

# DGEpi Nachwuchspreisträger 2011

Den Stephan-Weiland-Nachwuchspreis erhielten folgende KollegInnen:

## 1. Preis

**Madlen Schütze**, cand. PhD, Deutsches Institut für Ernährungsforschung (DIfE), Nuthetal

### **Alcohol attributable burden of incidence of cancer in eight European countries based on results from prospective cohort study.**

In: *British Medical Journal* 2011 Apr 7;342:d1584. doi: 10.1136/bmj.d1584 (free article)

Schütze M, Boeing H, Pischon T, Rehm J, Kehoe T, Gmel G, Olsen A, Tjønneland AM, Dahm CC, Overvad K, Clavel-Chapelon F, Boutron-Ruault M-C, Trichopoulou A, Benetou V, Zylis D, Kaaks R, Rohrmann S, Palli D, Berrino F, Tumino R, Vineis P, Rodriguez L, Agudo A, Sánchez M-J, Dorransoro M, Chirlaque M-D, Barricarte A, Peeters PH, van Gils CH, Khaw K-T, Wareham N, Allen NE, Key TJ, Boffetta P, Slimani N, Jenab M, Romaguera D, Wark PA, Riboli E, Bergmann MM

**ABSTRACT:** *Objective* To compute the burden of cancer attributable to current and former alcohol consumption in eight European countries based on direct relative risk estimates from a cohort study. *Design* Combination of prospective cohort study with representative population based data on alcohol exposure. *Setting* Eight countries (France, Italy, Spain, United Kingdom, the Netherlands, Greece, Germany, Denmark) participating in the European Prospective Investigation into Cancer and Nutrition (EPIC) study. *Participants* 109 118 men and 254 870 women, mainly aged 37-70. *Main outcome measures* Hazard rate ratios expressing the relative risk of cancer incidence for former and current alcohol consumption among EPIC participants. Hazard rate ratios combined with representative information on alcohol consumption to calculate alcohol attributable fractions of causally related cancers by country and sex. Partial alcohol attributable fractions for consumption higher than the recommended upper limit (two drinks a day for men with about 24 g alcohol, one for women with about 12 g alcohol) and the estimated total annual number of cases of alcohol attributable cancer. *Results* If we assume causality, among men and women, 10% (95% confidence interval 7 to 13%) and 3% (1 to 5%) of the incidence of total cancer was attributable to former and current alcohol consumption in the selected European countries. For selected cancers the figures were 44% (31 to 56%) and 25% (5 to 46%) for upper aerodigestive tract, 33% (11 to 54%) and 18% (-3 to 38%) for liver, 17% (10 to 25%) and 4% (-1 to 10%) for colorectal cancer for men and women, respectively, and 5.0% (2 to 8%) for female breast cancer. A substantial part of the alcohol attributable fraction in 2008 was associated with alcohol consumption higher than the recommended upper limit: 33 037 of 178 578 alcohol related cancer cases in men and 17 470 of 397 043 alcohol related cases in women. *Conclusions* In western Europe, an important proportion of cases of cancer can be attributable to alcohol consumption, especially consumption higher than the recommended upper limits. These data support current political efforts to reduce or to abstain from alcohol consumption to reduce the incidence of cancer.

## 2. Preis

**Diewertje Sluik**, cand. PhD, Deutsches Institut für Ernährungsforschung (DIfE), Nuthetal

### **Associations Between General and Abdominal Adiposity and Mortality in Individuals With Diabetes Mellitus.**

In: *American Journal of Epidemiology* 2011 Jul 1;174(1):22-34. Epub 2011 May 26.

Sluik D, Boeing H, Montonen J, Pischon T, Kaaks R, Teucher B, Tjønneland A, Halkjaer J, Berentzen TL, Overvad K, Arriola L, Ardanaz E, Bendinelli B, Grioni S, Tumino R, Sacerdote C, Mattiello A, Spijkerman AMW, van der A DL, Beulens JW, van der Schouw YT, Nilsson PM, Hedblad B, Rolandsson O, Franks PW, Nöthlings U

**ABSTRACT:** Individuals with diabetes mellitus are advised to achieve a healthy weight to prevent complications. However, fat mass distribution has hardly been investigated as a risk factor for diabetes complications. The authors studied associations between body mass index, waist circumference, waist/hip ratio, and waist/height ratio and mortality among individuals with diabetes mellitus. Within the European Prospective Investigation into Cancer and Nutrition, a subcohort was defined as 5,435 individuals with a confirmed self-report of diabetes mellitus at baseline in 1992-2000. Participants were aged 57.3 (standard deviation, 6.3) years, 54% were men, the median diabetes duration was 4.6 (interquartile range, 2.0-9.8) years, and 22% of the participants used insulin. Body mass index, as indicator of general obesity, was not associated with higher mortality, whereas all measurements of abdominal obesity showed a positive association. Associations generally were slightly weaker in women. The strongest association was observed for waist/height ratio: In the fifth quintile, the hazard rate ratio was 1.88 (95% confidence interval: 1.33, 2.65) for men and 2.46 (95% confidence interval: 1.46, 4.14) for women. Measurements of abdominal, but not general, adiposity were associated with higher mortality in diabetic individuals. The waist/height ratio showed the strongest association. Respective indicators might be investigated in risk prediction models.

### 3. Preis

**Dr. Benjamin Barnes**, Deutsches Krebsforschungszentrum, Heidelberg

#### **Population attributable risk of invasive postmenopausal breast cancer and breast cancer subtypes for modifiable and non-modifiable risk factors.**

In: *Cancer Epidemiology* 2011 Aug; 35(4):345-52. Epub 2010 Dec 14.

Barnes BBE, Steindorf K, Hein R, Flesch-Janys D, Chang-Claude J

**ABSTRACT:** Background: The population-level impact of modifiable postmenopausal breast cancer risk factors is incompletely understood, especially regarding potential heterogeneity by estrogen receptor (ER) and progesterone receptor (PR) status. Methods: Using data on 3074 cases and 6386 controls from a population-based case-control study of postmenopausal breast cancer conducted in Germany between 2002 and 2005, we calculated multivariable-adjusted odds ratios and population attributable risks (PARs) for modifiable and non-modifiable risk factors. We examined overall postmenopausal invasive breast cancer as well as tumor ER/PR subtypes. A bootstrap method provided estimates of 95% confidence intervals (95% CIs). Results: The summary PARs (95% CIs) for non-modifiable risk factors (age at menarche, age at menopause, parity, benign breast disease, and family history of breast cancer) were 37.2% (27.1–47.2%) regarding overall invasive tumors, 36.5% (23.3–47.6%) regarding ER+/PR+ tumors, 47.9% (26.4–64.4%) regarding ER+/PR- tumors, and 31.1% (4.0–51.9%) regarding ER-/PR- tumors. Of the modifiable risk factors (hormone therapy (HT) use, physical inactivity, BMI, alcohol consumption), HT use and physical inactivity had the highest impact with PARs of 19.4% (15.9–23.2%) and 12.8% (5.5–20.8%), respectively, regarding overall invasive tumors. For ER+/PR+ tumors, the corresponding PARs were 25.3% (20.9–29.7%) and 16.6% (7.0–26.0%). The summary PARs (95% CIs) for HT use and physical inactivity together were 29.8% (21.8–36.9%) and 37.9% (30.6–46.2%) regarding overall invasive and ER+/PR+ tumors, respectively. Conclusions: The population-level impact of modifiable risk factors appears to be comparable to that of non-modifiable risk factors. Alterations in HT use and physical inactivity could potentially reduce postmenopausal invasive breast cancer incidence in Germany by nearly 30%, with the largest potential for reduction among ER+/PR+ tumors, the most frequently diagnosed subtype.

### **Posterpreise 2011 von GMDS und DGEpi**

Die Preisträger der beiden Posterpreise 2011 sind:

#### **Autorengruppe Gottschling A<sup>1</sup>, Franze M<sup>1</sup>, Hoffmann W<sup>1</sup>**

<sup>1</sup>Universität Greifswald, Institut für Community Medicine, Greifswald  
für das Poster

Motorische Entwicklungsgefährdungen bei 3- bis 6-Jährigen in Mecklenburg-Vorpommern (M-V): Update zu Assoziationen mit dem sozioökonomischen Status (SES) der Eltern

#### **Autorengruppe Zimmermann H<sup>1</sup>, Zimmermann N<sup>2</sup>, Kim T-S<sup>2</sup>, Becher H<sup>1</sup>**

<sup>1</sup>Institut für Public Health, Heidelberg

<sup>2</sup>Dental School, Abteilung Zahnerhaltungskunde, Heidelberg  
für das Poster

Literaturreview und Meta-Analyse: Ist (schlechte) Mundhygiene ein Risikofaktor für alveolären Knochenverlust/Parodontitis