

# Can food and beverage companies help improve population health? Some insights from PepsiCo

Derek Yach, Antonio Lucio and Carlos Barroso

*Further progress may require business and public sector partnerships*



Chronic diseases in low-to-middle-income countries have continued to increase. At the same time, calls for prevention have grown.<sup>1-3</sup> The World Health Organization resolution on diet and physical activity, published in 2004, recommended several specific actions for food companies and the broader private sector.<sup>4</sup> Among these were:

- Limit the levels of saturated fats, *trans* fatty acids, free sugars and salt in existing products;
- Continue to develop and provide affordable, healthful and nutritious choices to consumers;
- Practise responsible marketing that supports the strategy, particularly with regard to promoting and marketing foods high in saturated fats, *trans* fatty acids, free sugars or salt, especially to children;
- Issue simple, clear and consistent food labels and evidence-based health claims; and
- Assist in developing and implementing physical activity programs.

## PepsiCo's strategy

Even though foods from PepsiCo contribute a modest proportion of calories to a typical diet in most of its markets, we believe we should continually improve nutrition so that each calorie has the optimum fat, sugar and salt content. We do so by reducing certain nutrients and increasing others. We have developed methods of measuring the current use of fats, sugar and salt in all our products in all countries where they are sold. On the basis of these measurements, we have set targets for reducing the levels of food constituents such as fats, sugar and salt by 2010.

The example of *trans* fatty acids and our use of oils illustrates how commitment and actions need careful thought. We continue to reduce *trans* fatty acids in all markets and have eliminated them from virtually all our oils used for cooking potato chips and snacks. In Europe, introduction of a new oil, Sunseed, which is higher in monounsaturated fats and lower in saturated fats has led to a 50%–70% reduction in the saturated fat levels in our potato chips and snacks compared with the same products in 2005. Further progress on reducing *trans* fats and saturated fats awaits further research gener-

ally on alternatives to *trans* fats and the optimal mix of fats and oils in food products.

Food companies need to ensure the long-term supply of the crops needed to produce high-quality oils. This has become increasingly complex in a world of globalised trade and when the future demand for biofuels is likely to affect the price and availability of oils. It is likely to be an even bigger problem in small and medium enterprises in low-to-middle-income countries.

Public demand for reduced sugar in food and beverages has stimulated research efforts to find natural sweeteners with the same taste but fewer calories than current products. Similarly, companies are actively seeking ways to maintain taste and the other qualities that salt brings to foods with healthier alternatives or formulations. In the United Kingdom we have lowered salt levels in all packaged chips by 25% through reformulation. Further progress in the UK and elsewhere requires industry-wide collaboration and agreement on acceptable levels, supported by governments.

## Smart Spot product criteria

Smart Spot beverage and food products:

- contain at least 10% of the daily value of a targeted nutrient (eg, protein, fibre, calcium, iron, vitamin A, or vitamin C); and
- meet the limits of the Institute of Medicine (the United States independent advisory body on health) or the US Food and Drug Administration for fat, saturated fat, sodium and added sugar; or are formulated to have specific health benefits; or are reduced in calories or nutrients like fat, sodium or sugar.



This packet of chips displays the Smart Spot logo. ♦

## Public health partnerships

Food industry investments in product reformulation will yield major public health gains, but product reformulation is only part of the solution. Well grounded insights into country-specific consumer preferences drive our decisions about when and how to introduce new products. We now seek ways of working with public health researchers to share our perspectives on how best to truly change the behaviour of consumers for public and private good. Our experience in the United States, for example, suggests that well designed, science-based logos can influence consumer behaviour. Sales of products that carry our Smart Spot logos (Box) are growing far faster than others, leading to more healthful consumption, and profits.

To date, most of the public sector research effort in relation to obesity or diet has tended to favour medication solutions over food-based solutions. We believe a shift in focus would stimulate new partnerships between corporations and public health scientists that could lead to healthier food products being developed through

innovative science — as we have seen with new pharmaceutical products.

A renewed and more forward-thinking nutrition-science agenda should go beyond a focus on reducing “harms” to identifying how the global underconsumption of fruit, vegetables and cereals could be partly addressed through new products; how nutrients might enhance physical and mental performance; and ways of addressing satiety and weight management.

### Research partnerships

Product reformulation is only part of the company’s solution. The PepsiCo Foundation, the primary charitable arm of the company, is deeply engaged in developing new models of partnership that will lead to health gains in communities and new research insights.<sup>5</sup> There are still no documented successes in reducing obesity in a large community setting anywhere in the world. We are supporting research aimed at meeting this gap.<sup>6</sup> For example, in the US, foundation support for Tufts University has helped to develop one of the few examples of a community-based approach that may reduce obesity in children.<sup>7</sup> Internationally, we have announced support for Community Interventions for Health, a partnership with the Oxford Health Alliance.<sup>8</sup> The partnership will carry out large-scale, community-based research projects in India, China, Mexico and the UK aiming to reduce the effects of the major risk factors for chronic diseases. Further, both the company and the foundation are involved in a range of initiatives aimed at increasing physical activity around the world in settings as diverse as Mexico (through Vive Saludable which addresses healthful eating and physical activity in primary schools) and in the US (through America on the Move).

### Conclusion

No single company can turn around the current threat of chronic disease. That is why we seek corporate and public sector partners. The role of the medical profession has been decisive in the battles against so many causes of ill health. This is the time, in our view, for them to review their clinical and public health roles in

supporting patients and communities to tackle the major public health issue of obesity. PepsiCo is ready to join them in this task.

### Competing interests

All authors are full-time employees of PepsiCo, involved in health policy, research and development, and innovation. They have a financial interest in the company and have received compensation for this article.

### Author details

**Derek Yach**, MB ChB, MPH, Director of Global Public Health  
**Antonio Lucio**, BA, Senior Vice President and Chief Innovation and Health and Wellness Officer

**Carlos Barroso**, BChemEng, Senior Vice President, R&D Foods, PepsiCo International

PepsiCo Inc, Purchase, NY, USA.

**Correspondence:** [Derek.yach@pepsico.com](mailto:Derek.yach@pepsico.com)

### References

- 1 World Health Organization. Preventing chronic diseases: a vital investment. Geneva: WHO, 2005. [http://www.who.int/chp/chronic\\_disease\\_report/en/](http://www.who.int/chp/chronic_disease_report/en/) (accessed Oct 2007).
- 2 Adeyi O, Smith O, Robles S. Public policy and the challenge of chronic noncommunicable diseases. Washington, DC: World Bank, 2007.
- 3 Yach D, Hawkes C, Gould CL, Hofman KJ. The global burden of chronic diseases: overcoming impediments to prevention and control. *JAMA* 2004; 291: 2616-2622.
- 4 World Health Organization. The global strategy on diet, physical activity and health [committee report]. Geneva: WHO, 2004. [http://www.who.int/gb/ebwha/pdf\\_files/WHA57/A57\\_R17-en.pdf](http://www.who.int/gb/ebwha/pdf_files/WHA57/A57_R17-en.pdf) (accessed Oct 2007).
- 5 PepsiCo. Performance with purpose: annual report, 2006. Purchase, NY: PepsiCo, 2006.
- 6 PepsiCo. Grant guidelines/to apply. [http://www.pepsico.com/PEP\\_Citizenship/Contributions/GrantGuidelines/index.cfm](http://www.pepsico.com/PEP_Citizenship/Contributions/GrantGuidelines/index.cfm) (accessed Oct 2007).
- 7 Economos CD, Hyatt RR, Goldberg JP, et al. A community intervention reduces BMI z-score in children: Shape Up Somerville first year results. *Obesity (Silver Spring)* 2007; 15: 1325-1336.
- 8 The Oxford Health Alliance. Community Interventions for Health. London: Oxford Health Alliance, 2007. <http://www.oxha.org/initiatives/cih> (accessed Oct 2007).

(Received 4 Oct 2007, accepted 18 Oct 2007)

□