HEALTHCARE SAVINGS ASSOCIATED WITH DIETS ADEQUATE IN ESSENTIAL NUTRIENTS: DATA VERSUS OPINION BASED POLICY

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The medical literature during the past three to four decades has identified adequate intake of essential nutrients from fruits, vegetables, dairy foods and various fish and animal protein sources as a factor that reduces the prevalence and cost of managing a wide-range of common medical conditions. These include hypertension, obesity, type 2 diabetes, chronic renal disease, osteoporosis, kidney stones, outcomes of pregnancy, and some cancers. These disorders consume a substantial portion of the healthcare budget of the U.S. as well as that of most other developed countries. As a case study, we originally published in 2004 an analysis of the beneficial effect in terms of reducing disease burden and healthcare costs in the U.S. were all adults to consume the recommended number of servings of dairy foods each day. The conservative estimate of healthcare savings we projected was $26 billion within the first year and 5-year cumulative savings in excess of $200 billion.

We utilized a similar structured literature search process to identify the relevant studies published between 2004 and 2011 to update our previous analysis and extend it to include other major food groups to estimate the current impact on U.S. healthcare costs of achieving diet adequacy. Based upon the U.S. analysis we have extended cost savings to include developed countries worldwide. Examples of benefit ranged between a 50% reduction in pre-eclampsia and 30-40% maternal death, a 40-50% reduction in type 2 diabetes, a 50% reduction in hypertension, a 50 -60% reduction in strokes, a 30 - 50% lower incidence ischemic heart disease, cancer lowered by 25-40% and obesity reduced by 25-30%. Estimated improvements in outcomes were combined with the most current available U.S. data on annual costs of the respective disorders to estimate healthcare saving. We assumed that the effect on the disease was only 50% of that identified in the literature and that associated costs in other countries would be 75% of those attributed to the U.S. Using these conservative assumptions, we estimate that the first year healthcare savings would be approximately $200-250 billion for the U.S. and $700-800 billion across all developed countries and 5 year savings of $1.5 trillion and $4.5-5 trillion in the U.S. and developed countries worldwide, respectively.

This presentation summarizes the evidence from prospective longitudinal studies and randomized controlled trials, of the net healthcare cost savings benefits of consuming the recommended daily intake of all essential nutrients intake. Further the presentation will address several examples of how current nutrition policies impair a society's ability to achieve nutritional adequacy.

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