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2015-2030 Inspiration for work and in life



Claus Leitzmann Institute of Nutrition Science, Justus Liebig University, Giessen, Germany Email: Claus@Leitzmann-Giessen.de

Access September 2005 Public Health Nutrition 'Choices' section here Access April 2012 Rio 2012 vision for the future 14 contributions here Access May 2012 Rio 2012 vision for the future 15 contributions here Access June 2014 Source by Geoffrey Cannon and Claus Leitzmann here Access July-August 2014 Source by Tony McMichael here

Editor's note

The general purpose of the WN Source series is to identify the texts, authors and leaders judged as especially valuable and vital to the profession and practice of public health and nutrition, now and for the future. What should all those who are concerned with agriculture, food, and nutrition in all biological, behavioural, social, economic, political and other aspects, be reading, digesting and applying? How should research priorities be shaped? Who should give key presentations at conferences, and advise UN agencies and national governments? Source addresses these questions. It has a set format. Contributors list and review the texts that mean most to them. The lists are of the 'Top 5' and then of the 'Top 10'. These are followed by choices of the Number 1 text, the number 1 author, and the number 1 champion, leader, and young leader. Source follows similar initiatives published in *Public Health Nutrition* in 2005, and in *WN*. Detailed rules and guidelines are found in the *WN* June Source by initiative convenors Geoffrey Cannon and Claus Leitzmann. Please access this and previous *PHN* and *WN* commentaries as linked above.

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Introduction

Claus Leitzmann writes: Most of the selections I made nine years ago in 2005 for our special issue of *Public Health Nutrition* have stood the test of time. Now there are more rules and guidelines provided for *Source*, and the task has not become simpler, but as co-convenors of this new project Geoffrey Cannon and I have we hope helped future contributors and ourselves by agreeing that the rules can be sensibly interpreted and that personal circumstances and inclinations should be respected.

My selections are based on the lasting impact my selected texts – all of which are books, though there is no need for this in the rule – have made on my thinking, philosophy, and actions both in my professional and in my personal life. I am a native German, and most books I have read over the course of my life are written in German. But these are only of limited accessibility to an international audience and so are not well suited for *Source*. Future contributors to *Source* who are not native English readers or speakers may feel the same about texts in their native languages.

As we have recommended, I tried not to ruminate about which choices to make. What I did do, was to think about the interesting challenge of reviews for about four weeks before beginning to write. The reviews took me longer than I expected, but the venture has been enjoyable and rewarding – for after all, the task has been to explain why I place special value on chosen texts, which is good for me to know! Although I clearly remember the impact each of the books had on me at the time, I felt I needed to make sure that my current recollections and evaluations were valid. I recommend this checking process for refreshment and to refine reviews, but I did not find that my abiding impressions and judgements have changed.

The Top 5



My top five texts are all books that have opened my eyes to the wider horizons of nutrition. Authors in alphabetical order: Alan Berg, William Brock, Geoffrey Cannon, Fritjof Capra, Colin Tudge

Alan Berg. *The Nutrition Factor.Its Role in National Development.* Washington: Brookings Institution, 1973. Alan Berg (1932 -) is a US economist and international development specialist. During his long tenure as the senior nutrition officer at the

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World Bank (1972-1995), he took a penetrating look at the role nutrition can or should play in national development. In *The Nutrition Factor* he affirms that poverty is the root evil of food insecurity, hunger, and starvation in least resourced countries. In his well-documented book, he argues that the quality of human existence is the ultimate measure of any development. He analyses nutrition from political and also economic perspectives in terms of benefits versus costs. He considers the population problem as a relationship between nutrition and family planning, and education for better nutrition. His examinations of non-nutritious food products (junk food), the 'Green Revolution', and reducing food waste, are still hot topics today. His efforts to transform developmental assistance for nutrition have prompted a number of academic training programmes in which nutritionists expand their curriculums to include coursework in nutrition policy, planning, and implementation. His propositions have been widely accepted, and many colleagues consider him to be a global giant in nutrition theory and practice.

William Brock. Justus von Liebig. The Chemical Gatekeeper. Cambridge: Cambridge University Press, 1997. William Hodson Brock (1936 -) is a British professor of history at Leicester University, now emeritus, who has written a number of books on pioneers of science. His wonderful book on Justus von Liebig (1803-1873) is a spirited portrait of this entrepreneurial famous and influential German chemist, who became professor at the age of 21, after studies in Bonn, Erlangen, and Paris. Liebig's contribution to science and society include the discovery of isomerism, the radical theory, the five-bulb-condenser, the silver mirror, iron-nickel-alloys, phosphate fertilisers, and chloroform. He also invented meat extract, yeast extract, baking powder, and baby formula. He has earned his reputation as the father of modern agriculture and modern nutrition. He was the first to bring scientific research and teaching together, an approach that was soon replicated in other countries by his many foreign students. The Liebig museum in Giessen, with its original laboratory, lecture room, and library, is a Mecca for chemists worldwide. He would have deserved a Nobel Prize but he died prior to its commencement; instead, a number of his students became Nobel laureates. There are several old and new books on Liebig written in German, but this biography by William Brock is the best one in English. I believe it to be required reading for anybody interested in the history of science, or in how initial discoveries continue to shape current teaching and practice.

Geoffrey Cannon. *The Politics of Food.* London: Century Hutchinson, 1987. Co-creator with me of the *New Nutrition Science* project, Geoffrey Cannon (1940 -) who in the 20th century was based in his native Britain, has since 2000 lived and worked in Brazil, at first with the Brazilian Ministry of Health and now at the University of São Paulo. He is also editor of *WN*. When in Britain he wrote this big closely referenced book. It followed his two earlier books *Dieting Makes You Fat* (1983, new edition in 2008) and *The Food Scandal* (1974). One of its central themes is the ways in which attempts to improve public health by good nutrition policies and actions are thwarted

by big businesses whose profits depend on unhealthy food products, together with their allies in government and the scientific community. In his words, 'money is not made with potatoes but with potato chips'. He gave me a copy of the book when we first met at the European Congress of Nutrition in Athens in 1991. It shows that again and again scientists who speak up against unhealthy processed food products are blocked, ignored, or sacked, and that many government advisors on food and health have links with the food product manufacturing industry. The book has 565 pages, of which 175 are additional reference material. Not much has changed for the better in the decades since it was published. Today, the clash of interests between the wealth and health imperatives remain weighted in favour of the food manufacturing and pharmaceutical industries whose executives and policies often remain stable, while politicians often do not last long in office. The book remains powerful reading, as a chronicle and a parable. It should be developed internationally and kept up to date – a task for a resourceful organisation, not a sole author!

Fritjof Capra. *The Turning Point: Science, Society, and the Rising Culture.* New York: Bantam, 1982. *Fritjof Capra* (1939 -) is an Austrian born physicist and philosopher resident in the US. This eye-opening analysis examines the scientific and economic crises that began in the 1970s, using systems theory. He highlights the shortcomings of the Cartesian and Newtonian reductionist paradigms that are now evident in the light of full understanding of the physical sciences. These are inadequate as guides to human behaviour and public policy. Fritjof Capra is the founder of the *Elmwood Institute*, whose mission is to accelerate the needed shift from a mechanistic and patriarchal world view to a holistic and ecological view. Much of his thinking, which many felt was futuristic a generation and more ago, is now clearly a crucial guide in the world as it has become now.

Colin Tudge. The Famine Business. London: Faber, 1977. Colin Hiram Tudge (1943 -) is a British naturalist, trained as a biologist, and an authority on the evolution and adaptation of the human and living world. He is author of many books, some on agriculture, food and nutrition, and gastronomy, others on the living world and the place of humans as one species in nature. He has been a research fellow at the Centre for Philosophy at the London School of Economics. The Famine Business is his first book, written at a time when he was a senior editor on New Scientist and a regular BBC Radio broadcaster. It is written with the characteristic Tudge bite and brilliance. It is a pungent diatribe against modern industrial agriculture and food policies and practices, which are based on fallacious and foolish political and economic theories. The Famine Business remains up to date – all the more so with the immense increase of industrial agriculture since it was written. /Editor's note. Colin Tudge is a regular WN contributor. Access his commentary on enlightened agriculture published in two parts in WN in 2013, the first part here, and the second part here. Access his diatribe against agricultural biotechnology published in Feedback also in two parts in <u>December 2013 here</u>, and in January 2014 here.]

The next 10



Colin Campbell, Jared Diamond, Al Gore, Joan Dye Gussow, Frances Lappé, Dennis Meadows, Michael Pollan, Peter Singer and Jim Mason, Hugh Trowell and Denis Burkitt, Walter Willett

Colin Campbell. Whole: Rethinking the Science of Nutrition. Dallas: BenBella, 2013. Thomas Colin Campbell (1934 -) is a US biochemist, now professor emeritus of nutritional biochemistry at Cornell University. He was a member of the 1982 US National Academy of Sciences panel whose report on diet and cancer was published in 1983. He became a celebrity as co-author of the 2005 book The China Study, in which he contends that a proper understanding of science shows that a wholefood, plant-based diet is the healthiest way to eat. In Whole he argues along the same lines. He believes that nutritional science is stuck in a reductionist mind-set, studying chemical constituents of food one by one in an attempt to determine their specific impact on the human body. These studies provide little insight into the complexity of what actually happens in our bodies. He asks why is it, if we have such overwhelming evidence on food, nutrition and health, that population eating habits have not changed, and rates of obesity and chronic diseases are increasing. Whole is an adventure with powerful implications for our health and for our world. Colin Campbell's views are quite often challenged, but he articulates his position with conviction, and maintains that reductionism has served the food manufacturers and is blocking the public from the nutritional truth for optimal health. He will offend some, but will inspire others.

Jared Diamond. *Guns, Germs, and Steel. The Fates of Human Societies.* New York: Norton, 1997. *Jared Mason Diamond* (1937 -) has three parallel careers: professor of physiology at the University of California at Los Angeles Medical School; an authority both in ornithology and ecology; and professor of geography at UCLA. This modern classic book, a gripping read for anybody interested in the evolution and development of the human species, has proved to be very influential. It provides a short history of the last 13,000 years, since the end of the Ice Ages, and addresses a basic question concerning the human condition, which is: Why did human societies evolve and develop in the way that they have done, on different continents? People of Eurasian origin dominate the world in wealth and power. Other peoples, having been conquered, displaced and often largely exterminated, still remain impoverished and vulnerable even after having thrown off colonial subjugation. Jared Diamond believes this is because of the technological (guns and steel) and immunological (germs) differences. Societies that shifted from being gatherers and hunters or pastoralists, and instead became based on peasant farming, gained a vast advantage. He synthesises anthropology, archaeology, ecology, epidemiology and linguistics, showing how the interplay of biology and technology determines the absolute and relative status of societies.

Al Gore. The Assault on Reason. New York: Penguin, 2007. Al (Albert Arnold) Gore (1948 -) is a US politician, Nobel Prize winner for his campaigns on climate change, and former US vice-president during the 1993-2001 Clinton administration. Rather than one of his other passionate books, An Inconvenient Truth and Earth in the Balance: Ecology and the Human Spirit, I choose The Assault on Reason, in which he calls for a politics of life and hope. He sees a trend in US politics towards ignoring facts and analysis when making policy decisions. He heavily criticises the administration of the younger George Bush (who defeated him for the US presidency in 2001) and also the US Congress, judiciary, and the media, for being complicit in the process. He calls for citizens to restore proper democracy. He argues that open and free public discussion and debate, central to the operation of democracy when amplified by a free and accessible press, is now threatened all over the world by television, with its one-way, entertainment-oriented communication and concentrated ownership. Drawing from diverse disciplines, including history, neuroscience and immune system research, as well as various philosophers and prophets, he argues for a decentralised, text-oriented internet, in which open discussion and debate that is vital for a flourishing democracy.

Joan Gussow. *The Feeding Web. Issues in Nutritional Ecology.* Palo Alto: Bull, 1978. Joan Dye Gussow (1928 -) is a US food and nutrition policy authority, environmentalist, and gardener. Professor emeritus at Columbia University, she has been a long-time analyst and critic of the US food system. *The Feeding Web* tracks the environmental hazards of an increasingly globalised food system. Writing in the late 1970s, she predicted the current concern with environmental issues. She exposes pollution and its consequences, overpopulation, and food manufacture, processing, advertising and marketing. She has influenced millions of people through this and her other books and lectures, and by the simple fact that she lives what she preaches.

Francis Moore Lappé. *Diet for a Small Planet*. New York: Ballantine, 1971. Frances Moore Lappé (1944 -) is a US writer and activist. One focus of her perennially bestselling and very influential book is the environmental impact of meat production as wasteful and a contributor to global food scarcity. She argues for vegetarianism, so as to choose what is best for the planet as well as for our bodies. She emphasises that world hunger is not caused by a lack of food but by irrational food policies. The book also features simple rules for healthy diets and hundreds of meat-free recipes. Realising that readers would be sceptical because of thinking that vegetarian diets could not supply sufficient protein, the book gives details of protein combining (as for example grains and legumes) as traditionally practiced in most parts of the world. In a later edition of the book, she emphasises that a sufficient amount of protein is easier to attain than previously thought, except for diets that consist mainly either of fruit, or very low-protein roots such as cassava, or junk food. With Margaret Mead, Rachel Carson, and Joan Gussow, she is one of the most dynamic female thinkers and doers in the US.

Dennis Meadows. The Limits of Growth. New York: Universe, 1972. Dennis L. Meadows (1942 -) is a US economist, professor emeritus of systems management, and former director of the Institute for Policy and Social Science Research, University of New Hampshire. In The Limits of Growth, commissioned by the Club of Rome, he and his three coauthors model the consequences of a rapidly growing world population and finite resource supplies. The book echoes some of the concerns and predictions of Thomas Robert Malthus in his 1798 Essay on the Principle of Population. Five variables are examined: world population, industrialisation, pollution, food production, and resource depletion. The authors explore the possibility of a sustainable feedback pattern that would be achieved by altering growth trends among the five variables under three scenarios. Two of the three scenarios show overshoot and collapse of the global system by the mid to later part of the 21st century, while a third scenario would result in a stabilised world. Updated and expanded versions of the original book continue to generate fervent debate and have alerted many economists and some politicians. I recommended the book in the WN Inspiration series a year ago in 2013.

Michael Pollan. In Defense of Food. An Eater's Manifesto. London: Penguin, 2008. <u>Michael Pollan</u> (1955 -) is a US journalist, author, activist, and also professor of journalism at the University of California at Berkeley. In Defense of Food is a revolutionary and inspiring examination of the food culture and dietary patterns that are dominant in industrialised countries and settings. It explores the impact of 'nutritionism'. This term, originally coined by Gyorgy Scrinis, identifies food with its chemical constituents, or to be more exact those constituents usually known as nutrients and more recently bioactive compounds that have been identified and measured. It assumes that the sum of these chemicals amounts to the value of foods and their contribution to health. It also assumes that the purpose of eating is to maintain health and avoid disease. In common with holistic thinkers throughout history, before and after the rise of nutrition as biochemistry, Michael Pollan insists that the value of a food is more than the sum of its parts and that the reductive analysis of food into nutritional components is a disastrous mistake. He also points out what has always been known and valued in all cultures and civilisations, that food should bring pleasure and be personally and socially valuable, as well as promoting physical good health and well-being. He gives three very short answers to what these days usually seems to be the complicated and confusing question of what people should eat. First: *Eat food*, meaning always prefer whole fresh foods to processed food products. Second: *Not too much*, since over-nutrition rather than under-nutrition is now a more serious threat to population health not just in the US but in most countries. Thirdly: *Mostly plants*, because there is plenty of evidence that a plant-centred diet is the better choice for health, environmental, social and ethical reasons. *[Editor's note. There is more information about Michael Pollan, including his contributions to WN, in Claus Leitzmann's 'Number 1 author', below].*

Peter Singer, Jim Mason. The Way We Eat - Why Our Food Choices Matter. Emmaus: Rodale, 2006. Peter Albert David Singer (1946 -), is an Australian philosopher of ethics. Jim Mason (1950s -) is a US attorney and author. They have co-authored a number of books, including Animal Factories and Eating. They state that of all human activities, agriculture has had and does have the greatest impact on the planet. When we buy food, we take part in a vast global industry that produces pollution, leads to loss of wildlife on land and sea, and causes immense suffering of farm animals reared in artificial factory conditions. The authors propose a number of principles for making conscientious food choices. These include transparency (the right to know how our food is produced); fairness (producing food should not impose costs on others or generate unsustainable costs on the environment); humanity (food should be produced without inflicting unnecessary suffering on animals) and social responsibility (workers are entitled to fair wages and working conditions). Even if preserving and protecting human life and health has more value than all other considerations, which implies that the need for good nutrition may sometimes override other values, food choices should not violate these principles.

Hugh Trowell, Denis Burkitt (editors and chief contributors). *Western Diseases: Their Emergence and Prevention*. London: Edward Arnold, 1981. Hugh Carey Trowell (1904-1989), a British physician who invented the term 'Western diseases', and Denis Parsons Burkitt (1911-1993), an Irish surgeon who identified the lymphoma that is named after him, worked together for two decades at the Makerere University medical school in Kampala, Uganda. They observed that Western diseases were virtually absent in gatherer-hunters and pastoralists, and very uncommon in peasants in pre-industrialised countries and settings – including East Africa. These observations were reinforced by studies in industrialised countries showing that obesity, diabetes, coronary heart disease, hyperlipidaemia and hypertension were all less common, and even could regress, on diets resembling the composition of those of populations where such conditions were rare or uncommon. In this book, 34 contributors gathered together by Hugh Trowell and Denis Burkitt, reported on hunter-gatherers, peasant agriculturalists, migrants, and mixed ethnic groups living in different parts of the world, confirming this correlation. They showed that Western

diseases usually emerge in a defined sequence, with obesity, diabetes and hypertension appearing relatively early and coronary heart diseases and ulcerative colitis later. This and other work of the authors has built foundations for a vast amount of epidemiological and clinical research, which usually supports or confirms the general thesis of the book. It should remain required reading for students of medicine as well as of nutrition.

Walter Willett. *Eat, Drink, and be Healthy.* New York: Simon and Schuster, 2001. Walter Churchill Willett (1945 -), a US nutritional epidemiologist, is chair of the department of nutrition at Harvard School of Public Health. In this lucid book for the general reader, the nutritional modifiers of overweight and obesity and of chronic non-communicable diseases are investigated. The book is well-reasoned, gives good advice, and values the pleasures of eating. Walter Willett presents information and recommendations much of which is based on the three huge ongoing US-based prospective cohort studies for which his department is responsible, together with a large number of other surveys and investigations. He is sharply critical of popular misconceptions about diet and nutrition, and also the official US guidelines with their 'food pyramid, which he argues are wrong and even dangerous. The book provides a new food pyramid which favours vegetables and fruits, including nuts and legumes. He gives simple- to-follow recommendations and suggestions, with specific advice for people with diabetes and hypertension, pregnant women, and nursing mothers.

The Number 1s



My choices above all. The text: Silent Spring by Rachel Carson. The author: Michael Pollan. The champion: Dennis Burkitt. The leader: Nevin Scrimshaw. The young leader: Martina Metz

Number 1 text

Rachel Carson. *Silent Spring*; Boston: Houghton Mifflin, 1962. <u>Rachel Louise Carson</u> (1907-1964) changed history. She was a US-American marine biologist and conservationist, who worked at several important scientific institutions. She explored the biology and ecology of the oceans in three well-received books, before she researched and wrote *Silent Spring*. In it she documents the devastating effects on the environment caused by systematic and indiscriminate overuse and abuse of pesticides. She accuses the chemical industry of spreading disinformation, and public officials of accepting industry claims unquestioningly. Her book was met with

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ferocious opposition by chemical companies. It awoke the thinking US public to environmental concerns. This influenced US and international pesticide policy, led to a global ban on DDT for agricultural uses, and inspired an environmental movement and, in the US government, the creation of the Environmental Protection Agency. During my time working at Chiang Mai University in Northern Thailand, students demonstrated against the use of DDT to control mosquitoes transmitting diseases like malaria. I was asked to join the protests. As an academic this was a turning point in my career and life. I wrote an article in support of the students for the local newspaper. Rachel Carson predicted increased adverse consequences of pesticide use in the future, especially as targeted animal and plant life identified as pests develop resistence to biocides, and weakened ecosystems are invaded by other less vulnerable species that often are even more of a menace. Rachel Carson is celebrated now, and has appeared on a US postage stamp, as if her dreams have come true. But it is her waking nightmares that have become dreadful reality.

Number 1 author

Michael Pollan

I have already chosen Michael Pollan's In Defense of Food: An Eater's Manifesto as one of my 'top 10' texts. But it is the totality of his work that is most impressive. As said above, Michael Pollan (1955 -) is a US journalist and author, initially a naturalist, and later specialising in agriculture, food, nutrition and gastronomy. He is the writer of regular impressive features in The New York Times, some of which are the beginnings of his books. He also spreads the word as an activist campaigner in regular television and press interviews and public appearances. As far as I can see, his best-selling books have done more to motivate people in the US and other countries too, to think about what they eat and drink than have all government efforts taken together. The content of each of his books have not only fascinated me but impressed me with his superb English, perhaps not surprising given his major in English, the scope he has been given by well-resourced media, and the fact that he teaches journalism at one of the top universities in the world. His assault on giant food product corporations whose policies and practices are having ever-more dreadful effects on population health worldwide, on the family and small farmers on which the world's food supply depends, and on the environment, makes his work as a whole as important as that of Rachel Carson. As a nutritionist I am impressed by his superb understanding of the essence of the science of nutrition. All students and all teachers of nutrition should read Michael Pollan's books and learn of the complex and also the simple aspects of this wonderful scientific field. /Editor's note. Michael Pollan regularly features in WN. In April 2013 WN contained an assessment of his work Access it here, It also contained the first of two appreciations of his new book Cooked. Access it here. The May issue contained the second appreciation. <u>Access it here</u>. The June issue carried a commentary by Michael Pollan on gut microbiota and human health. Access it here.

Number 1 champion

Denis Burkitt

I have already chosen Western Diseases: Their Emergence and Prevention, of which Denis Burkitt is co-editor and co-chief contributor with Hugh Trowell, as one of my 'Top 10' texts. One of my heroes since I first met him in 1978, Denis Parsons Burkitt (1911-1993) was an Irish surgeon with many years' clinical and epidemiological experience in East Africa. As well as identifying the lymphoma named after him, for which he was elected a Fellow of the Royal Society, he above all is the great champion of dietary fibre. This means also the whole plant foods that are naturally rich in fibre. He was by no means the first investigator to identify dietary fibre as crucial, as he always emphasised. But he was the foremost evangelist for fibre, and as such a champion of whole food and of plant-based diets. He has had a tremendous impact on public health and nutrition, and on the practice of public medicine. Remarkably, he never had his own research centre or a sophisticated laboratory, or research assistants other than colleagues all round the world. He lost his right eye in an accident as a child, but studied medicine and served as a surgeon with the Royal Army Medical Corps in England and later in Kenya and Somaliland during World War II. After the war, he moved to Uganda. While undertaking a busy clinical practice, and after retirement in Britain, he worked as a self-taught epidemiologist. He compared the pattern of diseases as seen in hospitals and by primary health care professionals in Africa, with their prevalence in industrialised countries and settings. He concluded that many Western diseases then rare in Africa were the result of unhealthy dietary patterns and ways of life, and that diets high in dietary fibre prevent many diseases of the digestive system, including cancer of the colon. Some of his findings are questioned today. In other ways current research has made his original insights even more important. He was also a generous and I would say loveable man. The inscription he wrote when asked to autograph his book says a lot about him:

Attitudes are more important than abilities. Motives are more important than methods. Character is more important than cleverness, And the heart takes precedence over the head.

Number 1 leader

Nevin Scrimshaw

Well before the time of the end of his long life, Nevin Stewart Scrimshaw (1918 – 2013), was generally reckoned to be the world's most influential international nutrition scientist and policy-maker. Part of his citation for the 1991 World Food Prize explains why:

His revolutionary accomplishments . . . in fighting protein, iodine, and iron deficiencies, developing nutritional supplements, educating generations of experts, and building support for continued advances in food quality, have made substantial improvements in the lives of millions throughout the world.

This touches only on some of his work and achievements. When I met him for the first time in 1971, he was already well known for his contributions to nutrition, especially in less resourced countries. He dedicated his career of almost seven decades to the alleviation of hunger and malnutrition in the world. Trained as a physician and physiologist, at the age of 31 he accepted the offer to become founding director of what became the Institute of Nutrition of Central America and Panama (INCAP), based in Guatemala, now a branch of the Pan American Health Organization. He remained in this post between 1949 and 1961, a time of appalling oppression and civil war in Guatemala. During this time one of his teams developed Incaparina, a low-cost high-protein food product made from cottonseed, corn, and sorghum flours, to prevent malnutrition in children. In 1961 he became the founding chair of the new department of food science and nutrition at Massachusetts Institute of Technology. In the 1960s, he compiled a formidable dossier of information on the interactions between nutrition and infection, which some believe to be his most important and enduring work. He founded the Massachusetts-based International Nutrition Foundation, and also the World Hunger Program of the United Nations University, and was a leading advisor to relevant UN agencies and other international organisations. He was president of the International Union of Nutritional Sciences 1978-1981, and counselled this global network over decades. He remained active until well into his 90s, and took special pleasure in active involvement in the international young nutrition leaders' initiative. As a scholar he wrote or edited over 20 books and 650 papers. His dozens of awards and honours include the designation Hero of Public Health in Mexico; a knighthood from the King of Thailand; and seven honorary doctorates. His most enduring influence has been his training of generations of students, a large number of whom are now international leaders.

Number 1 young leader

Martina Metz

I have special respect and admiration for Martina Metz (1980 -). She specialises in nutrition ecology, a course and a discipline I helped to develop in my time as professor at the Justus Liebig University at Giessen, Germany. In her career so far Martina has worked on food culture, obesity, community-based dietary intervention programmes, and transfer of knowledge to sustained behaviour. Since 2007 she has been a research assistant in the Giessen nutrition ecology unit. She teaches and conducts projects on social sustainability for international students, analysis and critical appraisal of vegetarian nutrition, the application and evaluation of methods for dietary competency, and strategies for a sustainable food consumption and life life course and sustainable food consumption. She addresses emerging and transdisciplinary research issues in the nutritional sciences. It is a pleasure to see her already become a leader in the field of nutrition ecology, a discipline and practice on which global health and welfare depends. <u>Access here</u> a list of some of her publications.

Reflections

Looking at my choices now, I see that most are of people of roughly my own generation (born in the 1930s and 1940s) and almost all the authors are European or North American. This reflects who I am, where I am coming from, and important training in the US. It also responds to the brief to *Source* writers to make personal choices. Further contributions should come from Asia and Africa and from a younger generation.

As a German I am sensitive to the fact that the 'master language' in the nutritional, biological and other sciences, is English. This is an obvious challenge to all whose native language is not English. But as well as this, the conceptual frameworks for nutrition until recently in history and traditionally in most countries, are not the same as those in 'Anglo' teaching and practice. This is another reason to hear different voices.

Status

Until my retirement I was professor of international nutrition at the Justus Liebig University in Giessen, Germany. It gives me great pleasure to see so many of my former students continue to contribute to our mutual work on worldwide food security and wholesome nutrition, nutrition ecology, vegetarianism, and the *New Nutrition Science*. I thank all the authors whose books have been and are a pleasure to read, and a source of insight.

Readers may make use of the material here if acknowledgement is given to Leitzmann C. 2015-2030. Inspiration for work and in life. [Source]. World Nutrition September 2014, 5, 9, 757-769. Obtainable at www.wphna.org/worldnutrition/ Contributions to World Nutrition are the responsibility of their authors. They should not be taken to be the view or policy of the World Public Health Nutrition Association (the Association) or of any of its affiliated or associated bodies, unless this is explicitly stated.

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