

Epi-Health

“Nordic Nutrition Recommendations and gut microbiota in experimental and epidemiological research”

Meeting for nutrition researchers, Lund 22-23 November 2012

In the end of November, 65 researchers with a common interest for nutrition gathered in the historical AF-castle in Lund, to participate in a two day meeting and discussion around the main topics; “Nordic Nutrition Recommendations (NNR) – do current Nordic studies support the NNR?” and “How does the gut microbiota influence health and disease, and how to examine these influences in epidemiological studies?”. The research groups of nutrition epidemiology and genetic epidemiology (diabetes and cardiovascular disease), Lund University, and EpiHealth arranged this meeting as a follow up on the appreciated meeting last year.

After a short introduction about the Epihealth network by Marju Orho-Melander (Lund University), Wulf Becker, chair of the Nordic Nutrition Recommendations committee continued the morning by giving a very clear and informative talk about the work behind the new recommendations (NNR5). He explained why it is so important to have NNR and to conduct studies in a Nordic setting. Elisabet Wirfält, professor in nutritional epidemiology (Lund University) and one of the three Swedish experts in the new NNR gave a passionate talk about the power of food. Her presentation also pointed out the ability to translate the NNR into food sources and dietary patterns.

Thereafter, Isabel Drake (Lund University), Lena Nilsson (Umeå University), Anja Olsen (Danish Cancer Society), Sofia Klingberg (University of Gothenburg) filled the day with positive results from food pattern and Nordic nutrition studies. The majority of the studies concluded that an increased adherence to the Nordic recommendations elongates life and lowers the risk for various common diseases such as cardiovascular disease and cancer. These findings are important in the work of strengthening the reliability of the recommendations.

After lunch Stine-Mathilde Dalskov talked about the OPUS School meal study in Denmark. The study ended very recently so there were unfortunately no results to present but she gave us a nice overview of the design of the study and how they have based their school meals on the Nordic diet. For sure, this will not be the last time we will hear about this study.

Results from the NORDIET and SYSDIET were presented by Ulf Riserus (Uppsala University) and Björn Åkesson (Lund University) as the two last speakers of the first day. Ulf started to tell about the effect of the Nordic diet and fat quality on cardio-metabolic risk factors. He pointed out why Nordic foods are preferable in Swedish (Nordic) diet intervention studies and summarized findings that a Nordic diet may have potential beneficial effects to decrease well known risk factors of cardiovascular disease such as total cholesterol, blood pressure and insulin levels. Björn presented results from the SYSDIET in Sweden where they concluded that it was easier to adhere to the Nordic diet than the Mediterranean diet.

After a very inspiring day with great presentations, interesting questions and discussions a majority of the participants joined for a delicious dinner at Grand Hotel where a Nordic menu was served.

The theme of the second day of this nutrition meeting was *“How does the gut microbiota influence health and disease, and how to examine these influences in epidemiological studies?”*. The first speaker was Göran Molin (Lund University) who gave a presentation about why they already many years ago became interested in the gut microbiota about progress in this field over the years and about differences between good and bad microbiota. His colleague Siv Ahrne then talked about how they have worked with pre- and probiotics and how these can be used in treatment and prevention of disease. She also mentioned interesting findings about the bacteria’s interactions with different foods, especially berries.

Frida Fåk, who recently started to work at the Anti-Diabetic Food Center in Lund, gave a presentation about how diet can affect gut microbiota. Her results were in line with those of Göran Molins , with observations that a diet high in fat changed the microbiota towards a less health-beneficial direction.

The last speaker, Bengt Jeppson (Lund University), presented and discussed the topic “gut microbiota in health and disease” and he highlighted how the probiotics can be used in the clinic and his experiences about that.

The meeting ended with general discussion about the topics of the meeting and about future of these meetings. Although most participants came from Lund/Malmö, around 30% were from other parts of Sweden or Danmark (Umeå, Uppsala, KI, Hamstad, Göteborg, Kristianstad, Örebro, Köpenhamn). We concluded that this meeting facilitates nutrition research, both experimental and epidemiological, in Sweden and that the next EpiHealth nutrition research meeting will be organized 2013-2014.

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