

## Nutrient found in dark meat of poultry, some seafood, may have cardiovascular benefits

## March 1 2012

A nutrient found in the dark meat of poultry may provide protection against coronary heart disease (CHD) in women with high cholesterol, according to a study by researchers at NYU Langone Medical Center.

The study, published online in the *European Journal of Nutrition*, evaluated the effects of taurine, a naturally-occurring nutrient found in the dark meat of turkey and chicken, as well as in some fish and shellfish, on CHD. It revealed that higher taurine intake was associated with significantly lower CHD risk among women with high total cholesterol levels. The same association was not seen in women with <u>low cholesterol</u> levels, however.

There is very little information available about taurine, said principal investigator Yu Chen, PhD, MPH, associate professor of epidemiology at NYU School of Medicine, part of NYU Langone Medical Center. While there have been some animal studies that indicate taurine may be beneficial to cardiovascular disease, this is the first published prospective study to look at serum taurine and CHD in humans, she explained. "Our findings were very interesting. Taurine, at least in its natural form, does seem to have a significant protective effect in women with high cholesterol."

<u>Coronary heart disease</u> is the leading killer of American men and women, causing one in five deaths. Also known as <u>coronary artery</u> <u>disease</u>, it is caused by the buildup of plaque in the arteries to the heart. Large prospective <u>epidemiologic studies</u> have provided evidence that



nutritional factors are important modifiable risk factors for CHD.

Dr. Chen and colleagues conducted their study using data and samples from the NYU Women's <u>Health Study</u>. The original study enrolled more than 14,000 women, 34 to 65 years of age, between 1985 and 1991 at a <u>breast cancer screening</u> center in New York City. Upon enrollment, a wide range of medical, personal and lifestyle information was recorded and the data and samples continue to be utilized for a variety of medical studies.

For the serum taurine study, funded by the American Heart Association, the researchers measured taurine levels in serum samples collected in 1985 – before disease occurrence – for 223 NYUWHS participants who developed or died from CHD during the study follow up period between 1986 and 2006. The researchers then compared those samples to the taurine levels in serum samples collected at the same time for 223 participants who had no history of cardiovascular disease.

The comparison revealed serum taurine was not protective of CHD overall. However, among women with high cholesterol, those with high levels of serum taurine were 60 percent less likely to develop or die from CHD in the study, compared to women with lower serum taurine levels. If future studies are able to replicate the findings, taurine supplementation or dietary recommendations may one day be considered for women with high cholesterol at risk for CHD.

"It is an interesting possibility," she said. "If these findings are confirmed, one day we might be able to suggest that someone with <u>high</u> <u>cholesterol</u> eat more poultry, specifically dark meat."

Dr. Chen explained that Caucasian <u>women</u> comprised more than 80 percent of the study population and, therefore, the results may not at this time be generalized to men or other races, but suggested that future



studies should be conducted in these populations. In addition, she explained, it is unclear whether synthetic taurine as an additive in food and drink products will have the same benefit observed in this study, and health effects of these products should be investigated separately. "We studied taurine found in the blood that originated from natural sources," Dr. Chen said. "The nutrient being added to energy drinks or supplements is man-made and is added in unstudied amounts. These products also often contain not only very high amounts of taurine, but a multitude of other ingredients as well – such as caffeine and ginseng – that may influence CHD risk."

The researchers are currently using NYUWHS data to evaluate the effect of taurine on the occurrence of stroke in another study funded by the National Heart, Lung, and Blood Institute (NHLBI).

## Provided by New York University School of Medicine

Citation: Nutrient found in dark meat of poultry, some seafood, may have cardiovascular benefits (2012, March 1) retrieved 4 May 2024 from <a href="https://medicalxpress.com/news/2012-03-nutrient-dark-meat-poultry-seafood.html">https://medicalxpress.com/news/2012-03-nutrient-dark-meat-poultry-seafood.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.