



Nothing to fear but ill-health

Over the next 10 years, Irish industry will have to supply goods and services to consumers who want to reduce health risks associated with diet and lifestyles, write UCD's Prof Patrick Wall and Dr Liam Delaney.

One hundred and sixty years since the Great Famine, many of the most urgent health challenges that Ireland faces are related to the overabundance of food rather than its scarcity. Diabetes, heart disease, strokes and obesity are now among our pressing health issues. It is an old but true adage that "our health is our greatest asset" and it should be invested in prudently. However, health investment involves more than building hospitals – it involves changing behaviour and changing perceptions of risk.

The public is averse to certain perceived risks while indifferent to other, more probable risks they are exposed to. The University of Chicago law professor Cass Sunstein refers to this as "probability neglect" – it is "the tendency to focus on the badness of the outcome rather than on the probability that that outcome will occur".

You are what you eat

Are risks from food exaggerated or understated among the public and do the public fear the correct types of food risks? The risk of diet-related disease is regarded differently to the risk of bacterial food poisoning. The risk of BSE and potential food-borne risks like avian flu are internalised and processed differently. Although we know about the erroneous assessment of health risks and the resulting inappropriate behavioural change, little is known about how society can engender more rational evaluation of potential food-related risks.

Food is associated with a number of types of risk, which include micro-biological, chemical or technical risks.

Micro-biological risks such as salmonella are generally to the forefront of public minds and perceptions of such hazards are

particularly important as most are easily averted by sensible hygiene practices.

Chemical risks, such as those arising from contaminants can also precipitate considerable public unease. In February 2005, a costly recall of over 350 food products took place in the UK and Ireland after chilli powder contaminated with Sudan 1 colouring agent was used in a range of foods. In many of the recalled products the level of Sudan 1 – if ever present – was below the level of laboratory detectability. This was a breach of the regulations, rather than a health risk, which demonstrated a deficiency in traceability and quality assurance of micro-ingredients, and precipitated a raft of adverse media coverage. Headlines like "Carcinogens in your food" did nothing for consumer confidence in the safety of food or in industry commitment to produce safe food.

Technological risks such as those perceived to arise from genetic engineering or irradiation of food are also prominent, despite reassurances from scientists that both technologies are safe.

However, a more deadly – if less salient – source of food risk is the risk of chronic disease associated with poor diet, a risk that many underestimate.

Terror of nutrition

As the noted psychologist Paul Slovic pointed out, risks tend to be exaggerated if: (i) they could lead to a catastrophic outcome; (ii) they are immediate; (iii) they have a dread factor – eg fatal incurable disease affecting the young; (iv) they are imposed by someone else; (v) there is scientific uncertainty; or (vi) they arise as a result of government incompetence. Although in the 1980s, Slovic used nuclear

power as an example, his classification can be used to explain the consumer reaction to the BSE crisis that had the beef industry on the ropes, resulted in the demise of both the UK ministry of agriculture and an EU commission and led to a review of the entire regulatory framework for the food chain with a new culture of openness, transparency and scientific robustness.

The tendency toward panic reactions in response to catastrophic risks is something that should concern those involved in both industry and public health. The economic losses caused by overreaction, or misplaced reactions, can be huge as can the loss of human life.

Often the risk management response is in proportion to the media coverage rather

than the risk to human health. Policymakers and regulators are not consistent in how they address risk and society does not treat equivalent risks with the same degree of intervention. Resources are finite and to maximise health-gain, interventions should be targeted to achieve the greatest yield. Life-saving products like antibiotics, cholesterol-lowering statins and beta blockers are only available in fixed quantities, whereas proper nutritional habits and healthy lifestyle behaviour are scarce only to the point of social choices.

False fears

There is very little point in the average member of the public being overly concerned about the current developments with the avian flu strain. It is extremely unlikely that someone will contract it in an Irish context. However, we must be aware of the threat to the health of commercial and wild birds and the potential disruption to trade.

The possibility of the virus mutating and developing the ability to pass from human to human exists but the probability of this happening is low, and there is not a great deal the average member of the public can do to hedge against such an event. Since the first outbreaks of the H5N1 strain were identified in Asia, over 155 million birds have been culled by workers with varying degrees of personal protection equipment, yet not one case of avian flu has occurred among those engaged in the culls.

There are many similar disasters that could befall the human race and these are

disasters that should be debated, but exaggerated concern over such risks should not be allowed to distract individuals from taking proper precautions for their own health and their families.

Cumulative risks under our own control may fail to stimulate the emotion and passion that are generated by small risks caused by others. The consequences of such risks may be slow and silent and we may be unaware of the effects of our exposure to such risks (like the clogging of our arteries from the saturated fat we consume) until we get an abrupt and often-irreversible revelation of the risk (such as a heart attack).

Eat yourself fitter

In Ireland, the alarming increase in obesity and Type 2 diabetes can be related, in part, to a failure to adequately comprehend the risk of poor diet. Studies in the Irish context have demonstrated that the public's objective perception of risk arising from food is not substantially different from those of food professionals.

However, such measures do not adequately capture the subjective nature of an individual's perception of risk to themselves and the research is probing deeper into the psychology of risk-perception to examine the self-serving biases individuals employ when comparing their own exposure to that of others. "It could be you" goes the Lotto ad, tapping into human fallibility in judgments of probability. We may realise the probability of winning is small, but many still secretly hold an over-optimistic hope.

We all are aware of the dangers of smoking and yet a significant proportion of the population continue to smoke. However, few would disagree that the notion that smoking is harmless has been significantly overcome. The impact of food on health has not yet penetrated the psyche of the nation to the same extent as the dangers of cigarette consumption.

Often the first decision people make about their health is when they lose it. "Will I have a bypass or a stent?" or "Will I have chemotherapy or radiotherapy?". The challenge is to get people to think about their most valuable asset every day and completely change national attitudes to food and the *laissez-faire* attitude to unhealthy diets. The rising incidence of obesity, false claims of health benefits and misleading labelling are gaining increasing air-time, as are the demand for nutritional profiling and signposting of the good, the bad and the indifferent foods. These policy trends are just the beginning of the paradigm shift toward an investment-like attitude to health.

Consumer demand for food products can be thought of as reflective of levels of perceived health risks. As this changes, so too will the level of demand for lower-risk healthier products and it is in this context that industry should be prepared to adapt. Turbulence in the capital markets, foreign exchange fluctuations or key staff losses are business risks that will pale into insignificance compared to the consequences of realisation by consumers that some of your products are damaging their health and that of their families. ■
Prof Patrick Wall (UCD school of public health and population science) and Dr Liam Delaney (UCD Geary Institute) are conducting research into health behaviours.

