BOOK REVIEW

THE FOOD REVOLUTION: HOW YOUR DIET CAN HELP SAVE YOUR LIFE AND OUR WORLD
(John Robbins)

A critical book review by Raphaella Prugsamatz*

Why is it that when the power of the dominant few corrupts, the rest of the world is left dealing with the aftermath and cleaning up the mess that neglects basic ethical and moral principles? In reading John Robbins' The Food Revolution, one immediately gets the sense that the book touches on subject matters much deeper than just "how your diet can help save your life and our world". It speaks of the deterioration of honorable business practices sweeping across continents that all end up on our plates, literally. One might wonder why the subject of food should be worth 480 pages when it's not a recipe book. Yet, it is this very basic component of life that feeds not just living things but economies around the world that is sometimes easily taken for granted that we forget its seminal role in sustaining life on this planet. Although the book primarily focuses on the food revolution taking place in the United States of America, it serves as fair warning to the rest of the world to pay heed to the rippling effects of this revolution and a call for a re-education of foundational business principles that incorporates respect for our health as well as that of others, respect for other sentient beings, respect for our environment, and respect for the natural order of things. More than just trying to sell the concept of a vegetarian diet, Robbins has taken the objective approach in sharing a horror tale of how our business values and ethos have morphed into a money bingeing monster that has stripped us of the imperative morals and ethics that we as a consumer nation have strived to uphold and maintain through the centuries.

ETHICAL ISSUES RELATED TO FOOD AND HEALTH PROTECTION

Born into the ubiquitous Baskin Robbins fortune, John Robbins realized at an early age the need to rethink the universal business model revolving around what we put into our mouths and that of others. This of course meant having to leave all his fame and fortune behind and embark on a back-to-basics but enlightening journey of relearning the relationship between business and nutrition.

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It is indeed a phenomenon how we have travelled from the early days of civilization when food sold could be effortlessly traced to its original sources by cautious consumers to our modern day technology-driven society where a small bag of chips can contain a plethora of ingredients doused with scientific names and descriptions that the majority of us modern consumers pay little attention to, yet trust that our interests are well taken care of by the very same corporations that sell these products to us. This ironic shift in consumer behavior has meant that we as consumers have essentially handed the decision-making power to the corporate few who misuse this power to decide our nutritional needs and to determine what is good for us.

This has also meant a shift in the relationship between food and our ability to sustain our health and that of future generations. While tradition has taught us that food consumption is essential for our wellbeing and maintenance of our health, more scientific studies exist today than ever before that link our modern diet with various chronic diseases including various forms of cancers, food-borne diseases, heart diseases, and other weight-related diseases (whether overweight or underweight). Robbins explains that these changes occurring in our relationship with food is directly linked with the food production processes involved. Understandably, these processes in the U.S are controlled by major industries including the meat and dairy industries, the biotechnology industry, and the pharmaceuticals industry, whose priorities have shifted from serving the nutritional needs of the public to serving the needs of their pockets through various cost-cutting, mass production, and marketing strategies that have resulted in an increase in low-quality if not unsafe products and also an increase in the industries' efforts to prevent consumers from knowing the truth behind these profit-driven food production processes.

Taking a closer look at the factory farming practices in the U.S., Robbins has revealed how these have not only compromised the health of meat and dairy consumers in America, but how these health impacts have crossed international boundaries through international trade ties with the U.S. While this has left a lot of consumer groups and government agencies baffled, many consumers are now beginning to ask "How did this happen?". Robbins points to the widely spread standard factory farming practices that has spread throughout the country, the lack of vigilance in the U.S. government's involvement in food safety monitoring, the saturation of false information to consumers by the media and advertising agencies, and the lobbying of politicians by the various industries involved. What this has meant is that while consumers would expect tobacco use to be damaging to the health, they would not expect the food they eat to be harmful. Yet Robbins points out that while the annual medical costs in the U.S. directly attributable to smoking amounts to around $65 billion, annual medical costs in the U.S. directly attributable to meat consumption is $60 - $120 billion. While at first glance this may seem unrealistic, when you factor in the 24.6 million pounds of antibiotics administered to livestock in the U.S. annually for purposes other than treating diseases when the amount used to treat human-related diseases amounts to only 3 million pounds, and also when you factor in the amount of hor-

mones fed to cattle which account for more than 90% of all cattle in the U.S., the aforementioned situation seems quite plausible. Even more mind-boggling is how a major pharmaceuticals organization could earn $300 million a year from the sale of a carcinogenic herbicide while at the same time marketing cancer medication to consumers.

ETHICAL ISSUES RELATED TO THE TREATMENT OF FOOD ANIMALS

As is anticipated in today's highly competitive business world, smaller players are often gobbled up by the few business giants who often seek to redefine business practices, some of which call for the compromising of basic ethical principles in dealing with their fellow businessmen as well as those involved in the business chain. This is the reality of the meat industry in the U.S. that have driven out small farmers who prefer to do things the "old - fashioned way" by allowing their cattle to graze and ensuring that their health is well taken care of and free from the notorious antibiotics and hormones and inhumane practices used by bigger "farmers" operating humungous farms. While the subject of the inhumane treatment of factory-farmed animals has been viewed by the meat industry as a cause of a sizable portion of unnecessary corporate bashing brought about by animal rights extremists, it has become evident why the very same industry can without qualms ignore the principles of such rights in doing their business, which is: production scale. Robbins points to the 10 billion food animals (not counting fish and other aquatic creatures) slaughtered each year in the United States. These include 90,000 cows and calves slaughtered every 24 hours and 14,000 chickens slaughtered every minute in the country. The 10 billion food animals is inclusive of the 90 million U.S. pigs raised for meat out of which 65 million are raised in absolute confinement factories where they never see the light of day until they're loaded onto huge trucks for slaughtering.

So how has the race for production scale compromised the ethical practices of animal farming? The life of factory-farmed animals can be broken down into three basic stages: confinement, feeding, and slaughtering. While this may seem like a far cry from the entitled life that humans beings have compared to other species on this planet, to factory farms they serve the very purpose of meeting production deadlines at the end of each day. When cattle and poultry are raised in factory farms, they are almost immediately destined to a life of extreme confinement conditions that involve overcrowding that provide very little room for free movement, unhygienic living conditions that bring about diseases and deaths, and much shorter life-spans that is free from any contact with nature that animals have a strong relationship with. Robbins points to an even more devastating reality of the young of these cattle and poultry. Veal calves, for example, by nature take about 8 months to suckle from their mothers but in the "veal production process" calves are routinely taken from their mothers and transported to veal stalls less than 24 hours after they are born. For young male chicks that are not destined to grow up to be laying hens, they don't usually make it past the 24 hours after they hatch from their eggs. Again,

since they do not serve the purpose of the "egg production process", it is "standard operating procedure" to throw them into garbage bags to suffocate or to hurl them straight into meat grinders to be fed back to chickens or other livestock.

Turning to what these animals are fed in order to reach production scale, Robbins points to animal waste that is recycled and fed back into the animals' diet in the form of chicken manure, dried poultry waste, and sewage sludge. Even more, pigs and chickens are routinely fed the bones, brains, meat scraps, feathers, and feces of their own species. With the millions of cats and dogs euthanized each year, rendering plants often pick up these bodies and turn them into rendered ingredients fed to factory-farmed animals. These are of course not inclusive of the various antibiotics and hormones added into their diets. One would think that after going through all this, these animals would at least be slaughtered in the most humane way possible. However, with massive production scales, it is almost impossible to ensure these animals can at least go through death peacefully. Robbins explains that what this often comes down to is that it is common that during the slaughtering process, these animals are still alive while being butchered and therefore able to feel the pain and horror of their ultimate demise.

ETHICAL ISSUES RELATED TO FOOD AND OUR ENVIRONMENT

It is blatantly clear today that the magnitude of our current environmental issues has expanded by unimaginable proportions and will continue to do so if we don't change our habits, behavior, and relationship with our natural world. Consumers have become well aware of this and are therefore adapting their buying behavior to reflect their concern for the sustainability of the planet. However, as Robbins points out most consumers are still unaware that one of the most effective ways to make a difference at the individual level is through the way we eat.

While farm animals have played a useful role in the past in preserving our environment, factory farms today have meant that the very same animals are feeding not just consumers but the fast-paced deterioration of our planet. One pound of U.S. beef can take up anywhere between 441 gallons to 5,214 gallons of water before it arrives on the plates of consumers, making nearly half of the water consumed in the country used for mainly cattle. It is of no surprise that with the "food animals" population being greater than that of the entire human population on this planet, we are running out of crucial water resources necessary to sustain life. Consequently, major droughts are already occurring around the world. Robbins points to the daunting fact that out of the 97% of the water available on this planet, only about 0.0001% of fresh water is readily accessible.

Besides depleting our fast-running-out water resources, given the sheer size of the food animals population, another not so pleasant reality we are left to deal with is their excrement. While manure unarguably is very useful natural and biodegradable fertilizer, we really need only so much to fertilize our crops. So what happens to the rest? As Robbins explains, most of this toxic waste goes into the soil and into the water that people ultimately use and consume in

their daily lives. It is therefore not uncommon in the U.S. to find that in areas where there are animal factories, locals have often complained of falling sick. Moreover, these wastes often find their way into natural rivers where they kill of millions of fish and marine life given that the relative concentration of pathogens in some of this waste is 10 - 100 times greater than human sewage. With limited inspectors and monitoring activities to oversee such a catastrophe in the country, it comes as no surprise that a glass of water that people drink in the U.S. could contain more than 10 million water molecules that have passed through the body of the buffalo not counting the other water molecules that connect people with the excrement of animals in factory farms.

To feed the billions of food animals, land is also needed. What this has meant is that precious "rainforests are being traded in for cheeseburgers", as Robbins puts it. Anywhere between 20 to 30 different plant species are destroyed, while an additional 100 different insect species and other birds, mammal, and reptile species are also destroyed in the production of one single fast-food hamburger. With fewer forests, trees, and species come our ultimate confrontation with global warming. It does not need to be iterated here the number of natural disasters that have occurred within this century alone which all come back to haunt us in the form of economic losses. While weather-related disasters cost the world economy about $2.8 billion in 1980, in 1999 it cost the world $67.1 billion. And more than would feed the world hunger that exists today, it has left 1.2 billion people underfed and malnourished and 1.2 billion people overfed and malnourished. A simple comparison of this reality is the 56% of children in Bangladesh who are so underfed and underweight that their health is compromised compared to the 55% of adults in the U.S. who are so overfed and overweight that their health is compromised as well. Along the same lines, the over 1 billion cattle alive on this planet today carries a weight double than that of the world's entire population. We now know that livestock in the U.S. eat 77% of the corn grown in the country plus an additional 70% of grains and cereals which could be used to feed 1.4 billion people. Such disparities have now extended to marine life where humans continue to deplete natural food sources in rivers, seas, and oceans around the world.

ETHICAL ISSUES RELATED TO THE LAWS OF NATURE

At this point, meat eaters might think that vegetarians have it better off. However, this is far from being the case and ultimately brings us back to the fact that it is actually not about what we eat but how we choose to eat. This diet dilemma becomes more apparent when genetic engineering is factored in. Apparently, the biotechnology industry ran out of toys to play with so they decided to play god with the genetic makeup of living organisms, including our food. Playing with nature of course has its consequences. Robbins explains in his book that genetic engineering is the mother-load of all the controversial things we do with our food not only because of its implications on the safety of our food but the implications it has for the thousands of living species in this world.

There are a few biotech giants who have taken upon themselves to prove to the world that genetic engineering is the answer to all our diet woes by playing with the genetic makeup of our crops in the hope of creating "super crops" that are virtually indestructible. Far from being a scientific success story, genetic engineering has proven to be a scientific horror with the hundreds of scientific studies and tests that have time and time again revealed the true potential of the nightmare of genetic engineering. Adding to this, the very same biotech giants control 60% of the global pesticide market. This might lead one to wonder about the relationship between genetically engineered seeds and pesticides and why such prominent companies would opt to operate in both markets. Robbins explains that with the grand possibilities of genetic engineering, these biotech companies have chosen to create highly pesticide-resistant seeds and insect-resistant seeds that enable farmers to spray all the pesticides/herbicides they want throughout the growing season without damaging their intended crops. However, this is also a selling point for their pesticide business as contracts often include loyalty to the companies' herbicides. Consumers therefore end up being poisoned in the process and the fact that currently 99 million acres in the whole world are currently used for planting genetically engineered crops does not help the situation. Adding to the irony is the fact that most of these crops are intended for livestock feed while the same biotech giants continue to claim that their aim is to alleviate world hunger.

On a darker note, scientific tests conducted by the very same biotech companies have revealed that some of their products have the dangerous potential of ending all plant life. Genetic engineering itself depends heavily on a trial-and-error process and less on scientific precision. This, as one can imagine, does not work well when you're playing around with genes transfer between species, including plant species. What this has left us with is an increase in allergic reactions to certain seeds and nuts that have been genetically modified with those seeds and nuts that people are allergic to. This is coupled with other health problems related to consuming genetically engineered foods which contain ingredients and chemicals harmful to the body's vital organs. Genetic engineering has also led to the creation of "Frankenfoods" that involve taking genes from one or several species and inserting them into a completely different species as witnessed in flounder genes being inserted into tomatoes, human genes being inserted into salmon, and rat genes being inserted into broccoli. This leaves little wonder as to why the insurance industry continues to refuse to insure the biotech industry.

LEARNING FROM BEST PRACTICES IN OTHER COUNTRIES

Besides discussing the precarious nature of the food industry in the U.S., Robbins in his book discusses some of the best practices in other countries that could serve as good examples for the U.S. to follow. These best practices are reflected in the general health of the population in those countries which include lower rates of cancer and other food-related diseases. Food-borne diseases are much lower in some European

countries compared to the U.S. For example, annual Salmonella cases in Sweden occur in only 1 for every 10,000 people while in the U.S. it's 1 for every 200 people. Chickens that are infected with the health-threatening bacteria Campylobacter add up to only 10% in Norway while it is 70% in the U.S.

Food-monitoring seems much stronger in Europe than it does in the U.S. While a great amount of antibiotics are administered to livestock in the U.S., in Denmark no antibiotics are administered to livestock for purposes other than treating diseases and as a result animals have better health and producers suffer no adverse effects on their income. Moreover, while Denmark used to have an 82% prevalence of antibiotic-resistant bacteria in chickens prior to their ban on the routine use of antibiotics in chickens, within three years following the ban, this prevalence dropped to around 12%. Moreover, the European Union since 1995 has completely banned the use of hormones in promoting growth in farm animals since they are linked with various human cancers and types of reproductive dysfunction. This of course has affected food-trade relations with the U.S. which resulted in the European Union having to compensate $150 million annually to the meat industry in the U.S. for their lost profit. This amount is of course minute compared to the potential health risks of consuming U.S. beef and so the European Union has been more than willing to pay the stipulated amount.

Additionally, the European Economic Community has fought for a ban on different forms of inhumane farming practices while the U.S. has yet to take any action at all. This disparity has meant for example that 90% of pigs in the U.S. are raised in confinement while there are no British pigs raised in total confinement factories. This has also meant that various animal protection laws currently exist in European countries like Sweden, Denmark, Austria, Ireland, Finland, Belgium, and the Netherlands. The European Union has also taken action against genetically engineered foods and the promotion organic food. In fact, as Robbins explains, it was the European Union that led the "global organic explosion" through a 35-fold expansion in organic acreage in the last 15 years. At present, around 30% of the total farmland in the European Union is organic. Governments, local communities and advocates around the world including Great Britain, India, France, Germany, Netherlands, New Zealand, Australia, Brazil, Greece, and Ireland continue to strongly protest against genetically engineered crops. Major grocery chains in several European countries have also committed to go "Genetically modified organisms - free" while major transnational corporations who previously supported genetically engineered foods have now joined the commitment as well. All these leading best practices highlight the "turning of the tide" in the food business and also in our relationship with the sources of our food. Most important is that it highlights the return of the consumer's voice in preserving the ethical business principles and practices that are crucial in defining our relationship with food and those who feed us.

CONCLUDING REMARKS

The Food Revolution holds valuable les-

sons for those who are working in the food industry and students who wish to eventually work in food-related industries, especially younger generations who will eventually play significant roles in the sustainability of the planet. Even more, Robbins' account of our food revolution would most certainly enlighten consumers about the important implications of their daily food choices. The reality of our food today is far from one that is simplistic and basically good. Nutrition has become a major component of the world's economy and businesses worldwide profit from selling nutrition to our consumer nation. With the rush to conquer food markets and escalate profits, the food industry and its various components have traded in their ethical principles for the very last buck. However, this is not to say that there aren't government bodies, organizations and consumer groups who are not afraid to fight for the preservation of ethical business practices across continents and international trade boundaries. Ultimately, it is up to us consumers to make ethically sound decisions in our everyday buying decisions that carry the respect for our health and that of others, our fellow creatures, our environment, and nature. It is not a phenomenon that consumers can make or break billion dollar industries should they put their minds to it. Consumers need to therefore take back the decision making power that they've handed to their food suppliers and hold them accountable for their unethical business practices and misuse of power. As the renowned Tony Benn advised the public citizen, the five questions that we need to ask of the powerful, in this case the hands that feed us, "What power have you got?", "Where did you get it from?", "In whose interests do you exercise it", "To whom are you accountable", and perhaps most relevant to the aforementioned more-harmful-than-helpful industries elaborated in John Robbin's book "How can we get rid of you?".