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Visions

Past, present and future: here is what we see



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Access Brooke's profile here

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The visionaries



Anthony Fardet, Ashok Bhurtyal, Cecilia Castillo, Claudio Schuftan
Diana Parra, Geoffrey Cannon (top); George Kent, Isabela Sattamini
José Luis Vivero Pol, Maria Alvim, Mark Wahlqvist, Olivia Yambi (middle)
Pilar Zazueta, Raj Patel, Sara Garduño-Diaz, Seva Khambadkone
Stefanie Vandevijvere, Thiago Hérick de Sá (below). And Brooke Aksnes

Here immediately below are essences of the testimonies – commitments, beliefs, and aspirations – of our 19 *Visions* writers, taken from selections of their contributions that follow, and expressed in one sentence. We have a balance of younger and older visionaries, women and men, and team members and regular contributors from all continents, listed here in alphabetical order of first name.

One by one and all together, they show one of the main purposes of public healh and nutrition, which is to understand, address, and aim to influence the world in which we all live now and as reliably projected. What they say in full, published between late 2014 and the previous issue of *WN* – all accessible above – in addition to many other contributions, have helped to shape our philosophy.

The sentences here are yours to tweet, post, or to stick on your computer or refrigerator – so as to become part of your own philosophy of living, and to use in your own conversation and writing. You can link to the profile of each contributor whose name is underlined.

Anthony Fardet (French citizen, resident and working in France)
Real leaders up to 2030 and beyond will be ordinary citizens who take responsibility for their lives – we are entering a time where all people will awaken to their power.

***Ashok Bhurtyal** (Nepali citizen, resident and working in Nepal)*
It is now time to explore the validity of indigenous and traditional practices, to understand why some civilisations and cultures have enjoyed healthy nutrition while others have been lacking, and to replicate successful systems and practices.

***Brooke Aksnes** (US citizen, working in Belgium)*
Food systems that operate in a local context and respect human labourers, animals and the environment, are universally possible, and are the answer to many of the issues humanity faces today.

***Cecilia Castillo** (Chilean citizen, resident and working in Chile)*
Martin Luther King rightly says: 'History will record that the greatest tragedy of this period of social transition was not the strident clamour of the bad people, but the appalling silence of the good people'.

***Claudio Schuftan** (Chilean, US and German citizen, resident in Vietnam)*
We all have a duty to fight in equal partnership with people rendered poor by an unfair system, for access to land and agricultural inputs, for the empowerment of women in agriculture, for sustainable agro-ecological practices, and for artisanal fishermen and nomadic groups.

***Diana Parra** (Colombian citizen, working in the US)*
When we envision solutions in bleak times, these may sometimes seem like dreams. But 'in dreams begins responsibility'.

***Geoffrey Cannon** (UK citizen, resident and working in Brazil)*
I hope for corporate trusts to be busted, radical decrease of use of energy, development judged in terms of quality, and renewal and protection of small and family farming systems.

***George Kent** (US citizen, resident and working in the US)*
There is hunger in the world mainly because in market-based food systems, locally, nationally, and globally, the poor feed the rich, and food flows to money, not need.

***Isabela Sattamini** (Brazilian citizen, resident and working in Brazil)*
I hope for and believe in an equitable world, in which people and populations have freedom and autonomy to choose their own paths, as part of the civilisation process.

***José Luis Vivero Pol** (Spanish citizen, working in Belgium)*
My greatest aspiration is to see food freed from being a mere commodity, just as people who were once slaves became free from being commodities two centuries ago because morals changed.

Maria Alvim *(Brazilian citizen, resident and working in Brazil)*
I try to do my best: as a nutritionist I educate, as a consumer I make healthy and sustainable choices, as a human I am compassionate and humane.

Mark Wahlqvist *(Australian citizen, working also in China and Taiwan)*
Whether the tide of affairs can be turned before habitable ecosystem collapse occurs, depends on slowing, stopping and reversing population growth, arresting ecosystem destruction, better strategies to resolve conflict, and providing satisfying and productive livelihoods in all populations and communities.

Olivia Yambi *(Tanzanian citizen, resident and working in Tanzania)*
Stay positive and inspired.

Pilar Zazueta *(Mexican citizen, working in the US)*
The wastefulness of industrial food systems, the cornucopia of non-seasonal produce, and ultra-processed products offered in upper-income stores, cannot be sustained: this is a mirage of infinite production in a finite world.

Raj Patel *(UK citizen, working in the US)*
History's great moments have come through active, intelligent, widespread organisation in which people have been encouraged to think for themselves.

Sara Garduño-Diaz *(Mexican citizen, working in Kuwait)*
I hope that people continue to demand better food and propose creative ways to harmonise food production and the well-being of the environment, and that the younger population enjoy many years of fresh, natural, real food.

Seva Khambadkone *(US citizen, resident and working in the US)*
Honest conversations and collaborations, and the actions they spur, strengthen me – in the words of Arundhati Roy: 'Another world is not only possible, she is on her way – on a quiet day, I can hear her breathing.'

Stefanie Vandevijvere *(Belgian citizen, working in New Zealand)*
The urgency for action, using what is already known, is now much greater than the urge only to generate more knowledge – as Leonardo da Vinci has stated: 'I have been impressed with the urgency of doing; knowing is not enough, we must apply; being willing is not enough, we must do.'

Thiago Hérick de Sá *(Brazilian citizen, working in the UK)*
I hope to live in a global society in which the lives of the poorest people are worth more than all the wealth of the richest ones, and in an era in which everybody has something, nobody has nothing, and nobody has much.

Introduction

The *Vision*s editors write:

Our series began towards the end of 2014 and has continued until the previous issue of *WN*, a year later. Its purpose is indicated in the title of this final full summary with extracts from all of us – 'Past, present and future, here is what we see'. We were all asked to answer ten questions as follows, which we did.

1 What mainly determines population well-being, health and disease?
2 What mainly determines good population nutritional status?
3 How useful are the current nutrition sciences?
4 Are enough governments and official agencies making real progress?
5 Are current dietary guidelines and nutrition education programmes effective?
6 What types of civil society groups are most responsive to the biggest issues?
7 Name up to three inspiring leaders likely to be active in 2030, with reasons.
8 Identify up to three of your greatest fears, with reasons.
9 Identify up to three of your greatest hopes, with reasons.
10 Make any other relevant remarks as you may wish.

Nutrition in flux

The series and the edited summaries that follow this introduction indicate a difference between *World Nutrition* and most other publications concerned with nutrition – and a resemblance with many of those engaged in public health.

The *Visions* series has been published at a time of flux in perception of what matters most when examining the effect of food and nutrients on states of health. The focus of attention has switched from dietary fat to added sugar. Focus has also switched from nutrients to processing. Thus, Anthony Fardet of the National Institute of Agronomic Research in Clermont-Ferrand, France and one of our visionaries agrees with the view developed by the *NOVA team led by Carlos Monteiro* of the University of São Paulo in Brazil – also a regular contributor to *WN*. In this view, what is most important in nutrition and health is what is done to food before it is acquired and consumed, rather than nutrients or foods as such. Anthony Fardet says:

> At least in Western societies, application of the reductionist paradigm to nutritional sciences has led to fractionating foods into isolated compounds and ingredients, and to associate one compound with one physiological effect. The health potential of foods as a whole has been reduced to a few compounds. This has led to the manufacture and marketing of refined energy-dense food products that are poorly satiating and depleted or devoid of protective phytochemicals.

More broadly, in its full meaning nutrition is an endeavour concerned equally and indivisibly with food, health, and care. The discipline of nutrition has basic technical

aspects, which as research continues usually become better understood and more complex. But as practically all we *Visions* contributors imply, state or stress, nutrition is not just a biological science, as conventionally defined. It is also a political and social science. At personal and population levels, the quality of nutrition, its impact on health, well-being and disease, and general states of nutrition, are also driven by dynamic social, cultural, economic, commercial, political and environmental factors.

Nutrition is political

The relative impact of these factors has always varied in different localities, countries and continents and at different periods, according to dominant events and prevailing political, economic and other forces. What has been most relevant even in the recent past is now changing and will change further in the future, at unpredictable velocity. Thus one of us, Pilar Zazueta, a Mexican national of the University of Texas at Austin says in a statement beyond usual conventional nutrition science discourse:

> To me the factor that mainly determines well-being, health and disease outcomes, is power. Some human groups have achieved better living standards than others. They have more economic resources, live longer, eat better, and have more leisure time and less stress. Today, these groups also tend to live in the global North 'liberal democracies'. This progress, or economic development, has been achieved in most cases through the exploitation of other human groups across the globe.

Judgement and wisdom

Seeing such 'big pictures' has profound implications. What is most relevant in nutrition, especially at population level, is not as much information as judgement, not so much knowledge as wisdom, and not so much quantity as quality. Moreover, which of the factors mentioned here (and others) are most relevant, also has to be weighed and assessed. *What matters most in rural India* (the topic of a commentary in this issue of *WN*) is different from the most pressing issues in European and North American cities. All this makes nutrition both as taught and practiced as a discipline and as a philosophy of living extraordinarily complex, exciting, and challenging.

We agree though, that there are global drivers of health. Many of us point at the impacts of transnational food and drink product manufacturing and catering corporations. Some of us place these in the wider context of the still-prevailing 'free market' political and economic ideology of constant material growth which is draining natural resources and disrupting climate as well as undermining long-established rational and appropriate food systems and supplies and dietary patterns. Another of us, Mark Wahlqvist of Monash University in Australia and the University of Zhejiang in China, who is a former president of the International Union of Nutritional Sciences, emphasises the most intractable threat to planetary ecosystems of all; a global human population liable to increase by around 2.5 billion to nearly 10 billion in 2050.

Ominous phenomena

Vast and largely ominous phenomena and prospects explain why the *Visions* initiative expresses our conclusions, judgements, and – perhaps above all – our fears and hopes. This is also why we write not only as professionals, but also personally as family members, citizen-advocates, and often also activists. Societies in which people are encouraged to think for themselves, says Raj Patel, a UK national of the University of Texas at Austin, embody the principles of agroecology, 'in which everyone is a scientist, activist, critic, transformer and, finally, a penitent before nature'.

Most of us indicate or state – some vehemently – that now is a time when 'objective' technical policies and programmes have limited value and little effect on the structural causes of health, well-being and disease or on epidemics. We also indicate or in effect state that the practice of nutrition when rightly understood as a branch of public health is political in both the senses of being engaged with policy and in embodying sets of social values.

We agree, explicitly or implicitly, that all champions of public health door should advocate for public services and public goods – such as human rights and equality--and should therefore be opposed to displacement of established food systems, demolition of public resources, and degradation of the physical world.

Some hopes

Finally in this introduction, some hopes and yes, visions. Isabela Sattamini, a Brazilian national of the University of São Paulo, says:

> I hope for an increase in people's recognition of the importance of good food and all the factors that create good food systems. I hope for an equitable world, in which people and populations have freedom and autonomy to choose their own paths.

Seva Khambadkone, a US national of Johns Hopkins University, says:

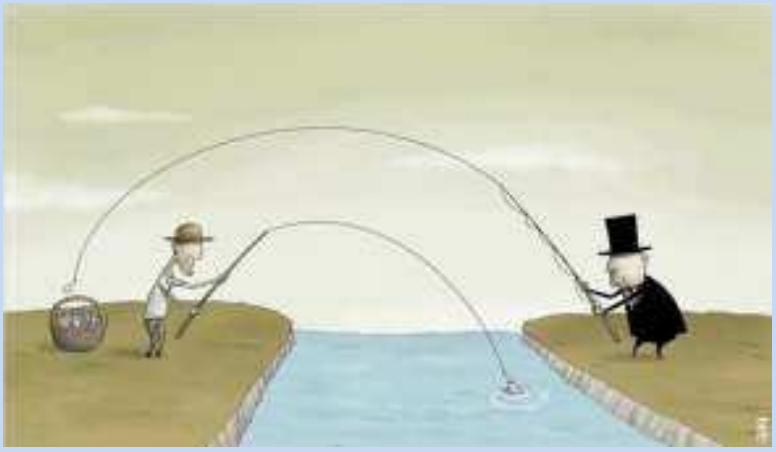
> In the most harrowing moments of tragedy, hope seems almost flippant. But just as an ocean is made of drops, society is made by people coming together. Honest conversations and collaborations, and the actions they spur, can make for social change. This strengthens me. In the words of Arundhati Roy: 'Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing.'

George Kent, also a US national of the University of Hawai'i, says:

> I put my hopes in young people of the sort identified by and now contributing to *World Nutrition*, the people heard in these pages who have broken free of the narrow confines of conventional nutrition science.

Extracts

1 What mainly determines population well-being, health, disease?



In theory, wealthy countries support and nourish impoverished countries. In fact, not so. The poor do the work to produce food much of which is acquired by the rich

Editor's choice!



Pilar Zazueta

To me the factor that mainly determines well-being, health and disease outcomes, is power. Some human groups have achieved better living standards than others. They have more economic resources, live longer, eat better, and have more leisure time and less stress. Today, these groups also tend to live in the global North 'liberal democracies'. This progress, or economic development, has been achieved in most cases through the exploitation of other human groups across the globe. The worst health and well-being outcomes have been and continue to be observed in colonised societies, or in places that have been ravaged by war. In both of these situations, the majority of people are excluded from participating in politics, or in making decisions on how to run their societies.

Diana Parra. From the food we eat, to the air we breathe, our bodies are interacting with the environment. But determinants of health and disease go beyond personal behaviour. They tap into political, cultural and social systems, which also determine and shape our ways of life. One of the main determinants is the degree of equity in any society. Inequity in the distribution of wealth, inequity in health care systems, and inequity in the distribution and production of food, all breed ill-health and disease.

Mark Wahlqvist. There is still too much attention paid to the proximate, measurable (and often profitable) factors that shape population health. These neglect well-being, and treat rather than prevent disease. For example, hypertension is correctly identified as the globally most prevalent and preventable immediate cause of disease and premature mortality. But it is the causes of hypertension and other preventable disorders and diseases that need to be identified and addressed.

Olivia Yambi .What generates good health, is an environment that enables people who are poor to use their capacities to act in ways that enhance their access and use of those public services. An environment that promotes a state of wellness and that creates confidence and assurance for people to care for themselves, and a system of governance that nurtures dignity. The well-being of a population is enhanced when mechanisms exist for people to engage in exchanges of views and knowledge that address and challenge the power systems and inequalities in society.

José Luis Vivero Pol. Common people want to pursue happiness and freedom. Elite people seek power, wealth and transcendence. And food has power, so the elite always want to control food systems and supplies, through governments and now also by corporations. These agri-food corporations only value the economic dimensions of food – cost of production, price in the market, profitability. People see food differently, as endowed with many non-economic dimensions: food is a vital need, a cultural pillar, a human right, an Earth's gift, as well as a good to be sold and bought. Non-economic dimensions also include cooking and eating together, and memories linked with flavours and tastes and sharing food with strangers and guests.

Cecilia Castillo. A democratic society that ensures education, food, healthcare, basic sanitation services, decent housing, and jobs, can achieve a good quality of life for all. Conversely, societal models based on ever-increasing consumption and profit, where basic rights and common goods are considered private property, lead to segregation, discrimination and inequity. These societies, like serf systems, prevent establishment of adequate and fair welfare and health, including nutrition.

Geoffrey Cannon. Determinants of well-being and good health should come first. Focus on disease is like judging travel by car wrecks, industry by bankruptcies, or marriage by domestic violence. Determinants of good health include relative and absolute degrees of equity, independence, security and peace; of family, community, municipal and national solidarity; of self-determination and self-respect and ability to make and

sustain relationships; and of belief in the present and hope for the future. The degree of pathology – emotional and mental as well as physical – in any society is a function of its quality. Epidemics are signs of societal breakdown. They cannot be conquered with drugs, surgery, or adjustments in 'lifestyle'.

Seva Khambadkone. It is difficult to eat healthily when the only local options are corner stores filled with chips, fast foods, and liquor, you have no car, public transportation is unreliable, and you have children at home. All the more so when even if you can get to a grocery store the economic and calorically efficient options are high-fat/-sugar/-preservative. It is difficult to seek healthcare without insurance and free clinics have specific hours of operation and you cannot miss work.

Sara Garduño-Diaz. Culture, society and tradition. In Scandinavia the population is encouraged to live healthier ways life, there is a demand for quality foods, and the physical environment is designed to encourage physical activity (bike lanes, hiking trails). Middle Eastern populations have decreased well-being due to negative changes in their environment. War, unstable societies, and 'development' that in reality is away from tradition towards more industrialised, 'Western' standards of living, which include ultra-processed food products, automatic everything, cars as the main means of transportation, are leading these countries in the wrong direction.

Isabela Sattamini. The determinants of population well-being and health are more social than biological. The science of epigenetics emphasises that the experiences of every person will influence their genes, and therefore their health outcomes. These experiences relate to living conditions, sanitation, air and water quality, food habits, and access to education and health services. Environment also includes national and local politics. The degree of equity in a city will for example influence levels of violence. It will also influence the degree of political participation and openness to social critical thought and other social factors deeply related to population well-being.

Summary

Brooke Aksnes. All of us see the big picture of the social, cultural, economic, political and environmental determinants of states of health, well-being and disease. We believe that far too much emphasis is given to biological and behavioural determinants, as if people are or should be able to choose how well or ill they are. We cite the level of power that people, groups, institutions, and governments hold locally, nationally, or globally and correspondingly the nature of political systems and degrees of equity. Specific causes include relative accessibility and affordability of healthcare; degree of access to health services; quality of sanitation and housing; and level of education. More general causes include degree of social support and stability; capacity of environments to meet basic needs; and political and social will and ability to empower populations.

2 What mainly determines population good nutritional status?



A student's meal in Zhejiang, China, where the central value of food in personal, and family and community life is still preserved after many hundreds of years

Editor's choice!



Isabela Sattamini

Population health is determined by the social environment. Within this, food systems as a whole (themselves shaped by political and economic ideology), and also nutrition education (a cultural factor) are main determinants. Food systems influence access to healthy food in many ways, such as what foods are available and at what prices. Eastern cultures in countries such as India, Thailand, Japan, and China (see the picture above of student food in Zhejiang) consider food to be a means of maintaining health, and also understand the need for food quality and beauty as part of the whole gastronomic experience. By contrast, the Western habit in general now is simply to think of food as fuel, so that anything tasty will be eaten, regardless of origin, the extent of processing, the nature of preparation, and what the food or product is made from. Children are brought up not to understand the importance of smart food choices, and to know little or even nothing about the joys of cooking and of preparing and enjoying meals at home. In Western societies very many people do not understand the link between food and health as a whole.

Mark Wahlqvist. There are four principles that underpin nutrition for optimal human health. One is well-nourished parents at conception and during foetal life. Two is breastfeeding. Three is regular physical activity. Four is consumption of adequate biodiverse foods.

Thiago Hérick de Sá. The way we eat, work, travel, play, create, and rest. Also the way we interact with each other, with our and other cultures, and with the built and natural environment. All this is conditioned, but not determined, by who we are, what is in our genes, and how life's experiences influence what we are, from epigenetics to culture. Just focusing on food is not enough, even though this is a very important start.

Stefanie Vandevijvere. Diets of minimally processed foods, predominantly plants, are now known to promote health and prevent disease. This seems simple, but people very often fail to convert this evidence into what they routinely do. The corporate and political determinants of nutritional health need to be addressed much more effectively in this century.

Raj Patel. What mainly determines good population nutrition status is the extent to which people have been able to capture the benefits of modernity and leach it of its toxins. For instance this means modern plumbing, clean water and sanitation in cities, without cities becoming islands of the ultra-wealthy. It means better understandings of how to handle, grow and share food without the food system being surrendered to those who would ultra-process everything.

Geoffrey Cannon. Rational agriculture systems that favour family farming and guarantee markets and prices for fresh and minimally processed foods. Flourishing national, regional and local food producers, manufacturers and traders, protected against transnational penetration and exploitation. Statutory restriction of ultra-processed food and drink products similar to that used to control use of tobacco. Strengthening of established food cultures at all levels, and of dietary patterns based on freshly prepared meals.

George Kent. There is hunger in the world mainly because of widespread exploitation under which many people are not able fully to enjoy the fruits of their own labour. In market-based food systems, locally, nationally, and globally, the poor feed the rich. Food flows toward money, not need. Good-hearted people often encourage more charitable giving to the poor, but a better answer is to take less from them. In stable well-functioning communities not exploited by insiders or outsiders, people are likely to have well-functioning food systems and good nutritional status. This is true even if they don't have much money. However, when food systems shift from being driven mainly by the objective of producing basic food to producing wealth for investors, the system shifts to production of less healthy or unhealthy products, on farms and in factories. This shift from myriad pre-industrial food systems

towards one global industrial food system brings with it increasing production of unnecessary and unhealthy foods, and non-foods such as fuel and flowers.

Ashok Bhurtyal. Determinants of nutrition are much the same as those that determine health in general. More specifically, the mechanisms and players that influence, control or manage the food systems in any given society have a direct impact on nutritional outcomes for that society's members. Additionally, the ways in which intervention programmes are implemented affects nutritional outcomes, be they good or bad. I give the example of my own country. Nepal has rich topography, ecology and culture. Nepali children should not suffer from malnutrition. Certainly, rates of malnutrition should never have been high. But progress in reducing child malnutrition has been slow. This is mainly because the policies chosen and the actions taken have been misguided. First came supplementation of micronutrients such as vitamin A, based on the idea that vitamin A deficiency was a top public health priority. Then came growth monitoring, based on the idea that Nepali children suffer from stunting. Such interventions have supported the investigators who have carried them out and published the results. They have not been much help to Nepali children, women or other vulnerable groups. They have consumed scarce human and financial resources that should have been directed to develop and carry out effective and appropriate nutrition programmes and policies. Now genetically modified plants are being touted. In the future, our forests and wilderness areas are likely to be targeted. It is only now that real attention is at last being given to food-based programmes. Why has this taken so long?

Summary

Brooke Aksnes. All our responses complement one another, with varying emphases on parts of the whole spectrum of personal, behavioural, biological (including inherited), social, cultural (including gastronomic), economic (including commercial), political and environmental causes. In the responses here there is no reference to specific nutrients. Instead, the focus is on foods, meals, and dietary patterns. There is general agreement, explicit or implicit, that healthy food systems and supplies are diverse. Some of us stress the ill-effects of industrialised food systems and ultra-processed products and the exploitation of former European colonies in the South by the most powerful countries in the North – and now also by transnational corporations.

3 How useful are the current nutrition sciences?



Good education encourages people to make conscious choices. Two children at a day care centre in Juiz de Fora, Brazil, being oriented for nutrition education using pedagogical methods

Editor's choice!



Maria Alvim

As a young nutritionist, I believe that the work of nutrition is very important to hospitals, research, food production, sports, and other fields. The greatest potential is in the nutritionist's role as an educator who influences people's food choices. For example, when carried out correctly, nutrition education enables people to eat well personally and also in group contexts, with family, friends, colleagues, constructing a multi-generational cycle.

Brooke Aksnes. Most branches of nutrition science are useful in their own right and in the context of focused, narrow interventions. But they tend not to deliver widespread, permanent changes in public nutrition status. This is not due to a lack of knowledge in the field; current nutritional sciences could easily provide the capacity to guide culturally relevant, lasting and equitable change in global nutrition. However, this rich knowledge base remains largely untapped as efforts to improve public nutrition must battle against the economic interests of corporations, broken political systems, and unjust distribution of wealth, knowledge and health empowerment.

Isabela Sattamini. Nutrition science as it is now is not very useful, I would say, because it does not look at the big picture and at the root of problems. As a nutritionist, I have a very critical view of current conventional Western nutrition science. This is quasi-medical, concerned with achieving the same standards as medicine, turning nutrients into remedies, managing diseases, not investing in prevention and health promotion, and in general overlooking most or all wider aspects. Nutrition is also a social and political science. The name 'nutrition' is inadequate. So many people, including young professionals, mostly see nutrition as a way of reducing body weight.

Anthony Fardet. At least in Western societies, the extreme application of the reductionist paradigm to nutritional sciences has led to fractionating foods into isolated compounds and ingredients, and to associate one compound with one physiological effect. The health potential of foods as a whole has been reduced to a few compounds. Food scientists and technologists have fractionated foods. This has led to the manufacture and marketing of refined energy-dense food products that are poorly satiating and depleted or devoid of protective phytochemicals.

Pilar Zazueta. Nutrition sciences that follow the model of natural sciences have been very successful in achieving various technical goals. It is very important to continue to innovate in those areas – to know more about chemistry, physics and physiology. Now, the problem is that in a lot of cases, nutritional sciences, as with other forms of medical knowledge, seem to operate in some sort of social vacuum. Few people are taking into consideration how their research or discoveries might affect communities, or what their application in the real world, beyond commercialisation, might be.

Thiago Hérick de Sá. The idea that scientific evidence is more valuable than other forms of knowledge, such as those learned over many centuries traditionally or by indigenous communities, is dangerously mistaken. Such an idea makes nutritional and physical activity sciences less useful in the necessary pursuit of a multi-dimensional whole body of knowledge and wisdom.

Raj Patel. To whom? We're only just starting to enter a time when nutrition science is democratically accountable, rather than a satrap of the state or capital.

Summary

Brooke Aksnes. Some of us focus on the more clinical, technical and medical personal and community aspects of nutrition where current practice is or should be effective and beneficial. Others point to the evident failure of current nutrition science to address population health and epidemic diseases effectively – a theme of the *WN Project Phoenix* initiative – and give various reasons for this. The limitations of biological science, and modern science in general, are also mentioned.

4 Are enough governments and official agencies making real progress?



Food and nutrition aid to impoverished countries and communities is vital in cases of actual hunger or deficiency (as of vitamin A, above) but does nothing to address structural causes

Editor's choice!



Raj Patel

For what and whom? The latest initiatives in Africa around the 'New Alliance for Food Security and Nutrition' are almost comically bad. Sure, it's important to iodise salt and provide paid maternity leave. But in Malawi, for instance, these optional nutritional interventions have been hitched by the G8 to mandatory requirements like 'improving score on Ease of Doing Business Index' or making land available to foreign buyers. Nutrition has never been free of other interests – whether of state concerns around fit soldiers, or of business concerns for profit and market. It seems that the era we're moving into is that of Poverty with Added Vitamins.

Claudio Schuftan. A better question is, why are they not making real progress? The main reason is the entrenched arrogant top-down approach to malnutrition. Have grassroots initiatives to combat malnutrition been sufficiently supported and strengthened? No. Has massive human rights learning taken place? No. Are claim

holders demanding changes to strengthen their food sovereignty? Many yes, but far fewer than would do so with greater political awareness and support. We professionals have a duty to fight in equal partnership with people rendered poor by an unfair system, for access to land and agricultural inputs, for empowerment of women in agriculture, for sustainable agro-ecological practices. We have the added duty to indict greedy corporations, corrupt governments, and autocratic donors.

José Luis Vivero Pol. United Nations agencies fail to question the mono-dimensional view of food as a private good. They see population nutritional status as an aspirational side-effect and policy goal of market-driven food systems. This is all wrong and misleading. Food is and needs to be seen as a public good. A system of food identified as a commodity made and sold to maximise profits, will never work.

Thiago Hérick de Sá. No. There are some national examples, usually in the 'outskirts' of capitalism, such as Bhutan, Bolivia and Uruguay. There are also remarkable initiatives from the Pan American Health Organization, and enlightening statements from Margaret Chan, director-general of the World Health Organization. But this is at a time in history when so many governments remain committed to the political and economic forces that are destroying traditional practices and societal well-being.

Mark Wahlqvist. No. Indeed, some governments do not support vigorous international campaigns to reduce poverty and hunger. This smacks of inhumanity. It is a political trend, based on excessive trust in devolution to corporations

Cecilia Castillo. If only! But governments and official agencies so often succumb to wealthy and powerful transnational corporations and other commercial organisations. This may even stop legislation designed to improve the quality of population life, including its nourishment. One example is the blockade that some governments in Latin America have suffered from corporations and their front organisations when they have decided to enact laws to identify unhealthy food products. There is an issue of sovereignty here – who rules, elected governments, or commercial corporations?

Maria Alvim. In Brazil, my country: yes. A good example is the *Bolsa Família* (Family Food Basket) programme, an important initiative that is helping permanently to remove Brazil from the 'hunger map'. But still there is much to do.

Summary

Brooke Aksnes. Our answer is No – with exceptions. We also generally agree on the reasons why. Failure of political will is caused by political, economic and commercial forces which have the general effect of deepening inequity, injustice, poverty and immiseration. Consumers and citizens need to exert their needs and rights, actively supported by public health and nutrition professionals.

5 Are current dietary guidelines and nutrition education programmes effective?



Sharing home-made meals made with locally grown, healthy foods, as here among workers after hours in a restaurant, is not a privilege of the minority but a right of the majority

Editor's choice!



Cecilia Castillo

Dietary guidelines as a means to educate populations to make healthy food choices are a fine notion. But a narrow view of nutrition that neglects other disciplines has prevailed. Also, in many countries dietary guidelines have been distorted as a result of pressure from food product corporations. Brazil is now a remarkable and encouraging exception. There, the new dietary guidelines have captured and summarised available relevant scientific information and have incorporated all aspects of good nutrition, not only mere nutrients.

Olivia Yambi. Guidelines are what they are. Often these are the preserve of programmers, decision makers or extension workers, and do not reach out to people who are poor. In very general terms, I find nutrition education very patronising. There is an overwhelming focus on telling people what to do, without adequate attention to understanding the limiting factors and capacities that would need to be in place and strengthened in order for the information to be translated into action.

Mark Wahlqvist. It is questionable. The development by WHO and FAO of food-based dietary guidelines in 1995 was a major step forward, and these have been adapted in various locations, such as the Western Pacific. But there is far to go. Nutrition and health policy still remains the prey of commercially-orientated nutrient programmes. These at best are only partial solutions. The underlying factors are overlooked. Besides, education and guidelines are never enough. What is needed is a complete shift, to strategies that empower populations, communities and households.

Claudio Schuftan. Are you kidding me? 'Food groups'? 'Healthy' food pyramids? 'Recommended dietary allowances', or 'daily amounts'? What? To teach poor people to choose and eat what they cannot afford? All of these are nutrient-based, and not based on what people eat, which is meals! Many millions of dollars have been spent by well–meaning colleagues doing this useless work. There is a role for nutrition education, but only in the context of and in support of the right to nutrition, of food sovereignty, and of empowerment of claim holders, above all, women

Maria Alvim. In Brazil, our new official national dietary guidelines have just been released. They are revolutionary. They are based on explicit principles. Some are as follows. To be relevant and effective, dietary guidelines need to be tuned to their times. Diet is much more than the intake of nutrients. Healthy diets are derived from socially and environmentally sustainable food systems. Dietary guidelines should broaden autonomy in food choices.

Anthony Fardet. No, not sufficiently. For example, in France recommendations are always based on food groups. But it is the nature and extent of food processing that render foods and products our friends or enemies, not botanical classification or nutrient content. The occurrence of diet-related chronic diseases is related to over-consumption of ultra-processed food products. All children between 3 and 18 should be taught about the acquisition, preparation, consumption and enjoyment of meals.

Summary

Brooke Aksnes. Our answer is another resounding No – but with one exception: the new Brazilian official food- and meal-based food guide, governed by principles as summarised by Maria Alvim. We agree on what are the three main faults of conventional dietary guidelines. One is that they are based on nutrients and food groups, and not on meals and dietary patterns. Two is that they pay little attention to the nature and extent of food processing. Three is that they are characteristically devised by 'us' – the experts – and imposed on 'them' – consumers – with inadequate attention to what people actually eat and drink. But we agree that nutrition education based in communities and schools should be effective when derived from the realities of custom, availability, and resources.

6 What types of civil society group are most responsive to the biggest issues?



The '12 spoonfuls' campaign. An adult hand thrusts a bottle of soda at two children, with the line 'Would you give them 12 spoonfuls of sugar? Then why would you give them a soda?'

Editor's choice!



Diana Parra

Around the world, journalists – such as Michael Pollan in the US – seem to be key players within civil society movements. So do gastronomes and chefs – such as Gastón Acurio in Peru, who started a movement that has helped to put a ten-year moratorium on genetically modified seeds and foods in Peru. But public health and nutrition researchers are usually far distant from the civil society movements and other active citizen organisations that really can protect population health, such as *El Poder del Consumidor* in Mexico, with their '12 spoonfuls' campaign (see above).

Sara Garduno-Diaz. Grassroots social movements that confront local problems. People around the world are no longer satisfied with the 'results' obtained by governments and official agencies; they are now taking matters into their own hands. In great part thanks to social media, awareness is now almost immediate, as is debate. In the Middle East, where I work, very strong and previously unquestionable issues are being tackled. Project 189 is an informal social movement promoting the rights

of domestic workers, a huge issue in this region, which official agencies are not adequately addressing. This makes Project 189's work of paramount importance.

Ashok Bhurtyal. In Nepal some civil society groups advocate for the common good; others are critical but not constructive. There is a huge untapped potential in building movements based within Nepali communities, following indigenous and traditional structures. These have always existed in many villages in low-income countries.

Pilar Zazueta. Organisations that are able to operate autonomously from government and industry and that have mechanisms in place to ensure internal democracy and leadership accountability.

Brooke Aksnes. The groups that stir people to take charge independent of legislation tend to be the most responsive to the overlying issues. These are the organisations that provide information to the public by using social networks, smart-phone applications and other culturally relevant platforms. In seeking to change cultural practices and perceptions, these groups respond to the 'big issues'. Food Tank, dedicated to sustainable food systems for all, is an excellent example of this.

Claudio Schuftan. First, please reject the concept of 'non-state' actors, which like 'stakeholders', is a manipulation meant to merged conflicted industry with genuine public interest groups. Next, distinguish between two main types of genuine non-governmental organisation. One is international NGOs funded by big traditional donors that have to protect their funding. The other is a mixture of 'public interest civil society groups' and 'social movements', both of which are clearly more responsive to claim holders' demands.

Anthony Fardet . I prefer not to identify specific groups or types of group. For me, the issue is much more general. This is a fundamental inversion of values. As long as money is given a higher value than human life, profits will remain a kind of God. The global industrial food system, and specifically its increasing domination by processed food products, is the result of greed for money. Human well-being must now come before money. Then food systems will develop to address real human needs.

Summary

Brooke Aksnes. We mostly admire and support social movements and other organisations rooted in or close to communities, that are prepared for direct action. These are usually the most distant from governments as well as UN and other official agencies. They engage 'the common people' and inspire them to make positive changes in their society locally and more widely. Characteristics of effective civil society groups include being transparent, accountable, autonomous, democratic, technologically savvy, community connected, and culturally relevant.

7 Identify up to three leaders likely to be active in 2030, with reasons



Lia watering the Vila Nova Esperanca community garden. The fight against sick societies that value profit more than people, must begin with the people at the grassroots

Editor's choice!



Thiago Hérick de Sá

Thomas Piketty, Carlos Monteiro, and (see the picture above) Lia. The French economist Thomas Piketty has taken many years developing proofs of how greed, the cause of all causes, operates, unveiling many cynical arguments used to justify business-as-usual. We need people with that resilience. The Brazilian nutrition scientist Carlos Monteiro is a restless academic, not happy with just producing high quality evidence but also prepared to spread the message and to work to make the world more equitable. He is a fighter. You will not know Lia. She is the personification of a warrior. Leading her very poor community in *Vila Nova Esperança*, which means New Hope Village, in the state of São Paulo, this skinny woman fights against unscrupulous officials and private companies grabbing the land that belongs to the local people, and against garbage trucks dumping rubbish on the people's gardens – more than once, with a gun pointed at her head. How far would you go, to fight for your community and for the environment?

Sara Garduño-Diaz. Thiago Hérick de Sá and Noel Solomons. Thiago is continually getting involved and trying to reshape food and nutrition panoramas at both national and international levels. It is refreshing to see someone who is working so hard who has many years ahead in his career development. I am sure we will continue to see non-stop action from him. I have had the pleasure of listening to Noel at debates on early feeding practices, and his passion comes across in the form of authority and scholarship. He truly believes in what he does. Noel has years of experience working in various regions of the world. His work in Central America has tangibly pushed forward the well-being of the people there. Well done, you two!

Geoffrey Cannon. Naomi Klein. Raj Patel. David Stuckler. All that they write or organise is valuable. They inspire others. They see the big picture of which states of population nutrition are one aspect. They have coherent world views that identify basic and underlying political, economic and social determinants of states of society. They are brave.

Anthony Fardet. The time when great leaders emerged is past. Real leaders up to 2030 and beyond will be ordinary citizens who will take responsibility for their lives.

Raj Patel. There are extraordinary individuals working to transform the world today. The best of them are conscious of the structures in which they lead, reluctant to remain at the front lest they prevent others from learning to lead. One of these I call the Unknown Activist, who may be the Occupy member who defends a home against foreclosure. The volunteer at a food bank who decides food banks are an insult, and who vows that no society should need a food bank in the future. The indigenous seed-saver who prevents the corporate enclosure of thousands of years of knowledge. The cook who teaches children the joy of real food, and gives the gift of critical thinking. Anyone who cracks open the world to reveal the possibilities beyond this one, and lives the politics that will get us there.

George Kent. I put my hopes in young people of the sort identified by and now contributing to *World Nutrition*, the people heard in these pages that have broken free of the narrow confines of conventional nutrition science.

Summary

Brooke Aksnes. We agree that some people are inspiring. Some of us followed the guidelines and named up to three people – these include two senior nutrition scientists and also two of us. Some of us resist the idea of 'leaders' with its implications of superiority, and prefer to identify types of people who set examples. These include those whose extraordinary courage and persistence emerges and grows in response to challenge or persecution. We will remember Lia.

8 Identify up to three of your greatest fears, with reasons



Eric Garner and Michael Brown, two unarmed black men, were killed by police action in the US, my country. Academics cannot remain detached from unjust and unequal societies

Editor's choice!



Seva Khambadkone

In the US, my country, the deaths of Michael Brown, Eric Garner, Tamir Rice, and many others, through police brutality and systemic devaluation of Black lives, are deeply disturbing. The public reaction has made clear once again, that not every human believes a basic tenet of humanity: that each and every human being is just as human. It terrifies me to live in such a world. Rage and sadness accompany this fear. I am so aware of my privilege that while ethnically Indian and thus a non-Black person of colour, I have the luxury to be angry and sad while not having to worry about my own life. I feel nausea in knowing that so many fellow human beings are constantly in danger, and that so many others refuse to see this as a problem. Such thoughts plague me and my colleagues and friends.

George Kent. First, I fear that those who have diverse views of how to address the major malnutrition issues of our times will never talk to one other, and will not formulate serious plans for addressing those problems. Second, I fear that a serious plan for addressing hunger in the world will never be made – I define a 'serious plan' as one for which the intended outcome can really be expected to be achieved. Third, I fear that discussions about how to end widespread hunger, which is here and now, will go on being eclipsed by discussions of how 'we' will feed the earth's population in the near and distant future. Many of these discussions are driven by corporate people looking for new ways to add to their wealth. There is too little caring for people who do not get enough good food now.

Olivia Yambi. One of my greatest fears relates to the dominance of top-down approaches and magic bullets – as if the world refuses to learn! Our language changes to accommodate the fads of the day. And thus technical solutions may be applied without concern for a reflective process, so that in the end there will be no sustained improvement.

Pilar Zazueta. I fear that governments and corporations will seriously consider products like Soylent – a powdered meal replacement developed in Silicon Valley – as viable alternatives to feed large numbers of people at times both of stability and of crisis. If a chemical concoction replaces real food, we would lose some fundamental elements of what makes us human: invention, reciprocity and joy.

Diana Parra. First, I fear the destruction of local, self-sufficient food systems in vulnerable communities if the activity of transnational and large international companies is not curbed. This has happened already in the Andean region, with the massive exportation of quinoa and the subsequent rise of child malnutrition. I also fear the economic and environmental consequences of a global industrial food system rooted in excessive fossil fuel consumption. My third fear is that citizens and governments will fail to realise that the looming issues posed by a growing population and climate change can be very simply and equitably solved.

Stefanie Vandevijvere. My biggest fear is that all of us are not currently doing more than simply fiddling around the margins, and are stuck in our current ways of life. Problems such as obesity and climate change are complex, but too often this is used as an excuse to do nothing or very little. Corporations are displacing national and local food systems; and only radical changes will have a substantial impact. Creativity and patience are needed; but also, passion and hope. Many of the changes needed will increase the happiness and well-being of people and future generations.

Cecilia Castillo. All of my fears can be summarised as one. I fear that governments will lose their sovereignty and ability to represent their people and will surrender their responsibilities to the power of corporations, and a resulting pseudo-democracy that limits civil rights and freedom of expression in which people are no longer citizens.

Ashok.Bhurtyal. I fear the hi-jacking of food systems by transnational corporations. If left unchecked they, aided by their 'partners' in governments, official agencies and even the academic world, will sabotage good nutrition initiatives, in favour of profit.

Sara Garduño-Diaz. Large corporations owning a patent for the genes of plants or animals is terrifying for me. I can see disaster on the horizon if farmers become unable to continue their trade without having to pay for seeds each year. My second fear is the uniformity of food systems. I see the widespread adoption of a non-seasonal 'global diet' based on the same foods and products all over the world. Thirdly, I fear the ultra-processing of foods into products. I don't want my food to be handled by machines and pre-packed full of non-recognisable ingredients. In short, I fear the loss of real food.

Thiago Hérick de Sá. My main fear is that the brilliant devious capacity of capitalism to recover, usually through creation of and profits from crises and wars, will continue to lead to massive suffering. Unless we organise and network as citizens and 'take the reins of this carriage', I fear that I will be alive as a witness of global mass murder, large-scale starvation and dehydration, displacement of most local cultures, loss of naturally grown and stored seeds, and other horrors and terrors now already evident. I also fear that the projected impact of change in climate, with all the consequences which include those mentioned above, will prove to be correct

Claudio Schuftan. On my dark days I sense doom. Why should we be different from the Egyptians, the Romans, or the Easter Islanders? Greed, status, folly, consumerism – and burgers and television, the modern bread and circuses – obsess or absorb most people. Top of my fear list is the growing power of transnational corporations that are usurping national sovereignty and peddling ultra-processed products. The consequent growth of religious and other ideological fundamentalism is my second great fear. My third fear is certainly climate change.

Summary

Brooke Aksnes. Our responses are stark. Directly related to public health and nutrition, we fear the power of transnational corporations and their erosion and destruction of established food systems and meal-based dietary patterns. More generally, related to the prevailing global political and economic ideology, we fear climate disruption and the impact of casino capitalism: sustainable development seems a mere dream. Other fears that we share with conscious citizens are ecosystem collapse, increase of food insecurity, famine, drought, poverty, forced migration, and extinction of species. Seva Khambadkone's intense everyday fear is perhaps the most profound. How has human society, even in wealthy, privileged countries, come to this?

9 Identify up to three of your greatest hopes, with reasons



A child in Kathmandu who survived the April Nepal earthquake. Ashok Bhurtyal's Vision was written before the catastrophe and published afterwards

Editor's choice!



Ashok Bhurtyal

I have hope for the many people in universities and research centres who are dedicated to practising science honestly, even in this age where science is so often auctioned off to the highest commercial bidder. But my greatest hope lies in local communities, these founts of reliable knowledge. People seen as being at the bottom of societal hierarchies, including impoverished and indigenous communities, still practice methods that ensure their nutrition and protect their health that have nurtured over millennia and in tune with nature. These customs should be respected.

Stefanie Vandevijvere. I hope that new global movements will be created to reduce the impact of transnational corporations on everybody's meals, diets, health, environment and lives. I also hope that more and more societies will collaboratively

re-experience living and eating convivially. This may be the most powerful antidote to the current snacking and grazing culture imposed by corporations. This implies a re-thinking of how to live life and how to build and strengthen communities. Well-being is about nourishment and caring about each other, our culture, and environment, instead of about money and power. This is how to recover and regain what has been and is being lost.

Geoffrey Cannon. Fully participatory, responsive and accountable democracy. Corporate trusts busted. Radical decrease of use of energy. Development judged in terms of quality. Renewal and protection of small and family farming systems. Such peaceful revolutions will also be good for rational and responsible industry, trade and employment. Systems of governance systematically different from those now dominant. At global level in the short term, hopelessly unrealistic. But some relatively well resourced countries, regions and communities, are making a start.

José Luis Vivero Pol. These are the reverse of my fears. I hope that all important domains of life become regained and re-commonified by all of us who oppose 'neo-liberal' politics and economics. After decades of purchasing and consuming degraded food products in supermarkets, I hope that people understand the horrible effects and implications of such products, and enable the protection and flourishing of a countless variety of healthy and fairer food systems. I hope that people everywhere care more about the food they eat, and are prepared to value food multi-dimensionally and to pay more to food producers in shorter and healthier supply systems. Such citizens will insist on stringent control of transnational food corporations, with regulations that restrict and tax ultra-processed food, and instead, build alternative food systems they want. Rights are not given but taken. My greatest aspiration is to see food freed from being a mere commodity, just as people who were once slaves became free from being commodities two centuries ago because morals changed. The same must happen with food, and for similar philosophical reasons. Absolute privatisation of food is a social construct and hence it is in our hands to reverse it. So I envision a world in which food becomes and remains a common good for the commonwealth.

Isabela Sattamini. First, I hope for an increase in people's recognition of the importance of good food and all the factors that create good food systems. Second, I hope for an equitable world, in which people and populations have freedom and autonomy to choose their own paths. I see this as part of the civilisation process, and believe this will happen. Third, I hope for education that is accessible to all. Knowledge creates freedoms.

George Kent. I hope that we all give more attention to how people can live together well at the local level, in strong communities. If ways are found to live together that are so excellent that others emulate these arrangements, the hunger problem will be solved from the bottom. I hope that the United Nations Committee on World Food Security will recognise that more attention should be given to the food

security of infants, especially in the face of plans by manufacturers massively to increase the consumption of infant formula worldwide.

Seva Khambadkone. The massive national and international response to injustice, and experiencing grassroots organisation in action, makes me hopeful that societal progress is possible. So do my conversations with some incredible friends and mentors. In the most harrowing moments of tragedy, hope seems almost flippant. But just as an ocean is made of drops, society is made by people coming together. Honest conversations and collaborations, and the actions they spur, can make for social change. This strengthens me. In the words of Arundhati Roy: 'Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing.'

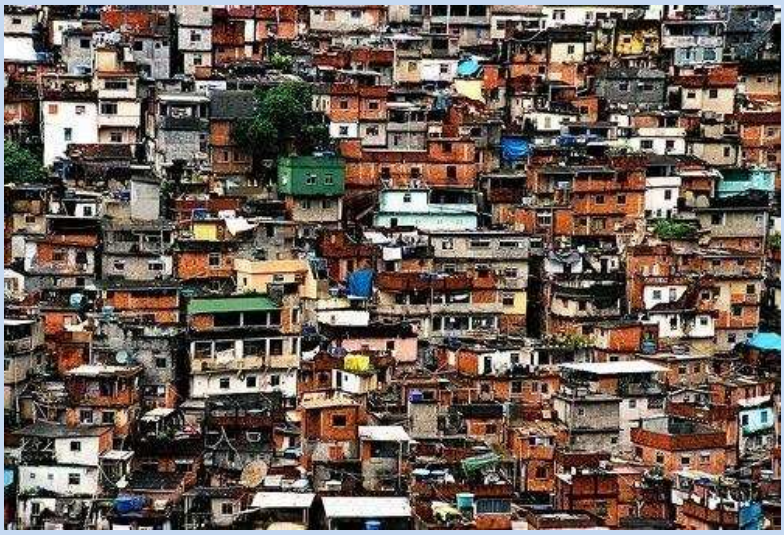
Thiago Hérick de Sá. I hope to live in a global society in which the lives of the poorest people are worth more than the wealth of all the richest ones.

Raj Patel. Luckily, many people understand that there are dialectics between leaders and led. History's great moments have come through active, intelligent, widespread organisation in which people have been encouraged to think for themselves. Agroecology embodies this kind of principle – in which everyone is a scientist, activist, critic, transformer and, finally, a penitent before nature. The spread of these ideas through organisations like *La Via Campesina,* through urban food movements, is a source of inspiration. We cannot build a better world without tearing down the rapacious elements of this one. You cannot have a monoculture and a polyculture in the same place at the same time. The monoculture must give. This means uprooting industrial agriculture – fighting its predations, its power, its representatives, its culture, its lies, its policies. Not easy. Yet I'm given hope by the millions of people who think it is possible, and fight this fight daily.

Summary

Brooke Aksnes. One of us quoted from Antonio Gramsci's *Letters from Prison*, written during a dark time for him as well as in Italy and Europe, in which he said that he was 'a pessimist because of intelligence, but an optimist because of will'. Pessimism such as that expressed above must not lead to despair, while optimism such as that expressed here must have some basis in reality. We have more faith in personal and community good will and civilised ways of life than we have in the integrity of institutions, corporations and governments. These seem almighty now, but history tells that times change. One inspiration, indicated by Ashok Bhurtyal, is the courage of the people of Himalayan Nepal after the earthquakes. Another is the example of integrity as expressed by Arundati Roy. Even more are the citizens' and social movements rising and flourishing all over the world whose aspirations are expressed positively. Yes, we do believe that another world is possible.

10 Make any other relevant remarks, as you may wish



The greatest challenge now is to avoid ecosystem collapse. There are too many of us, often living in misery. Population growth must be slowed, stopped, and reversed as a top priority

Editor's choice!



Mark Wahlqvist

Whether the tide of human and ecological nutrition affairs can be turned in the diminishing time-frame available before habitable ecosystem collapse occurs, depends above all on four factors. One, is slowing, stopping and reversing population growth. Two, is arresting ecosystem destruction, particularly that caused by energy production at the cost of food and water security. Three, is better strategies to resolve conflict, including agreement to meet basic needs in less materialistic ways. Four, is providing satisfying and productive livelihoods in all populations and communities.

Geoffrey Cannon. The world and the biosphere is being damaged by human activity. Repair and recovery is possible only after this is admitted. The outrageous conditions of life in many parts of the world, especially those that have been colonised, exploited or invaded, are also symptoms of a general sickness. Ebola, Gaza and the

Islamic State are signals, as are melting glaciers and vast storms. It is not easy to discern how the human species can step off its present path. It would be nice to think that things can only get better, but this is not an evidence-based position.

Brooke Aksnes. The solutions to global nutrition issues – including associated economic and environmental concerns – are common sense. Unfortunately, these solutions become complicated when conflicting economic, political and consumer interests are put before the well-being of humans. But food systems that operate in a local context and respect human labourers, animals and the environment are universally possible and are the answer to many of the issues humanity faces today

Diana Parra. When we envision solutions in bleak times, these may sometimes seem like dreams. But 'in dreams begins responsibility'. There is movement. I think of the citizens of the small town of Malvinas in Argentina, who blocked the construction of a Monsanto plant for a year. I think of the national, municipal and local governments of more countries that are defying Big Food and Big Drink, and passing laws and regulations that protect children from predatory propaganda. I sense hope in the air.

Sara Garduno-Diaz. One key is knowledge and practice of growing and cooking one's own food. Valorising traditional knowledge and wisdom is also important. I highlight the importance of respect for diversity, of people, of solutions, of food systems.

Maria Alvim. Many things in the world need changing, and I feel overwhelmed. I try to do my best. As a nutritionist, I educate. As a consumer, I make healthy and sustainable choices. As a human, I am compassionate and humane.

Claudio Schuftan. I chose public health nutrition as my life's work 40 years ago, after qualifying as a physician in my native Chile. In the early 1970s, socially conscious people became politicised there, because of the changes occurring in the country. For me, then, nutrition blended science, medicine and politics. Undernutrition and related infections, and high infant and young child mortality were endemic in Chile at that time, as now in Asia and Africa and among other populations rendered impoverished and marginalised. Nutrition work made me an activist. It still does.

Summary

Brooke Aksnes. Some of us take the opportunity to make a statement of personal or professional commitment to the causes we believe in or of faith in the future. Some of us are more aware of dark times now and ominous prospects ahead. Mark Wahlqvist may well speak for us all, as he states what he believes are the over-riding priorities now and in future. These begin with the need to check and reduce what is now gross population overload, itself a driving force of other big global troubles.

Conclusions

The *Visions* editors write:

Our *Visions* are snapshots taken by us – a selection of *WN* team members and contributors – at this time in history. They were edited and published over a period of a year and are now here condensed and edited again for this commentary. They follow a somewhat similar *WN* project in the context of the *World Nutrition Rio2012* conference (see Box 1, below).

More Visions needed

We recommend that more such initiatives should be undertaken and published by other publications or organisations and that the net for contributors is cast widely, because nutrition as a branch of public health is now growing fast. Money is too various to be left to economists, and health in most aspects is beyond the scope of physicians. Likewise, the theory and practice of nutrition needs to be informed and enlightened by other professional disciplines – and also by civil society organisations, social movements, concerned parents, community members, and citizens.

What we are suggesting is not new, of course. For example, a recent relatively broad-minded initiative is GLiMMER™ launched in mid-2015 in the US by David Katz of Yale University and Dan Buettner. This involves, among many others, *WN* team members or contributors Claus Leitzmann, Walter Willett, Barry Popkin, Boyd Swinburn, Shiriki Kumanyika and Yoni Freedhoff. *WN* concluded at the time:

> GLiMMER is a return to age-old beliefs and practices that are a hallmark of most developed civilisations. It sets aside the 'quick fix' ideology of single causes and single diseases characterising conventional medicine and nutrition, in favour of advice on the good life well led. This is the cardinal principle of the natural philosophy of dietetics, devised and developed in many different civilisations. Dietetics became obscure only as from the 19th century in Europe and then elsewhere, as a result of materialism and industrialisation. This debt to history should be fully acknowledged.

We advocate for more open minds on the nature, value and future of nutrition in all its aspects and dimensions – and also for open hearts and spirits.

Fears

We are generally agreed on some of the most troublesome or menacing global concerns and threats. All of these have been identified for many years and reflected in *WN* since its beginnings, but now with much greater emphasis and urgency – as even of over-riding importance. The five we identify as of special significance are all inter-related, and should be addressed all together. These are:

- *Misdirected causes*
  Too much importance is given to the immediate biological, 'proximal' causes of health, well-being and disease. Too little attention is paid to their 'distal', social, economic, environmental and other structural causes. As a corollary, there is too much focus on quantitative states of disease and not enough on qualitative states of well-being. Also, interventions based on or adapted from medical models typically do not address the reasons why populations are deficient or impoverished in ways that cause widespread and epidemic disability and disease.

- *Increased inequity*
  The prevailing 'free market' political and economic system overall generates greater flows and amounts of money mostly in and for already money-rich countries, organisations, companies and people. But it also increases inequality and relative and absolute poverty, especially within the least-resourced regions, countries and communities -- notably those that have suffered famines, wars and invasions. This is all wrong. It is also dangerous, because awareness of gross contrasts in conditions of life is liable to enrage impoverished populations.

- *Privatised governance*
  National governments and UN and other international agencies continue to abdicate responsibility for protection of public health and public goods. Transnational and other huge corporations correspondingly grow stronger and more powerful andare thus increasingly able to transform public goods meant for welfare into private commodities used for profit. One prominent effect is the irreversible displacement of established food systems and meal-based dietary patterns with ultra-processed snack and fast food and drink products.

- *Abused resources*
  Progress and development continues to be gauged in terms of average amounts of money circulating within countries and other populations. This crude measure, as well as being unfair and misleading, is also a road to catastrophe. It causes depletion, degradation and destruction of human, living and physical resources, climate disruption, environmental disaster, urban and rural squalor, and also misery, famine and violence. It contradicts any idea of sustainable development and leads to a world much of which will be unfit for habitation.

- *Wrong policies*
  Needed now is acceptance and use of a conceptual policy framework based on principles that address actual and projected realities and thus aims systematically to reduce the scale and weight of all human activity. Many documents have been issued by UN agencies, national governments and other bodies on global prospects. But they almost all remain encased in the paradigm of constant material growth and industrial expansion, a prime cause of present crises and future calamities, which cannot be sustained.

Box 1

The *World Nutrition Rio2012* visions

Visions was preceded by another *WN* series, *Looking into the future, published in April and also in May 2012*, in the context of the *World Nutrition Rio 2012* conference. Contributors – 29 altogether – were asked four questions:

1 What do I hope Rio2012 will achieve?
2 My advice to a young public health nutritionist?
3 When I am optimistic, what is my vision?
4 When I am pessimistic, what do I foresee?

In the April issue, contributors were Marion Nestle, Philip James, Reggie Annan, Barrie Margetts, Catherine Geissler, Harriet Kuhnlein, Claudio Schuftan, Geoffrey Cannon, Agneta Yngve, Barry Popkin, Ricardo Uauy, Urban Jonsson, Geof Rayner, and Tim Lang. In the May issue, they were Renato Maluf, Fabio Gomes,. Sabrina Ionata, Inês Rugani, Asma Ali, Christina Black, Roger Hughes, Nahla Hwalla, Sara Kehoe, Shiriki Kumanyika, Mark Lawrence, Carlos Monteiro, Jean-Claude Moubarac, Isabela Sattamini, and Boyd Swinburn.

The 'pessimistic' and 'optimistic' questions are essentially the same as two of our *Visions* questions. In 2012, answers in general were less wide-ranging than those given now – reflecting perceptions of those chosen to contribute, or changes in local and global circumstances, or both. Extracts from three pessimistic answers in the final selection were:

*Carlos Monteiro. T*he global food system controlled by transnational agribusiness, food processors, and retailers, only concerned with maximising their profits and their returns to shareholders, with no responsibility or real concern for public health or public goods.

Fabio Gomes. I fear that all humans and living beings will be owned and controlled by a few. That rights will be turned into private goods, shared only when subjected to the exchange of money, power, and status. I fear increase in privatisation of fundamental and elemental public goods, leading to ownership of lives and slavery of the planet.

Isabela Sattamini. Greed. I fear the predominance of greed and the abuse of life. The bad use of our resources for unjustifiable ends is too dangerous. Sometimes I wonder if some world problems can ever be resolved. Is the political will there, to do what most matters in the public interest? Obviously not yet.

Extracts from three of the optimistic answers in the final selection were:

Shiriki Kumanyika. A world in which the commitment of the dynamic global food system is to feed people well, in a way that allows them to survive and thrive in the environments in which they find themselves. Once we figure out what that will look like, we will begin to create it, involving powerful stakeholders from multiple sectors.

Jean-Claude Moubarac. More dialogue between disciplines, and interdisciplinary work better to understand health and disease. Our understanding of human diversity, both in biology and culture, makes us realise that there are more fundamental similarities than differences.

Boyd Swinburn. A global wave of food democracy, where information access and levers of influence shift away from the big players of governments and food corporations and towards the public. Increasing monitoring and accountability can contribute to this shift in power.

Hopes

Many of us nevertheless remain hopeful and even optimistic. As shown above, Ashok Bhurtyal of Tribhuvan University in Nepal says:

> My greatest hope lies in local communities. People seen as being at the bottom of societal hierarchies, including impoverished and indigenous communities, still practice methods that ensure their nutrition and protect their health, that have been nurtured over millennia and in tune with nature. These customs should be respected.

Stefanie Vandevijvere of the University of Auckland in New Zealand says:

> I hope that new global movements will be created to reduce the impact of transnational corporations on everybody's meals, diets, health, environment and lives. I also hope that more and more societies will collaboratively re-experience living and eating convivially. Well-being is about nourishment and caring about each other, our culture, and environment, instead of about money and power.

José Luis Vivero Pol of the Catholic University of Louvain in Belgium says:

> I envision a world in which food becomes and remains a common good for the commonwealth.

George Kent of the University of Hawai'i in the US says:

> I hope that we all give more attention to how people can live together well at the local level, in strong communities. If ways are found to live together that are so excellent that others emulate these arrangements, the hunger problem will be solved from the bottom

Raj Patel of the University of Texas at Austin in the US says:

> Organisations like *La Via Campesina* are a source of inspiration. We cannot build a better world without tearing down the rapacious elements of this one. You cannot have a monoculture and a polyculture in the same place at the same time. The monoculture must give. This means uprooting industrial agriculture – fighting its predations, its power, its representatives, its culture, its lies, its policies. Not easy. Yet I'm given hope by the millions of people who think it is possible, and fight this fight daily.

Diana Parra of Washington University, St Louis, Missouri in the US says

> I think of the citizens of the small town of Malvinas in Argentina, who blocked the construction of a Monsanto plant for a year. I think of the national, municipal and local governments of countries that are defying Big Food and Big Drink, and passing laws and regulations that protect children from predatory propaganda. I sense hope in the air.

We are impressed by the fact that in different ways and with different emphases, many of us are saying the same thing. We guess that none of us would disagree: the future is not with the established systems of power and control. It is and must be with people personally and collectively standing up, speaking, and acting with conviction and courage, in combination with public interest organisations, social

movements, genuinely democratic and accountable professional associations, rural and urban cooperatives and syndicates, and political parties. We envision a global network of alliances with harmonious purposes, intentions, and work. These should amplify the declarations that have already been issued and work already being done and give more coherence, recognition and authority to the many movements that have already been founded.

This also is not a new vision. We working within public health and nutrition can help to make it work with plans designed to enhance health and well-being and guard against disease within the broad context we have outlined. Rational and sustainable plans will emphasise shared meals, strengthen social coherence, valorise established cultures, multiply local agriculture and food systems, protect rural and urban livelihoods, increase all forms of diversity, cleanse land, air and water, and reduce the burden the human species imposes on the physical world and the biosphere. All this can be worked out and, we believe, can be made to work.

The more that minds and hearts are opened at this time, the better. Much new work is needed. This means new teaching and practice and revised and renewed knowledge, decisions, and actions. It means coalitions and alliances in the public interest that really do gain and sustain the capacity to change or eliminate bad policies and to confirm and strengthen good policies at all levels from local to global. It means becoming one part of the infinite variety of old and new societies that all together can ensure a world fit for our grandchildren and their grandchildren.

Status

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