



## Program

### Scientific Committee

Kåre I Birkeland<sup>1</sup>, Ingunn Bergstad<sup>1</sup>, Serena Tonstad<sup>2</sup>, Lars Christian Stene<sup>3</sup>, Anne-Marie Aas<sup>1</sup>, Asim K Duttaroy<sup>4</sup>, Ingrid L Mostad<sup>5</sup>, Bryndis Eva Birgisdóttir<sup>3</sup>, Kirsti Bjerkan<sup>1</sup>

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### Thursday, July 1<sup>st</sup>

12:00-14:00

**Registration and lunch**

14:00-14:15

**Opening**

**Roger Ingebrigtsen**, State Secretary, The Ministry of Health and Care Services, Norway

**Ingunn Bergstad**, Scientific and Organising committee, Norway

14:15-17:15

**Session I: Fat metabolism – new findings and challenges for diabetes.**

Chairperson: **Angela A Rivellese**, Department of Clinical and Experimental Medicine, Federico II University, Naples, Italy and **Ingrid Løvold Mostad**, Department of Clinical Nutrition, St. Olavs Hospital, Trondheim, Norway

14:15-14:45

Lecture

**Inger Njølstad**, Institute of Community Medicine, University of Tromsø, Norway  
Lipids, diabetes and gender differences

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14:45-15:30

Lecture

**Keith N Frayn**, Oxford Centre for Diabetes, Endocrinology and Metabolism, University of Oxford, United Kingdom  
Adipose tissue, fatty acids and insulin resistance: time for a re-evaluation

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15:30-15:45

**Lene S Mortensen**, J Holmer-Jensen, ML Hartvigsen, A Astrup, M de Vrese, JJ Holst, C Thomsen, K Hermansen. Denmark  
Effects of different fractions of whey protein on postprandial lipid and hormone responses in type 2 diabetes

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15:45-16:00

**Jens Holmer-Jensen**, ML Hartvigsen, C Thomsen, JJ Holst, K Hermansen. Denmark  
Acute differential effects of dietary protein quality on postprandial lipaemia in obese non-diabetic subjects

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16:00-16:15		<b>Hana Kahleova</b> , M Matoulek, H Malinska, O Oliyarnik, L Kazdova, T Neskudla, A Skoch, M Hajek, M Hill, M Kahle, T Pelikanova. <i>Czech Republic</i> Vegetarian diet improves insulin resistance and oxidative stress markers more than conventional diabetic diet in subjects with type 2 diabetes	5
16:15-16:45		<b>Coffee break</b>	
16:45-17:00		<b>Rosalba Giacco</b> , G Costabile, G Clemente, D Viscovo, G Anniballi, P Cipriano, A Mangione, G Riccardi, AA Rivellese. <i>Italy</i> . Effects of whole grain intake on insulin, glucose and lipid metabolism in subjects with metabolic syndrome: a 3 month intervention	6
17:00-17:15		L Leccesi, A Iaconelli, A Abati, R Kochevar, P Familiari, ME Riccioni, G Costamagna, <b>Geltrude Mingrone</b> . <i>Italy</i> Effect of toga on insulin sensitivity and secretion	7
17:15-18:15		<b>Session II: Dietary antioxidants: Beneficial or not – what is the evidence?</b> <u>Chairperson:</u> <b>Asim K. Duttaroy</b> , <i>Department of Nutrition, Faculty of Medicine, University of Oslo, Oslo, Norway</i>	
17:15-17:45	Lecture	<b>Rune Blomhoff</b> , <i>Department of Nutrition, Faculty of Medicine, University of Oslo, Norway</i> Dietary antioxidants; Beneficial – what is the evidence?	8
17:45-18:15	Lecture	<b>Andrew R Collins</b> , <i>Department of Nutrition, Faculty of Medicine, University of Oslo, Norway</i> Antioxidants: Not the whole story	9
19:00		<b>Welcome dinner – DNSG Olympic Games</b>	



## Friday, July 2<sup>nd</sup>

<b>6:30</b>		<b>Early bird activity – Nordic Walking/Gymstick</b>		
<b>8:15-9:30</b>		<b>Session III: Vitamin D and diabetes.</b>		
		<i>Chairperson: Ursula Schwab, Department of Clinical Nutrition, Institute of Public Health and Clinical Nutrition, University of Eastern Finland, Kuopio, Finland and Kåre I Birkeland, Department of Clinical Endocrinology, Oslo University Hospital, Aker, Oslo, Norway</i>		
<b>8:15-8:45</b>	Lecture	<b>Rolf Jorde</b> , Department of Clinical Medicine, Faculty of Health Sciences, Hospital of North Norway, Norway	Vitamin D and type 2 diabetes	<b>10</b>
<b>8:45-9:15</b>	Lecture	<b>Lars Christian Stene</b> , Division of Epidemiology, Norwegian Institute of Public Health, Norway.	Vitamin D and type 1 diabetes	<b>11</b>
<b>9:15-9:30</b>		<b>Hanne L Gulseth</b> , IMF Gjelstad, J A Lovegrove, C Defoort, EE Blaak, J Lopez-Miranda, A Dembinska-Kiec, S Basu, U Risérus, HM Roche, CA Drevon, KI Birkeland. Norway	The relationship between vitamin D status and markers of oxidation and inflammation in subjects with the metabolic syndrome	<b>12</b>
<b>9:30-10:30</b>		<b>Session IV: Type 1 diabetes and CVD.</b>		
		<i>Chairperson: Margareta Benschow Bacos, Steno Diabetes Center, Gentofte, Denmark</i>		
<b>9:30-10:00</b>	Lecture	<b>Torild Skriverhaug</b> , Paediatric Department, Norwegian Childhood Diabetes Registry, Oslo University Hospital, Ullevål, Norway	CVD in type 1 diabetes	<b>13</b>
<b>10:00-10:30</b>	Lecture	<b>Nina C Øverby</b> , Department of Public Health, Sport and Nutrition, University of Agder, Norway	Diet and cardiovascular risk factors in Norwegian children and adolescents with type 1 diabetes	<b>14</b>
<b>10:30-11:00</b>		<b>Coffee break</b>		
<b>11:00-14:30</b>		<b>Session V: The integrated approach to lifestyle intervention in the prevention and treatment of diabetes.</b>		
		<i>Chairperson: Ulf Risérus, Department of Public Health and Caring Sciences/Clinical Nutrition and Metabolism, Uppsala University, Uppsala, Sweden and Anne-Marie Aas, Department of Clinical Nutrition, Oslo University Hospital, Aker, Oslo, Norway</i>		
<b>11:00-11:30</b>	Lecture	<b>Jaana Lindström</b> , National Institute for Health and Welfare, Diabetes Prevention Unit, Finland	The integrated approach to lifestyle intervention in the prevention of diabetes	<b>15</b>



11:30-12:00	Lecture	<b>Torsten Lauritzen</b> , <i>Dept. Family Practice, Aarhus Universitet, Denmark</i> Motivation, coherence, barriers or possibilities	16
12:00-12:15		KJ Coppell, M Kataoka, SM Vorgers, SM Williams, <b>Alexandra W Chisholm</b> , VL Farmer, JI Mann. <i>New Zealand</i> Intensive nutritional intervention in patients with type 2 diabetes hyperglycaemic despite optimised drug treatment: the lifestyle over and above drugs in diabetes (LOADD) study	17
12:15-12:30		<b>Matti Uusitupa</b> , A Stan áková, M Peltonen, JG Eriksson, J Lindström, S Aunola, P Ilanne-Parikka, S Keinänen-Kiukaanniemi, J Tuomilehto, M Laakso. <i>Finland</i> Impact of the genetic risk variants on the incidence of diabetes – the Finnish Diabetes Prevention study (DPS)	18
12:30-13:30	<b>Lunch</b>		
13:30-13:45		<b>Malina Petkova</b> , S. Ganeva. <i>Bulgaria</i> Glucometabolic effects of lifestyle modification and SMBG in patient with type 2 diabetes mellitus	19
13:45-14:00		<b>Auli Pölönen</b> , L Kalttila, K Sammallahti, U Siljamäki-Ojansuu. <i>Finland</i> Multiprofessional nutrition counselling as a prerequisite for the successful prevention of type 2 diabetes	20
14:00-14:15		<b>Konstantinos Makrilakis</b> , M Kontogianni, C Dimosthenopoulos, S Liatis, S Grammatikou, C Stathi, P Tsiligros, D Perrea, N Katsilambros. <i>Greece</i> Effectiveness of a community based dietary intervention for type 2 diabetes prevention	21
14:15-14:30		<b>Markos Giannaris</b> , A Thanopoulou, M Noutsou, E Spanou, A Kofinis, B Karamanos, A Archimandritis. <i>Greece</i> Is strict adherence to dietary recommendations always indispensable for good metabolic control in type 2 diabetics?	22
14:30-15:15	<b>Session VI: Physical activity and diabetes.</b> <i>Chairperson: Richard M Bracken, Sports and Exercise Science Research Centre, Swansea University, Swansea, United Kingdom</i>		
14:30-15:15	Lecture	<b>Jørgen Jensen</b> , <i>Department of Physical Performance, Norwegian School of Sport Sciences, Norway</i> Mechanisms and potentials of exercise to prevent insulin resistance and type 2 diabetes	23



15:15-15:45

Poster session

*All presenters are asked to stay at their poster during the poster session.*

I-XIV

F Al Anouti, J Thomas, B Ahmad, S Al Hasani, LO Abdel-Wareth, AD Khalili, **Afrozul Haq**. *United Arab Emirates*  
High prevalence of vitamin D deficiency among young emirates in a sunny country

I

**Eliina Aro**, A Joki, M Olli, M Lahti-Koski. *Finland*  
Heart Symbol – 10 years of experience

II

**Richard M Bracken**, D West, R Morton, J W. Stephens, S Bain. *United Kingdom*  
No increase in ketoacidotic risk following pre-exercise administration of rapid-acting insulin in exercising type 1 diabetes individuals

III

**Elena Caceaune**, D Lic roiu, L Micu, N Caceaune, C Ionescu-Tîrgovi te. *Romania*  
The evaluation of metabolic parameters and inflammatory markers at the patients with non-alcoholic steatohepatitis

IV

**Omotayo O Erejuwa**, SA Sulaiman, MS Ab Wahab, Sirajudeen KNS, Md. Salzihan Md. Salleh, S Gurtu. *Malaysia*  
Comparison of Antidiabetic Effect of Glibenclamide, Metformin, Malaysian Tualang Honey and their Combinations in Streptozotocin-Induced Diabetic Rats

V

**Omotayo O Erejuwa**, SA Sulaiman, MS Ab Wahab, Sirajudeen KNS, Md. Salzihan Md. Salleh, S Gurtu. *Malaysia*  
Effect of Combined Glibenclamide and Malaysian Tualang Honey on Oxidative Stress in Pancreas of Streptozotocin-Induced Diabetic Rats

VI

M Due-Christensen, **Annalise Klausen**. *Denmark*  
Inspiring new ideas – combining theoretical and practical cooking

VII

**Per B Jeppesen**, X Chen, Z Liu, K Hermansen. *Denmark*  
Isosteviol elevates plasma HDL-cholesterol level - a potential new drug for the treatment of coronary heart disease

VIII

**Ulrich Julius**, A Böhme. *Germany*  
Adherence to the recommended diet in patients suffering from lipid disorders

IX

**Daniela Lic roiu**, E Caceaune, C Ionescu – Tîrgovi te. *Romania*  
Increased risk of the macrovascular complications in newly diagnosed type 2 diabetes patients in Bucharest, Cohort 2009

X

M Noutsou, **Anastasia Thanopoulou**, A Kofinis, E Spanou, M Giannaris, B Karamanos, A Archimandritis. *Greece*  
Acute effects of a short duration low calorie diet in patients with type 2 diabetes and secondary failure to anti diabetic medications

XI



**Auli Pölonen**, L Kalttila, K Sassi-Pyykkö. *Finland* XII  
 Multiprofessional co-operation for promoting life style changes in  
 workplace community

**Theodoros Thomas**, C Gerbracht, M Weickert, A Pfeiffer. *Germany* XIII  
 The Optimal Fibre Trial for Diabetes Prevention (OPTIFIT): Can  
 insoluble dietary fibre protect individuals with impaired glucose tolerance  
 from developing diabetes?

**Thomas MS Wolever**, X Lan-Pidhainy. *Canada* XIV  
 Are the glycaemic and insulinaemic index values of carbohydrate foods  
 the same in normal, hyperinsulinaemic and type 2 diabetic patients?

**15:45-16:15 Coffee break**

**16:15-18:15 Session VII: Vegetarian food and diabetes.**  
 Chairperson: **Anastasia Thanopoulou**, *Diabetes Center, 2nd Department of Internal Medicine, National University of Athens, Athens, Greece* and **Serena Tonstad**, *Department of Preventive Cardiology, Oslo University Hospital, Ullevål, Oslo, Norway/ Loma Linda University, California, USA*

**16:15-16:45** Lecture **Dagfinn Aune**, *Department of Epidemiology and Biostatistics, School of Public Health, Imperial College London, United Kingdom* 24  
 Vegetarian and plant-based diets and the prevention of type 2 diabetes: which dietary factors may influence type 2 diabetes risk?

**16:45-17:15** Lecture **Cyril WC Kendall**, *Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Canada* 25  
 Nuts, cereals and legumes and type 2 diabetes

**17:15- 17:45** Lecture **Vladimir Vuksan**, *Risk Factor Modification Centre, St. Michael's Hospital, Toronto, Canada* 26  
 Possible health benefits of the ancient Aztec oily grain *Salvia Hispanica L. (Salba)*

**17:45-18:00** **R Åsgård, Elisabet Rytter**, S Basu, L Abramsson-Zetterberg, L Möller, B Vessby. *Sweden* 27  
 High intake of fruit and vegetables is related to low oxidative stress and inflammation in a group of patients with type 2 diabetes

**18:00-18:15** **John L Sievenpiper**, AJ Carleton, A Mirrahim, M Yu, R J de Souza, J Beyene, CWC Kendall, DJA Jenkins. *Canada* 28  
 Fructose has heterogeneous effects on body weight in diabetes: systematic review and meta-analyses of experimental clinical trials

**19:00 Sightseeing/Dinner**



Saturday, July 3<sup>rd</sup>

6:30

Early bird activity – Taiji

8:15-9:45

**Session VIII: Carbohydrate counting as a method for adjusting insulin to food intake.**

Chairperson: **Brita Karlström**, *Department of Food, Nutrition and Dietetics and Department of Public Health and Caring Sciences/Clinical Nutrition and Metabolism, Uppsala University, Uppsala, Sweden* and **Vladimir Vuksan**, *Risk Factor Modification Centre, St. Michael's Hospital, Toronto, Canada*

8:15-8:45

Lecture

**Margareta Bensosw Bacos**, *Steno Diabetes Center, Gentofte, Denmark*  
 Carbohydrate Counting – the easy way for patients with diabetes to better metabolic control and a better quality of life - PRO

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8:45-9:15

Lecture

**Thomas MS Wolever**, *Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Canada*  
 Carbohydrate counting as a method for adjusting insulin to food intake - CON

30

9:15-9:30

**Thomas MS Wolever**, AM Kochan, A Sharma. *Canada*  
 Glycaemic index predicts individual glucose responses after breakfast in free-living adults with abdominal obesity

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9:30-9:45

**G J van Woudenberg**, A Kuijsten, EJG Sijbrands, A Hofman, JCM Witteman, EJM. Feskens. *The Netherlands*  
 Glycemic index and glycemic load and their association with C-reactive protein (CRP) and incident type 2 diabetes

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9:45-10:15

Coffee break

10:15-11:30

**Session IX: Intrauterine/postnatal nutrition and diabetes**

Chairperson: **John L Sivenpiper**, *Risk Factor Modification Centre, St. Michael's Hospital and Department of Nutritional Sciences, University of Toronto, Toronto, Canada* and **Lars Christian Stene**, *Division of Epidemiology, Norwegian Institute of Public Health, Oslo, Norway*

10:15-11:00

Lecture

**Susan E Ozanne**, *Department of Clinical Biochemistry Institute of Metabolic Science, University of Cambridge, Cambridge, United Kingdom*  
 Mechanisms linking early nutrition to long term risk of type 2 diabetes

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11:00-11:15

**Inga Thorsdottir**, ÁV Thorisdottir, I Gunnarsdottir. *Iceland*  
 The effect of new public health recommendation on protein intake and growth up to one year of age

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11:15-11:30

Thorhallur I Halldorsson, BE Birgisdottir, I Gunnarsdottir, T Aspelund, V Gudnason, **I Thorsdottir**. *Iceland*  
 Growth pattern in childhood and metabolic syndrome in adult life

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**11:30-12:00**                      **Poster session**

*Poster titles are the same as in the program for Friday July 2<sup>nd</sup>.  
All presenters are asked to stay at their poster during the poster  
session.*

I-XIV

**12:00-13:00**                      **Lunch**

**13:00-17:00**                      **Session X: Dietary recommendations.**  
**Chairperson: Kjeld Hermansen**, *Department of Endocrinology and Metabolism C, Aarhus University Hospital, Aarhus, Denmark* and **Inga Thorsdottir**, *Unit for Nutrition Research, Department of Food Science and Human Nutrition, School of Health Sci., University of Iceland, Landspítali-University Hospital, Reykjavík, Iceland*

**13:00-13:30**                      **Jim I Mann**, *Edgar National Centre for Diabetes Research and Department of Human Nutrition, University of Otago, Dunedin, New Zealand*                      **36**

Nutritional recommendations for the treatment and prevention of diabetes and chronic disease: 1988 – 2004

**13:30-13:50**                      **Rune Blomhoff**, *Department of Nutrition, Faculty of Medicine, University of Oslo, Norway*                      **37**

National dietary recommendations: principles and types of evidence.

**13:50-14:10**                      **Christian Berne**, *Department of Medical Sciences, Endocrinology, Diabetes and Metabolism, Uppsala University, Sweden*                      **38**

Evidence based recommendations on diet and diabetes in Sweden. Experiences from using the GRADE-system for dietary recommendations.

**14:10-15:30**                      **Discussion on evidence systems**

**Andreas FH Pfeiffer**, *Department of Clinical Nutrition, German Institute of Human Nutrition Potsdam-Rehbrücke, Nuthetal, Germany* leading the discussion

**Ursula Schwab**, *Department of Clinical Nutrition, Institute of Public Health and Clinical Nutrition, University of Eastern Finland, Kuopio, Finland* and **Ulf Risérus**, *Department of Public Health and Caring Sciences/Clinical Nutrition and Metabolism, Uppsala University, Sweden* Experiences from using the GRADE-system for the DNSG lipid recommendations                      **39**

**15:30-16:00**                      **Coffee break**



**16:00-17:00**

**General discussion of guidelines**

**Andreas FH Pfeiffer** leading the discussion

**Jim I Mann** introducing a discussion on fibre

**40**

**Andreas FH Pfeiffer** introducing a discussion on low-carbohydrate diets

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**17:00-17:30**

**General assembly**

**19:00**

***Dinner/Social event***