

Letters to the Editor

Food cost and nutritional quality

In reaction to the paper by Katz and colleagues

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Madam

In a paper published in *Public Health Nutrition* entitled 'A cost comparison of more and less nutritious food choices in US supermarkets', Katz *et al.* compared the cost of foods from a given food category according to their nutritional quality⁽¹⁾. Foods were classified as 'more nutritious' ($n = 68$) or 'less nutritious' ($n = 63$) using subjective and objective criteria based on information on the packaging. The authors found that the average price for more nutritious foods did not differ significantly from that of less nutritious foods.

We fully agree with their assertion that 'improving dietary choices does not invariably cost more'. The possibility of modelling low-cost nutritious diets has been known for a while⁽²⁾ and is routinely used by the US Department of Agriculture to design the Thrifty Food Plan⁽³⁾. We also agree with Katz *et al.*'s proposal that 'objective measures of overall nutritional quality might be used for direct comparison of nutrition per dollar'. In fact, we demonstrated the validity of such a measure, based on French data⁽⁴⁾.

However, we disagree with their statement that before their study 'no other study has investigated the price differences of foods within food categories'. A previous study in the UK analysed and compared the contents of energy, fat, minerals and vitamins in branded and 'economy line' simple foods (canned tomatoes, orange juice, sliced bread, fresh potatoes and sausages) and found that prices of foods with similar nutrient contents could differ fourfold⁽⁵⁾. Another study conducted in France analysed the relationship between the nutritional quality and price of 220 food products in seventeen different categories⁽⁶⁾. Within a given category, branded products cost 2.5 times more than the low-cost products with an equivalent energy and lipid content; they also had a slightly higher (1.3) ingredient quality score, suggesting that the lower price could be due in part to the replacement of higher-quality, higher-cost ingredients (meat, fish, fruit, vegetables) with poorer-quality, cheaper ingredients such as sugars, fats (including hydrogenated or partially hydrogenated vegetable fats), refined starch, salt, polyphosphates, certain food additives, colorants and texturizing agents. Other studies have analysed the difference in price between regular food items and their better-nutritional-quality equivalents (low-fat and/or low-salt and/or more fibre) in Canada⁽⁷⁾ and Australia⁽⁸⁾ and found that the healthy options were significantly

more expensive than the regular ones. Yet more recent studies conducted by the French Observatory for Diet Quality (<http://www.oqali.fr/oqali/>), particularly on dairy products⁽⁹⁾, show that cheaper products are not always the more energy-dense, saltier or sweeter options.

Too few studies have rigorously examined whether the nutritional quality of foods is associated with their prices within the same category. In addition, these studies have used different methods to estimate the nutritional quality of food and different definitions of what is a food category, perhaps explaining why conflicting results were obtained. As poor people's food choices are highly influenced by food prices, whether or not there is a difference between the nutritional quality food products according to their price is an important issue in the fight against health inequalities.

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Reply to: 'In reaction to the paper by Katz and colleagues'

Madam

We appreciate the comments and insights shared by Dr Darmon. We are gratified to know we agree about the fundamental message our paper⁽¹⁾ purported to deliver, that selecting more nutritious foods in given categories does not inevitably cost more.

Dr Darmon refutes our claim that no prior studies had examined price differentials based on overall nutritional quality⁽²⁾ within given food categories. She is correct in global context. However, pricing is a matter of policies and politics, and thus is highly culture-specific. We should more precisely have said we could find no prior studies specifically addressing this issue in the USA. The references provided by Dr Darmon relate to studies in the UK⁽³⁾, France⁽⁴⁾, Canada⁽⁵⁾ and Australia⁽⁶⁾. And even so, these citations show that while some prior work has been done in this area, the relevant literature is surprisingly limited for a topic so often discussed. We nevertheless convey a *mea culpa* for failing to explicate our ethnocentric focus more decisively.

More importantly, we quite agree that too few studies have examined the issue, and concur as well about the challenges related to variable definitions of food categories and variable measures of overall nutritional quality.

Price is well established as an important barrier to more healthful eating; our paper does not refute that. The extent to which enhanced knowledge of the overall nutritional quality of available products would allow consumers in the USA and around the globe to navigate to

better nutrition in many food categories without incurring a financial penalty is a matter of timely importance, deserving more dedicated attention.

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