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Sir Peter Gluckman's address to the 20th anniversary of the signing of the Australian and New Zealand Food Treaty, Wellington

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We have a very complex relationship with food. In many ways our societies are defined by what we eat, how we eat, when we eat. There are complex interactions with culture, religion, social and family behaviours, belief and traditions. Food is essential for our life and it is increasingly evident that it is important for our health – especially in relation to Non Communicable Diseases. In all countries the food system is an important part of the economy but particularly so in food exporting countries like New Zealand and Australia. This centrality of the positioning of food in our life and countries therefore makes it inevitable that the public should and do have a high interest in how the food system is operated, regulated and protected.

We are fortunate that we live in a country where there are no systematic issues of food safety - although sadly too many individuals, for a variety of reasons, may face personal food insecurity.

And these interactions are creating some complex and rather wicked, in the sense of unresolvable, interfaces. But what I want to focus on in my comments is that the relationship between food and our physical health is increasingly understood - and has fundamental implications for the issues we frequently face about the relationship between food and society. There are some priors:

- We want our food export industry to grow in the returns it provides to our economy.
- We believe in personal freedom and choice over what we eat, indeed we must have it because of the complexities of our beliefs, traditions and social rituals about food.
- And we want to have safe food - but perceptions and understandings of nutritional quality and safety vary, as we have seen recently in discussion on pasteurisation of farm milk supplies.
- And we want our population to be healthy - and poor nutrition is a major and growing burden on society and the taxpayer.

There are growing perceptions of conflict between some of these desires. I have faced these issues in co-chairing the WHO Commission on Childhood Obesity for the last two and half years. Organisations such as FSANZ have a critical role assisting in managing these interfaces.

It is the standing and credibility that is essential to addressing a number of the matters I raise. And that we do it jointly with Australia is an enormous advantage.

But before I expand on these issues let me make a key point: Nutritional science (including its related disciplines of epigenetics, genetics, metabolic imaging, genomics, behavioural science, appetite control etc) is complex, and that complexity can be exploited for good or bad.

Firstly we do not just eat nutrients - that is the horrible and confusing list of components listed on the label - we eat food, and how that food is digested and its components absorbed is influenced by lots of factors: consistency, composition, matrix, how we chew it and most importantly by what the bacteria in our intestines do to it. And beyond that how much we eat is influenced by social factors and the context of where and what we are eating, by our sense of taste, smell, satiety, by how we perceive food. Many of these biological and behavioural factors interact and are affected by our genes, our development, what we learn from our family and so forth. This complexity has led to considerable confusion for much of the public about what to eat, what is good nutrition, what is bad nutrition.

Sadly this is driven by a morass of utter confusion in the popular media – there are over 100,000 books on weight loss alone on Amazon. One so-called nutrition expert will say it's fat, another it's sugar, another it's salt, or a magic vitamin or something else and whatever is written the popular media will likely find some 'expert' to say something else. And of course it is not like that – good nutrition is about adequate and balanced food intake appropriate for age and context. But this has not stopped some parts of the food production and retail industry exploiting this confusion badly – for example some comments about sugar by segments within industry over the last year have been inappropriate, misleading and harmful. And the level of nutrition and food literacy is low, so can be easily manipulated. How many parents know how many kilojoules their five year old should eat every day?

The ECHO commission that I co-chaired made it very clear in recommendation 1.1 that Governments had to take the lead in providing accessible, sensible nutrition and food education, information and literacy to all members of the population. It also suggested the need for global improvement in front-of-package food labelling. The Food Star labelling is a start, though far from perfect. But it cannot be effective if not associated with a clear education process that gets to every member of the purchasing community.

Schools need to be engaged and the Report indicated that nutritional education needed to be imbedded in mainstream subjects and pedagogically developed. School environments need to improve. It is educationally unsound to try and teach one message but to provide a contradictory environment. The joint letter from the Director Generals of Health and Education is a step forward, the 22 components of the Childhood Obesity Plan previously announced by the Minister is a major step forward - but implementation will inevitably be a challenge.

The ECHO Commission also suggested serious consideration to ensuring limits of marketing of junk food to children - and of course this extends from the producer to the retailer but we acknowledged its complexity. The Commission saw the importance of a mixed carrot and stick approach with industry: that is that progress need not be by regulation if, for example, the

industry entered voluntary high-standard accords with government input and independent audit. We emphasised independent audit because trust does need to be built between the industry and the community. In many countries regulation will follow if progress is not made on this matter. But trust in the food industry is badly undermined where there is egregious and inappropriate behaviour - and there continues to be too much of it. We need a robust, respected and healthy food industry.

But let me look ahead. The high value nutrition sector will grow in the next decades. What will drive that sector? Evidence based health claims. I distinguish this from natural products, although I think the moves being made there will reduce the level of confusion and over-claim. Evidence based health claims require good science and they require rigorous regulation of the claims. And again our two countries have worked hard together to get to a position to look at such claims. For example, we have the High Value Nutrition National Science Challenge getting off the ground. But there are also more complex issues where science, innovation and society may collide. We need to learn lessons from what has happened - in NZ at least over GM - to better understand how technologies, whatever they are, will be applied in the pastoral and food sectors. Technologies, both physical and biological, are moving very fast and there are many potential ways they may be used to increase productivity and nutritional value, and reduce environment damage from agriculture and horticulture.

Some technologies will be adopted, others will not – that is a societal decision. My office has released the first of three papers on understanding decision-making in the face of uncertainty, concepts of precaution and innovation. We need to greatly enhance the dialogue between society, science, industry and the policy community to ensure we make the right choices about what technologies to use. This has many aspects to it but it does require informed, civil, non-polemical discussion. As we have seen in other countries where that precious and essential value of democracy is lost, outcomes can be hurtful.

In summary, food is critical to our lives, both to eat and to sell. Get it wrong and our community suffers both in health and economically. But in saying this there are some inevitable tensions and conflicts. Good regulation and food safety monitoring is essential and this requires quality agencies such as FSANZ, but so is effective government encouraging good nutritional literacy. It also requires highly responsible industry, both the production and retail components, and it requires good science - and this requires better and early dialogue with society. If these things are done well there is real opportunity for a healthier population and a healthier economy.