



Program

Scientific Committee

Kåre I Birkeland¹, Ingunn Bergstad¹, Serena Tonstad², Lars Christian Stene³, Anne-Marie Aas¹, Asim K Duttaroy⁴, Ingrid L Mostad⁵, Bryndis Eva Birgisdóttir³, Kirsti Bjerkan¹

¹ Oslo University Hospital, Aker, Oslo, Norway, ² Oslo University Hospital, Ullevål, Oslo, Norway/Loma Linda University, California, USA, ³ Norwegian Institute of Public Health, Oslo, Norway, ⁴ Faculty of Medicine, University of Oslo, Oslo, Norway, ⁵ St. Olavs Hospital (Trondheim University Hospital), Trondheim, Norway.

Thursday, July 1st

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 Løvd 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

1

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

2

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

3

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

4



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| 16:00-16:15 | | Hana Kahleova , 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 | | Coffee break | |
| 16:45-17:00 | | Rosalba Giacco , 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, Geltrude Mingrone . <i>Italy</i> Effect of toga on insulin sensitivity and secretion | 7 |
| 17:15-18:15 | | Session II: Dietary antioxidants: Beneficial or not – what is the evidence? <u>Chairperson:</u> Asim K. Duttaroy , <i>Department of Nutrition, Faculty of Medicine, University of Oslo, Oslo, Norway</i> | |
| 17:15-17:45 | Lecture | Rune Blomhoff , <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 | Andrew R Collins , <i>Department of Nutrition, Faculty of Medicine, University of Oslo, Norway</i> Antioxidants: Not the whole story | 9 |
| 19:00 | | Welcome dinner – DNSG Olympic Games | |



Friday, July 2nd

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



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|-------------|---|---|----|
| 11:30-12:00 | Lecture | Torsten Lauritzen , <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, Alexandra W Chisholm , 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 | | Matti Uusitupa , 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 | Lunch | | |
| 13:30-13:45 | | Malina Petkova , S. Ganeva. <i>Bulgaria</i> Glucometabolic effects of lifestyle modification and SMBG in patient with type 2 diabetes mellitus | 19 |
| 13:45-14:00 | | Auli Pölönen , 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 | | Konstantinos Makrilakis , 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 | | Markos Giannaris , 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 | Session VI: Physical activity and diabetes. <i>Chairperson: Richard M Bracken, Sports and Exercise Science Research Centre, Swansea University, Swansea, United Kingdom</i> | | |
| 14:30-15:15 | Lecture | Jørgen Jensen , <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 3rd

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 2nd.
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

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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