Title: Fish consumption and health in Pacific Island Countries and Territories: A systematic literature review

Background: Pacific Island countries and territories (PICTs) face a double burden of disease with a high prevalence of childhood micronutrient deficiencies, accompanied by an increase in adult obesity, diabetes and heart disease. This study reviewed existing literature to assess the role fish consumption plays in the diets of Pacific Islanders.

Methods: A systematic literature review was undertaken following the PRISMA guidelines. Three online academic databases were searched using a combination of keywords and limited to articles published between December 2004 and December 2014.

Results: A total of 26 studies were reviewed. Fifteen studies identified fish as the primary food source for Pacific Islanders and five studies reported fish/seafood as the primary source of dietary protein. Fish consumption varied by cultural sub-region and Pacific Island countries and territories. Fish consumption and nutritional status was addressed in nine studies with moderate iodine deficiency in Vanuatu reported where only 30% of participants consumed mostly fresh fish. In Samoa, a ‘modern’ dietary pattern, characterised by high intakes of processed foods, was associated with an increased prevalence of metabolic syndrome.

Conclusions: Fish remains an important staple food for many of the PICTS. However, the traditional diet of Pacific Islanders is threatened by a rapidly changing food system that is characterised by an increasing supply of packaged imported foods, such as canned meats, instant noodles, cereals, rice, and sugar-sweetened beverages. Public health strategies are needed to address the region’s nutrition transition and to encourage continued access to fish resources.