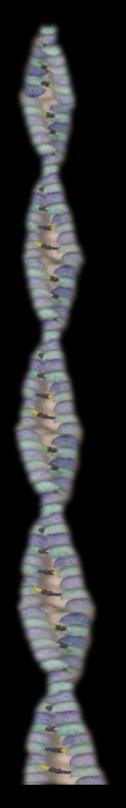
# Science Documents



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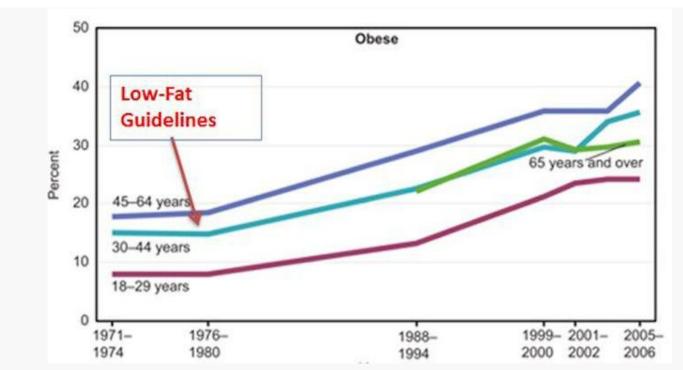
# Effect of Low-Fat Edible Items Advertising on Global Health Aparna Sai Ganesh<sup>1\*</sup>, Akshaya Sai Ganesh<sup>2</sup>

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## **Thought Process**

Diet culture is essentially what the name entails, a culture revolving around consuming the perfect diet in hopes of attaining the ideal body and health. This phenomenon has captured many across generations, tracing all the way back to the ancient Greeks. The idea of maintaining a diet of certain foods (in Ancient Greece the Mediterranean diet) to configure the most athletic physique was held in high importance. But this idea of creating the perfect image of oneself by cutting or adding particular foods evolved exponentially from the sought-after healthy lifestyle of the Ancient Greeks<sup>1</sup>.

published in 1912. The commercials, the fad diets, and the false promises of a diet chased him wherever he went on his journey to get to his desired weight. Although this book was written in 1912, the same frustrations are experienced by many today<sup>2</sup>. In addition, there were many popular magazines at the time which included advertisements that mainly targeted women to get slimmer bodies. One of these advertisements from the 1920s publicized medicated rubber garments that claimed to "dissolve fat". No evidence was found to suggest that this garment was practical, or effective<sup>3</sup>. It is evident that this chase to become happier by achieving this ideal body



National Center for Health Statistics (US). Health, United States, 2008: With Special Feature on the Health of Young Adults. Hyattsville (MD): National Center for Health Statistics (US); 2009 Mar. Chartbook.

**Fig. 1.** Graph from the National Center for Health Statistics showing obesity rate increasing despite low-fat guidelines, over time.

Over the years, across the globe including America has had its fair share of emphasized diet culture in all walks of life. For example, S.G. Blythe reported his frustrations of trying to get thinner in his book standard became a marketing target for companies. Starting in the 1900s, and even more prevalent in the 90s, food companies began marketing products as low-fat, and customers took this at face value.

Unfortunately, many low-fat products do not actually lead to weight loss as promised.

### **Derivation**

A significant increase in the products promising low fat came at the expense of a high intake of other nutrients such as sugars, proteins, or even modified sugars/fatty acids4. This rise in low-fat products came after a study in the 1940s that showed saturated fat had a correlation with obesity and the risk of cardiovascular diseases<sup>5</sup>. Although saturated fats do contribute to bad heart health, not all fats need to be ruled out in a healthy diet. Particularly, it isn't just fats that could cause cardiovascular diseases. The public, the authorities, and food companies were largely convinced eliminating fat altogether would eliminate the risk of heart disease based on the huge number of published convincing studies. However, this was quickly proven to be false, due to the "Snackwell" phenomenon, which is when low-fat and regular foods would have relatively the same number of calories with the only difference being that the fat would be replaced with sugar or another fat substitute in the low-fat product. This was linked to a very high incidence of obese patients or imbalanced nutrition cases among the public since low-fat products didn't actually meet the nutrition standards for a healthy diet. Having a balanced and adequate diet, and more importantly, burning more calories than the intake is far more important for weight loss, reducing obesity risks, and an overall healthy life 6.

The low-fat era opened a new perspective on the food people consume. Despite it bringing in the misconception that all fat is wrong, it did bring healthy eating habits into the spotlight. Government regulations and committees were given more importance to preserving global health including America's health through a balanced diet. In the 1970s, the Senate Select Committee on Nutrition and Human Needs was formed marking a turning point in nutrition for the general public. Their role was to encourage citizens to have a balanced diet and cut out saturated fats, increased amounts of carbohydrates sugars, and exercise. In the original recommendation, cutting out all fats was seen as beneficial to one's diet. Still, despite this misunderstanding, this committee was a starting

point for a brighter future for America's nutrition. Since the original guidelines were set in place, dietary guidelines have improved taking into account the science behind dietary nutrition, and effectively educating the public on what their general dietary needs are.<sup>7</sup>

### **Justification**

Though different conceptions existed over time, there seems to be a growing consensus that the right way to eat is not dependent on cutting out one food group or aiming for one body type. It consists of eating various foods while also getting the right amount of physical activity or exercise every day; at least 30 to 60 minutes8. Initiatives like MyPlate in primary and secondary education have helped youth understand how to be healthy9. On a global level, organizations like UNICEF, or the United Nations International Children's Emergency Fund, pair with local entities in order to provide education to families and children about nutrition, while also working to provide easily accessible resources<sup>10</sup>. Despite the many initiatives and projects being put in place there still stands prevalent issues such as eating disorders, body image struggles, and low self-esteem due to this fat-phobic diet culture that has formed through every decade.

One of the principal culprits for continued false information about dietary needs is the media. Whether that be social media, advertisements, or unreliable news reports on nutrition, it is quite easy to get caught up in false information that is found at one's fingertips. Influencers on social media often edit themselves to make their photos the most aesthetically appealing. However, the edited images have a negative effect on a generation that spends a considerable amount of time using social media platforms. This culture feeds into eating disorders, and negative self-talk<sup>11</sup>. The constant viewing of a body ideal that is usually unattainable is detrimental to self-confidence, but there are still promising solutions to this problem. The simplest of them is working with oneself. Trying to actively encourage body-positive self-talk and refraining commenting on other people's physiques will collectively limit toxic diet culture. The need for fitting into an ideal will decrease once people stop preaching the ideal as healthy for everyone. This is

the most integral part of limiting misinformed diet culture. A collective healthier diet culture comes with everyone making an effort to change. Awareness needs to be created by authorities to differentiate the misunderstanding of the media matters and to explain the role of diet and physical

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activity on a healthy body and lifestyle; it is highly needed to overcome this global issue.

### Conflict of interest: None.

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