We live in a world capable, in principle, of providing a diverse and healthy diet for all, and yet one quarter of its people suffer from frequent hunger and ill health generated by a diet that is poor in quantity or quality or both. Another quarter of the world’s population eats too much food, food that is often heavy with calories and low on nutrients (colloquially called ‘junk food’). This quarter of the world’s population risks diabetes and all of the other chronic illnesses generated by obesity. In Mexico, for example, 14 per cent of the population have diabetes, and in India, 11 per cent of city-dwellers over 15.\(^1\) In the US it has been estimated that one-third of the children born in the year 2000 will develop diabetes – a truly sad prospect, given that most of this is entirely preventable.\(^2\) Study after study in recent years has come to the conclusion that the single most important factor in human health is diet, and diet is something we can shape.

Cheap food is important to capitalism because it allows wages to be lower (and thus profits to be higher) and yet leave workers with more disposable income available to buy other commodities. For these and other reasons, early in the history of capitalism, the food system became tied to colonialism, where various forms of forced or semi-forced labour were common. After the civil war ended slavery in the US, the domestically-produced food system came to rest primarily on the family farm. But after the Second World War the increasing mechanization and chemicalisation of agriculture favoured larger farms. In the early 1970s the US Secretary of Agriculture Earl Butz got Congress to pass a programme of subsidies that rewarded high yields. As a result, the larger the farm and the higher the yield, the larger became the subsidy. Nearly all the subsidies went to large farms, and for a few basic crops: tobacco, cotton, corn, wheat, and eventually soy. Moreover the large farms that could benefit the most from mechanization and chemicalisation became increasingly subservient to the gigantic corporations that supplied...
the inputs and bought the outputs of these factory farms.\(^3\)

This situation remains essentially unchanged today. In 2005 alone the US government spent over $20 billion in agricultural subsidies (46 per cent of this went for corn production, 23 per cent for cotton, 10 per cent for wheat, and 6 per cent for soybeans).\(^4\) The largest 10 per cent of the farms got 72 per cent of the subsidies and 60 per cent of all farms got no subsidy at all. For the most part, fruit and vegetable crops received no subsidies, and the same could be said for most small and medium sized farms. In short, the subsidy program rewards the large yields that result from very large, highly industrialized farms.

Today, while there are still many family farms in the US, the older mixed family farm that utilized manure from its animals to fertilize the land, and practised crop rotation and other techniques to control pests, has been largely wiped out. The giant capitalist farm of today is dependent on cheap oil and government subsidies. David Pimentel, professor of ecology at Cornell University and a globally recognized expert on food systems and energy, has argued that if the entire world adopted the American food system, all known sources of fossil fuel would be exhausted in seven years.\(^5\) At the same time, utilizing such huge amounts of petroleum-based chemicals (fertilizers and pesticides) would not only contribute enormously to global warming, but also would make our toxic environment even more toxic.

In this short essay most of my examples come from the US, because, as the most hegemonic capitalist power in the world, it has done the most to shape the global food system. But I don’t want to give the impression that there is one tightly integrated capitalist world food system. Even in the US, capitalism has not entirely subsumed the whole food system, and while there are few places in the world untouched by capitalism, its degree of hegemony may vary a great deal. Still, up to the present, capitalism has been the single strongest force shaping the global food system, and much of that shaping power has flowed outward from the US.\(^6\)

**THE PROFITS OF OBESITY**

It is scandalous that in the academic world many professors of economics still teach the doctrine of consumer sovereignty when it is so clear that on the contrary, corporations are the far greater sovereign force. Coca-Cola, for example, is the most universally recognized brand name, and is one of the world’s largest and most profitable corporations. But Coke got this way with a little help from its friends. According to food political economist Raj Patel:
… the US taste for Coca-Cola was first chorused in the theatre of the Second World War. The drink itself wasn’t given away during the conflict, but General Marshall went to great lengths to make sure that it was freely available to buy wherever US troops were stationed. The Coca-Cola Company was exempted from sugar rationing [Pepsi was not] so that it might produce a drink that came, for US soldiers, to signify the very lifeblood of the country.7

According to nutritionist Marion Nestle, Americans consume on average 31 teaspoons of added sugars a day, 40 per cent of which comes from soft drinks.8 American teenage boys drink on average 800 12-ounce cans of soft drink a year, while the standard soft drink in vending machines has gone from 8 to 12 to 20 ounces (on average there are 15 teaspoons of sugar in a 20-ounce bottle).9 No wonder the number of overweight children in the US has tripled since 1980. Given that fat and sugar constitute 50 per cent of the caloric intake of the average American, it is also not surprising to find that over two-thirds of all Americans are overweight, while the very obese (at least 100 pounds overweight) are the fastest-growing group.10 Obesity is a risk factor for many chronic diseases, but is most closely connected to diabetes. In the seven years from 1997 to 2004 type 2 diabetes increased 41 per cent in the US. Globally the six-fold increase in cases of diabetes since 1985 almost exactly parallels the global increase in high fructose corn syrup (HFCS) consumption.11

The ideal food ingredient for profit purposes is something that is cheap and that consumers crave. Sweetness is the most desired taste to the point that many if not most people can easily be caught up in an ‘excessive appetite’ for it.12 A craving for sugar is widespread, and recent tests suggest that sugar may be addictive.13 It also happens that many of the widely used sugars in the food industry are among the cheapest inputs to food processing. The cheapness of HFCS makes soft drinks — that typically consist of artificial flavour, artificial colouring, water, and HFCS — among the most profitable commodities produced by the capitalist food industry.14 A common way of classifying foods contrasts calorie density to nutrient density. While some foods may be both calorie dense and nutrient dense, food that we usually call ‘junk food’ tends to be very high in calories relative to nutrients.15 Many soft drinks contain lots of calories but no other nutrients whatever.

The addictive quality of sugar can be compared to that of cigarettes. In part because of the marketing power of corporations like Philip Morris, cigarette smoking is now common amongst children as young as thirteen in
places like Latin America, the former Soviet Union, China, and India, and it is estimated that over one billion people will die from smoking cigarettes in the twenty-first century. But the so-called ‘obesity pandemic’ with its frequent sugar fix may end up damaging more lives than the rapid spread of smoking cigarettes amongst the youth of developing and post-communist societies. Tobacco often kills after the age of sixty, while sugar attacks the teeth of the young and may in many cases be the main cause of obesity and all of its related chronic illnesses throughout life.

Warren Buffet, among the top five richest men in the world, once said: ‘I’ll tell you why I like the cigarette business. It costs a penny to make. Sell it for a dollar. It’s addictive. And there’s fantastic brand loyalty.’ One could say that the same for sugar. It is very cheap and it produces a craving, and in the case of Pepsi and Coca-Cola there is often strong brand loyalty too – a sure formula for fabulous profits in the food industry. It should also be noted that the cost of food inputs (in many cases of ‘value added’ processed foods) constitutes a small fraction of the total price. This is certainly the case with soft drinks, as it is also for most breakfast cereals. For example, the grain in a 12 ounce box of cereal that sells for $3.50 may only cost 25 cents. The rest of the $3.50 reflects the costs of transporting, processing, packaging, and retailing, plus a very sweet profit.

It happens that the sugars, fats, and salts that are so central to junk food, are not only the foods that humans most crave, but also are among the cheapest food inputs. With such cheap inputs it is tempting to increase portion sizes, since the increased cost to the consumer of the larger portion then becomes almost pure profit. While McDonalds led the way, the entire food industry has now followed. Many studies show that as portions get larger, people eat more, and since food itself is a small portion of the costs in food items like french fries, or soda pop, much of the extra cost to the consumer of larger portions is pure profit for the fast food outlet. Indeed, the difference between what the farmer gets and the final selling price of food items sometimes reaches obscene proportions as when on average the potato farmer gets 2 cents out of an order of fries that sells for $1.50. No wonder some burger chains have found it profitable to serve larger and larger orders of fries.

In response to recent criticisms, fast food chains have made a few cosmetic changes, but overall their commitment to deliver large portions of junk food cheap is continuing. For example, in the summer of 2008, Pizza Hut began to aggressively market its new one pound P’zone pizza and dipping sauce, which contains 1,560 calories (the average daily intake of calories should be 2,100 calories) and twice the recommended daily intake of sodium.
Indeed, salt consumption in the US increased by a striking 20 per cent over the ten-year period between 1992 and 2002. Salt itself is not fattening, but it does increase thirst, which in the US is very often slaked by high calorie soft drinks or beer. Further, salt contributes to high blood pressure, a major risk factor in heart disease and strokes. It has been estimated that reducing salt consumption by half in the US would prevent 150,000 deaths a year.

The growth of meat and dairy consumption, with their saturated fats, along with the conversion of various vegetable oils into trans fats, have also contributed to the obesity epidemic and other health problems. The percentage of fat in the average American diet increased from 19 per cent in 1977 to 40 per cent in 2005. French fries drenched in fat and salt constitute 25 per cent of all vegetables consumed in the US, and the per capita consumption of cheese has nearly tripled since 1970.

And this meatification and junkification of diet is now spreading to the rest of the world with dire long term consequences to human and environmental health. The world’s poorer countries already carry immense burdens of infectious diseases. Now they have to contend with the junkification of their diets, plus increased tobacco use, both of which have escalated the incidence in these countries of chronic illnesses such as diabetes, heart disease, and cancer.

The United Nations International Codex Alimentarius Commission, which sets international food norms, is heavily influenced by the food industry. This influence was demonstrated at its November 2006 meeting where it was proposed to lower the limit of sugar in baby foods from the existing 30 per cent to 10 per cent. The proposal was defeated by the combined forces of the European and American sugar industries. In a similar case, the UN’s World Health Organization (WHO) and Food and Agriculture Organization (FAO) proposed, in their 2003 report, *Diet, Nutrition and the Prevention of Chronic Diseases*, a guideline, widely supported by nutritionists, that recommended that added sugars should not exceed 10 per cent of daily calorie intake. This was too much for the US sugar industry to swallow, and they threatened to lobby Congress to cut off its $400,000 annual funding of the WHO and FAO if they did not remove the offending norm from their report. Under the circumstances, it was hardly surprising, if nevertheless still shameful, that the UN bodies gave in.

According to Patti Randall, policy director of Baby Milk Action Group, ‘A bottle-fed baby consumes 30,000 more calories over its first eight months than a breast-fed one. That’s the calorie equivalent of 120 average size chocolate bars.’ ‘Several research studies have shown correlations between bottle-feeding and subsequent obesity’, which is what would be expected.
given the early age at which tastes may be formed. And yet despite these findings, baby formula is aggressively marketed around the world. The soy lobby in the US has convinced the government to buy its soy formula and give it away to mothers on welfare – despite the fact that giving a baby soy formula with its powerful oestrogen is equivalent to an adult woman taking 5 birth control pills a day.

At the same time, because the American sugar industry is protected by high tariffs blocking the import of sugar, it can charge consumers up to three times the going international price, which typically amounts to a subsidy of $1–3 billion a year. This subsidy paid by American consumers of sugar is given to very large and profitable corporations that grow a crop high in calories and low in other nutrients (refined sugar typically has no other nutrients), a crop that consumed in large quantities endangers the health of the world. At the same time, sugar laden food is marketed with a vengeance.

‘Brand loyalty from cradle to grave’ is the aim of current marketing strategies that seem to be achieving just that. Toddlers are requesting brands early in life, with 60 per cent of American children under two watching television (and with 26 per cent having their own television!). According to Schor, children request on average over 3,000 products a year. The food brands that can tap into the human craving for sugar, fat, and salt the earliest end up being the big winners, for kids’ number one spending category (at one-third of the total) is sweets, snacks, and beverages. American children get on average over 25 per cent of their total calorie intake from snacks, and 50 per cent of their calories from sugars and fats added to their food.

The incidence of diabetes among children and teenagers is to say the least alarming: besides the one-third of the babies born in the US in the year 2000 who are likely to become diabetic, about 6 per cent suffer from fatty liver disease, and about 25 per cent have risk factors, such as elevated blood pressure, for heart disease.

The private sector has developed numerous marketing strategies for getting at the impressionable minds of today’s youth by exploiting the underfunding of schools. McDonalds and other fast food chains utilize sets of toys made by children in China to entice American children to want to come back repeatedly in order to complete their set. The hunger and exploitation of children in one part of the world feeds ‘the toxic food environment’ offered children in another part, where soft drink companies gain exclusive ‘pouring rights’ in educational institutions in return for a modest monetary contribution, junk foods find their ways into cafeterias in similar fashion, and some schools even receive free televisions for having students watch ten
minutes of news and two minutes of commercials a day on Channel One in the US. Since so much of this advertising is for junk foods, it would indeed appear that so long as this continues – however many pledges we hear today to turn around the massive increase in healthcare spending in recent decades – we may expect an even greater expansion of healthcare spending in the future.

THE HUNGER OF CAPITALISM

Almost as a hallmark of its dysfunctionality, the same capitalist food system that produces obesity also produces hunger, which in terms of immediate suffering is far more serious than obesity. One of the UN’s Millennium Development Goals is to reduce hunger from the previous 800 million (in 2000) to 400 million by the end of 2015. Yet, since this goal was enunciated, the number of hungry people in the world has grown, to over a billion.

Why is it that the term ‘obesity epidemic’ has wide currency and ‘starvation epidemic’ does not? One reason is that capitalists would rather not call attention to hunger, because its widespread existence stands in such jarring contrast to the ‘chicken in every pot’ pretensions of capitalism. A second reason is that to medicalise starvation with the term ‘epidemic’ seems out of place in connection with something so obviously connected, except for natural disasters, to institutions of human design. A third reason is that capitalistic rationality dictates profit maximisation, and the ‘starvation sector’ of the economy is not one where profits can be made. A fourth reason is that from the point of view of distributive justice or of ethics, the global massacre that is starvation is totally preventable and totally unjustifiable.

Defenders of the capitalist system might point out that hunger and starvation have always been problems, and that we must accept them as we do the law of gravity. But we have the knowledge and technical means to provide a good diet for everyone in the world, and failing to do so stems from radically unjust institutions of distribution. Good intentions continually arise from the grass roots, but more often than not they get deflected away from altering the capitalist institutions that lie at the base of the hunger and starvation. Hunger is basically a problem of poverty, a poverty created primarily by capitalism, colonialism, imperialism, racism, and patriarchy.

Agriculture remains the main source of income for 2.5 billion people, 96 per cent of them living in developing countries. In the late 1970s the World Bank and International Monetary Fund developed increasingly invasive structural adjustment policies (SAPS) which set conditions for developing countries to get further loans, or get better repayment schedules for existing loans, in response to the capitalist-generated ‘debt crisis’. Many
of these countries were forced to develop export-oriented cash crops to pay off debts. With many tropical countries expanding their export crops (such as tea, coffee, tobacco, sugar, flowers, peanuts, cotton, and cocoa) at the same time, the resulting glut on the market produced falling prices. Given that agriculture is the weightiest sector in the economies of over 80 developing countries, the result was devastating. According to Peter Robbins, ‘The collapse of tropical commodity prices represents the most formidable obstacle to efforts to lift huge numbers of people out of poverty and yet, mysteriously, the problem has received almost no attention from the world’s mainstream media’. For example, by 2002 coffee prices were 14 per cent of their already low 1980 price, while cocoa had fallen to 19 per cent and cotton to 21 per cent. Is it really so surprising that a class-biased media would neglect such phenomena?

Worse still, while one might think that coffee farmers would be better off if the price of coffee went up this does not necessarily follow. Kraft and Nestlé, which control 49 per cent of the roasting, are among the small number of importers and roasters that control 78 per cent of the total revenues received from selling coffee. History has shown that when the price of coffee increases it is the large corporations that rake in extra profits, while the money received by the direct producers changes little if at all; just as when the price of coffee falls, it often does not fall for the consumer, the large corporations grabbing the difference.

Developing countries cannot compete with crops grown in the US or Europe because they are so highly subsidized. The North American Free Trade Agreement (NAFTA) between Canada, Mexico, and the US has had a similar impact on Mexico as SAPs and the ‘green revolution’ have had in other parts of the world. During the first ten years of the agreement, 1.7 million Mexicans were displaced from agriculture largely as a result of highly subsidised US food commodities (especially corn) flooding into Mexico. Because US corn farmers receive on average half of their income in subsidies, they can sell their corn on the international market under the cost of production and still make a profit. For instance, in 2002 US corn cost $2.66 a bushel to produce and was sold on the international market for $1.74 a bushel. Many of the Mexican farmers displaced by the dumping of cheap US corn into the Mexican market crossed the border to the US. Before the NAFTA 7 per cent of the 900,000 migrant farm workers in the US were undocumented. Ten years later 50 per cent of the 2 million migrant farm workers in the US were undocumented.

The struggle of farm households is not limited to developing countries. By 1990 20 per cent of farm households in the US had incomes that put them
below the poverty line. And with up to 20,000 family farms shutting down each year, many low income farm families no longer farm. These trends largely account for the fact that the average Iowa farmer is now approaching 60, and that suicide is the leading cause of death amongst US farmers, three times higher than for the population as a whole.

It is the rising incidence of hunger and starvation among children that bodes so ill for the future. More than 18 per cent of hungry people are children under five, and many of them do not make it to five. For those who do survive, physical and/or mental stunting affects 31 per cent of all children in developing countries. Current trends indicate that soon one billion people in the world will suffer impaired mental development because of malnutrition. According to the FAO, malnutrition plays a role in more than 50 per cent of the annual 12 million deaths of children under five. In developing countries 25 per cent of men and 45 per cent of women have anaemia, which is also far more dangerous to women, of whom an estimated 300 die during childbirth each day. Clearly gender relations that disadvantage women play a huge role in the continuation of global poverty. A more thorough analysis of global poverty would need to make gender issues much more visible.

The UN estimates that 1.2 billion people live on less than $1 a day, while 2.8 billion, or 40 per cent of the world’s population, live on less than $2 a day. When food prices spike, as they did in the first half of 2008, the survival of many of these 2.8 billion people is jeopardised, as many of them were already spending 90 per cent or more of their income on food. The deepening global depression has since reduced all commodity prices, including food, but the price of food has still gone up 28 per cent since 2006. Though many prices may fluctuate in the short term, there are several reasons why the price of food is bound to go up in the long run unless some radical changes are made.

- Fertile land that could grow food crops is being utilized for non-food crops, including tobacco, agro-fuels, illegal drugs, and trees for pulp and paper.
- Fertile land is being lost to suburban sprawl, golf courses, roads, parking lots, and mega shopping malls.
- Land is being degraded by industrial farming techniques.
- Global warming will sharply decrease crop yields due to higher temperatures and extreme weather.
- The globalisation of a meat-based diet will divert food grains to animals.
• Speculators, seeing all of these pressures on the global food supply, will bid up the price of basic grains on commodity futures markets.

All of this adds up to rising food prices and increasing hunger for nearly half of the world’s population. It is unlikely that the poor farmers who produce the food will benefit much from higher prices, since they will mostly be skimmed off by the transnational corporations that control the international trade and processing.

THE IRRATIONALITY OF CAPITALIST RATIONALITY
What could be more foolhardy than placing food, the basis of all human flourishing, in the hands of giant corporations, which are obliged to pursue profits in order to further enrich an elite of wealthy stockholders? Indeed, within the framework of existing company law, units of capital must continually attempt to expand by maximizing profits, no matter what the social or environmental costs. The absurdity of our capitalist economic system emerges clearly when our understanding is not blinded by the ideology of market fundamentalism. The two basic institutions of our capitalist system are corporations and markets, and without radical reform neither has the capability of rationally responding to the mounting crises that we face now (and will increasingly face in the future) as the ecological and energy crises compound the economic crisis. Immense corporations whose decisions affect everyone in the world are fundamentally only accountable to a small number of wealthy shareholders, and even to them only in accord with the narrow criteria of profit maximisation. Markets, that in theory are supposed to satisfy social needs, treat enormous and ever-mounting social costs as ‘externalities’ that corporations can ignore and simply pass on to taxpayers, or to future generations.

In India, Coca-Cola’s bottling companies are running down aquifers that farmers desperately need to irrigate crops. Banana corporations have knowingly exposed third world workers to highly toxic pesticides, because the companies figured that they would not have to pick up any medical bills and because poor people desperate for jobs abound, so that sick or dying workers can always be replaced. Meatpacking companies prey upon the vulnerability of undocumented workers, paying them low wages and speeding up the line to the point where injuries become routine. Sugar companies oppose a norm which would lower the 30 per cent sugar now allowed in baby foods to 10 per cent. Giant feedlots (Confined Animal Feeding Operations or CAFOs) pollute the surrounding earth, air, and water with foul odours and toxic substances. Highly subsidised and therefore
profitable ethanol producers buy up much of America’s corn crop (as much as 50 per cent in the near future, on current predictions), and, as a result, raise the cost of food while the world’s poor starve.\textsuperscript{65} Cocoa farmers in Ivory Coast receive so little for their crop that some have had to turn to child slavery in order to survive.\textsuperscript{66}

All of the above examples are taken from our actually existing capitalist system of food provision, and what needs to be emphasized is that they are all perfectly rational from the point of view of profit-maximising capitalism. But this only confirms the extreme irrationality of capitalist ‘rationality’, and the urgent need to bring about radical changes via democratic long-term planning from the local level to the global. It is precisely because today’s global capitalist food system promotes both hunger and obesity while at the same time undermining the earth’s capacity to support us, that we need to fight to replace it at every link of the food chain with a system that is democratically planned to meet the human need for nutritious food and ensure that everyone has access to it, while at the same time leaving the environment – in so far as this is possible, given the damage already done – in an improved state for future generations.

NOTES

3 Another aim of Butz’s subsidies was that by enabling the dumping of basic grains on international markets at below cost of production, the growing US balance of trade deficit could be lessened, and developing countries would become more dependent on the US for food.
4 ‘Uncle Sam’s teat’, \textit{The Economist}, 9 September 2006, p. 35.
6 For a much more inclusive analysis of how the current food system is integrated into global capitalism in ways that undermines not only human and environmental health, but also social justice and democracy, see my recently published book: \textit{Let Them Eat Junk: How Capitalism Creates Hunger and Obesity}, London: Pluto Press, 2009 and Winnipeg: Arbeiter Ring Press, 2009.
9 Global Dump Soft Drinks Campaign, \texttt{http://www.dumpsoda.org}, 2007. See also, Center for Science in the Public Interest, ‘Consumer groups in 20


14 HFCS constitutes 50 per cent of all caloric sweeteners in processed foods. There is considerable debate over whether or not HFCS is more likely to cause diabetes than other sugars. There is some evidence that high levels of HFCS consumption may contribute to heart attacks, kidney and liver disease, high blood pressure, systemic inflammation and increased formation of cell-damaging free radicals. Two things are well established: never has the level of fructose consumption in the human diet increased so rapidly and to such a high level, and HFCS does not trigger the body’s satiation reflex as much as other sugars. P. Roberts, The End of Food, New York: Houghton Mifflin, 2008, pp. 97–8. T. Talago, ‘Too poor to avert diabetes’, Toronto Star, 27 December 2007, p. A27.


20 Schlosser, Fast Food Nation, p. 117.


25 Ibid., p. 75.

26 Nestle, What to Eat?, p. 63.

27 Ibid.


30 Ibid.
33 The health of workers on sugar plantations also needs to be considered. There are approximately 650,000 field workers on American-owned sugar plantations in the Dominican Republic, where in 2004 they received on average $2 for a twelve hour day working in the hot sun cutting cane. See Brian McKenna’s documentary film, *Big Sugar* (2005), produced by Galafilm.
36 Ibid., p. 23.
41 McDonalds, for example, sells or gives away more than 1.5 billion toys a year. Most are made in China, often by children paid as little as 20 cents an hour. See E. Schlosser and C. Wilson, *Chew On This: Everything You Don’t Know About Fast Food*, Boston: Houghton Mifflin, 2006, p. 59.
49 C. Ahn, M. Moore and N. Parker, ‘Migrant farmworkers: America’s new plantation workers’, *Backgrounder*, Food First, 10(2), available online via http://www.foodfirst.org.
51 P. Rosset, *Food is Different*, p. 49.
56 Ibid., p. 98
61 N. Berube, ‘Chiquita’s children’, *In These Times*, May 2005.
63 Lawrence, ‘Sugar rush’.
64 The smell of CAFOs is repellent, and schools near to CAFOs have a higher incidence of asthma. S. Cox, *Sick Planet: Corporate Food and Medicine*, London: Pluto Press, 2009, p. 71. One study found that 25 per cent of hog house workers had breathing obstructions that could cause long-term lung damage. See T. Pawlick, *The End of Food*, Toronto: Greystone, 2006, p. 132.