 21–22 March 2016)*
- New technology in nutrition research and practice  
  *(Above proceedings to be presented at the NS meeting at University College Dublin, 11–14 July 2016)*

For further details, see our website: http://www.nutritionssociety.org/events