

## **THE JOINT FAO/WHO EXPERT CONSULTATION ON THE RISKS AND BENEFITS OF FISH CONSUMPTION**

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FAO and WHO held a Joint Expert Consultation on the health benefits of fish consumption in comparison with health risks associated with the contaminants methyl mercury (MeHg) and dioxins and dioxin-like PCBs (DLCs) that may be present in fish. Seventeen experts in nutrition, toxicology, epidemiology, dietary exposure and risk-benefit assessments reviewed data on nutrient and specific chemical (MeHg and DLCs) contaminant levels in a range of fish species. Fish was defined as finfish and shellfish, whether of marine or freshwater origin, farmed or wild. The Consultation examined the benefits of fish consumption on neurodevelopment and prevention of cardiovascular disease. The Consultation also examined the risks from fish consumption of MeHg and DLCs. Consumption of fish was recognized to provide energy, protein, and a range of other important nutrients, including the long-chain n-3 poly unsaturated fatty acids (LCn3PUFA). Eating fish was recognized as part of the cultural traditions of many peoples, and in some populations as a major source of food and essential nutrients. Among the general adult population, consumption of fish, particularly oily fish, lowered the risk of coronary heart disease (CHD) mortality, while there was an absence of probable or convincing evidence of CHD risks from MeHg. Potential cancer risks from DLCs were well below established CHD benefits. Analysis of benefits of LCn3PUFA vs. risks of MeHg among women of childbearing age, found that maternal fish consumption lowered the risk of suboptimal neurodevelopment in the offspring compared to women not eating fish in most circumstances evaluated, at levels of maternal DLC intake (from fish and other dietary sources) that did not exceed the provisional tolerable monthly intake (PTMI) of 70 picograms/kg body weight/month established by the Joint FAO/WHO Expert Committee on Food Additives. Among infants, young children, and adolescents, the available data were insufficient to derive a quantitative framework of health risks and benefits of eating fish. In conclusion, healthy dietary patterns include fish and are established early in life, establishing healthy dietary habits for adult life.