

## **The Effect of Food Industry on Human Health**

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### **Abstract**

We are living in a world where capital comes before anything else, which is called Capitalism. I agree that money has a huge role in our lives, but we all should be aware of our actions and the footprint we live on earth. We might not face the consequences on a daily basis, however if we continue putting unhealthy, unqualified food in our body, we will all suffer from severe diseases in a few decades and our next generation will have to live on an unsustainable planet that we have left for them.

Throughout all these years of heavy marketing humanity started to believe that whatever we see on an advertisement is what we should be doing, eating or using. Which clearly means we have no filter towards what society tries to put on our mind and how big corporations use our lives to run their business successfully.

The problem is not only the system that is trying to control our life, it's also how we are not educated enough to make our own choices. When I say educated, I mean all the aspects of education, including emotional, physical and academic education. To be able to distinguish what is good and what is not for our health starts from opening our mind to different resources except social media and television. There is tons of evidence and indexes of effect on human health. If we all just try to have a different state of mind about food and understand how essential nutrition is in our body, everybody will live a long happy life. Since no one wants to spend the rest of their retirement going to the hospital and taking medicine just because the choices you made in your early years were not wise.

Surely, nothing is perfect in this world, nevertheless I tried my best to make as much effort into the research and try to provide a comprehensive academic paper focused on the International economy and human health.

**Keywords:** Food industry, capitalism, international business, corporations, human health

### **1. Introduction**

Since the hunting and gathering culture, Homo sapiens have fought and struggled for food. Over the centuries, people began farming and domesticating animals so eating would be easier and simpler. Eventually humans started to exchange, barter and later to sell the things they need, or just to make profit. The types and variety of food have been expanding rapidly over time. As we all know, our ancestors had to fight for their supper, these days we are surrounded by endless advertisement and marketing of different food products. It might seem odd, in the past there was no problem for people to choose what they would or could eat: people just hunted whatever

animal was simpler to reach. In the past, people had a satisfying diet: plenty of lean proteins, fresh fruits and vegetables. With the fast growing innovations in many areas such as civilization, industrialization, technology, mechanization, economy and expanding condition of lifestyle everything has changed radically. Our mind has shifted, we no longer look for food that is beneficial for us, instead we are all fascinated by the type of foods that appear tasty and tempting. Generally the foods we want nowadays contain so much carbohydrates, sugars and trans fats and are low in nutrition and proteins. We can see that the food industry has undergone the biggest change in its record. Food providers began aiming for faster and easier ways to make their goods. In order to achieve the new success, automation, standardization and generalization became crucial. It all began when the world's first fast food restaurant A&W all American food opened. In my thesis, I will evaluate how this company and other leading firms in the industry have coped to be successful over the decades in one of the most competing industries. When it all started, the whole world was having the problems of lacking materials and laborers and only the most organized and adjustable businesses managed to continue. Corporations started using automation and synthetic fertilizers to produce more ready to eat foods, make more revenue and cut the cost. Apparently, providing inexpensive food and more profits was a way to satisfy both consumers and manufacturers. Nevertheless, it did not last very long, as the consequences of a changed diet on the human health environment became more and more considerable.

The food industry has developed over the decades to meet customers' needs and attitudes. In other words, food has become a product for the profit driven food industry. The industry is made of a compound process of supply, consumption and delivery of food items across the whole world. The food industry is the compound association of farmers and various factories that together provide a considerable portion of the food taken by the community. Needless to say that the food industry makes up all the parts of industry's manufacture and demand. The industry involves many areas such as growing crops and livestock, production of plantation equipment and different types of agrochemicals, food processing, packaging and labeling, storage, distribution, regulatory frameworks, financing, marketing, retailing, catering, research and development, and education.

## **2. Methodology**

One of the fastest developing industries is the Food industry. Indeed, without the Food industry we all would be living nothing better than our ancestors. A coin has two sides, every business has its ups and downs, advantages and disadvantages. Needless to say, the whole world perceives the benefits of Food industry. My question here is what are the major problems and what are the roots. I could spend days listing all the minor issues and complaining all about it. However, I want to save everyone's time and address only the important ones here. One of the biggest problems is how the Food business is running internationally and affecting human health and our environment. As well as how the modern system is wiring us to think what the big corporations want us to think and how big companies use heavy marketing on a daily basis in order to sell more.

I have collected quantitative, qualitative and a blend of both researches to evaluate the current situation of my chosen topic and what the other scholars' opinion about it. Though, I mainly

gathered information through numerical data, which shows the real index and numbers to support my investigation and research. It is extremely easy to come up with a random idea or discuss certain topics. But when it comes to data, everything is on the table. Numerical data gives the whole picture of the development and the outcome of the topic that is being focused on. Since my topic is focused on human health and international business, I have collected data especially focused on the global economy and overall health of the world population. Simultaneously, there are thousands of highly qualified case studies on my chosen topic, so it is my pleasure to review them and learn about other scholars' perspectives. The reason I have used both quantitative and qualitative research is because even though the numbers and statistics make it easier to understand, there is something about expressing things that are important to us in words. To provide accurate and most recent data in my thesis I've sourced all of the data and statistics from legit and international resources which are well known globally and the data was originally gathered from in-real-life experiments and years long studies. I have analyzed the data by year and by origin. The one thing about statistics is that if you look monthly or yearly, it doesn't make that much change. However, when you start comparing the data, it starts to seem that there has been a big change in either good or bad ways. Furthermore, differentiating the date by origin is advantageous in many aspects. Foremost, it is immature to analyze data gathered from different places in the world, not because every region is different, but also it doesn't make sense to weigh up two completely different things. In my opinion, using both qualitative and quantitative data makes it more relatable and it hits home.

### **3. Results**

My paper work has mainly depended on statistical analysis. Since the data available are accurate and significant. Yet, it is much easier and convenient for anyone to understand a simple graph than hundreds of pages of writings. Hence, I have collected well founded statistics from valid sources to bring valued information.

Body Mass Index(BMI) index by WHO shows that, Worldwide, at least 2.8 million people die each year as a result of being overweight or obese, and an estimated 35.8 million (2.3%) of global Disability adjusted life year(DALY)s are caused by overweight or obesity.

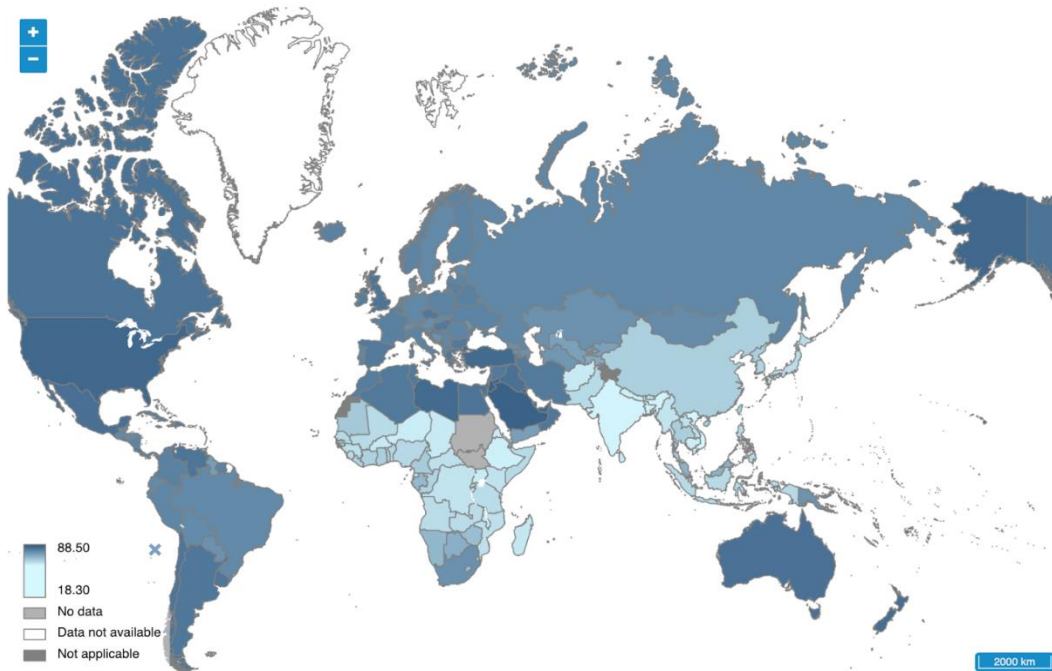


Table 1: Prevalence of overweight among adults, 2022  
Source: WHO

According to a report in “WHO” the number of type 2 diabetes sufferers has increased from 153 million in 1980 to 422 million in 2014. The research published by “Canadian Journal of Public Health” showed that regions with a bigger concentration of fast food restaurants have 2.62 times more hospitalized coronary problems sufferers. Later on, a research of the University of South Australia confirmed the latter.

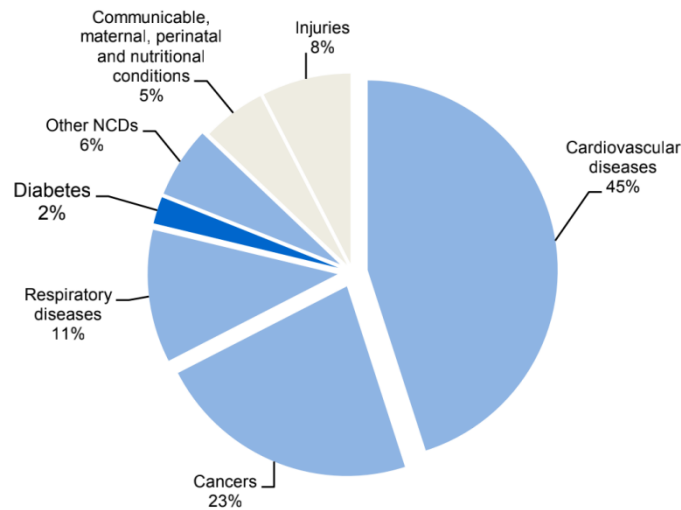


Table 2: Proportional mortality (% of total deaths, all ages) in China  
Source: WHO Diabetes country profile 2016

The World health organization estimated that in China the number of diabetes deaths aged 30-69 was 37000 in males, 56000 in females and aged 70+ was 49300 in males, 82400 in females. Though, China has one of the most functional existence of operational policy/ strategy/action plan to reduce unhealthy diet related to NCDs.

	males	females	total
Diabetes	10.5%	8.3%	9.4%
Overweight	37.2%	33.6%	35.4%
Obesity	6.2%	8.5%	7.3%
Physical inactivity	22.2%	25.4%	23.8%

Table 3: Prevalence of diabetes and related risk factors in China  
Source: WHO Diabetes country profile 2016

To bring a little more awareness, below are some of the data that had my most interest which are gathered from WHO.

9.6 million people worldwide are estimated to have died from cancer in 2018.

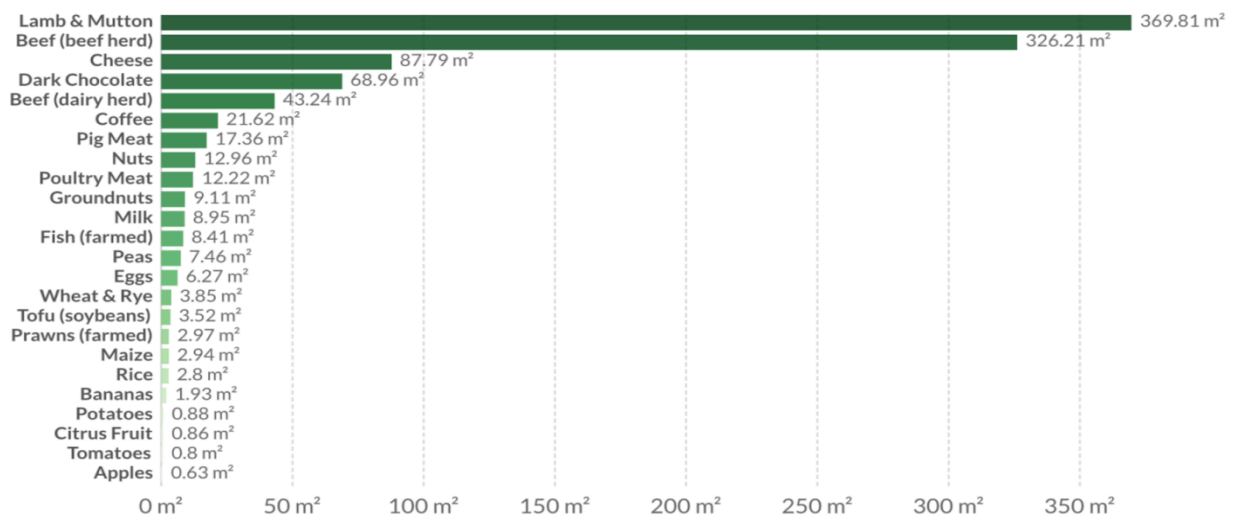
400 000 children develop cancer each year.

30-50% of cancers could be prevented.

US\$ 1.16 trillion is the estimated total annual economic cost of cancer in 2010.

To produce different food, there are different effects on the environment. Numbers of statistics from reliable sources showed that the whole food plant based products have the least effect environmentally.

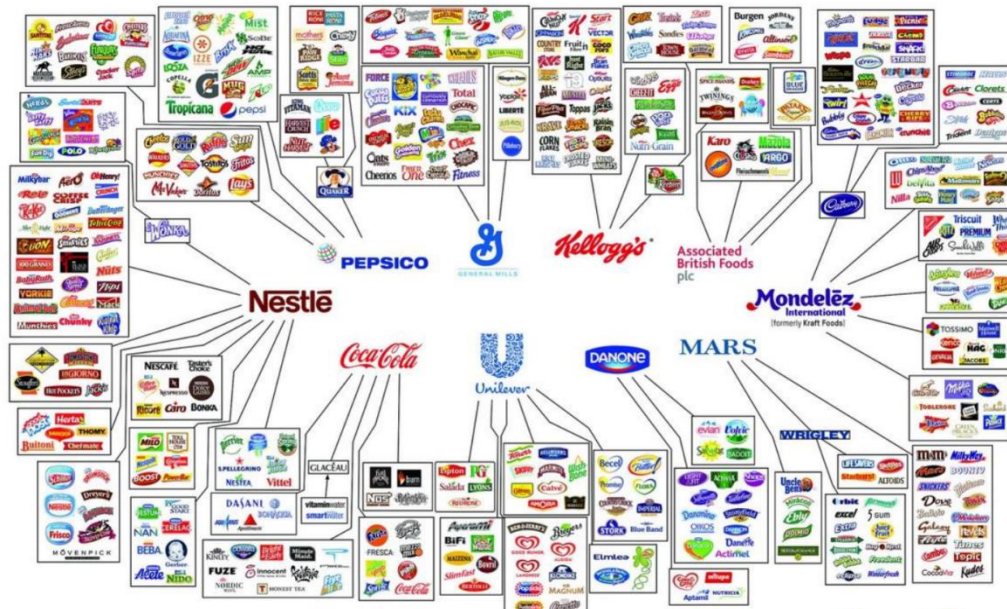
Table 4: Lands used per kilogram of food product



Source: Poore, J., & Nemecek, T. (2018)

In one of the fastest growing industries, there are millions of small players, but mostly big corporations have been having the most influence and revenue over the years. The global food and beverages market was expected to grow from \$5838.8 billion in 2020 to \$6196.15 billion in 2021 at a compound annual growth rate CAGR of 6.1%, which was not too far from reality.

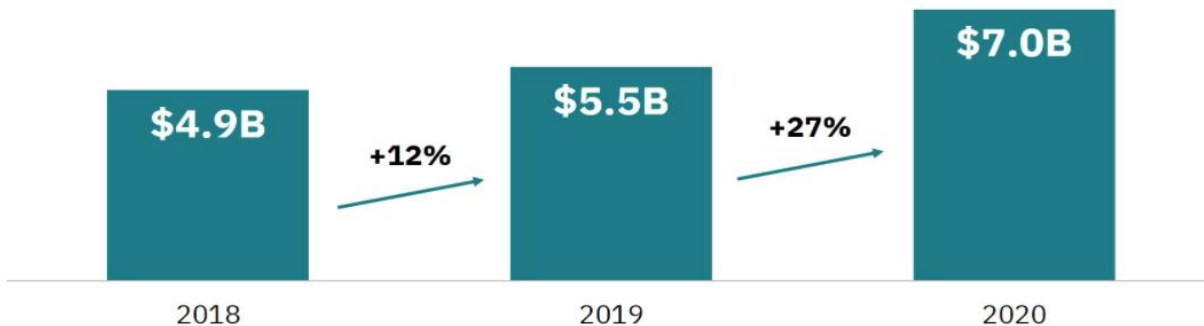
Table 5: Big 10 food and beverage companies



Source: Joki Gauthier for Oxfarm 2012

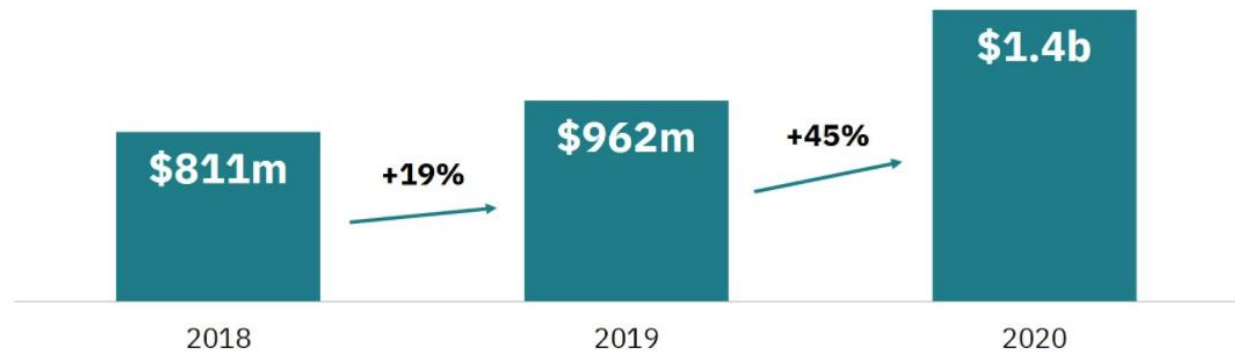
Lately, people are becoming more and more aware of what they put in their body and food's effect on their health as well as the earth. Thus, the whole food plant based diet is on trend and everyone is either following it or considering it. Statistics show that plant based food sales in 2020 grew two times faster than overall food sales.

Table 6: U.S. plant based food market



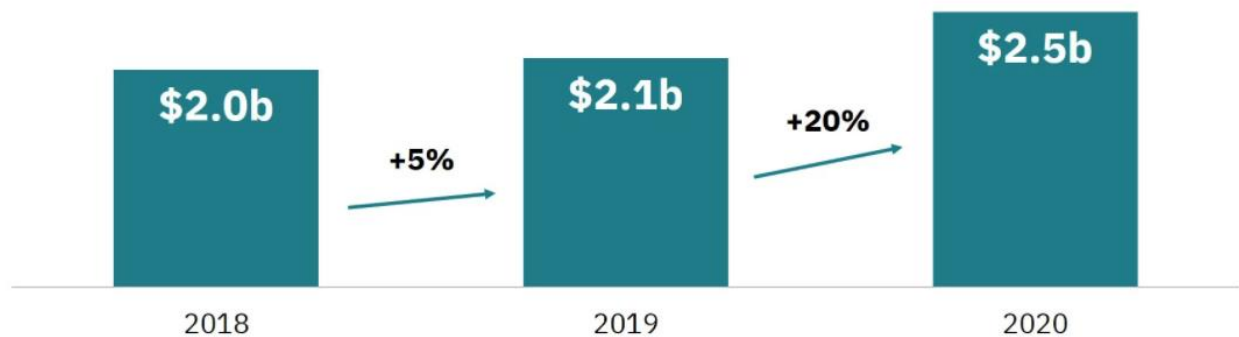
Source: SPINS Natural Enhanced Channel, SPINS Conventional Multi Outlet

Table 7: U.S. Plant based meat market



Source: SPINS Natural Enhanced Channel, SPINS Conventional Multi Outlet

Table 8: U.S. plant based milk market



Source: SPINS Natural Enhanced Channel, SPINS Conventional Multi Outlet

#### 4. Discussion

The result indicates that the food industry is one of the main factors of our lives and it is inevitable to live without it. Thus, the industry's growth is one of the fastest and has the most revenue. The need for food in our lives on a daily basis lays the basic reason for its growth and demand. Consequently, the prevalence of overweight and obesity among both adults and children has increased a lot globally. To be specific, the same result came out in China as well. Apparently, China has the largest market and consumption due to its large population and fast growing economy. Following the high rate of obesity, cancer rate goes higher too. Most common cancer cases globally and in China include lung cancer, colorectal cancer, stomach cancer, liver cancer etc.

In addition, cardiovascular disease takes up to 45% of mortality in China. Added to that, WHO reported that the number two diabetes sufferers has increased 4 times more in only two decades. Top risk factors of diabetes in China include overweight, obesity and physical inactivity.

Other than the health problem, there is also catastrophe environmentally. For instance, the land used to produce food varies depending on what is being produced. It could be a little like 0.62m<sup>2</sup> to huge up to 369.81m<sup>2</sup> per kilogram. Other than land use, the water is being used extremely. In order to reach the demand of some products, countries import and export their best goods to one another. New Zealand and Australia are China's largest food importing countries. The most valued importing products of China are meat and dairy.

According to the statistics, it is clear to say that food and beverage businesses are led by a few big companies. Which are Nestle, Coca cola, Pepsico, Mars etc. These big corporations are running the industry successfully and meeting the demand of consumers outstandingly. The total revenue of the Food market is about US\$8773,679m in 2022 and most of the revenue is initiated in China which is US\$1298,561m.

Nevertheless, new players are in the game and doing pretty good at bringing new products and new value to the industry. With the help of the new companies, the plant-based market has grown two times faster than overall food sales in 2020. It shows that the people are becoming more aware of food they consume and started thinking of its impact. The U.S plant based food market has grown to \$7 billion in only the last two years. Plant based market also has meat and dairy products, which also have growing sales as well.

Indeed, fast growing business and successful operation provide jobs and occupation for those who need it. That being said, it is helping not only people to have stable income but also it helps the country's economy tremendously. However, disadvantages of the food consumed not mindfully has been causing the deathly diseases for centuries, and this should be something that has to be considered more in the future.

Further research is required to establish whether some food we consume on a daily basis is a factor in getting death rate diseases like cancer and diabetes. Furthermore, whether it is possible to run the food industry in a more sustainable way internationally.

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### References

- Steele, Sarah; Sarcevic, Lejla; Ruskin, Gary; Stuckler, David *Confronting potential food industry 'front groups': case study of the international food information Council's nutrition communications using the UCSF food industry documents archive*  
<https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-022-00808>  
Pedroza-Tobias A; Crosbie E; Mialon M; Carriedo A; Schmidt LA;
- Food and beverage industry interference in science and policy: efforts to block soda tax implementation in Mexico and prevent international diffusion*  
<https://gh.bmj.com/content/6/8/e005662>  
Lauber K; Rutter H; Gilmore AB
- Big food and the World Health Organization: a qualitative study of industry attempts to influence global-level non-communicable disease policy*  
<https://pubmed.ncbi.nlm.nih.gov/34117011/>  
Goldberg RF; Vandenberg LN
- The science of spin: targeted strategies to manufacture doubt with detrimental effects on environmental and public health*  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7996119/>  
Mialon, M; Ho, M; Carriedo, A; Ruskin, G; Crosbie, E.
- Beyond nutrition and physical activity: food industry shaping of the very principles of scientific integrity* <https://doi.org/10.1186/s12992-021-00689-1>  
Schmidt, Laura; Mialon, Melissa; Kearns, Cristin; Crosbie, Eric
- Transnational corporations, obesity and planetary health*  
<https://www.sciencedirect.com/science/article/pii/S2542519620301467?via%3Dihub>
- Ruskin G; US Right to Know *Seedy Business: What Big Food is hiding with its slick PR campaigns on GMOs* <https://usrtk.org/seedybusiness.pdf>
- Kearns, CE; Schmidt, LA; Glantz, SA *Sugar industry and coronary heart disease research: A historical analysis of internal industry documents*  
<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2548255>