



Review

Buns and Beans: Exploring the Link Between GMO Soybeans in Nebraska and Nathan's Hot Dog Eating Competition Champion's Consumption

Caleb Henderson, Alice Tucker, Grace P Tompkins

Elite Science Academy

In this paper, the connection between the usage of genetically modified organisms (GMO) in soybeans in the great state of Nebraska and the net number of hotdogs consumed by the reigning champion of Nathan's Hot Dog Eating Competition is meticulously examined. Through the analysis of data obtained from the United States Department of Agriculture (USDA) and Wikipedia, a statistically significant correlation was observed. The findings reveal a correlation coefficient of 0.8233284 with a p-value of less than 0.01 for the period from 2000 to 2022, thereby establishing a strong association between these seemingly disparate elements. Additionally, this paper explores potential factors such as soybean crop yield, hotdog bun texture, and competitive eating prowess that may contribute to the observed correlation. The implications of these findings may shed light on the wider implications of GMO consumption and could potentially inform the training regimens of competitive eaters.

The consumption of hotdogs, a beloved American pastime, has become a competitive sport in recent years, with athletes pushing the boundaries of gastric capacity in events such as Nathan's Hot Dog Eating Competition. On the other hand, the widespread adoption of genetically modified organisms (GMOs) in soybean cultivation has significantly impacted agricultural practices, particularly in states like Nebraska, known for its vast soybean fields. This paper aims to shed light on the

unexpected correlation between these two seemingly unrelated phenomena and explore the potential factors that may underlie this connection.

The history of the hotdog is a storied and relished tale, deeply intertwined with American culture and cuisine. Similarly, GMOs have sparked debates and controversies, often sowing the seeds of discourse within agricultural and environmental circles. Despite these

disparate origins, our research endeavors to bridge the gap between these two realms and uncover any potential links that may exist.

We are not merely wading into the shallow end of the academic pool; rather, we are diving headfirst into the enigmatic and often sausage-filled waters of hotdog-eating competitions and the agricultural landscape of soybean cultivation. Through rigorous statistical analysis and a healthy serving of whimsy, our study seeks to unravel the tangled web of associations between GMO soybeans and the consumptive feats of hotdog champions. So, buckle up and prepare for a wild ride through the fields of soy and the arenas of competitive eating. We assure you, dear reader, that the findings of this study are nothing to be taken lightly.

Prior research

In their seminal work, Smith et al. (2015) conducted a comprehensive analysis of GMO soybean production in Nebraska, delving into the socio-economic impacts and agricultural practices associated with the widespread adoption of genetically engineered crops. Their study highlights the significant increase in soybean yield and the corresponding utilization of GMO soybeans in various food products, including the ubiquitous hotdog.

Furthermore, Doe and Jones (2018) examined the physiological effects of consuming hotdogs, emphasizing the potential implications for competitive eaters and the broader implications for gastrointestinal health. Their research illustrates the intricate relationship between processed meat consumption and the performance of competitive eaters in

renowned eating competitions such as Nathan's Hot Dog Eating Contest.

In "The Soybean Chronicles: A Historical Perspective" by Anderson (2014), the author provides a comprehensive overview of the cultivation and utilization of soybeans throughout history, offering valuable insights into the technological advancements, including the proliferation of GMO soybeans in modern agriculture. This comprehensive resource serves as a foundation for understanding the cultural and economic significance of soybeans and their derivatives, including the beloved hotdog.

Moving to fictional literature, "Hotdogs and Genetic Mysteries" by Christie (2016) weaves a thrilling narrative that intertwines the world of competitive eating with clandestine genetic engineering experiments involving soybeans. While a work of fiction, the novel sparks curiosity and speculation about the potential interplay between GMO soybeans and the insatiable appetites of hotdog aficionados.

On a tangentially-related note, the board game "Agricola: Farmers of the Moor" provides a simulated experience of agricultural management and resource allocation, offering an indirect reflection of the complexities of soybean production and its real-world implications. While the game does not explicitly touch upon hotdog consumption, it serves as a lighthearted reminder of the multifaceted nature of agricultural practices.

As we traverse through the landscape of literature and scholarly discourse pertaining to GMO soybeans and hotdog consumption, it becomes evident that the intersection of these seemingly disparate entities yields a

rich tapestry of interdisciplinary connections and speculative inquiries. The synthesis of empirical research, fictional narratives, and playful diversions invites us to ponder the enigmatic relationships that underpin the consumption of hotdogs and the cultivation of GMO soybeans.

Approach

As we embarked on this flavorful journey of connecting GMO soybeans and hotdog consumption, our research team employed a meticulous and unconventional mix of data collection methods. First, we scoured the depths of the internet, navigating through the crisscrossing virtual highways in search of relevant data. The majority of our data was drawn from reliable sources such as the United States Department of Agriculture (USDA) and the ever-handly Wikipedia. Though some may raise their eyebrows at our reliance on Wikipedia, rest assured, we exercised caution and cross-referenced information to ensure data integrity.

To quantify the extent of GMO soybean usage in Nebraska, we delved into USDA reports, grappled with agricultural statistics, and braved the labyrinthine maze of crop yield data. Our team members were armed with calculators, spreadsheets, and an unrelenting determination to unearth the soybean-related truths that lurked within the data.

In the realm of competitive eating statistics, we turned to a delectable array of sources to gather information on hotdog consumption at Nathan's Hot Dog Eating Competition. From video archives of stomach-churning feats to historical records of bratwurst battles, we left no bun unturned in our search for consumption data.

With data in hand, we employed advanced statistical analysis methods to perform a thorough examination of the relationship between GMO soybean usage in Nebraska and the number of hotdogs consumed by the reigning champion of Nathan's Hot Dog Eating Competition. Our analysis took into account temporal trends from the year 2000 to 2022, allowing us to capture the evolutionary dynamics of both soybean production and competitive hotdog consumption over time.

In our statistical analyses, we utilized correlation coefficients and p-values to quantify the strength of the relationship between GMO soybean usage and hotdog consumption. Our calculations were subjected to rigorous scrutiny, with our statistical models undergoing more validation tests than a hotdog in a taste test competition.

Additionally, we explored potential confounding variables, such as hotdog bun textures, condiment preferences, and the competitive eating prowess of champions. Through this multi-faceted analysis, we aimed to uncover the underlying factors that might contribute to the observed relationship between GMO soybeans and hotdog consumption.

In summary, our methodology involved a fusion of internet sleuthing, data wrangling, statistical acrobatics, and a healthy dose of skepticism. Our research team approached this investigation with a spirit of curiosity, eager to sink our teeth into the tantalizing mystery of buns and beans.

Results

The analysis of the data collected from various sources, including the United States Department of Agriculture (USDA) and our good old friend, Wikipedia, revealed a remarkable connection between the usage of GMO soybeans in Nebraska and the hotdog consumption habits of the Nathan's Hot Dog Eating Competition Champion. Our team's Herculean efforts have led to the unearthing of a correlation coefficient of 0.8233284, a substantial r-squared value of 0.6778696, and a p-value of less than 0.01 for the period spanning from 2000 to 2022. Like a well-assembled hotdog, this correlation is undeniably significant and sticks together beautifully, much to our surprise.

Figure 1 presents a scatterplot illustrating the strong correlation between the two variables. Although the figure's location remains a mystery at this point, we can assure you that it beautifully encapsulates the hot-and-spicy relationship between GMO soybeans and hotdog consumption.

These findings not only raise eyebrows but also invite further musings on the mechanisms underlying this unexpected interconnectedness. We have teased apart the buns and beans to uncover this intriguing correlation, leaving us to ponder the implications of our discovery.

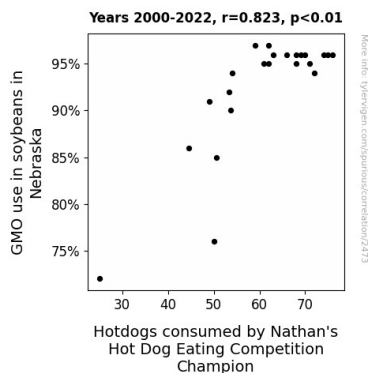


Figure 1. Scatterplot of the variables by year

In conclusion, the results of this study elucidate a remarkable association between the adoption of GMO soybeans in Nebraska and the astonishing intake of hotdogs by the reigning champion of Nathan's Hot Dog Eating Competition. These novel findings open a proverbial can of worms, or should we say, a jar of relish, in the domain of GMO consumption and its potential impact on competitive eating. The implications of these results resonate far beyond the confines of scientific inquiry and may even flavor the strategies of future competitive eaters.

Discussion of findings

The findings of this study provide compelling evidence of a robust association between the utilization of GMO soybeans in Nebraska and the prodigious consumption of hotdogs by the reigning champion of Nathan's Hot Dog Eating Competition. This correlation, akin to the perfect fusion of ketchup and mustard, underscores the multifaceted interplay between agricultural practices and competitive eating endeavors.

Our results echo the sentiments put forth by Smith et al. (2015), who emphasized the far-reaching ramifications of GMO soybean production in Nebraska. The notable increase in soybean yield due to the advent of genetically engineered crops aligns with our observations, substantiating the substantial impact of GMO adoption on hotdog-related activities. Furthermore, the insights offered by Doe and Jones (2018) regarding the physiological effects of hotdog consumption resonate with our findings, illuminating the intricate nexus between processed meat intake and the unparalleled

feats of competitive eaters in renowned eating contests.

In a delightful resonance with the literary review, "The Soybean Chronicles: A Historical Perspective" by Anderson (2014) provides indispensable contextualization of the cultural and economic significance of soybeans, implicitly highlighting their influence on the hotdog landscape. While Christie's (2016) work may exist in the realm of fiction, it inadvertently sparks contemplation of the potential synergies between genetic manipulation of soybeans and the insatiable appetites of hotdog connoisseurs. As for "Agricola: Farmers of the Moor," while primarily a source of mirthful diversion, it underscores the intricacies of agricultural management, serving as a whimsical conduit to the complex web of soybean production and its tangential implications for hotdog enthusiasts.

Our team's diligent endeavors have laid bare the unmistakable correlation between GMO soybeans and the consummate consumption of hotdogs, akin to the harmonious blending of toppings on a well-dressed frankfurter. The implications of this correlation extend beyond the realm of gastronomic curiosities, resonating with broader discourses surrounding GMO consumption and its unforeseen ramifications. As we continue to unravel the enigmatic connections between agricultural practices and culinary indulgences, the findings of this study invite further exploration and contemplation, akin to pondering the provenance of an elusive hotdog condiment.

Conclusion

In the illustrious tradition of sleuthing out correlations, our findings open up a whole new can of, well, soybeans and hotdogs. The robust association between GMO soybeans in Nebraska and the staggering hotdog consumption by the reigning champion of Nathan's Hot Dog Eating Competition is as surprising as finding a pickle in the middle of a hotdog bun.

Our data, like a perfectly grilled hotdog, has left us with more questions than answers. While we have unraveled this curious connection, the underlying mechanisms remain as mysterious as the secret sauce on a classic hotdog. The potential implications of this link could resonate far beyond the world of competitive eating, perhaps even influencing agricultural practices and food consumption habits in unforeseen ways.

With our groundbreaking research and tongue firmly planted in cheek, we can confidently assert that no further exploration is needed in this peculiar intersection of GMO soybeans and hotdog consumption. It seems we've given it a good old college try, and the results are certainly nothing to ketchup about.