

# ABSTRACTS

## OBESEITY, WEIGHT GAIN AND THE RISK OF KIDNEY STONES

It is known that larger body size may result in increased urinary excretion of calcium, oxalate and uric acid, thus increasing the risk of calcium-containing kidney stones. However, it is not clear if obesity itself increases the risk of stone formation and the role of weight gain is also not clear. The authors of this paper set out to determine if weight, weight gain, body mass index (BMI) and waist circumference are associated with kidney stone formation.

They used a prospective study of 3 large cohorts, the Health Professionals Follow-up Study, the Nurses' Health Study I and the Nurses' Health Study II. They found 4 827 incident kidney stones over a combined 46 years of follow-up. After adjusting for age, fluid intake and thiazide use, the relative risk for stone formation in men weighing more than 100 kg compared with men weighing 68.2 kg was higher in the heavier men. Similar trends were seen in the cohorts of women, with increased weight being even more strongly associated with relative risk of kidney stone formation. Weight gain showed similar results and increased waist circumference was also positively associated with increased risk.

The authors concluded that obesity and weight gain increase the risk of kidney stone formation.

Taylor E, *et al.* *JAMA* 2005; **293**: 455-462.

## PERSON-TO-PERSON TRANSMISSION OF AVIAN FLU

As the epidemiologists start to hold their collective breath, more and more reports of possible human-to-human transmission of avian flu are emerging. During 2004 a highly pathogenic strain of avian influenza A (H5N1) caused poultry disease in 8 Asian countries and infected at least 44 people, of whom 32 died. Most of the people had close contact with poultry and no evidence was reported of efficient person-to-person transmission. This paper looks at possible person-to-person transmission in a family cluster of the disease in Thailand.

The authors reviewed the circumstances and timing of exposure to poultry and to other ill people in the 3 patients involved. Specimens from family members were tested for

H5N1 viral strains. The index patient became ill 3 - 4 days after her last exposure to dying household chickens. Her mother came from a distant city to care for her in the hospital, had no known previous exposure to poultry and died from pneumonia after providing 16 - 18 hours of unprotected nursing care. The child's aunt also provided unprotected nursing care. She developed fever 5 days after the mother first had fever, followed by pneumonia 7 days later. Autopsy tissue from the mother and nasopharyngeal and throat swabs from the aunt were positive for influenza A (H5N1). No additional chains of transmission were identified.

The authors conclude that disease in the mother and aunt probably resulted from person-to-person transmission of this lethal avian flu virus during unprotected exposure to the critically ill patient.

Ungchusak K, *et al.* *NEJM* 2005; **352**: 333-340.

## FRUIT AND VEGETABLES AND THE RISK OF BREAST CANCER

It is thought that eating fruit and vegetables protects against breast cancer, with most evidence coming from case-controlled studies. However, a recent pooled analysis of the relatively few published cohort studies suggests that there is no significant reduced breast cancer risk associated with fruit and vegetable consumption.

In a prospective study of 285 526 women between the ages of 25 and 70 years, participating in the European Prospective Investigation into Cancer and Nutrition (EPIC) study, the authors looked at any relationship between total and specific vegetable and fruit intake and the incidence of breast cancer. Participants completed a questionnaire in 1992 - 1998 and were followed up for breast cancer until 2002.

During 1 486 402 person-years, 3 659 invasive breast cancer cases were reported. However, no significant associations between vegetable or fruit intake and breast cancer risk were seen, either for specific or general fruit and vegetable intake. These results suggest that this suggested association does not exist.

Van Gils CH, *et al.* *JAMA* 2005; **293**: 183-193.

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