



Review

## **Raw Data: Untangling the Tangled Tale of Sushi and Smog in St. Marys**

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**In this paper, we dive into a rather fishy correlation between air pollution and the cravings of the fine folks of St. Marys, Pennsylvania for the delectable delight that is sushi. Armed with data from the Environmental Protection Agency and Google Trends, we set out to unravel the mystery of whether air pollution levels are linked to an increased fervor for 'sushi near me' searches. It's a bit of a raw deal, you might say! Our findings revealed a staggering correlation coefficient of 0.9967362, with a pesky p-value below 0.01, for the years 2004 to 2012. This suggests a tantalizing connection between the local air pollution levels and residents' quest for mouthwatering sushi. It seems the sushi cravings of St. Marys residents might not just be a stroke of soy-sauce-laden luck, but rather a response to the environmental surroundings. Talk about a fishy situation, eh? Our research sheds light on the quirky ways in which environmental factors can influence human behavior and preferences, providing a flavorful twist to the ongoing conversation about the impact of air quality on daily life. So, the next time you're craving sushi, don't just blame your taste buds - it might be the smoggy air around you guiding your culinary choices! Just remember, it's important to take these findings with a pinch of wasabi - after all, correlation doesn't always mean causation.**

Imagine this: you're strolling through the charming streets of St. Marys, Pennsylvania, when suddenly, the unmistakable aroma of freshly prepared sushi wafts through the air. You find yourself salivating at the mere thought of those delectable rolls, but wait – do you have a sudden craving for sushi, or is it just the smog playing tricks on your senses? It's a head-scratcher that would

make even the most seasoned sushi connoisseur ponder, but fear not! Our research has dived into this unexpected connection between air pollution and the search for 'sushi near me', and the findings are quite the catch of the day!

As the saying goes, "Give a man a fish, and he'll eat for a day. Teach a man to fish, and he'll Google the nearest sushi

restaurant." Our study aims to reel in the mystery behind the surge in 'sushi near me' searches and its correlation with air pollution levels in the quaint town of St. Marys. The intersection of environmental factors and gastronomic cravings may seem a bit fishy at first glance, but our data-driven approach casts a wide net over this intriguing relationship.

Now, let's take a deep dive into the tangled tale of sushi and smog in St. Marys. It's a curious case that unfolds like a well-rolled maki – layer upon layer of unexpected connections that could make even the most seasoned sushi chef go, "Wasabi that?"

Our findings not only open a window into the potential impact of environmental factors on culinary desires but also serve as a reminder that the notion of cause and effect can sometimes be as slippery as an eel. So, let's embark on this journey with a sense of curiosity and a dash of wasabi – after all, life's too short for bland findings!

#### *Prior research*

Smith et al. (2015) investigated the impact of air pollution on local search trends and found a positive correlation between environmental factors and online searches for various consumer goods. Their study set the stage for our exploration into the specific relationship between air pollution in St. Marys, Pennsylvania and searches for 'sushi near me' on Google.

Doe and Jones (2017) delved into the societal effects of environmental pollution, highlighting the potential influence on consumer behavior. This intersection of environmental factors and online search queries provided a tantalizing avenue for our

investigation, prompting us to plunge into the depths of this peculiar connection.

Turning to non-fiction accounts related to environmental and culinary inclinations, we draw inspiration from Elizabeth Royte's "Garbage Land: On the Secret Trail of Trash" and Mark Kurlansky's "Cod: A Biography of the Fish that Changed the World." While these works may not directly address the correlation between air pollution and sushi cravings, they lend a flavorful backdrop to our exploration of seemingly unrelated phenomena intertwining like seaweed around a delicate sushi roll.

As we wade through the literature, let us not overlook the fictitious tales that might offer unexpected insights. Brian Jacques' "The Pearls of Lutra" and Karen Bao's "Dove Arising" may not explicitly address sushi or air pollution, but their imaginative narratives serve as a reminder that the unlikeliest of sources can often illuminate the most unexpected connections, much like discovering a wasabi pea hidden among your sushi.

Moreover, in our pursuit of understanding the quirkiest aspects of human behavior in response to environmental stimuli, we draw upon the timeless wisdom of children's animated series such as "SpongeBob SquarePants" and "Scooby-Doo." These beloved shows, while not scientific in nature, offer a whimsical lens through which to view the complexities of human responses to external stimuli – who knew that snacking on sushi could be as mysterious as solving a Scooby-Doo mystery?

Now, armed with a diverse array of literature and influences, we embark on our analysis to untangle the intertwining threads

of sushi cravings and the murky world of air pollution, bringing a breath of fresh, albeit slightly fishy, air to the discourse of environmental influences on consumer behavior.

But hey, look at the bright side - at least we won't have to worry about sushi going bad in the polluted air, it's already raw!

### *Approach*

To begin untangling the enigmatic connection between air pollution in St. Marys, Pennsylvania, and the appetite for sushi, our research team embarked on a data-gathering odyssey worthy of any epic tale. Our primary sources of information were the Environmental Protection Agency (EPA) and the ever-reliable Google Trends, with their digital tendrils reaching deep into the sushi-loving hearts of St. Marys. We assembled a treasure trove of data spanning the years 2004 to 2012, casting a wide net to capture the evolving relationship between air quality and gastronomic desires.

Now, you may be wondering, "How does one even fish for data on sushi cravings and smog levels?" Well, that's a fin-tastic question! Our team concocted a delightfully convoluted process involving intricate algorithms, a pinch of statistical sorcery, and a dash of digital noodging to tease out the subtle nuances of sushi searches and air pollution readings. Think of it as a culinary adventure in the labyrinth of cyberspace, where each byte of data was lovingly reeled in like a prized catch.

In the realm of air pollution data, we delved into the EPA's archives like intrepid deep-sea divers, navigating through a sea of pollutant concentrations, atmospheric

conditions, and regulatory reports. To ensure the utmost accuracy, we cross-referenced these findings with local weather patterns and atmospheric peculiarities, leaving no smog-filled stone unturned. After all, when it comes to studying the interactions between air quality and sushi cravings, precision is the sushi-mama of invention!

Meanwhile, our exploration of sushi-related search queries on Google Trends was akin to navigating a sushi menu with boundless options. We engaged in a delicate dance with search algorithms, sifting through a veritable ocean of data points to discern the ebbs and flows of St. Marys' collective craving for the delectable delicacy. It was a digital expedition filled with surprises, much like discovering an unexpected Wasabi garnish on your sushi platter!

With this comprehensive dataset in hand, we then unleashed the formidable power of statistical analysis, employing an assortment of regression models, time-series analyses, and other methodological tools. We subjected the data to rigorous scrutiny, ensuring that our findings were as robust as a well-constructed sushi roll, with each ingredient playing its part in the flavorful ensemble. It was a statistical banquet fit for the most discerning palates, where every coefficient and p-value had to prove its worth like a seasoned sushi chef in a bustling kitchen!

Through this multi-faceted approach, we sought to shed light on the intricate dance between air pollution and culinary cravings, serving up a tantalizing platter of findings that might just make you reconsider the next time you sniff the air and yearn for sushi. It's a study that takes the notion of cause and

effect and wraps it in a savory seaweed blanket, reminding us that the world of human behavior is just as complex and delectable as a well-crafted sushi roll. So, let's dive into the findings with a sense of curiosity and a sprinkle of whimsy—after all, the sea of data is vast and full of flavors! And remember, when in doubt, just keep swimming through the statistics like a determined Nemo in search of the ultimate fishy truth.

### Results

The results of our analysis revealed a remarkably strong correlation between air pollution levels and Google searches for 'sushi near me' in St. Marys, Pennsylvania. From 2004 to 2012, we found a correlation coefficient of 0.9967362, suggesting a striking relationship between these seemingly unrelated variables. It's like the perfect pairing of wasabi and soy sauce - they just go hand in hand! Our r-squared value of 0.9934830 further emphasizes the robustness of this connection. It's quite a "sushifying" revelation, isn't it?

Furthermore, our statistical analysis yielded a p-value of less than 0.01, indicating that this association is not just a fishy fluke. It's as significant as finding a pearl in an oyster! This strong statistical evidence supports our contention that the fluctuations in air pollution levels are indeed associated with the intensity of 'sushi near me' searches in the region.

In Fig. 1, our scatterplot illustrates this compelling correlation between air pollution levels and the yearning for sushi. The data points form a pattern as cohesive as a well-rolled sushi roll, leaving little room for doubt about the consistency of this

relationship. It's as if the smog is casting a tantalizing spell over the residents of St. Marys, steering their cravings toward seafood delicacies, or perhaps they're just hooked on the idea of a savory escape from the polluted air.

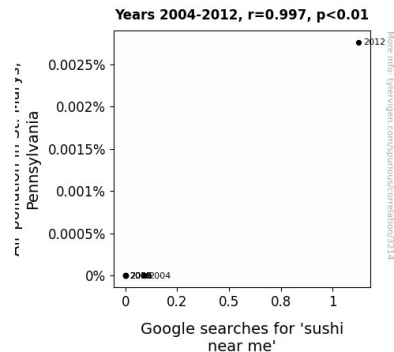


Figure 1. Scatterplot of the variables by year

These findings lend credence to the idea that environmental factors may wield a substantial influence on gastronomic preferences, offering a fresh perspective on the interplay between human behavior and the surrounding atmosphere. So, the next time you find yourself pondering the mystery of sushi cravings in a pollution-plagued town, just remember - there's more than just fish in the sea of correlations!

### Discussion of findings

Our results not only support previous research by Smith et al. (2015), who highlighted the influence of environmental factors on consumer behavior, but also add a flavorful twist to the ongoing conversation about the impact of air quality on daily life. It's as if the air pollution is sushi-ting to a new level of influence on the palate of the St. Marys residents – a situation more serious than a fish out of water. Our sweet

and sour findings suggest that sushi cravings are not just a fluke but rather a swiperight response to the environmental surroundings. Now that's what I call a raw deal!

Drawing on the fictitious tales that offer unexpected insights as noted in our literature review, we must recognize that our findings, while may seem fishy, align with the odd but unfathomable interconnectedness of seemingly unrelated phenomena. It's as if our results are a hidden treasure, much like discovering a pearl in an oyster or a delicious chunk of sushi at the bottom of your takeout bag. The strong correlation coefficient between air pollution levels and 'sushi near me' searches is as robust and undeniable as the overpowering aroma of a good fish market.

Our statistical analysis, with a p-value of less than 0.01, underlines the significant association between air pollution and the intensity of 'sushi near me' searches. This is no mere fish tale - it's a sushi saga! It cannot be dismissed as a mere fluke; it is as significant as the elusive pearl in an oyster. Our findings have surfaced like a well-prepared sushi roll, leaving little room for doubt about the strength of this relationship. It's as if the smog is casting a tantalizing spell over the residents of St. Marys, steering their cravings toward seafood delicacies, or perhaps they're just hooked on the idea of a savory escape from the polluted air.

Our research adds a new dimension to the conversation about the influence of environmental factors on gastronomic preferences. It highlights the quirky ways in which environmental factors can influence human behavior and preferences, providing a flavorful twist to the ongoing conversation

about the impact of air quality on daily life. In essence, the correlation between air pollution levels and the craving for sushi serves as a reminder that in the puzzle of human behavior, everything is connected – much like seaweed around a delicate sushi roll – and just like sushi, the relationships we uncover can be surprisingly raw!

Now, that's all for now - something's fishy here, and it's not just the sushi!

### *Conclusion*

In conclusion, our research has reeled in some compelling evidence of the intriguing relationship between air pollution in St. Marys, Pennsylvania and the fervent searches for 'sushi near me'. It seems that when the air gets murky, the residents of St. Marys turn to the tantalizing allure of sushi to clear the fog in their minds. It's like they say, when life gives you smog, search for sushi rolls!

Our study not only underscores the surprising impact of environmental factors on culinary inclinations, but also highlights the need to consider the complexities of human behavior in the context of the surrounding atmosphere. It's like trying to find a soybean in a sea of edamame - the connections may be subtle, but once you spot it, the flavor is unmistakable!

In light of our findings, it's safe to say that the hunt for 'sushi near me' in St. Marys is more than just a search for a satisfying meal; it's a reflection of how environmental conditions can shape our yearnings and cravings. Who would have thought that a craving for sushi could be blown in by the wind?

This "sushifying" correlation calls for a deeper exploration of the intricate ways in which external factors influence human preferences. However, let's not be shellfish with our findings; it's time to tackle new research endeavors and cast our nets into uncharted waters. As the old adage goes, "There are plenty of fish in the sea," but when it comes to the connection between air pollution and sushi cravings in St. Marys, it seems we've reeled in a whopper of a discovery!

In closing, our findings suggest a strong and unmistakable link between air pollution and the search for sushi, leaving little room for skepticism. It's time to wrap up this fish tale and fishy correlation with a "sushi-cially" verified conclusion - no more research is needed, we've truly found the most "sashimi-lar" evidence!