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## Abstract

As the global population grows there is a clear challenge to address the needs of consumers, without depleting natural resources and whilst helping to improve nutrition and hygiene to reduce the growth of noncommunicable diseases. For fast-moving consumer goods companies, like Unilever, this challenge provides a clear opportunity to reshape its business to a model that decouples growth from a negative impact on natural resources and health. However, this change in the business model also requires a change in consumer behaviour. In acknowledgement of this challenge Unilever organised a symposium entitled 'Behaviour Change for Better Health: Nutrition, Hygiene and Sustainability'. The intention was to discuss how consumers can be motivated to live a more healthy and sustainable lifestyle in today's environment. This article summarises the main conclusions of the presentations given at the symposium. Three main topics were discussed. In the first session, key experts discussed how demographic changes – particularly in developing and emerging countries – imply the need for consumer behaviour change. The second session focused on the use of behaviour change theory to design, implement and evaluate interventions, and the potential role of (new or reformulated) products as agents of change. In the final session, key issues were discussed regarding the use of collaborations to increase the impact and reach, and to decrease the costs, of interventions. The symposium highlighted a number of key scientific challenges for Unilever and other parties that have set nutrition, hygiene and sustainability as key priorities. The key challenges include: adapting behaviour change approaches to cultures in developing and emerging economies; designing evidence-based behaviour change interventions, in which products can play a key role as agents of change; and scaling up behaviour change activities in cost-effective ways. The symposium highlighted a number of key scientific challenges for Unilever and other parties that have set nutrition, hygiene and sustainability as key priorities. The key challenges include: adapting behaviour change approaches to cultures in developing and emerging economies; designing evidence-based behaviour change interventions, in which products can play a key role as agents of change; and scaling up behaviour change activities in cost-effective ways.

## Introduction

The current rate of population growth translates directly into increased numbers of consumers and needs for goods and services. This growth provides consumer goods companies, like Unilever, with opportunities to grow. A key challenge in this progression, however, is to address these needs in a manner that promotes good nutrition, promotes proper hygiene and minimises the impact on the environment (sustainability). Growth following traditional business models is not suited to working with these targets, in both the short term and

the longer term. In light of this, Unilever has developed the Unilever Sustainable Living Plan [1] – a set of new, global targets in the areas of improving health and well-being, reducing environmental impact and enhancing livelihoods. This plan includes product reformulations (for example, nutrition: lowering sodium in foods), changes in design of products (for example, sustainability: improved packaging to reduce waste) and consumer behaviour change (for example, hygiene: encouraging handwashing with soap). Analyses of this plan, and current progress, indicate that creating behaviour change amongst the general population is one of the greatest challenges Unilever will face in the execution of the Unilever Sustainable Living Plan. Nutrition, hygiene and sustainable behaviours are the biggest areas where change needs to be achieved. For example, an analysis of

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the footprint of Unilever products across their lifecycle has indicated that consumer use of the product is responsible for almost 70% of the sustainability footprint.

Historically, the success of private industry has been driven by its ability to influence consumer behaviour and develop new markets. Fast-moving consumer goods companies like Unilever therefore have a clear role to play in making sustainable and healthy living possible (for example, regular handwashing, lowering salt intake, making sustainable choices). However, the scale of this challenge requires a bigger, faster, concerted approach between multiple sectors [2]. Combining academic and public health expertise in conducting evidence-based interventions with industry marketing power and consumer and health understanding will enable the delivery of long-term, practical solutions that will help to address the challenges of achieving behaviour for better health. Examples of alliances such as Water and Sanitation for the Urban Poor and Scaling Up Nutrition highlight where this approach has brought success.

In light of this challenge, Unilever organised a symposium entitled Behaviour Change for Better Health: Nutrition, Hygiene and Sustainability. The aims of the

Behaviour change has often been positioned as a required individual adaptation for avoiding or reducing the risk of ill-health. However, the determinants of health operate at multiple levels: individual, family, community, country and the world. At the level of the individual, there is interplay between beliefs, behaviours and biology that affects the balance between health and disease. At the level of families and communities, cultural perceptions, social and economic priorities and pathways of access to health-promoting environments as well as health services are key determinants of health. At the national and global levels, the stage and speed of development, the distribution of developmental benefits across social groups (equity) and the demand–supply issues of trade act as drivers of health transition at the macro level, impacting downstream on the health and well-being of families and individuals.

Since health transition is increasingly being influenced by upstream determinants (for example, features of the social environment), behaviour change is also needed at the societal level. Policy interventions have been shown to have an important impact on health – for example, the North Karelia project used community and policy interventions to reduce cholesterol in the community, and resulted in a large reduction in rates of cardiovascular disease [7]. However, policy interventions must stimulate and support personal choices for good health, even as education enhances knowledge, alters attitudes and helps people to acquire the skills needed for change. Global evidence suggests that behaviour change is best accomplished when education is accompanied by policies that enable individuals to make and maintain healthy choices across their lifespan [7].

The determinants of NCDs, nutritional disorders and even zoonotic diseases are convergent with those that degrade the environment. Industrial-scale livestock production, for example, not only increases meat consumption to unhealthy levels (with NCDs as the principal consequence) but also establishes a conveyor belt for transmission of microbes from wildlife to the veterinary population and then on to the human host. The industrial-scale production is also responsible for grain diversion (accentuating food insecurity), is water intensive (aggravating water insecurity) and is responsible for large-scale production of methane that contributes to global warming. In turn, environmental degradation affects agriculture, biodiversity and availability of water. We are living in an era where food systems threaten the environment and environmental change threatens the food systems. Similarly, tobacco is not only a threat to health but is also a cause of deforestation and environmental pollution.

The response to health transition therefore has to be positioned in the context of sustainable development. Behaviour change has to occur at the level of persons

(individuals), of people (communities) and of populations (nations) so that the health of the planet is also protected.

The response to health transition needs to extend from an epidemiological model to an ecological model, if global health has to be protected and promoted in the 21st century.

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First it must be acknowledged that health is a key public good and a prerequisite for human, social and economic development. The duty of governments worldwide is to act in the interests of all people, especially those most vulnerable: children, women, older people, the impoverished, the diseased and the disabled (considering all stages of the lifecourse).

Prevention of malnutrition in all its forms includes addressing the pending agenda of protein energy (stunting and wasting) and micronutrient (vitamin A, iron and zinc) deficiencies, as well as controlling the progression of the diet and physical activity-related NCDs (obesity, diabetes, cardiovascular disease and cancer). This needs to occur in the context of recognition that protection and preservation of public health is a key priority for government action. Prevention should start as early as possible in life – even before conception – and should be continued throughout pregnancy, infancy and childhood to have the greatest impact.

The global population generally aspires to a better life for themselves and for future generations. To achieve optimal nutrition and keep active lives, as well as what needs to be done to avoid disease and disability, everyone needs to learn to communicate what it is that needs to be done. Education is an important first step to raise awareness, but this is insufficient to change behaviour by itself. Motivational messages tailored to the context of the recipient – addressing their beliefs, their situation and their views of the future – are necessary.

Governments, civil society organisations, development agencies and the global public health community at large should reframe NCD prevention within a strategy that places NCDs as a barrier to development; this means explicitly including them as a target for ‘technical assistance, capacity building, program implementation, impact assessment of development projects, funding, and other activities’, as recommended by the World Health Organization diet and physical activity prevention of chronic disease report [8] and the USA Institute of Medicine [9].

Future Millennium Developmental Goals beyond 2015 should set specific targets that address primordial, primary, secondary and tertiary prevention and access to treatment of NCDs. Governments should generate data from periodic surveys across all age groups to better understand and address current factors that determine

the burden of NCDs and long-term effects of NCDs;

related to dependency on single-car use, in the European Union's 27 Member States increased by more than one-third (35%) between 1990 and 2007 [11]. Over one-third of the world's 750 million automobiles are owned by drivers in the European Union.

 Change, for

economies have given rise to a range of health and social problems that have proved impervious to traditional approaches of legislation, education and exhortation. Numbered among these problems are education systems that are failing; parents who lack the basic skills to bring up children; high rates of antisocial behaviour; obesity; alcoholism; drug abuse; the ongoing degradation of the planet; and, of course, the chaos that is the international banking and finance system. Most of these problems are, however, preventable and, because they are fundamentally behavioural problems, the solutions to them lie in behaviour change.

The interest in the behavioural change approach now being shown by governments and other agencies across the globe has been sparked by a number of recent books, such as Thaler and Sunstein's *Nudge* [24] and Cialdini's *Influence* [25], which have brought together a range of findings from experimental psychology and behavioural economics showing how behaviour can be nudged by environmental factors in ways that promote good health and well-being. For example, we are influenced by social norms to behave as we think most other people do, so that if we are told that lots of people do it, then we tend to do likewise; we are more influenced by people we like or who have authority; we have a tendency to be consistent with what we say we are going to do; and our behaviour is influenced by environmental prompts.

While the evidence for the influence of such factors is undeniable, there remains the question of whether the nudge approach is sufficient to deal with the complex and deep-rooted health and social issues that are of most concern to us. Solving these issues may require more than mere nudges.

care products, which can have a positive influence on health and hygiene. As such, consumer companies like Unilever can usefully work with different public and private sectors to create change in living conditions to produce positive behaviour change and eventual better health. Unilever is currently pursuing three projects of relevance to this area: solar heated showers in South Africa, improved cookstoves in Kenya, and a sanitation service business in Ghana. In each case a significant improvement is made to the physical conditions of the house, and as a consequence positive behaviour change is created. These projects will help to understand commercially scalable models that create sustained positive behaviour change.

(what are the things that stop people from adopting a new behaviour?), triggers (how could we get people to start a new behaviour?) and motivators (what are the ways to help them stick with the new behaviour?).

Next, we take all those insights and consider how to inspire change, using each of the Five Levers for Change:

1. **Do people know about the behaviour? Do they believe its relevance?** This lever raises awareness and encourages acceptance. A good example of how this lever has been applied is the Unilever salt calculator. This calculator is a simple online diagnostic tool to make people aware of the amount of salt in their diet and products that may be significantly contributing to it. Likewise, Lifebuoy's innovative Glo-Germ demo is a good diagnostic tool that overcomes the key mindset barrier of 'I wash my hands with water and it looks clean. So, why use soap?', by showing how washing with water alone, is not good enough. The tool does this by making visible the glowing particles that will not go away with water alone, but need soap.

2. **Do people know what to do and do they feel confident doing it?** This lever establishes convenience and confidence; for example, by designing appropriate packs that enable people to adopt new habits.

The cap of Small & Mighty concentrated liquid was designed to prevent people from dosing the same amount of liquid as a conventional dilute detergent.

The cap optimised dosing for great cleaning results and also enhanced value-for-money perceptions.

3. **This lever is about self and society.** We tend to emulate the lifestyles and habits of people we respect. We like to follow the norms in society. So





the agreed consumer-focused salt-reduction approaches. At a global level, output from the surveys and workshops will be used to identify common themes around the world, and cluster countries where similar approaches

- Nurture (mother and child interaction): mothers are

and regulatory authorities are also important players,

