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## ASSOCIATION BETWEEN FISH CONSUMPTION AND RISK OF DEMENTIA: A SYSTEMATIC WORLDWIDE LITERATURE REVIEW AND A NEW STUDY FROM CHINA

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The aim of this presentation is to assess the association of eating fish with risk of dementia by a systematic literature review and a new study. We examined a random sample of 6981 participants aged  $\geq$ 60 years in China for health survey in 2007-2011. After adjustment for age, sex, province, urban-rural areas, education, smoking and stroke, odds ratio (OR) for dementia in 5453 participants (dementia rate 4.33%) who had any fish consumption over the past 2 years was 0.73 (95% CI 0.64-0.99) in comparison to 1528 never eating fish (dementia rate 5.89%). Adjusted OR was 0.79 (0.49-1.29) in participants eating fish once a week, 0.59 (0.38-0.90) in eating fish more than twice a week, and 0.76 (0.55-1.04) in eating  $\geq$ daily. Searching Medline and 4 other electronic databases up to February 2016 we identified and 11 articles for review. Two of 11 articles did not include data on the association, while 9 others included 15 studied populations; 4 demonstrated a significant association of fish eating (or high verse low consumptions) with reduced risk of dementia (around 20% to 66%), 9 showed a non-statistically reduced risk, and 2 exhibited no association (or increased risk). Pooled data from 16 studied populations, including the older Chinese showed a relative risk (RR) of dementia in people eating, fishing was 0.80 (0.73-0.87). Pooled dose-response data showed a RR of 0.85 (0.73-0.98), 0.79 (0.72-0.86) and 0.73 (0.59-0.92) from low, middle to high consumption of fish. Increasing fish consumption in the population may help prevent dementia in the world.

## Biography

Ruoling Chen joined in the University of Wolverhampton, UK as a Reader in Epidemiology and Public Health and Epidemiology in 2009. He was awarded his PhD from the University of Aberdeen in 1997, after studying medicine and medical statistics in China. His research areas and expertise include epidemiology and global public health. Dr Chen has published widely in these fields. He previously worked at the Universities of Liverpool, Dundee and London (UCL and KCL) as a lecturer, senior lecturer and principle investigator, over the past 20 years. He has been an adjunct Professor at Anhui Medical University since 2003.

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