

## SECTION OF NUTRITION AND METABOLISM (NME)

### Head

Dr Silvia Franceschi

POOR NUTRITION IS AN IMPORTANT CANCER RISK FACTOR IN THE DEVELOPED WORLD, ALTHOUGH THE ROLE OF SPECIFIC NUTRITIONAL FACTORS AND THEIR MECHANISMS OF ACTION REMAIN ILL-UNDERSTOOD. OVERWEIGHT AND OBESITY REPRESENT A GLOBAL EPIDEMIC CONTRIBUTING TO A NUMBER OF COMMON CHRONIC DISEASES, INCLUDING CANCER. AT THE SAME TIME, LACK OF PHYSICAL ACTIVITY AND ENERGY BALANCE ARE INCREASINGLY RECOGNISED AS BEING IMPORTANT DETERMINANTS OF CANCER RISK. IN LOW- AND MIDDLE-INCOME COUNTRIES THE ROLE OF DIET IS FAR LESS STUDIED, AND FUTURE RESEARCH SHOULD INCLUDE UNDER-NUTRITION AS WELL AS OVER-NUTRITION.

In the recent re-organisation of the IARC scientific structure, a new Section of Nutrition and Metabolism was created. Its main objectives are to investigate the causes and prevention of cancer in association with diet (including biomarkers of diet), obesity, physical inactivity and endogenous hormones, through different existing (e.g. the EPIC study) and new epidemiological and clinical studies in developed and middle- and low-income countries. The NME section is also charged with investigating the role of nutrition and metabolism in cancer etiology using internal laboratory facilities and complementary expertise from internal and external support and collaborations.

Selection of a new section head is underway, and therefore new research activities for the next biennium are under discussion. As such, only activities related to the Dietary Exposure Assessment (DEX) Group (formerly the Nutrition and Hormone [NTR] Team) are reported here.



# DIETARY EXPOSURE ASSESSMENT GROUP (DEX)

## Head

Dr Nadia Slimani (since 04/09)

## Scientists

Dr Sabina Rinaldi

Dr Véronique Chajès (Visiting scientist, from March 2008)

## Post-doctoral fellows

Dr Heinz Freisling  
(from March 2009)

Dr Inge Huybrechts  
(from April 2008)

Dr Aurelie Moskal  
(from February 2009)

Dr Kimberley Bouckaert  
(February 2008 to February 2009)

## Secretariat

Myriam Adjal  
(until February 2009)

Nicole Suty (until October 2008)

## Technical Assistants

David Achaintre

Carine Biessy

Corinne Casagrande

Geneviève Deharveng

Bertrand Hemon

Carole Manigand  
(until September 2008)

Jérôme Vignat

DIET IS CONSIDERED AN IMPORTANT ENVIRONMENTAL FACTOR IN THE ETIOLOGY OF SEVERAL MAJOR CANCERS. HOWEVER, THERE ARE STILL INCONSISTENT RESULTS ON THE RELATIONSHIPS BETWEEN DIET AND CANCER, LEADING TO A CRITICAL EVALUATION OF THE TRADITIONAL STUDY DESIGNS AND METHODOLOGICAL APPROACHES USED SO FAR. THE MAIN OBJECTIVES OF THE DEX GROUP ARE TO IMPROVE THE ACCURACY, UNDERSTANDING AND INTERPRETATION OF DIETARY EXPOSURE AND TO STRENGTHEN THE LIKELIHOOD OF DETECTING ASSOCIATIONS BETWEEN DIET AND CANCER AND OTHER INTERMEDIATE DISEASES IN INTERNATIONAL STUDY CONTEXTS. OVER THE LAST TWO YEARS, DEX HAD FIVE MAJOR AXES OF ACTIVITIES, DETAILED BELOW:

## 1. ADVANCED RESEARCH ON DIETARY METHODOLOGIES AND LABORATORY ACTIVITIES FOR INTERNATIONAL STUDIES

A focal point of the DEX Group is to develop methods for the standardisation of dietary data collection, data processing and statistical analyses in large international multi-centre studies. This involves the development of a standardised computerised 24-hour dietary recall programme (EPIC-Soft<sup>™</sup>) and the enrichment and maintenance of a large international standardised nutrient database (ENDB) and its related database management system program (EnMan). Over the last two years, the EPIC-Soft programme initially developed for EPIC in the early 1990s has been substantially restructured and extended so that it may be used as a standardised method and reference in future international studies. Furthermore, a comprehensive platform to be hosted on the IARC website is under development to facilitate the use and dissemination of the whole EPIC-Soft methodology. Discussions at the international level (the European Food

Safety Authority, the Directorate General for Health and Consumer Affairs [DG-SANCO], WHO, the European Food Information Resource [EuroFIR] Network) are ongoing to establish a network of future possible users of the platform and plan new inter-disciplinary projects on cancer research and prevention.

More recently, a new international methodological project has been initiated to compare different multivariate approaches (e.g. principal component analysis, cluster analysis) relevant to analyses of diet-disease associations in international study context. In this project the DEX group, in collaboration with the IARC Biostatistics Group (BST), is specifically in charge of the nutrient and biological pattern analyses, with already-planned applications to cancer and diabetes.

Another important activity of DEX is its laboratory-based support to hormone analyses in large epidemiological studies. Over the last two years, the laboratory activities have focused on the validation studies of cytokine and steroid measurements. Measurement of inflammatory factors and sex hormones by using immunoassays has also been undertaken in large-scale epidemiological studies within the EPIC cohort (endometrium and cervical cancers). In addition to these more routine analyses, a reference method for the measurements of Bisphenol A (BPA, a xenoestrogen and food contaminant) in serum using gas chromatography/mass spectrometry has been established.

## 2. CROSS-SECTIONAL STUDIES ON DIET AND BIOMARKERS OF DIET

Following the completion of a standardised nutrient database for use in the international context of the EPIC study (\*Slimani *et al.*, 2007), a special issue of the European Journal of Clinical Nutrition entitled *Nutrient Intakes and Patterns in EPIC* has been prepared under DEX supervision (\*Slimani & Margetts eds, in press). In addition, a series of cross-sectional analyses using standardised dietary and biomarker exposure measurements (e.g. blood fatty acid

concentrations, acrylamide hemoglobin adducts) have been published or are ongoing. These analyses enable, for example, a better understanding of two new plasma phospholipid fatty acid isomers (cis C18:n-9 Oleic acid and *trans* C18:n-9 Elaidic acid) with suspected opposite effects on risk cancer, as biomarkers of olive oil and margarine respectively (Figure 1) (\*Saadatian-Elahi *et al.*, 2009).

## 3. DIET AND CANCER AND OTHER (INTERMEDIATE) CHRONIC DISEASES

A specific topic of interest for the DEX group is the study of the role of diet and biomarkers of diet in relation to cancer (EPIC) and other chronic diseases such as obesity and diabetes (PANACEA, INTERACT projects), with a particular recent focus on industrial foods (industrial trans fatty acids, acrylamide, energy and glycaemic index/glycaemic load dense foods, BPA). Within the EPIC-PANACEA project on obesity and lifestyle factors, DEX has produced papers on the relationship between diets rich in foods with high glycaemic index/glycaemic load and trans fatty acid concentrations and obesity [REFs], as well as a methodological paper on under-reporting amongst obese subjects, using both dietary and biomarker data [REF].

## 4. HORMONES AND CANCER

Over the last biennium, research has focused on colorectal, cervical, endometrial and thyroid cancers. Results from nested case-control studies within EPIC on colorectal cancer have shown a mild implication of hyperglycemia (Figure 2), and a modest association with serum insulin-like growth factors (\*Rinaldi *et al.*, 2008; \*Rinaldi *et al.*, in press). DEX has also coordinated the working group on thyroid cancer within the EPIC cohort, and studies on obesity, thyroid hormones, reproductive factors and thyroid cancer risk are ongoing.

## 5. SUPPORT THE COORDINATION AND MANAGEMENT OF THE EPIC STUDY

Over the last two years, the DEX Group has ensured technical support and preparation of a series of common and project-specific databases for a large network of 33 different EPIC working groups and related projects, including a new release of the EPIC dietary and endpoint data. In addition, the group has provided computing support and has managed a complex Laboratory Information Management System (LIMS) to access biological sample retrieval and to collect related laboratory results.

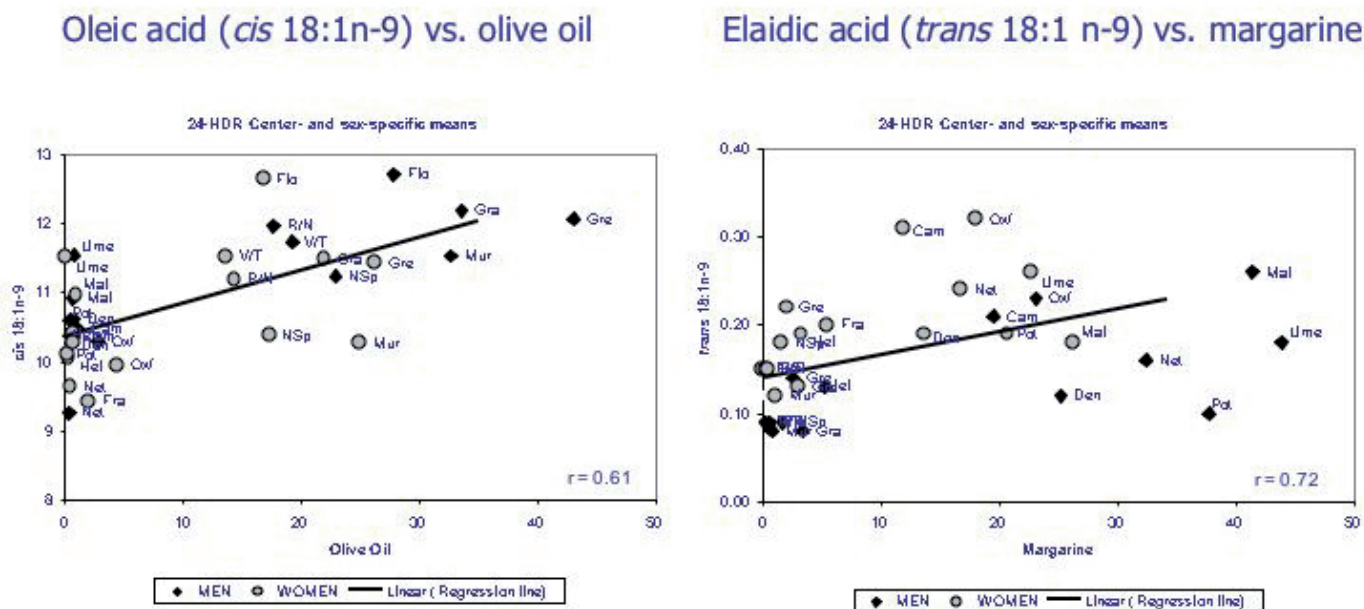


Figure 1. Two mono-unsaturated plasma fatty acid isomers as markers of dietary sources with opposite suggested cancer effects Saadatian-Elahi *et al.*, Am. J. Clin., 2009

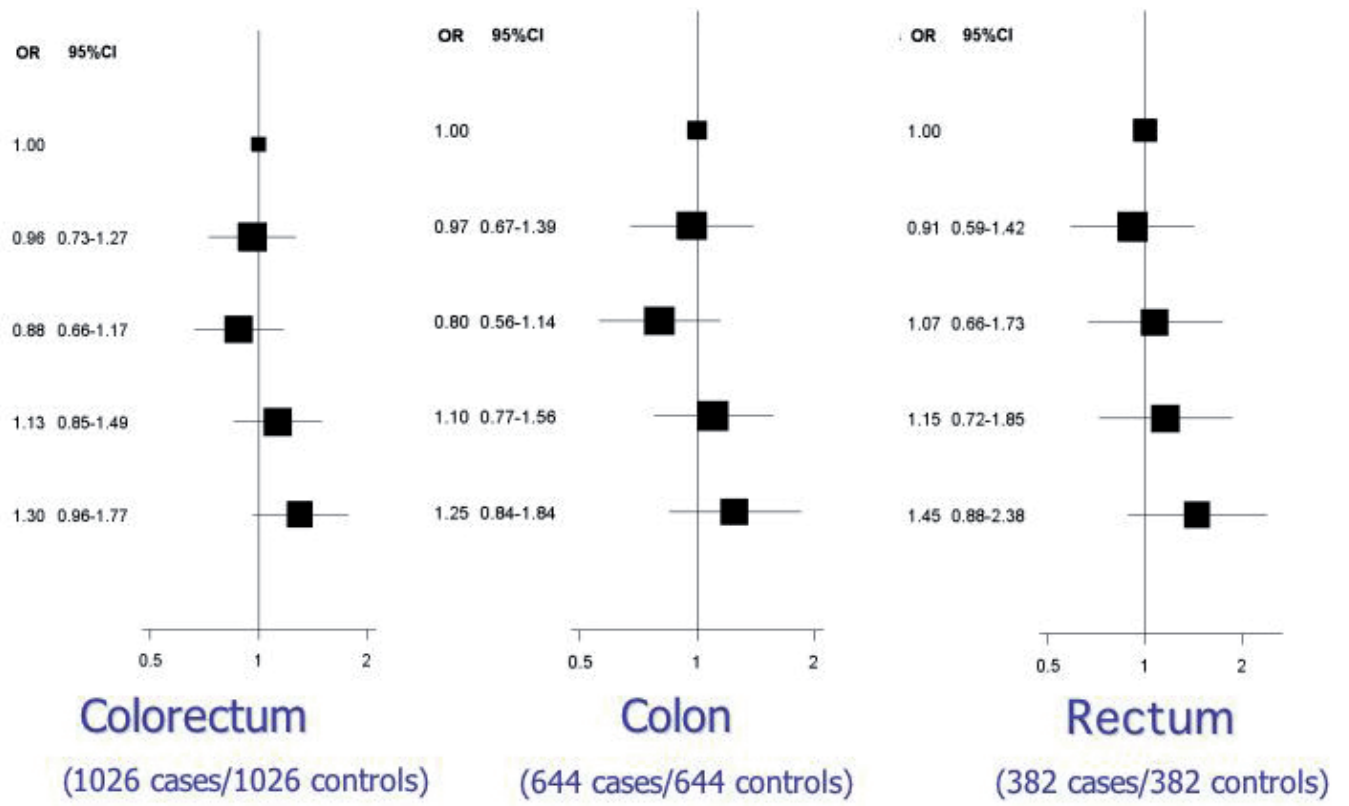


Figure 2. Glycated hemoglobin and risk of colorectal cancer: EPIC. Rinaldi et al., Cancer Epidemiol Biomarkers Prev. 2008

## REFERENCES

Slimani N, Deharveng G, Unwin I, Southgate DA, Vignat J, Skeie G, Salvini S, Parpinel M, Møller A, Ireland J, Becker W, Farran A, Westenbrink S, Vasilopoulou E, Unwin J, Borgejordet A, Rohrmann S, Church S, Gnagnarella P, Casagrande C, van Bakel M, Niravong M, Boutron-Ruault MC, Stripp C, Tjønneland A, Trichopoulou A, Georga K, Nilsson S, Mattisson I, Ray J, Boeing H, Ocké M, Peeters PH, Jakszyn P, Amiano P, Engeset D, Lund E, de Magistris MS, Sacerdote C, Welch A, Bingham S, Subar AF, Riboli E (2007). The EPIC nutrient database project (ENDB): a first attempt to standardize nutrient databases across the 10 European countries participating in the EPIC study. *Eur J Clin Nutr. Sep;61(9):1037-56*

Slimani N & Margetts B (2009). Co-editors in a special issue (14 papers) on "Nutrient Intakes and Patterns in the EPIC cohorts from ten European countries" (SNIFE). *Eur J Clin Nutr. Nov;63, S1-S274:*

Saadatian-Elahi M, Slimani N, Chajès V, Jenab M, Goudable J, Biessy C, Ferrari P, Byrnes G, Autier P, Peeters PH, Ocké M, Bueno de Mesquita B, Johansson I, Hallmans G, Manjer J, Wirfält E, González CA, Navarro C, Martínez C, Amiano P, Suárez LR, Ardanaz E, Tjønneland A, Halkjaer J, Overvad K, Jakobsen MU, Berrino F, Pala V, Palli D, Tumino R, Vineis P, de Magistris MS, Spencer EA, Crowe FL, Bingham S, Khaw KT, Linseisen J, Rohrmann S, Boeing H, Noethlings U, Olsen KS, Skeie G, Lund E, Trichopoulou A, Oustoglu E, Clavel-Chapelon F, Riboli E (2008). Plasma phospholipid fatty acid profiles and their association with food intakes: results from a cross-sectional study within the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr. Dec 3 (89):331-346.*

Rinaldi S, Rohrmann S, Jenab M, Biessy C, Sieri S, Palli D, Tumino R, Mattiello A, Vineis P, Nieters A, Linseisen J, Pischon T, Boeing H, Hallmans G, Palmqvist R, Manjer J, Wirfält E, Crowe FL, Khaw KT, Bingham S, Tjønneland A, Olsen A, Overvad K, Lund E, Skeie G, Clavel-Chapelon F, Boutron-Ruault MC, de Lauzon-Guillain B, Ardanaz E, Jakszyn P, Ramon Quiros J, Chirlaque MD, Sanchez MJ, Dorronsoro M, Trichopoulou A, Lagiou P, Trichopoulos D, Bueno-de-Mesquita HB, van Duynhoven FJ, Peeters PH, Slimani N, Ferrari P, Byrnes GB, Riboli E, Kaaks R (2008). Glycosylated hemoglobin and risk of colorectal cancer in men and women, the European prospective investigation into cancer and nutrition. *Cancer Epidemiol Biomarkers Prev. Nov;17(11):3108-15.*

Rinaldi S, Cleveland R, Norat T, Biessy C, Rohrmann S, Linseisen J, Boeing H, Pischon T, Panico S, Agnoli C, Palli D, Tumino R, Vineis P, Peeters PHM, van Gills C, Bueno-de-Mesquita BH, Vrieling A, Allen NE, Roddam A, Bingham S, Khaw KT, Manjer J, Borgquist S, Dumeaux V, Gram IT, Lund E, Trichopoulou A, Makrygiannis G, Benetou V,

Molina E, Suárez ID, Barricarte Gurrea A, Gonzalez CA, Tormo MJ, Altzibar JM, Olsen A, Tjønneland A, Grønbaek H, Overvad K, Clavel-Chapelon F, Boutron-Ruault MC, Morois S, Slimani N, Boffetta P, Jenab M, Riboli E, Kaaks R (2009). Serum levels of IGF-I, IGFBP-3 and colorectal cancer risk: results from the EPIC cohort, plus a meta-analysis of prospective studies. *Int J Cancer. Oct 6.*

## PUBLICATIONS

Allen NE, Appleby PN, Roddam AW, Tjønneland A, Johnsen NF, Overvad K, Boeing H, Weikert S, Kaaks R, Linseisen J, Trichopoulou A, Misirli G, Trichopoulos D, Sacerdote C, Grioni S, Palli D, Tumino R, Bueno-de-Mesquita HB, Kiemeny LA, Barricarte A, Larrañaga N, Sánchez MJ, Agudo A, Tormo MJ, Rodriguez L, Stattin P, Hallmans G, Bingham S, Khaw KT, Slimani N, Rinaldi S, Boffetta P, Riboli E, Key TJ. Plasma selenium concentration and prostate cancer risk: results from the European Prospective Investigation into Cancer and Nutrition (EPIC). *Am J Clin Nutr. 2008 Dec;88(6):1567-75.*

Allen NE, Key TJ, Appleby PN, Travis RC, Roddam AW, Tjønneland A, Johnsen NF, Overvad K, Linseisen J, Rohrmann S, Boeing H, Pischon T, Bueno-de-Mesquita HB, Kiemeny L, Tagliabue G, Palli D, Vineis P, Tumino R, Trichopoulou A, Kassapa C, Trichopoulos D, Ardanaz E, Larrañaga N, Tormo MJ, González CA, Quirós JR, Sánchez MJ, Bingham S, Khaw KT, Manjer J, Berglund G, Stattin P, Hallmans G, Slimani N, Ferrari P, Rinaldi S, Riboli E. Animal foods, protein, calcium and prostate cancer risk: the European Prospective Investigation into Cancer and Nutrition. *Br J Cancer. 2008 May 6;98(9):1574-81.*

Allen NE, Key TJ, Dossus L, Rinaldi S, Cust A, Lukanova A, Peeters PH, Onland-Moret NC, Lahmann PH, Berrino F, Panico S, Larrañaga N, Pera G, Tormo MJ, Sánchez MJ, Ramón Quirós J, Ardanaz E, Tjønneland A, Olsen A, Chang-Claude J, Linseisen J, Schulz M, Boeing H, Lundin E, Palli D, Overvad K, Clavel-Chapelon F, Boutron-Ruault MC, Bingham S, Khaw KT, Bas Bueno-de-Mesquita H, Trichopoulou A, Trichopoulos D, Naska A, Tumino R, Riboli E, Kaaks R. Endogenous sex hormones and endometrial cancer risk in women in the European Prospective Investigation into Cancer and Nutrition (EPIC). *Endocr Relat Cancer. 2008 Jun;15(2):485-497.*

Besson H, Ekelund U, Luan J, May AM, Sharp S, Travier N, Agudo A, Slimani N, Rinaldi S, Jenab M, Norat T, Mouw T, Rohrmann S, Kaaks R, Bergmann M, Boeing H, Clavel-Chapelon F, Boutron-Ruault MC, Overvad K, Andreasen EL, Johnsen NF, Halkjaer J, Gonzalez C, Rodriguez L, Sanchez MJ, Arriola L, Barricarte A, Navarro C, Key TJ, Spencer EA, Orfanos P, Naska A, Trichopoulou A, Manjer J, Wirfält E, Lund E, Palli D, Agnoli C, Vineis P, Panico S, Tumino R, Bueno-de-Mesquita HB, van den Berg SW, Odysseos AD, Riboli E, Wareham NJ, Peeters PH. A cross-sectional analysis of physical activity and obesity indicators in European participants of

the EPIC-PANACEA study. *Int J Obes (Lond). 2009 Apr;33(4):497-506.*

Campa D, McKay J, Sinilnikova O, Hüsing A, Vogel U, Hansen RD, Overvad K, Witt PM, Clavel-Chapelon F, Boutron-Ruault MC, Chajes V, Rohrmann S, Chang-Claude J, Boeing H, Fisher E, Trichopoulou A, Trichopoulos D, Palli D, Villarini A, Sacerdote C, Mattiello A, Tumino R, Peeters PH, van Gils CH, Bas Bueno-de-Mesquita H, Lund E, Chirlaque MD, Sala N, Suarez LR, Barricarte A, Dorronsoro M, Sánchez MJ, Lenner P, Hallmans G, Tsilidis K, Bingham S, Khaw KT, Gallo V, Norat T, Riboli E, Rinaldi S, Lenoir G, Tavtigian SV, Canzian F, Kaaks R. Genetic variation in genes of the fatty acid synthesis pathway and breast cancer risk. *Breast Cancer Res Treat. 2009 Dec;118(3):565-74.*

Crowe FL, Allen NE, Appleby PN, Overvad K, Aardestrup IV, Johnsen NF, Tjønneland A, Linseisen J, Kaaks R, Boeing H, Kröger J, Trichopoulou A, Zavitsanou A, Trichopoulos D, Sacerdote C, Palli D, Tumino R, Agnoli C, Kiemeny LA, Bueno-de-Mesquita HB, Chirlaque MD, Ardanaz E, Larrañaga N, Quirós JR, Sánchez MJ, González CA, Stattin P, Hallmans G, Bingham S, Khaw KT, Rinaldi S, Slimani N, Jenab M, Riboli E, Key TJ. Fatty acid composition of plasma phospholipids and risk of prostate cancer in a case-control analysis nested within the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr. 2008 Nov;88(5):1353-63.*

Crowe FL, Key TJ, Allen NE, Appleby PN, Roddam A, Overvad K, Grønbaek H, Tjønneland A, Halkjaer J, Dossus L, Boeing H, Kröger J, Trichopoulou A, Dilis V, Trichopoulos D, Boutron-Ruault MC, De Lauzon B, Clavel-Chapelon F, Palli D, Berrino F, Panico S, Tumino R, Sacerdote C, Bueno-de-Mesquita HB, Vrieling A, van Gils CH, Peeters PH, Gram IT, Skeie G, Lund E, Rodríguez L, Jakszyn P, Molina-Montes E, Tormo MJ, Barricarte A, Larrañaga N, Khaw KT, Bingham S, Rinaldi S, Slimani N, Norat T, Gallo V, Riboli E, Kaaks R. The association between diet and serum concentrations of IGF-I, IGFBP-1, IGFBP-2, and IGFBP-3 in the European Prospective Investigation into Cancer and Nutrition. *Cancer Epidemiol Biomarkers Prev. 2009 May;18(5):1333-40.*

Crowe FL, Key TJ, Appleby PN, Travis RC, Overvad K, Jakobsen MU, Johnsen NF, Tjønneland A, Linseisen J, Rohrmann S, Boeing H, Pischon T, Trichopoulou A, Lagiou P, Trichopoulos D, Sacerdote C, Palli D, Tumino R, Krogh V, Bueno-de-Mesquita HB, Kiemeny LA, Chirlaque MD, Ardanaz E, Sánchez MJ, Larrañaga N, González CA, Quirós JR, Manjer J, Wirfält E, Stattin P, Hallmans G, Khaw KT, Bingham S, Ferrari P, Slimani N, Jenab M, Riboli E. Dietary fat intake and risk of prostate cancer in the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr. 2008 May;87(5):1405-13.*

Crusius JB, Canzian F, Capellá G, Peña AS, Pera G, Sala N, Agudo A, Rico F, Del Giudice G, Palli

- D, Plebani M, Boeing H, Bueno-de-Mesquita HB, Carneiro F, Pala V, Save VE, Vineis P, Tumino R, Panico S, Berglund G, Manjer J, Sterling R, Hallmans G, Martínez C, Dorronsoro M, Barricarte A, Navarro C, Quirós JR, Allen N, Key TJ, Bingham S, Caldas C, Linseisen J, Kaaks R, Overvad K, Tjønneland A, Büchner FC, Peeters PH, Numans ME, Clavel-Chapelon F, Trichopoulou A, Lund E, Jenab M, Rinaldi S, Ferrari P, Riboli E, González CA. Cytokine gene polymorphisms and the risk of adenocarcinoma of the stomach in the European prospective investigation into cancer and nutrition (EPIC-EURGAST). *Ann Oncol*. 2008 Nov;19(11):1894-902.
- Cust AE, Skilton MR, van Bakel MM, Halkjaer J, Olsen A, Agnoli C, Psaltopoulou T, Buurma E, Sonestedt E, Chirlaque MD, Rinaldi S, Tjønneland A, Jensen MK, Clavel-Chapelon F, Boutron-Ruault MC, Kaaks R, Nöthlings U, Chloptsios Y, Zylis D, Mattiello A, Caini S, Ocké MC, van der Schouw YT, Skeie G, Parr CL, Molina-Montes E, Manjer J, Johansson I, McTaggart A, Key TJ, Bingham S, Riboli E, Slimani N. Total dietary carbohydrate, sugar, starch and fibre intakes in the European Prospective Investigation into Cancer and Nutrition. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4:S37-60.
- Dossus L, Becker S, Achaintre D, Kaaks R, Rinaldi S. Validity of multiplex-based assays for cytokine measurements in serum and plasma from «non-diseased» subjects: comparison with ELISA. *J Immunol Methods*. 2009 Oct 31;350(1-2):125-32.
- Dossus L, McKay JD, Canzian F, Wilkening S, Rinaldi S, Biessy C, Olsen A, Tjønneland A, Jakobsen MU, Overvad K, Clavel-Chapelon F, Boutron-Ruault MC, Fournier A, Linseisen J, Lukanova A, Boeing H, Fisher E, Trichopoulou A, Georgila C, Trichopoulos D, Palli D, Krogh V, Tumino R, Vineis P, Quirós JR, Sala N, Martínez-García C, Dorronsoro M, Chirlaque MD, Barricarte A, van Duijnhoven FJ, Bueno-de-Mesquita H, van Gils CH, Peeters PH, Hallmans G, Lenner P, Bingham S, Khaw KT, Key TJ, Travis RC, Ferrari P, Jenab M, Riboli E, Kaaks R. Polymorphisms of genes coding for ghrelin and its receptor in relation to anthropometry, circulating levels of IGF-I and IGFBP-3, and breast cancer risk: a case-control study nested within the European Prospective Investigation into Cancer and Nutrition (EPIC). *Carcinogenesis*. 2008 Jul;29(7):1360-6.
- Ferrari P, Day NE, Boshuizen HC, Roddam A, Hoffmann K, Thiébaud A, Pera G, Overvad K, Lund E, Trichopoulou A, Tumino R, Gullberg B, Norat T, Slimani N, Kaaks R, Riboli E. The evaluation of the diet/disease relation in the EPIC study: considerations for the calibration and the disease models. *Int J Epidemiol*. 2008 Apr;37(2):368-78.
- Ferrari P, Roddam A, Fahey MT, Jenab M, Bamia C, Ocké M, Amiano P, Hjartåker A, Biessy C, Rinaldi S, Huybrechts I, Tjønneland A, Dethlefsen C, Niravong M, Clavel-Chapelon F, Linseisen J, Boeing H, Oikonomou E, Orfanos P, Palli D, Santucci de Magistris M, Bueno-de-Mesquita HB, Peeters PH, Parr CL, Braaten T, Dorronsoro M, Berenguer T, Gullberg B, Johansson I, Welch AA, Riboli E, Bingham S, Slimani N. A bivariate measurement error model for nitrogen and potassium intakes to evaluate the performance of regression calibration in the European Prospective Investigation into Cancer and Nutrition study. *Eur J Clin Nutr*. (2009) Nov;63 Suppl 4:S179-87.
- Halkjaer J, Olsen A, Bjerregaard LJ, Deharveng G, Tjønneland A, Welch AA, Crowe FL, Wirfält E, Hellstrom V, Niravong M, Touvier M, Linseisen J, Steffen A, Ocké MC, Peeters PH, Chirlaque MD, Larrañaga N, Ferrari P, Contiero P, Frasca G, Engeset D, Lund E, Misirli G, Kostí M, Riboli E, Slimani N, Bingham S. Intake of total, animal and plant proteins, and their food sources in 10 countries in the European Prospective Investigation into Cancer and Nutrition. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4:S16-36
- Hermann S, Rohrmann S, Linseisen J, Nieters A, Khan A, Gallo V, Overvad K, Tjønneland A, Raaschou-Nielsen O, Bergmann MM, Boeing H, Becker N, Kaaks R, Bas Bueno-de-Mesquita H, May AM, Vermeulen RC, Bingham S, Khaw KT, Key TJ, Travis RC, Trichopoulou A, Georgila C, Triantafyllou D, Celentano E, Krogh V, Masala G, Tumino R, Agudo A, Altzibar JM, Ardanaz E, Martínez-García C, Suárez MV, Tormo MJ, Braaten T, Lund E, Manjer J, Zackrisson S, Hallmans G, Malmer B, Boffetta P, Brennan P, Slimani N, Vineis P, Riboli E. Level of education and the risk of lymphoma in the European prospective investigation into cancer and nutrition. *J Cancer Res Clin Oncol*. 2009 Jul 7 (in press).
- Jenab M, McKay J, Bueno-de-Mesquita HB, van Duijnhoven FJ, Ferrari P, Slimani N, Jansen EH, Pischon T, Rinaldi S, Tjønneland A, Olsen A, Overvad K, Boutron-Ruault MC, Clavel-Chapelon F, Engel P, Kaaks R, Linseisen J, Boeing H, Fisher E, Trichopoulou A, Dilis V, Oustoglou E, Berrino F, Vineis P, Mattiello A, Masala G, Tumino R, Vrieling A, van Gils CH, Peeters PH, Brustad M, Lund E, Chirlaque MD, Barricarte A, Suárez LR, Molina E, Dorronsoro M, Sala N, Hallmans G, Palmqvist R, Roddam A, Key TJ, Khaw KT, Bingham S, Boffetta P, Autier P, Byrnes G, Norat T, Riboli E. Vitamin D Receptor and Calcium Sensing Receptor Polymorphisms and the Risk of Colorectal Cancer in European Populations. *Cancer Epidemiol Biomarkers Prev*. 2009 Sep;18(9):2485-91.
- Jenab M, McKay JD, Ferrari P, Biessy C, Laing S, Munar GM, Sala N, Peña S, Crusius JB, Overvad K, Jensen MK, Olsen A, Tjønneland A, Clavel-Chapelon F, Boutron-Ruault MC, Kaaks R, Linseisen J, Boeing H, Bergmann MM, Trichopoulou A, Georgila C, Psaltopoulou T, Mattiello A, Vineis P, Pala V, Palli D, Tumino R, Numans ME, Peeters PH, Bueno-de-Mesquita HB, Lund E, Ardanaz E, Sánchez MJ, Dorronsoro M, Sanchez CN, Quirós JR, Hallmans G, Sterling R, Manjer J, Régner S, Key T, Bingham S, Khaw KT, Slimani N, Rinaldi S, Boffetta P, Carneiro F, Riboli E, Gonzalez C. CDH1 gene polymorphisms, smoking, Helicobacter pylori infection and the risk of gastric cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC-EURGAST). *Eur J Cancer*. 2008 Apr;44(6):774-80.
- Jenab M, Salvini S, van Gils CH, Brustad M, Shakya-Shrestha S, Buijsse B, Verhagen H, Touvier M, Biessy C, Wallström P, Bouckaert K, Lund E, Waaseth M, Roswall N, Joensen AM, Linseisen J, Boeing H, Vasilopoulou E, Dilis V, Sieri S, Sacerdote C, Ferrari P, Manjer J, Nilsson S, Welch AA, Travis R, Boutron-Ruault MC, Niravong M, Bueno-de-Mesquita HB, van der Schouw YT, Tormo MJ, Barricarte A, Riboli E, Bingham S, Slimani N. Dietary intakes of retinol, beta-carotene, vitamin D and vitamin E in the European Prospective Investigation into Cancer and Nutrition cohort. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4:S150-78
- Jenab M, Slimani N, Bictash M, Ferrari P, Bingham SA. Biomarkers in nutritional epidemiology: applications, needs and new horizons. *Hum Genet*. 2009 Jun;125(5-6):507-25
- Johansson M, Appleby PN, Allen NE, Travis RC, Roddam AW, Egevad L, Jenab M, Rinaldi S, Kiemeny LA, Bueno-de-Mesquita HB, Vollset SE, Ueland PM, Sánchez MJ, Quirós JR, González CA, Larrañaga N, Chirlaque MD, Ardanaz E, Sieri S, Palli D, Vineis P, Tumino R, Linseisen J, Kaaks R, Boeing H, Pischon T, Psaltopoulou T, Trichopoulou A, Trichopoulos D, Khaw KT, Bingham S, Hallmans G, Riboli E, Stattin P, Key TJ. Circulating concentrations of folate and vitamin B12 in relation to prostate cancer risk: results from the European prospective investigation into cancer and nutrition study. *Cancer Epidemiol Biomarkers Prev*. 2008 Feb;17(2):279-85.
- Johansson M, McKay JD, Rinaldi S, Wiklund F, Adami HO, Grönberg H, Kaaks R, Stattin P. Genetic and plasma variation of insulin-like growth factor binding proteins in relation to prostate cancer incidence and survival. *Prostate*. 2009 Sep 1;69(12):1281-91.
- Johansson M, McKay JD, Wiklund F, Rinaldi S, Hallmans G, Bälter K, Adami HO, Grönberg H, Stattin P, Kaaks R. Genetic variation in the SST gene and its receptors in relation to circulating levels of insulin-like growth factor-I, IGFBP3, and prostate cancer risk. *Cancer Epidemiol Biomarkers Prev*. 2009 May;18(5):1644-50.
- Johnsen NF, Tjønneland A, Thomsen BL, Christensen J, Loft S, Friedenreich C, Key TJ, Allen NE, Lahmann PH, Mejlvig L, Overvad K, Kaaks R, Rohrmann S, Boeing H, Misirli G, Trichopoulou A, Zylis D, Tumino R, Pala V, Bueno-de-Mesquita HB, Kiemeny LA, Suárez LR, Gonzalez CA, Sánchez MJ, Huerta JM, Gurrea AB, Manjer J, Wirfält E, Khaw KT, Wareham N, Boffetta P, Egevad L, Rinaldi S, Riboli E. Physical activity and risk of prostate cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort. *Int J Cancer*. 2009 Aug 15;125(4):902-8.

- Khan AE, Gallo V, Linseisen J, Kaaks R, Rohrmann S, Raaschou-Nielsen O, Tjønneland A, Johnsen HE, Overvad K, Bergmann MM, Boeing H, Benetou V, Psaltopoulou T, Trichopoulou A, Masala G, Mattiello A, Grioni S, Tumino R, Vermeulen RC, Peeters PH, Bueno-de-Mesquita HB, Ros MM, Lund E, Ardanaz E, Chirlaque MD, Jakszyn P, Larrañaga N, Losada A, Becker N, Nieters A, Martínez-García C, Agren A, Hallmans G, Berglund G, Manjer J, Allen NE, Key TJ, Bingham S, Khaw KT, Slimani N, Ferrari P, Boffetta P, Norat T, Vineis P, Riboli E; EPIC Group. Diabetes and the risk of non-Hodgkin's lymphoma and multiple myeloma in the European Prospective Investigation into Cancer and Nutrition. *Haematologica*. 2008 Jun;93(6):842-50.
- Kröger J, Ferrari P, Jenab M, Bamia C, Touvier M, Bueno-de-Mesquita HB, Fahey MT, Benetou V, Schulz M, Wirfält E, Boeing H, Hoffmann K, Schulze MB, Orfanos P, Oikonomou E, Huybrechts I, Rohrmann S, Pischon T, Manjer J, Agren A, Navarro C, Jakszyn P, Boutron-Ruault MC, Niravong M, Khaw KT, Crowe F, Ocké MC, van der Schouw YT, Mattiello A, Bellegotti M, Engeset D, Hjartåker A, Egeberg R, Overvad K, Riboli E, Bingham S, Slimani N. Specific food group combinations explaining the variation in intakes of nutrients and other important food components in the European Prospective Investigation into Cancer and Nutrition: an application of the reduced rank regression method. *Eur J Clin Nutr*. (2009) Nov;63 Suppl 4:S263-74.
- Lahmann PH, Cust AE, Friedenreich CM, Schulz M, Lukanova A, Kaaks R, Lundin E, Tjønneland A, Halkjær J, Severinsen MT, Overvad K, Fournier A, Chabbert-Buffet N, Clavel-Chapelon F, Dossus L, Pischon T, Boeing H, Trichopoulou A, Lagiou P, Naska A, Palli D, Grioni S, Mattiello A, Tumino R, Sacerdote C, Redondo ML, Jakszyn P, Sánchez MJ, Tormo MJ, Ardanaz E, Arriola L, Manjer J, Jirstrom K, Bueno-de-Mesquita HB, May AM, Peeters PH, Onland-Moret NC, Bingham S, Khaw KT, Allen NE, Spencer E, Rinaldi S, Slimani N, Chajes V, Michaud D, Norat T, Riboli E. Anthropometric measures and epithelial ovarian cancer risk in the European prospective investigation into cancer and nutrition. *Int J Cancer*. 2009 Oct 9 (in press).
- Lahmann PH, Friedenreich C, Schulz M, Cust AE, Lukanova A, Kaaks R, Tjønneland A, Johnsen NF, Overvad K, Fournier A, Boutron-Ruault MC, Clavel Chapelon F, Boeing H, Linseisen J, Rohrmann S, Trichopoulou A, Lagiou P, Trichopoulos D, Palli D, Mattiello A, Sacerdote C, Agnoli C, Tumino R, Quirós JR, Larrañaga N, Agudo AT, Sánchez MJ, Berglund G, Manjer J, Monninkhof EM, Peeters PH, Bueno-de-Mesquita HB, May AM, Allen N, Khaw KT, Bingham S, Rinaldi S, Ferrari P, Riboli E. Physical activity and ovarian cancer risk: the European prospective investigation into cancer and nutrition. *Cancer Epidemiol Biomarkers Prev*. 2009 Jan;18(1):351-4.
- Linseisen J, Welch AA, Ocké M, Amiano P, Agnoli C, Ferrari P, Sonestedt E, Chajès V, Bueno-de-Mesquita HB, Kaaks R, Weikert C, Dorronsoro M, Rodríguez L, Ermini I, Mattiello A, van der Schouw YT, Manjer J, Nilsson S, Jenab M, Lund E, Brustad M, Halkjaer J, Jakobsen MU, Khaw KT, Crowe F, Georgila C, Misirli G, Niravong M, Touvier M, Bingham S, Riboli E, Slimani N. Dietary fat intake in the European Prospective Investigation into Cancer and Nutrition: results from the 24-h dietary recalls. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4:S61-80.
- McSorley MA, Alberg AJ, Allen DS, Allen NE, Brinton LA, Dorgan JF, Kaaks R, Rinaldi S, Helzlsouer KJ. Prediagnostic circulating follicle stimulating hormone concentrations and ovarian cancer risk. *Int J Cancer*. 2009 Aug 1;125(3):674-9.
- Menvielle G, Boshuizen H, Kunst AE, Dalton SO, Vineis P, Bergmann MM, Hermann S, Ferrari P, Raaschou-Nielsen O, Tjønneland A, Kaaks R, Linseisen J, Kostis M, Trichopoulou A, Dilis V, Palli D, Krogh V, Panico S, Tumino R, Büchner FL, van Gils CH, Peeters PH, Braaten T, Gram IT, Lund E, Rodriguez L, Agudo A, Sánchez MJ, Tormo MJ, Ardanaz E, Manjer J, Wirfält E, Hallmans G, Rasmussen T, Bingham S, Khaw KT, Allen N, Key T, Boffetta P, Duell EJ, Slimani N, Gallo V, Riboli E, Bueno-de-Mesquita HB. The role of smoking and diet in explaining educational inequalities in lung cancer incidence. *J Natl Cancer Inst*. 2009 Mar 4;101(5):321-30.
- Nagel G, Linseisen J, van Gils CH, Peeters PH, Boutron-Ruault MC, Clavel-Chapelon F, Romieu I, Tjønneland A, Olsen A, Roswall N, Witt PM, Overvad K, Rohrmann S, Kaaks R, Drogan D, Boeing H, Trichopoulou A, Stratigakou V, Zylis D, Engeset D, Lund E, Skeie G, Berrino F, Grioni S, Mattiello A, Masala G, Tumino R, Zanetti R, Ros MM, Bueno-de-Mesquita HB, Ardanaz E, Sánchez MJ, Huerta JM, Amiano P, Rodríguez L, Manjer J, Wirfält E, Lenner P, Hallmans G, Spencer EA, Key TJ, Bingham S, Khaw KT, Rinaldi S, Slimani N, Boffetta P, Gallo V, Norat T, Riboli E. Dietary beta-carotene, vitamin C and E intake and breast cancer risk in the European Prospective Investigation into Cancer and Nutrition (EPIC). *Breast Cancer Res Treat*. 2009 Jun 30 (in press).
- Ocké MC, Larrañaga N, Grioni S, van den Berg SW, Ferrari P, Salvini S, Benetou V, Linseisen J, Wirfält E, Rinaldi S, Jenab M, Halkjaer J, Jakobsen MU, Niravong M, Clavel-Chapelon F, Kaaks R, Bergmann M, Moutsiou E, Trichopoulou A, Lauria C, Sacerdote C, Bueno-de-Mesquita HB, Peeters PH, Hjartåker A, Parr CL, Tormo MJ, Sanchez MJ, Manjer J, Hellstrom V, Mulligan A, Spencer EA, Riboli E, Bingham S, Slimani N. Energy intake and sources of energy intake in the European Prospective Investigation into Cancer and Nutrition. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4:S3-15.
- Olsen A, Halkjaer J, van Gils CH, Buijsse B, Verhagen H, Jenab M, Boutron-Ruault MC, Ericson U, Ocké MC, Peeters PH, Touvier M, Niravong M, Waaseth M, Skeie G, Khaw KT, Travis R, Ferrari P, Sanchez MJ, Agudo A, Overvad K, Linseisen J, Weikert C, Sacerdote C, Evangelista A, Zylis D, Tsiotas K, Manjer J, van Guelpen B, Riboli E, Slimani N, Bingham S. Dietary intake of the water-soluble vitamins B1, B2, B6, B12 and C in 10 countries in the European Prospective Investigation into Cancer and Nutrition. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4: S122-49.
- Orfanos P, Naska A, Trichopoulou A, Grioni S, Boer JM, van Bakel MM, Ericson U, Rohrmann S, Boeing H, Rodríguez L, Ardanaz E, Sacerdote C, Giurdanella MC, Niekirk EM, Peeters PH, Manjer J, van Guelpen B, Deharveng G, Skeie G, Engeset D, Halkjaer J, Jensen AM, McTaggart A, Crowe F, Stratigakou V, Oikonomou E, Touvier M, Niravong M, Riboli E, Bingham S, Slimani N. Eating out of home: energy, macro- and micronutrient intakes in 10 European countries. The European Prospective Investigation into Cancer and Nutrition. *Eur J Clin Nutr*. 2009 Nov;63 Suppl 4:S239-62.
- Pala V, Krogh V, Berrino F, Sieri S, Grioni S, Tjønneland A, Olsen A, Jakobsen MU, Overvad K, Clavel-Chapelon F, Boutron-Ruault MC, Romieu I, Linseisen J, Rohrmann S, Boeing H, Steffen A, Trichopoulou A, Benetou V, Naska A, Vineis P, Tumino R, Panico S, Masala G, Agnoli C, Engeset D, Skeie G, Lund E, Ardanaz E, Navarro C, Sánchez MJ, Amiano P, Svatetz CA, Rodriguez L, Wirfält E, Manjer J, Lenner P, Hallmans G, Peeters PH, van Gils CH, Bueno-de-Mesquita HB, van Duinhoven FJ, Key TJ, Spencer E, Bingham S, Khaw KT, Ferrari P, Byrnes G, Rinaldi S, Norat T, Michaud DS, Riboli E. Meat, eggs, dairy products, and risk of breast cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort. *Am J Clin Nutr*. 2009 Sep;90(3):602-12.
- Pischon T, Boeing H, Weikert S, Allen N, Key T, Johnsen NF, Tjønneland A, Severinsen MT, Overvad K, Rohrmann S, Kaaks R, Trichopoulou A, Zoi G, Trichopoulos D, Pala V, Palli D, Tumino R, Sacerdote C, Bueno-de-Mesquita HB, May A, Manjer J, Wallström P, Stattin P, Hallmans G, Buckland G, Larrañaga N, Chirlaque MD, Martínez C, Redondo Cornejo ML, Ardanaz E, Bingham S, Khaw KT, Rinaldi S, Slimani N, Jenab M, Riboli E. Body size and risk of prostate cancer in the European prospective investigation into cancer and nutrition. *Cancer Epidemiol Biomarkers Prev*. 2008 Nov;17(11):3252-61.
- Rinaldi S, Cleveland R, Norat T, Biessy C, Rohrmann S, Linseisen J, Boeing H, Pischon T, Panico S, Agnoli C, Palli D, Tumino R, Vineis P, Peeters PHM, van Gills C, Bueno-de-Mesquita BH, Vrieling A, Allen NE, Roddam A, Bingham S, Khaw KT, Manjer J, Borgquist S, Dumeaux V, Gram IT, Lund E, Trichopoulou A, Makrygiannis G, Benetou V, Molina E, Suárez ID, Barricarte Gurrea A, Gonzalez CA, Tormo MJ, Altzibar JM, Olsen A, Tjønneland A, Grønbaek H, Overvad K, Clavel-Chapelon F, Boutron-Ruault MC, Morois S, Slimani N, Boffetta P, Jenab M, Riboli E, Kaaks R. Serum levels of IGF-I, IGFBP-3 and colorectal cancer risk: results from the EPIC cohort, plus a meta-analysis of prospective studies. *Int J Cancer*. 2009 Oct 6.



- Rinaldi S, Rohrmann S, Jenab M, Biessy C, Sieri S, Palli D, Tumino R, Mattiello A, Vineis P, Nieters A, Linseisen J, Pischon T, Boeing H, Hallmans G, Palmqvist R, Manjer J, Wirfält E, Crowe FL, Khaw KT, Bingham S, Tjønneland A, Olsen A, Overvad K, Lund E, Skeie G, Clavel-Chapelon F, Boutron-Ruault MC, de Lauzon-Guillain B, Ardanaz E, Jakszyn P, Ramon Quiros J, Chirlaque MD, Sanchez MJ, Dorronsoro M, Trichopoulou A, Lagiou P, Trichopoulos D, Bueno-de-Mesquita HB, van Duynhoven FJ, Peeters PH, Slimani N, Ferrari P, Byrnes GB, Riboli E, Kaaks R. Glycosylated hemoglobin and risk of colorectal cancer in men and women, the European prospective investigation into cancer and nutrition, *Cancer Epidemiol Biomarkers Prev.* 2008 Nov;17(11):3108-15.
- Roddam AW, Allen NE, Appleby P, Key TJ, Ferrucci L, Carter HB, Metter EJ, Chen C, Weiss NS, Fitzpatrick A, Hsing AW, Lacey JV Jr, Helzlsouer K, Rinaldi S, Riboli E, Kaaks R, Janssen JA, Wildhagen MF, Schröder FH, Platz EA, Pollak M, Giovannucci E, Schaefer C, Quesenberry CP Jr, Vogelmann JH, Severi G, English DR, Giles GG, Stattin P, Hallmans G, Johansson M, Chan JM, Gann P, Oliver SE, Holly JM, Donovan J, Meyer F, Bairati I, Galan P. Insulin-like growth factors, their binding proteins, and prostate cancer risk: analysis of individual patient data from 12 prospective studies. *Ann Intern Med.* 2008 Oct 7;149(7):461-71, W83-8.
- Rohrmann S, Linseisen J, Vrieling A, Boffetta P, Stolzenberg-Solomon RZ, Lowenfels AB, Jensen MK, Overvad K, Olsen A, Tjønneland A, Boutron-Ruault MC, Clavel-Chapelon F, Fagherazzi G, Misirli G, Lagiou P, Trichopoulou A, Kaaks R, Bergmann MM, Boeing H, Bingham S, Khaw KT, Allen N, Roddam A, Palli D, Pala V, Panico S, Tumino R, Vineis P, Peeters PH, Hjartåker A, Lund E, Redondo Cornejo ML, Agudo A, Arriola L, Sánchez MJ, Tormo MJ, Barricarte Gurrea A, Lindkvist B, Manjer J, Johansson I, Ye W, Slimani N, Duell EJ, Jenab M, Michaud DS, Mouw T, Riboli E, Bueno-de-Mesquita HB. Ethanol intake and the risk of pancreatic cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC). *Cancer Causes Control.* 2009 Jul;20(5):785-94.
- Romaguera D, Norat T, Mouw T, May AM, Bamia C, Slimani N, Travier N, Besson H, Luan J, Wareham N, Rinaldi S, Couto E, Clavel-Chapelon F, Boutron-Ruault MC, Cottet V, Palli D, Agnoli C, Panico S, Tumino R, Vineis P, Agudo A, Rodriguez L, Sanchez MJ, Amiano P, Barricarte A, Huerta JM, Key TJ, Spencer EA, Bueno-de-Mesquita HB, Büchner FL, Orfanos P, Naska A, Trichopoulou A, Rohrmann S, Kaaks R, Bergmann M, Boeing H, Johansson I, Hellstrom V, Manjer J, Wirfält E, Uhre Jacobsen M, Overvad K, Tjønneland A, Halkjaer J, Lund E, Braaten T, Engeset D, Odysseos A, Riboli E, Peeters PH. Adherence to the mediterranean diet is associated with lower abdominal adiposity in European men and women. *J Nutr.* 2009 Sep;139(9):1728-37.
- Saadatian-Elahi M, Slimani N, Chajès V, Jenab M, Goudable J, Biessy C, Ferrari P, Byrnes G, Autier P, Peeters PH, Ocké M, Bueno de Mesquita B, Johansson I, Hallmans G, Manjer J, Wirfält E, González CA, Navarro C, Martínez C, Amiano P, Suárez LR, Ardanaz E, Tjønneland A, Halkjaer J, Overvad K, Jakobsen MU, Berrino F, Pala V, Palli D, Tumino R, Vineis P, Santucci de Magistris M, Spencer EA, Crowe FL, Bingham S, Khaw KT, Linseisen J, Rohrmann S, Boeing H, Noethlings U, Olsen KS, Skeie G, Lund E, Trichopoulou A, Oustoglu E, Clavel-Chapelon F, Riboli E. Plasma phospholipid fatty acid profiles and their association with food intakes: results from a cross-sectional study within the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr* 2009 Jan;89(1):331-46.
- Saadatian-Elahi M, Slimani N, Chajès V, Jenab M, Goudable J, Biessy C, Ferrari P, Byrnes G, Autier P, Peeters PH, Ocké M, Bueno de Mesquita B, Johansson I, Hallmans G, Manjer J, Wirfält E, González CA, Navarro C, Martínez C, Amiano P, Suárez LR, Ardanaz E, Tjønneland A, Halkjaer J, Overvad K, Jakobsen MU, Berrino F, Pala V, Palli D, Tumino R, Vineis P, de Magistris MS, Spencer EA, Crowe FL, Bingham S, Khaw KT, Linseisen J, Rohrmann S, Boeing H, Noethlings U, Olsen KS, Skeie G, Lund E, Trichopoulou A, Oustoglu E, Clavel-Chapelon F, Riboli E. Plasma phospholipid fatty acid profiles and their association with food intakes: results from a cross-sectional study within the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr* 2008 Dec 3 (89):331-346.
- Sieri S, Krogh V, Ferrari P, Berrino F, Pala V, Thiebaut AC, Tjønneland A, Olsen A, Overvad K, Jakobsen MU, Clavel-Chapelon F, Chajes V, Boutron-Ruault MC, Kaaks R, Linseisen J, Boeing H, Nöthlings U, Trichopoulou A, Naska A, Lagiou P, Panico S, Palli D, Vineis P, Tumino R, Lund E, Kumle M, Skeie G, González CA, Ardanaz E, Amiano P, Tormo MJ, Martínez-García C, Quirós JR, Berglund G, Gullberg B, Hallmans G, Lenner P, Bueno-de-Mesquita HB, van Duynhoven FJ, Peeters PH, van Gils CH, Key TJ, Crowe FL, Bingham S, Khaw KT, Rinaldi S, Slimani N, Jenab M, Norat T, Riboli E. Dietary fat and breast cancer risk in the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr.* 2008 Nov;88(5):1304-12.
- Sieri S, Krogh V, Saieva C, Grobbee DE, Bergmann M, Rohrmann S, Tjønneland A, Ferrari P, Chloutsios Y, Dilis V, Jenab M, Linseisen J, Wallström P, Johansson I, Chirlaque MD, Sanchez MJ, Niravong M, Clavel-Chapelon F, Welch AA, Allen NE, Bueno-de-Mesquita HB, van der Schouw YT, Sacerdote C, Panico S, Parr CL, Braaten T, Olsen A, Jensen MK, Bingham S, Riboli E, Slimani N. Alcohol consumption patterns, diet and body weight in 10 European countries. *Eur J Clin Nutr.* (2009) Nov;63 Suppl 4:S81-100.
- Skeie G, Braaten T, Hjartåker A, Lentjes M, Amiano P, Jakszyn P, Pala V, Palanca A, Niekerk EM, Verhagen H, Avloniti K, Psaltopoulou T, Niravong M, Touvier M, Nimptsch K, Haubrock J, Walker L, Spencer EA, Roswall N, Olsen A, Wallström P, Nilsson S, Casagrande C, Deharveng G, Hellström V, Boutron-Ruault MC, Tjønneland A, Joensen AM, Clavel-Chapelon F, Trichopoulou A, Martínez C, Rodríguez L, Frasca G, Sacerdote C, Peeters PH, Linseisen J, Schienkiewitz A, Welch AA, Manjer J, Ferrari P, Riboli E, Bingham S, Engeset D, Lund E, Slimani N. Use of dietary supplements in the European Prospective Investigation into Cancer and Nutrition calibration study. *Eur J Clin Nutr.* 2009 Nov;63 Suppl 4:S226-38
- Slimani N & Margetts B. Co-editors in a special issue (14 papers) on "Nutrient Intakes and Patterns in the EPIC cohorts from ten European countries" (SNIFE). *Eur J Clin Nutr* 2009, Nov;63, S1-S274.
- Slimani N, Deharveng G, Southgate DA, Biessy C, Chajès V, van Bakel MM, Boutron-Ruault MC, McTaggart A, Grioni S, Verkaik-Kloosterman J, Huybrechts I, Amiano P, Jenab M, Vignat J, Bouckaert K, Casagrande C, Ferrari P, Zourna P, Trichopoulou A, Wirfält E, Johansson G, Rohrmann S, Illner AK, Barricarte A, Rodríguez L, Touvier M, Niravong M, Mulligan A, Crowe F, Ocké MC, van der Schouw YT, Bendinelli B, Lauria C, Brustad M, Hjartåker A, Tjønneland A, Jensen AM, Riboli E, Bingham S. Contribution of highly industrially processed foods to the nutrient intakes and patterns of middle-aged populations in the European Prospective Investigation into Cancer and Nutrition study. *Eur J Clin Nutr.* 2009 Nov;63 Suppl 4:S206-25
- Spencer EA, Key TJ, Appleby PN, van Gils CH, Olsen A, Tjønneland A, Clavel-Chapelon F, Boutron-Ruault MC, Touillaud M, Sánchez MJ, Bingham S, Khaw KT, Slimani N, Kaaks R, Riboli E. Prospective study of the association between grapefruit intake and risk of breast cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC). *Cancer Causes Control.* 2009 Aug;20(6):803-9.
- Suzuki R, Allen NE, Appleby PN, Key TJ, Dossus L, Tjønneland A, Føns Johnsen N, Overvad K, Sacerdote C, Palli D, Krogh V, Tumino R, Rohrmann S, Linseisen J, Boeing H, Trichopoulou A, Makrygiannis G, Misirli G, Bueno-de-Mesquita HB, May AM, Díaz MJ, Sánchez MJ, Barricarte Gurrea A, Rodríguez Suárez L, Buckland G, Larrañaga N, Bingham S, Khaw KT, Rinaldi S, Slimani N, Jenab M, Riboli E, Kaaks R. Lifestyle factors and serum androgens among 636 middle aged men from seven countries in the European Prospective Investigation into Cancer and Nutrition (EPIC). *Cancer Causes Control.* 2009 Aug;20(6):811-21.
- Travier N, Agudo A, May AM, Gonzalez C, Luan J, Besson H, Wareham NJ, Slimani N, Rinaldi S, Clavel-Chapelon F, Boutron-Ruault MC, Palli D, Agnoli C, Mattiello A, Tumino R, Vineis P, Rodriguez L, Sanchez MJ, Dorronsoro M, Barricarte A, Tormo MJ, Norat T, Mouw T, Key TJ, Spencer EA, Bueno-de-Mesquita HB, Vrieling A, Orfanos P, Naska A, Trichopoulou A, Rohrmann S, Kaaks R,

- M Bergmann M, Boeing H, Hallmans G, Johansson I, Manjer J, Lindkvist B, Jakobsen MU, Overvad K, Tjønneland A, Halkjaer J, Lund E, Braaten T, Olyseos A, Riboli E, Peeters PH. Smoking and body fatness measurements: A cross-sectional analysis in the EPIC-PANACEA study. *Prev Med.* 2009 Nov;49(5):365-73.
- Travis RC, Crowe FL, Allen NE, Appleby PN, Roddam AW, Tjønneland A, Olsen A, Linseisen J, Kaaks R, Boeing H, Kröger J, Trichopoulou A, Dilis V, Trichopoulos D, Vineis P, Palli D, Tumino R, Sieri S, Bueno-de-Mesquita HB, van Duijnhoven FJ, Chirlaque MD, Barricarte A, Larrañaga N, González CA, Argüelles MV, Sánchez MJ, Stattin P, Hallmans G, Khaw KT, Bingham S, Rinaldi S, Slimani N, Jenab M, Riboli E, Key TJ. Serum vitamin D and risk of prostate cancer in a case-control analysis nested within the European Prospective Investigation into Cancer and Nutrition (EPIC). *Am J Epidemiol.* 2009 May 15;169(10):1223-32.
- Travis RC, Spencer EA, Allen NE, Appleby PN, Roddam AW, Overvad K, Johnsen NF, Olsen A, Kaaks R, Linseisen J, Boeing H, Nöthlings U, Bueno-de-Mesquita HB, Ros MM, Sacerdote C, Palli D, Tumino R, Berrino F, Trichopoulou A, Dilis V, Trichopoulos D, Chirlaque MD, Ardanaz E, Larranaga N, Gonzalez C, Suárez LR, Sánchez MJ, Bingham S, Khaw KT, Hallmans G, Stattin P, Rinaldi S, Slimani N, Jenab M, Riboli E, Key TJ. Plasma phyto-oestrogens and prostate cancer in the European Prospective Investigation into Cancer and Nutrition. *Br J Cancer.* 2009 Jun 2;100(11):1817-23.
- Travis RC, Spencer EA, Allen NE, Appleby PN, Roddam AW, Overvad K, Johnsen NF, Olsen A, Kaaks R, Linseisen J, Boeing H, Nöthlings U, Bueno-de-Mesquita HB, Ros MM, Sacerdote C, Palli D, Tumino R, Berrino F, Trichopoulou A, Dilis V, Trichopoulos D, Chirlaque MD, Ardanaz E, Larranaga N, Gonzalez C, Suárez LR, Sánchez MJ, Bingham S, Khaw KT, Hallmans G, Stattin P, Rinaldi S, Slimani N, Jenab M, Riboli E, Key TJ. Plasma phyto-oestrogens and prostate cancer in the European Prospective Investigation into Cancer and Nutrition. *Br J Cancer.* 2009 Jun 2;100(11):1817-23.
- van Bakel MM, Kaaks R, Feskens EJ, Rohrmann S, Welch AA, Pala V, Avloniti K, van der Schouw YT, van der A DL, Du H, Halkjaer J, Tormo MJ, Cust AE, Brighenti F, Beulens JW, Ferrari P, Biessy C, Lentjes M, Spencer EA, Panico S, Masala G, Bueno-de-Mesquita HB, Peeters PH, Trichopoulou A, Psaltopoulou T, Clavel-Chapelon F, Touvier M, Skeie G, Rinaldi S, Sonestedt E, Johansson I, Schulze M, Ardanaz E, Buckland G, Tjønneland A, Overvad K, Bingham S, Riboli E, Slimani N. Dietary glycaemic index and glycaemic load in the European Prospective Investigation into Cancer and Nutrition. *Eur J Clin Nutr.* (2009) Nov;63 Suppl 4:S188-205.
- van Bakel MM, Slimani N, Feskens EJ, Du H, Beulens JW, van der Schouw YT, Brighenti F, Halkjaer J, Cust AE, Ferrari P, Brand-Miller J, Bueno-de-Mesquita HB, Peeters P, Ardanaz E, Dorronsoro M, Crowe FL, Bingham S, Rohrmann S, Boeing H, Johansson I, Manjer J, Tjønneland A, Overvad K, Lund E, Skeie G, Mattiello A, Salvini S, Clavel-Chapelon F, Kaaks R. Methodological challenges in the application of the glycemic index in epidemiological studies using data from the European Prospective Investigation into Cancer and Nutrition. *J Nutr.* 2009 Mar;139(3):568-75.
- van Duijnhoven FJ, Bueno-De-Mesquita HB, Ferrari P, Jenab M, Boshuizen HC, Ros MM, Casagrande C, Tjønneland A, Olsen A, Overvad K, Thorlacius-Ussing O, Clavel-Chapelon F, Boutron-Ruault MC, Morois S, Kaaks R, Linseisen J, Boeing H, Nöthlings U, Trichopoulou A, Trichopoulos D, Misirli G, Palli D, Sieri S, Panico S, Tumino R, Vineis P, Peeters PH, van Gils CH, Ocké MC, Lund E, Engeset D, Skeie G, Suárez LR, González CA, Sánchez MJ, Dorronsoro M, Navarro C, Barricarte A, Berglund G, Manjer J, Hallmans G, Palmqvist R, Bingham SA, Khaw KT, Key TJ, Allen NE, Boffetta P, Slimani N, Rinaldi S, Gallo V, Norat T, Riboli E. Fruit, vegetables, and colorectal cancer risk: the European Prospective Investigation into Cancer and Nutrition. *Am J Clin Nutr.* 2009 May;89(5):1441-52.
- Vesper HW, Slimani N, Hallmans G, Tjønneland A, Agudo A, Benetou V, Bingham S, Boeing H, Boutron-Ruault MC, Bueno-de-Mesquita HB, Chirlaque D, Clavel-Chapelon F, Crowe F, Drogan D, Ferrari P, Johansson I, Kaaks R, Linseisen J, Lund E, Manjer J, Mattiello A, Palli D, Peeters PH, Rinaldi S, Skeie G, Trichopoulou A, Vineis P, Wirfält E, Overvad K, Strömberg U. Cross-sectional study on acrylamide hemoglobin adducts in subpopulations from the European Prospective Investigation into Cancer and Nutrition (EPIC) Study. *J Agric Food Chem.* 2008 Aug 13;56(15):6046-53.
- Weikert C, Dietrich T, Boeing H, Bergmann MM, Boutron-Ruault MC, Clavel-Chapelon F, Allen N, Key T, Lund E, Olsen A, Tjønneland A, Overvad K, Rohrmann S, Linseisen J, Pischon T, Trichopoulou A, Weinehall L, Johansson I, Sánchez MJ, Agudo A, Barricarte A, Amiano P, Chirlaque MD, Quirós JR, Wirfält E, Peeters PH, Bueno-de-Mesquita HB, Vrieling A, Pala V, Palli D, Vineis P, Tumino R, Panico S, Bingham S, Khaw KT, Norat T, Jenab M, Ferrari P, Slimani N, Riboli E. Lifetime and baseline alcohol intake and risk of cancer of the upper aero-digestive tract in the European Prospective Investigation into Cancer and Nutrition (EPIC) study. *Int J Cancer.* 2009 Jul 15;125(2):406-12.
- Weiss JM, Huang WY, Rinaldi S, Fears TR, Chatterjee N, Hsing AW, Crawford ED, Andriole GL, Kaaks R, Hayes RB. Endogenous sex hormones and the risk of prostate cancer: A prospective study. *Int J Cancer.* 2008 May 15;122(10):2345-50.
- Welch AA, Fransen H, Jenab M, Boutron-Ruault MC, Tumino R, Agnoli C, Ericson U, Johansson I, Ferrari P, Engeset D, Lund E, Lentjes M, Key T, Touvier M, Niravong M, Larrañaga N, Rodríguez L,