

## A high-quality diet is not necessarily an expensive one

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Diet quality is linked to the risk of many chronic diseases (1). Food choices by consumers depend on several factors including pleasure, cost and health outcomes. The general perception is that high-quality diets are more expensive than low-quality ones. However, this is a crude answer which could not lead to any practical policy to improve the quality of diets by consumers. This perception comes from some research which estimate food costs by the price of energy provided by the food. This approach could not indicate the actual costs of purchasing foods(2). However, in research which estimate food costs per serving of food, a high-quality diet is not necessarily more expensive than a low quality one (3-5). On the other way, allocating more budgets to foods could not guarantee having a healthier diet. Although both high- and low-income households spend significant share of their budget to away-from-home foods, higher-income households spend more (6). Several studies have shown that away-from-home foods are less healthy (rich in sodium, calorie, saturated fatty acids and low in fiber and micronutrients). Moreover, it is possible to purchase a healthy or less-healthy diet at the same level of expenditure (7, 8). Comparing food plan allocating budget to what consumers do, indicted that consumers allocate much more budget to protein, fats and sweets, but less than recommended amounts to vegetables and fruit (9, 10). Therefore, it is possible to improve diet quality by reducing fat and protein consumption and increasing vegetables and fruit consumption, without spending more budgets.

The story might be a little different in developing countries. Inflation-adjusted costs in these countries are different from those in

developed-countries. Fruit and vegetables are less expensive than meats and alternatives, and therefore, consumers can allocate more budgets to them rather than proteins. Therefore, it seems that people in both developed- and developing countries need to be educated regarding to how to value nutrition and make informed-decision to improve their diet quality with the same food expenditure as they have at the present. By the way, food price crisis might result in increased food insecurity and decreased vegetables, fruits, meat products and dairy intake in some developing countries. However, previous studies from developed countries reported that diet cost is inversely related to intakes of total fat and saturated fatty acids, and directly associated with vitamins A and vitamin C intake. Although several studies assessed the correlation between economy and diet quality in developing countries (10), scarce data were reported regarding the association between economy and nutrient content of foods which is recommended for the future studies. Furthermore, it is suggested that relationship between characteristics of diet and diet costs will be separately studied in each country.

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