

FOOD – PUTTING IT ALL TOGETHER, by David G. Schwartz, M.D
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We have covered many issues regarding food in the last 5 years. In this presentation I am summarizing and hitting the high points of these articles, featuring nutrition, sustainable and regenerative agriculture, considering both individuals' relation to food and the socio-cultural, economic, and political forces that shape our nutrition, and I am adding some further discussion about newer publications. This is a high priority topic because the quality of our food is so vital to our health, and, generally speaking, the quality is appalling. No matter what reforms we make in the health care payment system and insurance coverage, if we don't change the way we eat, and if we don't stop poisoning our food, water, and air, this isn't going to give us good health. As Hippocrates said, "Let your food be your medicine." If food is our medicine, then wow, are we really in trouble!

Michael Pollan's Food Rules is probably the most succinct and poignant work among all the food related books I reviewed. He encapsulates his whole premise in 7 words: Eat food. Not too much. Mostly plants. "Eat food" means eat real food, not "edible substances that resemble food."

These are some of his most eye-catching and memorable recommendations:

- Don't eat anything your great-grandmother would not recognize as food.
- Avoid things that have some form of sweetener listed in the top 3 ingredients.
- Avoid products that contain more than five ingredients.
- Avoid food products containing ingredients a third-grader cannot pronounce.
- Don't get your fuel at the same place your car does.
- Avoid food products that make health claims. (It's likely to be packaged and processed.)
- Eat food made from ingredients that you can picture in their raw state and in nature.
- Avoid foods you see advertised on T.V.
- Eat only foods that will eventually rot. ("If bugs don't want it, why would I.")
- Get out of the supermarket whenever you can.
- Buy your snacks at the farmers' market.
- Eat only foods that have been cooked by humans (not corporations).
- It's not food if it came through the window of your car.
- It's not food if it is called by the same name in every language.
- Eat mostly plants, especially leaves.
- If it came from a plant, eat it. If it was made in a plant, don't.
- Treat meat as a flavoring or a special occasion food.
- Eat your colors.
- Eat animals that have eaten well themselves.
- If you have space, buy a freezer
- Plant a vegetable garden if you have space, a window box if not.

I disagreed with #40 on skipping the supplements, because I know that supplements can be beneficial, even if eating well; however, supplements do not substitute for a poor

diet. I take issue with #43, having a glass of wine with dinner, as I do not believe that alcohol has any health benefit. Drink it as you choose, but don't call it a health food.

This book is an eye opener on how our society uses food as a commodity instead of as a medicine, as Hippocrates recommended. The food industry pays little attention to health, and the "healthcare" industry pays little attention to food. Pollan's book is founded on excellent evidence and is a reader-friendly manual for healthful eating. It honors real food and the plants, animals, and farmers and gardeners from whence it comes.

A most important book about the relevance of knowing where our food comes from is FARMACOLOGY, by Daphne Miller. Modern medicine with its high tech procedures tends to promote the illusion that health care can be removed from nature. Patients and consumers are breaking open the awareness that the human body has complex, dynamic, web-like whole systems that are intricately woven into wild nature. Likewise farmers for generations have had to be resourceful and innovative to grapple with the complexities of nature. Farmacology shows the importance of having an intimate understanding of how farming and gardening methods determine the power of nutrition in our food.

This author visits many farms and notes the parallel relationship of restorative farming and human health, in addition to the obvious benefits of clean agriculture for clean food. Six areas of integration of farming and health care and noticeable parallels are: 1. Renewing the soil and the renewing of our bodies. 2. Healthful child rearing by learning from animals' mothering. 3. Stress management in animals similar to that in humans. 4. Integrated pest management and healthy human immune systems. 5. Urban gardens promoting better diets and healing the community. 6. Microorganism diversity in soil and diversity of the micro-biome of the human body.

She visited a biodynamic farm where animals eat a diversity of plants, recycle their waste onto the land, and thereby nourish the biodiversity of the soil and the complex root system of interconnecting fungi and bacteria, called the "rhizosphere." This makes available minerals and enzymes in the best usable form for the plants. The crops are inter-planted and rotated to preserve diversity, not planting one large monoculture of one particular food crop, too common in conventional agriculture, and in some organic farms.

She notes a study of children in two villages. One, in Africa, where the food was locally produced, harvested, and prepared, people ate a variety of vegetables, beans, millet, and occasional free-range chicken, and a village in Italy where children ate junk food. The African children's digestive systems had a great diversity of bacteria and of the types that promote health. The Italian children's gut bacteria were much less diverse, and were of the type that promote inflammation, weight gain, diabetes, cancer and antibiotic resistance.

Dr. Miller's patient, Allie, had spent thousands on medical bills because of chronic bloating, abdominal pain, weight gain, and fatigue. She invited her to "join the farm eco-cycle." 1. Get food from the farmers markets and CSA's (Community Supported

Agriculture in which the consumer pays in advance for a season of produce from one local farm). 2. Eat for diversity. She ate onions, leeks, garlic, basil, parsley, thyme, Jerusalem artichokes, honey, goat milk, kale, dandelions, spinach, broccoli, Brussels sprouts, squash, asparagus, carrots, tomatoes, blueberries, kiwis, cantaloupe, cherries, plums, apricots, apples, and oranges. 3. Eat dirt and bugs. Eat fermented foods, eat the outer peels of vegetables, and don't scrub them too cleanly (assuming no pesticides or herbicides were used). 4. Don't take medications that kill the good bacteria in your body – antibiotics, steroids, etc. 5. Volunteer at a local community garden and a school garden, for exercise, for making wholesome social connections, getting sunlight, and engaging a purpose to serve others. A few weeks later, Allie stopped almost all of her prescription drugs, she was feeling better than she had in years, and all of her lab tests returned to normal.

At Rockin' H. Ranch, calves staying with their mothers longer instead of early weaning, learned from their mothers how to pick the best plants from a very diverse salad of pasture. Correlate research shows that human babies develop a taste and desire for vegetables if their mothers ate those vegetables during pregnancy, and other babies did not if their mothers ate very few vegetables. The same was true if mothers ate vegetables during nursing.

The author points out that not all organic foods are equally nutritious. Organic does not guarantee:

- Food freshly picked from a local farm
- No natural pesticides
- Recycled waste and water
- Animals raised outdoors in pasture
- Fair labor practices and protection of safety of workers
- Inter-planting and crop rotation in contrast to large monocultures

“Health comes from the farm, not the pharmacy.”

Diet For a Dead Planet highlights the concept, “No farms, no food.” We are nearly in that situation if we consider that on real farms, the farmers actually live on the farm, are an integral part of their communities, are intimately connected to the soil, produce high quality real food, and get decent prices for what they sell. Big agribusiness and the petrochemical industry, with collusion with governments, have turned food away from nutrition and into a commodity, and sometimes a weapon.

Before the onset of industrial civilization and commerce, the hunter-gatherer societies knew scarcity at times of drought and other adverse weather conditions, but they had none of the widespread famine and mass starvation of the modern world. Current corporate control of food supply including seeds, agriculture, harvest, storage, distribution, food processing, and retail result in famine, chronic malnutrition, food deserts, an epidemic of sugar addiction, obesity, diabetes, and a host of inflammatory chronic illnesses, as well as the loss of topsoil, depletion of the fertility and vitality of

soils, mass pollution of air, water, and food, greenhouse gases, serfdom of farmers, farm worker and meat packer abuse, community disintegration, and ecological degradation.

Christopher Cook, an award-winning journalist, points out the poisoning of ground and waterways with pesticides and toxic manure run-off from animal factory farms. The meat is permeated with pesticides and growth hormones, with thousands of people dying each year from food-borne infection and hundreds of thousands hospitalized. Most soy and corn products have GMO's and/or glyphosate. Now most non-organic grains have been sprayed with glyphosate. Processed food and sugar produces obesity and diabetes. Meat packing plants cripple thousands of workers, mostly cheap, expendable, vulnerable, non-union, immigrant labor. Cornell University's expert Dr. David Pimentel found that U.S. Agriculture, dependent on petrochemical based fertilizers and pesticides for large monocultures, uses 400 gallons of fossil fuels each year to feed each American. The average supermarket food item has traveled nearly 1,500 miles.

Most of the food items in the shopping cart, especially packaged, and the meat and dairy products, are produced and controlled by a handful of corporations that determine their cost and their producers. Due largely to this corporate takeover, the U.S. loses one farm every ½ hour. "When farms shut down, the social and economic fabric of rural communities and small towns is shattered. And whole generations of highly skilled producers of food are lost. Each time the Justice Department approves another merger or takeover, both farmers and consumers lose more control over what we eat, how is grown, and how much it costs."

The lame excuse for GMO and large monoculture agriculture is that it can feed large number of people. Hunger and malnutrition are not caused by any global food shortage, but by severe economic inequalities and lack of distribution and access, yet global charities like the Gates Foundation pour enormous dollars into large monocultures.

Small, family-run businesses are muscled out by the large corporations that can afford supermarkets' "slotting fees." Corporate retailers can dictate terms to producers, who then dictate to the growers. Retailers have the market power to keep prices high when prices to wholesalers and to farmers keep dropping. Some European countries actually subsidize small family farms because they consider them to be important for quality of life of the society. China is planning now to subsidize small farms. We could do better than giving subsidies to large agribusiness. Food borne illness can cause so much more harm from large agribusiness than small farms, yet it's the smaller producers that get inspected, and the large processors do voluntary testing, with occasional oversight by government inspectors. A Denver Post columnist notes, "If 19 million pounds of meat distributed to ½ of this country had been contaminated with a deadly strain of E. Coli bacteria by terrorists, we'd go nuts. But when it's done by a Fortune 500 corporation, we continue to buy it and feed it to our kids."

A disturbing lack of public debate about these issues goes hand in hand with the food and agribusiness lobbying federal lawmakers and officials with enormous sums of money.

Christopher Cook says that we need a whole new way of thinking about food that encompasses health, affordability, accessibility, ecological sustainability, and economic fairness. Consumers and voters can make a difference. Community Supported Agriculture, where customers get their produce directly from the farms, school gardens, urban community gardens, the training of new farmers in sustainable agriculture, boycotts of the large corporate bad actors, and grassroots political activism, are already having an effect. But major public policy changes need to address these issues.

In The Blue Zones, by Dan Buettner, who studied healthy centenarians in 4 areas of the world, he found a common thread among these peoples was a connection to the earth, land, soil, gardens, and farms, among other things.

I wrote several articles about sugar. The movie, “Fed Up,” and Dr. Robert Lustig’s book, Fat Chance, highlight the highly addictive effects of sugar, that is, mainly sucrose and high fructose corn syrup, and its promotion by industry, targeting children and getting them addicted. Sugar is a main factor in the obesity and diabetes epidemic, especially in children. Dr. Lustig, a pediatrician, describes in detail the metabolic pathways of how sugar creates addiction and disrupts many hormones in the body, leading to cardiovascular disease and diabetes. He dispels the notion of “calories in, calories out,” used by the fast food industry to blame the health problems on lack of exercise and overeating. It is the sugar itself that drives the metabolism to conserve calories, rev up appetite, and gain weight. He says to stop blaming the victim, especially children, and look at the metabolic and endocrine factors that drive weight gain.

In the article about alcohol in moderation, I reviewed the available evidence for the beneficial effect of moderate alcohol consumption, and found that most likely this is not true. The correlations were most likely explained by economic class and social connections, which were confounding variables in attempts to show causation. So alcohol should not be considered to be a food, but rather a drug, and a toxin, natural though it is.

Foods play an important role in detoxification, that is, if they are not contaminated with toxic pollutants. Clean foods can aid the body’s detoxification systems. Blackberries, blueberries, and green tea can help phase 1, and cabbage, broccoli, etc., garlic, onions, eggs, beets, fish oils, turmeric, green tea, and cocoa can help with phase 2. Fiber helps with elimination through the gut.

The article on Sicker, Fatter, Poorer, by Leonardo Trasande, features the dangers of many artificial chemicals that mess with the endocrine system and create havoc in several systems, with some effects lasting to the 2nd or 3rd generation. To reduce exposure to these pollutants, don’t heat food in plastic, reduce foods wrapped in plastic, avoid canned foods to prevent exposure to the bisphenols, avoid food in plastic containers especially in #3’s (phthalates), and #7’s (bisphenols), avoid junk food, eat organic when possible, and when not organic, avoid the Environmental Working Group’s designated “dirty dozen” vegetables, and eat the “clean 15.” Get political action going to remove these endocrine

disrupters and other toxic chemicals from out of our food supply. Call the retailers and say we want better. Jane Goodall said, “Some day we shall look back at this dark era of agriculture and shake our heads: How could we ever have believed that it was good to grow our food with poisons?”

Another perspective on food is that anything we take in through hearing, seeing, smelling, touching is food for the mind/body, and that makes a difference in our health and well being.

The Fate of Food, by Amanda Little, outlines the intricately woven relationships, of, eating, food production, and ecology. “We can taste climate change.” Eating affects climate change, and that, in turn, affects our food. Agricultural production in several parts of the world has already been reduced by climate change. Carbon-intensive agribusiness causes more greenhouse gases, which in turn damage agriculture. Worldwide meat consumption has risen more than population increase in recent years. Beef and lamb are the most carbon-intensive, with high usage of water and release of methane. Many people have changed to vegetarian or vegan diet for the sake of the planet. For one example, to produce a meat substitute burger made of pea protein, “Beyond Meat,” compared to a ¼ lb beef burger, uses 99% less water, 93% less land, ½ the energy consumption, and emits 90% fewer greenhouse gases. As noted earlier, excess meat consumption is not even healthful.

The NGO, “Food First,” also known as The Institute For Food and Development Policy, proclaims it to be a basic human right for people to be able to feed themselves. The former director, Eric Holt-Gimenez, presents his new book, A Foodie’s Guide to Capitalism. He explains the corporate takeover of the global food system, dominating worldwide economic and political systems with corruption, pollution, environmental devastation, and injustice to small farmers who are producing high quality food, in favor of agribusiness’ devitalized, processed, nutrient poor, and polluted edible substances resembling food. Farmers throughout the world have been forced off their land by unfair trade competition by agribusiness, and end up in poor urban settings unemployed or underemployed, with no access to land. Dense urbanization leaves little space for gardening. Small farms with poly-culture are more productive per acre than the large monoculture farms, although, more labor intensive (not necessarily a negative, given the massive worldwide unemployment).

We need to build a different food regime by changing the rules and institutions that govern our food. We need to ask who owns what, does what, gets what, and what they do with it. We need to educate people to understand capitalism, the silent ingredient in our food, and its devastating crises. Fifty million people living in poverty in the richest country on earth, many of whom grow, harvest, process, and serve our food, can’t afford to be “foodies,” because they are too busy worrying where their next meal is coming from. We need to build a new transnational public sphere that critically analyzes capitalism, builds social legitimacy for movements and coalitions for food justice and food sovereignty, to forge a democratic food system in favor of the poor and the oppressed, locally and globally. We need re-distributive land reform, to end current free

trade agreements, and to break up food monopolies. Restoration of community rights to water and seeds, protection from dumping and overproduction. The purpose of production must change from growing commodities to using sound regenerative practices to make healthful food available to people. This movement should not have to depend on the charitable sector, should have strong unions and political and social movements. The reformist and neo-liberal trends within the corporate regime will not do the job because their goal is to maintain the power structure. A new system is needed in which people doing the producing make critical decisions in which environmental and social considerations are at the top of the agenda. Already the construction of alternative food systems at a local level brings together farmers, communities, churches, social workers, educators, small entrepreneurs, restaurants, food and farm workers, and local politicians. Food First helps small farmers with sustainable and renewable agriculture, and supports their struggle to protect their land from being taken over by large agribusiness. We all need to support these kinds of actions, by changing public policy, and by purchasing choices, buying Fair Trade and organic products, boycotting the junk food and the edible substances resembling food produced by large agribusiness, and supporting financially the NGO's like Food First, Oxfam America, etc.

Holt-Gimenez attended farmer-to-farmer soil and water conservation workshops. He quotes one farmer explaining that farming is hard, but to change the way we farm is even harder. We must work harder than we ever worked in our life. "You can't do this work if you don't love. You must love the land, love agriculture, love your family, love your village, and love peasant people. You must love your God. If you don't love, you will never last. It's just too hard. We must love to change the world!"

He listened to the group of poor illiterate farmers in the mesoamerican countryside chat enthusiastically about changing the world.

The author ends the book with, "Love alone won't transform our food system, but without it, we'll never change the world."