

Physical Activity and the Association of Common *FTO* Gene Variants With Body Mass Index and Obesity

Common *FTO* (fat mass and obesity associated) gene variants have recently been associated with increased body mass index and obesity in several large studies. In this study of 704 Old Order Amish adults who were enrolled in the Heredity and Phenotype Intervention Heart Study, the authors not only replicated this finding but also showed that the association between *FTO* variants and body mass index is abolished in those who are the most physically active as determined by objective movement monitoring with accelerometers. These findings emphasize the important role of physical activity in public health efforts to combat obesity, particularly in genetically susceptible individuals.

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Postmenopausal Hormone Use and Symptoms of Gastroesophageal Reflux

This study examined the association between postmenopausal hormone use and symptoms of gastroesophageal reflux disease (GERD) among 51 637 participants in the Nurses' Health Study. Investigators found that use of estrogens, but not necessarily progesterone, is significantly associated with an increased risk for GERD symptoms. The authors observed significant trends in risk for both increasing doses and durations of estrogen use in a prospective fashion. In addition, use of selective estrogen receptor modulators, such as tamoxifen and raloxifene, and use of over-the-counter hormone preparations also carries an increased risk for GERD symptoms. These findings suggest that there may be a hormonal component to the pathophysiologic characteristics of gastroesophageal reflux.

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Association Between Blood Pressure Responses to the Cold Pressor Test and Dietary Sodium Intervention in a Chinese Population

Chen et al examined the association between blood pressure (BP) responses to the cold pressor test and to dietary sodium and potassium interventions among 1906 study participants in rural China. The dietary intervention included three 7-day periods of low sodium intake (51.3 mmol/d), high sodium intake (307.8 mmol/d), and high sodium intake plus potassium supplementation (60 mmol/d). Compared with the lowest quartile of BP response to the cold pressor test, systolic BP changes for the top 3 quartiles were -2.02 , -3.17 , and -5.98 mm Hg during the low-sodium intervention; 0.40 , 0.44 , and 2.30 mm Hg during the high-sodium intervention; and -0.26 , -0.95 , and -1.59 mm Hg during the high-sodium intervention plus potassium supplementation (all $P < .001$). These results indicate that BP response to the cold pressor test was associated with salt sensitivity and potassium sensitivity.

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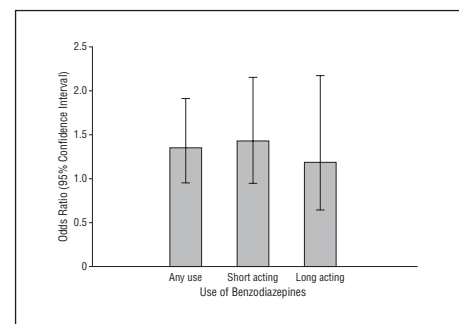
Practice-Linked Online Personal Health Records for Type 2 Diabetes Mellitus

Web-based personal health records (PHRs) have been advocated as a means to improve diabetes care. However, few Web-based systems are linked directly to the electronic medical record used by physicians. Grant et al randomized 11 primary care practices to receive access to either (1) a diabetes-specific PHR that imported clinical and medications data and enabled the patient to author a "diabetes care plan" before upcoming appointments vs (2) a PHR to update and submit family history and health maintenance information ("active control" arm). Previsit use of the diabetes PHR increased rates of diabetes-related medication adjustment compared with active controls (53% vs 15%; $P < .001$). However, low rates of online patient account registration and good baseline diabetes control among study participants limited the intervention's impact on overall risk factor levels.

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Actigraphy-Measured Sleep Characteristics and Risk of Falls in Older Women

This study uses objective estimation of sleep characteristics using wrist actigraphy to explore the relationship between sleep and risk of incident falls in a cohort of nearly 3000 community-dwelling older women. After accounting for a variety of potential risk factors for falls including comorbidities, use of benzodiazepines and other medications, older women who experienced short nighttime sleep durations (≤ 5 hours per night) and those with more fragmented sleep had a significantly increased risk of falls.



Association of benzodiazepine use and risk of 2 or more falls during 1 year after the eighth examination.

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