

## Editorial

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# The Food Industry and Nutritional Health: In Concert or in Conflict?

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An interesting thing usually happens as a nation advances from “developing” to “developed” status. Malnutrition for most individuals becomes a thing of the past. But this depends on what type of “development” occurs. If development results in states similar to Scandinavia, New Zealand or Canada, then a relatively heavily taxed population provides a social safety net that guarantees at least the basic health and nutrition needs of the majority of the country’s population. It’s interesting to note that in annual surveys of the “Most Happy Nations” in the world, these countries generally appear at the top of the list. Perhaps not starving or being nutrient deficient is relatively high up on the list of “*What makes me happy?*” for most people.

In contrast, there are countries that develop through a more Darwinian approach, where there is little government or societal effort to divide the spoils of economic success. Instead, those who are able to (by whatever means), take as much of the spoils as they can, leaving others on the outside looking in these countries, the top 10-15% of the population controls the vast majority of the wealth, while the remaining 80-85% is split into a relatively small middle class and a large underclass of impoverished, undernourished people. What is the result of this scenario from a health and nutrition perspective? Using the Philippines (my current home) as an example, marginalized Filipinos suffer from a very high rate of both infant mortality and stunting of growth from malnutrition, while at the same time there is over-nutrition in the Metro Manila area—where the upper class tends to live. With over-nutrition comes a disease of excess—Type II diabetes, heart disease, hypertension, and cancer. The Philippines, therefore, experiences both undernutrition and overnutrition. Not surprisingly, countries such as these invariably rank low in “Most Happy Nations” surveys.

Although the number of underfed inhabitants of the planet has steadily been decreasing, there are still an estimated 800 million people who consume inadequate amounts of food necessary to sustain a healthy existence.<sup>1</sup> Globally, 51 million under-five year olds were wasted and 17 million were severely wasted in 2013.<sup>2</sup> As well, ~250 million preschool children worldwide are vitamin A deficient, and it is likely that in vitamin A deficient areas, a significant number of pregnant women are vitamin A deficient.<sup>3</sup> Anaemia is even more of a concern on a world basis, with as many as 2 billion people, or >25% of the world’s population being anaemic, many due to iron deficiency.<sup>3</sup> Who, then, has the primary responsibility to address these worldwide nutrition/health problem? Is it the individual countries involved, the collective effort of the world community through agencies such as the United Nations-World Health Organisation (UN-WHO)/FAO, or is it the world’s food industry? To be fair, the industry, especially in impoverished and developing countries, cannot be expected to solve problems of this magnitude on its own while also sustaining itself at some level of profitability. Without government support, it is highly unlikely that these malnourished individuals can access the essential resources needed to improve their situation. But what happens when 10 billion people inhabit the planet, as projected for the year 2100?

One goal of agricultural production is to insure that sustainable levels of food are made available to all people, and not just those that are currently receiving adequate (and more than adequate) levels of sustenance. Reducing the level of food waste from its current 30-35% would be a good place to start, as are efforts to improve crop yields, increase the efficiency of

livestock production, and exploit alternative sources of nutrients.

National nutritional guidance programs in developed and developing countries focus on the role that diet and proper nutrition play in growth and development and the maintenance of good health throughout the lifespan. The emphasis is not only on the setting of nutrient recommendations, and the avoidance of nutrient deficiency diseases, but also on the prevention of chronic non-pathogenic diseases, such as cardiovascular disease, diabetes and cancer, which are the bane of most “developed” societies.

How well, then, is the food industry, in its provision of raw materials, primary and secondary processed food products, as well as the food service sector, doing in terms of contributing to the well-being of the population? Is it a partner-in-kind with governments and non-government organizations (NGOs) in meeting the challenges hereto described, or is it a hurdle in the way of progress? Likely, the answer is that the industry can play either role, and that it is we, the consumers, who hold the key to what that role will be. In the end, it is up to the individual to decide what she/he will consume each day. However, that may not be such an easy choice in all cultures. For those raised in a culture that values independent thought, what one eats is generally the concern only of the individual, especially once adulthood is reached. But in many other cultures, tradition, family and societal pressures will dictate what it is that is consumed during most meals throughout one’s lifetime. Individual choice becomes a rare event, even well into adulthood. This is true even when dietary selections beg one’s discretion when it comes to good health choices.

Is it the food industry that is to be blamed in these cultures where unwise food selections continue, or are the food companies simply responding to the market demands in order to remain competitive? One can argue that the advertising and marketing of these companies is directed toward the continued consumption of these “traditional” poor food choices, but the companies would likely answer that their advertising budgets are not designed to be government programs to change the eating habits of the populace (which would also decrease the purchase of their products). In countries around the world this holiday season (whether Christmas and New Year or the Chinese “Spring Festival”), the events will be celebrated with an excess of food, many of which would make the average cardiologist or dietician cringe. But is the food industry to be held to blame for providing the food items that have been traditionally eaten for decades or centuries? The choices may still not be wise from a health perspective, but not many food companies could afford to “buck the trend” and lose out on the income associated with the holiday sales of these traditional foods.

Education, in fact, needs to begin with the consumer. The 2005 USDA Food Pyramid (Figure 1) (which was replaced by the USDA Pie Plate in 2011)<sup>4</sup> was in marked contrast to previous pyramids. It shows the different food groups as slices of the pyramid instead of sections from bottom to top. This way, the USDA has been able to clearly show that the overall emphasis in the diet should be on grains, vegetables and fruits, with dairy products having a more prominent role than meat and beans. In fact, meat has been downplayed to a relatively small part of overall consumption. But if the consumer listens to the meat industry associations, then they should ignore warnings from some scientists about possible risks associated with eating processed and red meats, and the recommendations of the medical and nutritional communities to shift toward a more vegetable and grain oriented diet. In the developed world especially, we are told that we over consume both meat and protein, and that these calories can be better (and more economically) obtained from grains and vegetables. In this case, is the lobbying of the meat industries for our (the consumers’) benefit, or for its own?



Figure 1: USDA food pyramid.

From the pyramid, we also see a de-emphasis on oil and fat in the diet. There is a need for dietary oil and fat as a source of energy, the essential fatty acids, and as a means to absorb the fat soluble vitamins, but the reality is that where there is an excess of caloric consumption in the world, there is generally an excess of fat consumption, and that excess is usually in the form of saturated fat, due to the high meat component of those diets. Another source of excess fat in the diet in both developed and developing countries is from fast food restaurants. This is due to the fact that so much of this food is fried. Yes, some fast-food chains provide “Healthy-Options” (so, are the other menu choices “Un-Healthy Options”?). Is eating out at a fast-food restaurant on the intermittent occasion going to wreak havoc with one’s health? Likely not, but making it a habit may not be the ideal diet plan. One need only look over the caloric content, fat and sodium levels in the average fast food menu items to realize that regular consumption of these items would not be conducive to following the USDA’s suggested “My Pyramid” guidelines. Perhaps the “tongue-in-cheek” alternative USDA Food Pyramid (2025 proposal), depicted in Figure 2, would better sum up the “fast-food” junkies perfect pyramid.<sup>5</sup> However, would the result be positive for the individual’s (or society’s) health in the long-term?



Figure 2: USDA food pyramid (2025 proposal).

Perhaps this is where the issue lies. The Food Industry has the ability to contribute to the nutritional well-being and health of the population. It has proven it time and again with innovative products that have met the need of both healthy and ailing individuals. But a closer look at Figure 2 will show that along with the good can come the bad. Eating salty, oily French fries day in and day out, followed by candy bars for dessert is bound to have its negative consequences in the long-term. While the real My Pyramid (Figure 1) highlights grains, fruits and vegetables as the basis of a healthy diets, the alternative USDA Food Pyramid (Figure 2) emphasizes meats and fast foods, yogurt, cheese, ice cream, candy and snack bars. Not exactly what the USDA has in mind. Yet, it cannot be argued that the companies that manufacture these products have as their intention growth in market share. When was the last time any food company—whether it makes healthy grains products or fast foods—has as its goal a REDUCTION in the amount of products it sells to consumers? Does the meat industry have any interest in seeing anything but an increase in the *per capita* consumption of meat (whether red, white or processed meat) on a national and world-level, if that is the product(s) it is selling? With few exceptions, it is easier (and less expensive) to counter the arguments for reductions than to change the product lines one is marketing.

So, what is the answer to our initial question? Is the food industry in conflict or in concert with nutritional health? It really depends on what aspect of the food chain one is referring to, and like so many other things in life, how we as individuals utilize each aspect of the food industry. The so-called developed countries of the world are the ones with excess caloric intake, excess fat, saturated fat and salt consumption. But, not all members of each developed country are guilty of these excesses. Given the same food supplies, a “healthy” percentage of each country is able navigate its way around the choices afforded by way of fresh food products, retail and wholesale goods, fast foods and restaurant fare and maintain both a healthy weight and healthy serum and biochemical indicators of good nutritional health. Meaning, there are good food choices to be made even in highly developed countries with a large selection of processed and seemingly unhealthy foods. This leads one to conclude that if others were to make similar market choices, the problems would be rectified both at a personal level and at a national and corporate level. Nothing works to change a company’s marketing direction faster than an absence of paying customers. The industry can and will meet our demand for healthy, nourishing foods, if we the consumer demand them. If we continue to be satisfied with vein clogging, obesity developing, hypertension inducing alternatives, then that is exactly what we are going to get.

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