

CONSUMED

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bringing into awareness of excessive packaging produced by the
Food Industry

by
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INTRODUCTION

I am creating a three-dimensional artwork conveying the relationship between food consumerism and excessive waste and how it impacts the climate and enter this artwork to the Human Impacts Institute.

Humans Impacts Institute annually select artists to showcase their artworks that regarding to climate change. They are open to a diversity of media including: performance art, dance, spoken word, films, 2d works such as painting and drawing and theatre pieces.

Website - <http://www.humanimpactsinstitute.org/creative-climate-awards>

My goal in this project is to be able to educate and remind people how our actions affects the world and aim to initiate change.



RESEARCH PAPER

Excessive Food Packaging

The Food Industry provides the public with a large variety of food from both local and international suppliers. Farms to grocery stores, businesses in this line of work contribute and are responsible for handling, transporting and maintaining the consumed products in good conditions. Ensuring quality is difficult as most goods are being imported, which is where packaging comes into use.

Packaging is designed to achieve convenience. It is made to contain and protect from the tossing and bumps on the road, designed in a certain way to present, attract consumers and provides them with nutritional information.¹ Since the late 19th century, the need for packaging has aggressively increased as more businesses entered the market. The amount of competition in the Food Industry raises the need for branding and advertising, each aiming to gain, steal customers from other companies. As it is the consumers who pay for the products, they are in control of what and how much the suppliers produce, controlling the amount of profit the supplier receives.

According to the Local Government Association, LGA, 40% of food packaging that are thrown out are unrecyclable.² These wastes are commonly known as Municipal Solid Waste, MSW, which consists of daily use wastes such as packaging, newspapers, food scraps, clothing, technologies and so on. The US on average produces 254 million tons of waste each year as UK produces 290 million tons.³ The LGA researched and compared UK supermarket retailers and have concluded that Waitrose uses the largest amount of packaging with a weight of 802.5 gram, 62.2 percentage are recyclable, however, the rest of 303.5 gram of waste are MSW: almost half of the packaging produced are being thrown out onto landfills, not reusable.⁴

When an individual purchases consumed goods from a supermarket retailer, they are being transported and used at his or her home. Once it is consumed, the packaging is thrown down into the trash chute. On average per capita trash disposal rate, the amount of trash one person throws out, is 4.5 pounds of trash⁵ and only 1.5 pounds are being recycled and composted. The 3.0 pounds of unrecyclable waste are MSW, mostly consists of food packaging. The government funds recycling and waste management companies to collect and sort out the trash people have thrown out and then are transported to landfills or recycling factories. Waste management and recycling companies can't keep up with the discarded output. The more to handle, hence, government funds more money to waste management by increasing tax.

¹ "Food Packaging and Its Environmental Impact." Food Packaging and Its Environmental Impact - IFT.org

² England, Rachel. "Food waste and excessive packaging: What about wrapping up food in beeswax?" The Independent.

³ Boggan, Steve. "Waste not, want not: Britain has become a nation of recyclers - but is it making a difference?" The Independent. May 10, 2013.

⁴ Meikle, James. "Supermarkets' excessive packaging exposed by survey." The Guardian. February 17, 2009

⁵ Kulpinski, Dan. "Human Footprint - Sunday 9 PM ET/PT, April 13. This show will be on televisions everywhere." Human Footprint | National Geographic Channel.

For every packaging being made requires extraction of raw materials: trees, plastic, metals, silica etc.⁶ Statistics collected by Eurostats stated that within the ten years, the Food Industry and other Commercial Industries mainly use paper and cardboard for packaging, as a result, being the main source of waste: some are recyclable and others are considered to be solid wastes. It is discovered that glass is the second most commonly used material in the Food Industry, reaching 15.7 million tons in 2014, following plastic, wood and metal.⁷ Packaging is one of the main sources to the increasing amount of waste. On average the amount of trash each household and retailers throw out increases by 1-3 percent each year. In rare cases, the amount of waste declines, for instance during and after the global financial and economic crisis. Within the two years of that event, 81.5 million tons of waste have dropped to 76.6 million tons due to the economic fall.⁸ Food companies were losing profit, therefore, cutting back costs on both labor and resources. However, the amount of waste rose back up gradually as the global economy recovers from the pitfall.

Not only do companies in the Food Industry strive for convenience, the public and the waste management companies as well. Studies have shown that people have less incentive to recycle due to the complicated, inconvenient waste management systems. The United State Environmental Protectional Agency, also known as the EPA, claimed that 75 percent of the wastes people produce are recyclable, however, on average only 30 percent of that is actually being recycled. The cost of disposing over 11 million waste is roughly 12 billion a year, in which half of the waste are from packaging alone.⁹ With increasing demands for consumed goods, suppliers have to produce more, extracting more materials for packaging turning them into waste, resulting in paying more to recycling and disposal companies due to extra handling and transportation from retailers' bins to landfills. Packaging counts as one of the many costs suppliers have to pay for. The more resources the manufacturers use, the more expensive the products are.

“Most bagged and film lidded produce are categorized as modified atmosphere packaging, MAP, which it replaces the air with mixture of gases that has the ability to slow down the growth of bacteria,” meaning altering the natural state of the consumed goods, adding toxins into the bodies.¹⁰ In addition, the substances on grease-resistant packaging put peoples' health at risk as they produce a chemical called PFOA, which are carried in the bloodstream and may cause cancer and in serious cases, death.¹¹

Not only excessive packaging put risks on the public's health, 42% greenhouse gas emissions, came from the production of goods.¹² Greenhouse gases are compounds released into the air to the atmosphere trapping heat and making the surface of the earth warmer by absorbing electromagnetic radiation. The emission of foreign compounds, such as carbon dioxide, methane

⁶ Lilienfeld, Bob. "From Crisis to Myth: The Packaging Waste Problem (Op-Ed)." LiveScience.

⁷ "Packaging waste statistics." Packaging waste statistics - Statistics Explained

⁸ "Packaging waste statistics." Packaging waste statistics - Statistics Explained

⁹ "Recycling & Sustainability Facts." Busch Systems

¹⁰ England, Rachel. "Food waste and excessive packaging: What about wrapping up food in beeswax?" The Independent

¹¹ Hawthorne, Michael. "Potentially dangerous chemicals found in fast-food wrappers, researchers say." Chicagotribune.com. February 02, 2017

¹² "Excessive supermarket food packaging is undermining householders' efforts to recycle." MY ZERO WASTE. February 18, 2009.

and nitrous oxide, is the leading cause of the rise in temperature, also known as global warming. Methane is the most toxic gas of all.¹³ The release of Methane is the main source that are being released into the air on landfills. "When biodegradable materials such as paper products, food scraps and etc. get sent to landfill, they don't simply break down as opposed to nature, they decompose anaerobically without oxygen. In the process, they create methane which is a greenhouse gas, GHG." Over the years, methane is far more harmful than carbon dioxide. Its rate on trapping heat is 72 times more powerful.¹⁴

There are laws and regulation imposed restricting the materials and amount of packaging being used, however, it is discouraged and frowned upon as it financially burdens supermarket retailers which declines profit.¹⁵ Thoroughly planned and well thought out strategies can have the potential to increase businesses rather than driving customers away. Well known coffee chains such as Starbucks have applied the strategy of encouraging costumers to purchase reusable mugs and cups for discounted beverages, discouraging the use of paper cups that are not recyclable. Bottled water companies have altered the bottle designs, using less plastic.

Statistics have shown that based on the average rate of the growing population, there will be three times the waste in 2100, which may cause serious externalities to the earth and to the people. Members of the World Bank also stated that by 2025, the public will be producing more than 6 million tons of waste each day as opposed to 3.5 million tons, recorded in the year 2010.¹⁶ Currently, sustainable companies and manufacturers are devoting time researching, coming up with ecofriendly solutions to the excessive packaging situation. Some are experimenting with reversing and replacing modified atmosphere packaging¹⁷, designing compostable packaging and utensils etc. Researchers are doing case studies to encourage companies in the Food Industry to use less packaging with statistics regarding customer's decision making when it comes to choosing a product based on the amount of materials used in the packaging. It is concluded that for fresh produce, it is "more appetizing to customers" when they have little to no packaging as it "appears fresher, easier to touch and feel as well as being environmentally friendly."¹⁸ This not only to help customers see the true product without the packaging in the way, but also to conserve energy and reduce amount of handling, transportation, costs and toxicity.

¹³ "Greenhouse Gases." EPA.

¹⁴ "Excessive supermarket food packaging is undermining householders' efforts to recycle." MY ZERO WASTE. February 18, 2009

¹⁵ Editorial, National. "Over-packaging is a wasteful habit." The National. October 20, 2012.

¹⁶ "Global Waste on Pace to Triple by 2100." World Bank.

¹⁷ England, Rachel. "Food waste and excessive packaging: What about wrapping up food in beeswax?" The Independent

¹⁸ Reporter, Daily Mail. "Excess packaging on fruit and vegetables is putting customers off a healthy diet because the food looks older and bad for the environment." Daily Mail

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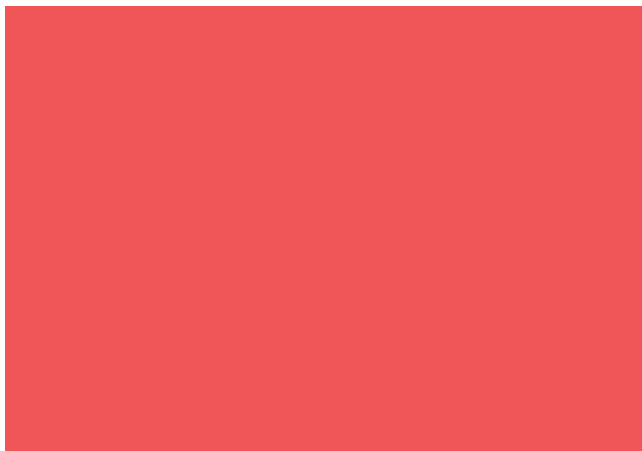
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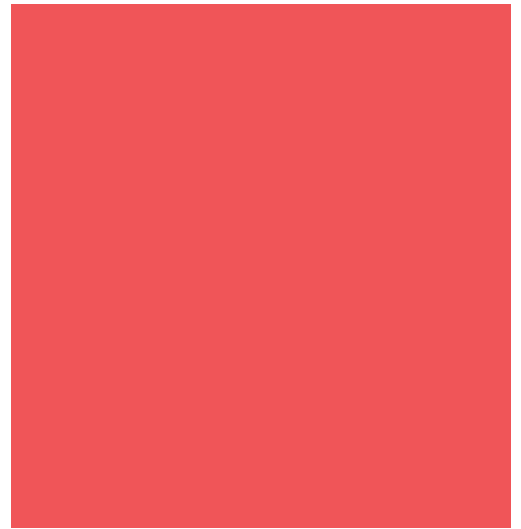
ABSTRACT

Consumerism is controlling the society. People are consuming commercial goods more than they have in the past decades. Product brands, specifically in the Food Industry, are keeping up with the growing consumer population by producing more goods to fulfill the demands. The Food Industry is constantly expanding, not only are they focusing on the production of the products themselves, but time, labor and resources are also devoted into packaging.

Packaging has become a necessity in business, not only it is used to contain and protect the product, it is also means of branding and advertising. Nevertheless, it has become one of the main sources to the rise in the production of waste. Food companies are currently producing over packaged food products, extracting unnecessary amount of raw materials, most are not reusable after manufacture. Wastes that are unrecyclable, non-compostable and non-biodegradable end up in landfills and bodies of water, causing harm and damage to the air and water putting the public's and animals' health at risk. "Consumed" is a three-dimensional artwork illustrating the concept of consumerism and how it impacts our lives. It is made with food packaging to bring into awareness of the amount of waste being produced from the Food Industry alone. From protein bars to take out containers, the packaging constructs the environment of the place we live in, we will be living in our own trash if we do not initiate change to the current production of wastes.

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EXECUTIVE SUMMARY


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“Consumed” is a sculpture illustrating a living environment constructed solely with food packaging. It is to bring awareness of the amount of waste we are producing upon purchasing consumed goods from supermarket retailers, restaurants and cafes. It is to reveal the relationship between consumer culture and wastes by placing them side by side. Majority of the food packaging people throw out are considered as Municipal Solid Waste, MSW, which are not recyclable, compostable or biodegradable. They are being collected on landfills and are thrown into the ocean, which causes many issues that are harming the earth.

- **GLOBAL WARMING:** The amount of MSW left on landfills releases greenhouse gas, methane and carbon dioxide that has the ability to trap heat, causing melting icecaps, rising sea level and extreme weather.
- **AIR POLLUTION:** Burning trash on landfill releases mercury and carbon dioxide which can be toxic if constantly exposed.
- **WATER POLLUTION:** Solid wastes that are thrown into the ocean kills wildlife as they mistaken them as food, potentially could disrupt the ecosystem.
- **DEPLETION OF RESOURCES:** Companies are extracting more, unnecessary, resources for packaging, which depletes the scarce amount nature provides, most importantly majority of it turns into waste.

In reaction to this issue that is causing immense amount of harm to the environment, “Consumed” reminds the public that the production of trash can cause serious damages, especially with food companies that are over packaging their products. Instead of having the luxury to live in a beautiful, clean city, we will end up living in a dirty, unappealing environment, breathing in toxic air, no clean water to drink and no fresh food to eat. Generations to come will not be able to see the original sight of nature and be able to live in a clean environment.





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