

Preface

How can healthy, sustainable diets be encouraged? The United States has poorer overall health compared to countries of similar income; many common health issues are attributed to poor nutrition and obesity. High cost and low accessibility to healthy foods contributes to poor nutrition in the U.S.. Other current concerns with the food industry are the environmental effects of high volume meat production.

What is the optimum design of a plant to manufacture an alternative meat product that is sustainable and economically viable? Sesame seeds can be used as a feedstock for plant-based chicken nuggets. Toasted sesame seed oil is generated as a high-value side product of this process. Leftover sesame seed cake from oil extraction can be fermented to improve flavor, protein content, and digestibility. A series of fermentations is used to produce yeast extract, a flavoring component of the final product. The designed process could achieve a market share of 1% of the plant-based chicken market.

How have women in the U.S. promoted, resisted, and otherwise responded to diet trends on social media? Fad diets have been present for decades, and are generally targeted towards women. As social media has developed, it has become a new way to share diets and lifestyle habits. Many women's posts regarding fad diets online are negative; some actively counteract harmful narratives from dieting communities, while others bring awareness to the issue. Dietitians have also begun sharing advice online, improving accessibility to correct and helpful information.