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DERIVE: DEvelopment of Riboflavin biomarkers to relate dietary sources with status, gene-nutrient Interactions and Validated health Effects in adult cohorts

Vitamin B2 (Riboflavin) plays a crucial role in human development and health across the lifespan. Recently, evidence has emerged which indicates that it may also have a modulating effect on blood pressure.

In most countries, there is little or no knowledge about the vitamin B2 nutrition status of the population due to the lack of convenient blood indicators and assessment tools. Dietary records are the sole source of information for most countries; however, these do not reflect the biochemical status of the population, which is a better indicator of health effects. In this international and multidisciplinary project, we aim to develop accessible blood indicators for vitamin B2 status assessment and identify which most sensitively reflect dietary intakes and food sources of vitamin B2 in Irish from the Irish National Adult Nutrition Survey (NANS) and Canadian adults from the British Columbia Generation Project (BCGP). We will also demonstrate an important health effect of vitamin B2 by investigating its role in modulating blood pressure via a novel gene-nutrient interactive effect.