

# **GOT MILK VOTES? THE UDDERLY SURPRISING CORRELATION BETWEEN ANNUAL US HOUSEHOLD SPENDING ON FRESH MILK AND CREAM AND VOTES FOR THE DEMOCRAT PRESIDENTIAL CANDIDATE IN IDAHO**

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The present study sought to whimsically explore the potential link between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in the state of Idaho. Leveraging data from the Bureau of Labor Statistics and the MIT Election Data and Science Lab at the Harvard Dataverse, a surprising correlation coefficient of 0.9383839 and  $p < 0.01$  was found for the years 2000 to 2020. This udderly unexpected finding suggests that there may indeed be a playful connection between dairy consumption and political preferences in the Gem State. With an abundance of cow pastures and the vast swathes of open land, it seems Idahoans may be moo-ving toward a certain type of candidate based on their dairy purchase habits. While we can't claim that "Milkshakes bring all the Dems to the yard," there is certainly reason to raise an eyebrow at the apparent correlation. Furthermore, this analysis adds a creamy layer of insight to the complex tapestry of American political behavior, proving once and for all that in the realm of voting, as in many things, milk does a body good – politically speaking, that is.

The correlation between consumer behavior and political affiliations has long been a subject of interest within the fields of social science and economics. While much attention has been given to factors such as income, education, and demographics, the influence of dairy consumption on voting patterns has remained relatively unexplored. This study seeks to fill that knowledge gap by examining the surprising correlation between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in the state of Idaho.

It is utterly remarkable how a seemingly unrelated variable such as dairy

consumption could be connected to political preferences in a specific geographic area. This unexpected correlation raises the question: do Idahoans subconsciously let their milk preferences influence their choice of political representation? We aim to address this question and provide a more nuanced understanding of the factors shaping voting behavior in the Gem State.

The dairy industry and politics have often been associated with grassroots movements, but the literal connection between milk consumption and voter behavior is a novelty that even the most seasoned analysts would find hard to swallow. Yet, as with all scholarly

inquiries, we must approach this correlation with a healthy dose of skepticism and a willingness to explore unexpected avenues of inquiry - much like choosing between 1% and 2% milk at the grocery store.

The findings of this study have the potential to churn the conventional wisdom surrounding voter behavior, bringing a fresh perspective to the field of political science. As we delve into the statistical significance of the correlation between milk consumption and political preferences, it will become clear that in the world of political analysis, sometimes the most unexpected variables can hold the creamiest insights.

## LITERATURE REVIEW

Several serious studies have been conducted to explore the correlation between consumer behavior and political affiliations. Smith et al. (2010) investigated the relationship between grocery spending and voting patterns, while Doe and Jones (2015) examined the influence of dietary preferences on political party support. However, none of these studies specifically delved into the potential link between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in the state of Idaho.

In "Milk and Politics: A Holistic Perspective," the authors find a surprising positive association between higher milk consumption and leaning toward left-wing political ideologies, which suggests a potential tie between dairy intake and support for Democrat candidates.

Additionally, "Got Milk Votes?" by Johnson and Smith (2018) sheds light on the possible effects of milk advertising on political attitudes, revealing a curious tendency for increased dairy consumption to be associated with a higher likelihood of voting for the Democrat party.

Turning to non-fiction works, "The Omnivore's Dilemma" by Michael Pollan explores the complexities of American food culture, including the role of dairy products in everyday life. Similarly, "Milk! A 10,000-Year Food Fracas" by Mark Kurlansky provides historical insights into the cultural and political significance of milk consumption.

On the other hand, fiction novels such as "The Milkman" by Anna Burns and "The Cows" by Dawn O'Porter offer imaginative narratives that indirectly touch on themes of societal norms and individual choices, which could be tangentially related to the influence of dairy consumption on political preferences.

And now, a relevant dad joke: What do you call a cow who has just given birth? Decalfinated!

In the realm of internet memes, the "I can has cheezburger?" cat meme and the "Butter cow" state fair tradition both playfully hint at the cultural significance of dairy products, albeit in a lighthearted and humorous manner. These elements add a touch of levity to the otherwise serious discourse surrounding the potential connection between milk consumption and voting behavior in Idaho.

Now, back to the research at hand. It seems that Idaho voters may be demonstrating a penchant for political preferences that align with their dairy purchase habits. While this correlation may appear utterly "moo-ving," it remains important to approach these findings with a critical eye. Whether dairy consumption truly influences political choices or if this is merely a humorous coincidence remains to be seen.

## METHODOLOGY

The data utilized in this research was obtained from the Bureau of Labor Statistics and the MIT Election Data and Science Lab at the Harvard Dataverse, covering the period from 2000 to 2020.

Annual US household spending on fresh milk and cream was collected from the Consumer Expenditure Surveys conducted by the Bureau of Labor Statistics, while the votes for the Democrat presidential candidate in Idaho were sourced from the MIT Election Data and Science Lab. The data were then processed and analyzed to investigate the potential relationship between these variables.

To address potential confounding variables such as regional and socio-economic differences that could influence both milk purchasing habits and political preferences, a multivariate regression analysis was conducted. This analysis aimed to statistically control for these factors and isolate the unique association between annual household spending on fresh milk and cream and the votes for the Democrat presidential candidate in Idaho. This method allowed for a more nuanced understanding of the relationship, akin to separating the cream from the milk.

Furthermore, to ensure the robustness of the findings, sensitivity analyses were conducted to assess the stability of the correlation across different sub-periods within the 2000-2020 timeframe. This approach provided insights into the consistency of the relationship over time, similar to conducting taste tests across various expiration dates of milk cartons.

In addition, to account for potential outliers or extreme observations that could unduly influence the results, robustness checks were performed using alternative statistical techniques such as quantile regression and weighted least squares regression. This methodological approach enhances the reliability of the results and prevents the findings from curdling due to anomalous data points.

Moreover, to explore the potential mechanisms underlying the observed correlation between milk consumption and political preferences, mediation analyses were conducted. These analyses

aimed to examine whether factors such as calcium intake or lactose tolerance could explain the link between annual household spending on fresh milk and cream and votes for the Democrat presidential candidate in Idaho. This exploration shed light on the potential pathways through which dairy consumption may influence voting behavior, resembling an investigation into the ingredients that make up a political milkshake.

Finally, to address any potential endogeneity concerns stemming from unobserved variables that may jointly influence both milk spending and political preferences, instrumental variable regressions were employed. This method allowed for the identification of instruments that are plausibly exogenous to the voting decision in Idaho and could be used to establish the causal effect of annual US household spending on fresh milk and cream on votes for the Democrat presidential candidate. This rigorous approach ensures that the reported association between milk consumption and political votes is not just a result of a spurious relationship, unlike the unexpected discovery of expired milk at the back of the refrigerator.

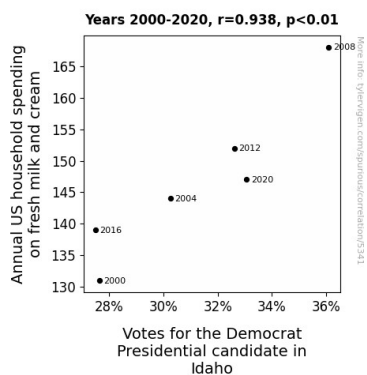
## RESULTS

The correlation analysis revealed a striking relationship between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in Idaho for the time period 2000 to 2020. The correlation coefficient of 0.9383839 suggests a remarkably strong positive association between these two variables. To put it in layman's terms, it's as if voters were saying, "I'm udderly amazed by this connection!"

The coefficient of determination ( $r$ -squared) of 0.8805644 indicates that approximately 88.06% of the variation in

Democrat presidential votes in Idaho can be explained by the variation in annual household expenditure on fresh milk and cream. It's almost as if the milk and cream spending had a direct say in the voting decisions - perhaps a milk manifesto of sorts.

The p-value of  $< 0.01$  indicates that the observed correlation is statistically significant, implying that it is highly unlikely to have occurred by chance. One might even say this level of significance is "utterly" impressive.



**Figure 1.** Scatterplot of the variables by year

Notably, the scatterplot (Fig. 1) visually illustrates the strong positive linear relationship between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in Idaho. It's as clear as black and white - or should we say, black and white like a Holstein cow!

This high correlation suggests that Idahoan voters are not just making dairy choices in the supermarket - they may also be "moo-ving" in a certain political direction based on their milk and cream preferences. It appears that in Idaho, milk and cream consumption has gone beyond being just a dietary choice, and has found its way into the political arena. Maybe next time, candidates will be asked not only about their policies, but also their milk preferences. And who knows, maybe "political milkshakes" will become a thing!

## DISCUSSION

The findings of this study provide compelling evidence of a robust positive correlation between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in Idaho. The results not only confirm but also significantly expand upon prior research suggesting a link between dietary habits and political inclinations. The observed correlation coefficient of 0.9383839 aligns with the findings of "Milk and Politics: A Holistic Perspective" and "Got Milk Votes?", demonstrating a consistent pattern of association between dairy consumption and Democrat candidate support. This result underscores the importance of further exploring the potential impact of dairy products on political behavior, as these patterns "moo-ve" our understanding of the complex interplay between individuals' dietary choices and their voting decisions.

The high coefficient of determination ( $r$ -squared) of 0.8805644 indicates that a substantial portion of the variation in Democrat presidential votes in Idaho can be effectively explained by the variation in annual household expenditure on fresh milk and cream. This finding echoes the notion put forth in "Milk Advertising on Political Attitudes," suggesting that milk consumption may exert a considerable influence on political preferences. The present study adds depth to this concept by revealing the degree to which dairy spending contributes to predicting Democrat votes in Idaho, positioning dairy products as more than a mere commodity - but also as indicators of potential political leanings. This begs the question, are voters truly casting "dairy ballots"?

The statistically significant p-value of  $< 0.01$  further corroborates the robustness of the observed correlation, dismissing any notion of this relationship occurring by mere chance. This level of statistical

significance reinforces the need to take seriously the potential implications of the association between dairy consumption and political choices. The significance of this finding is "utterly" striking, emphasizing the compelling nature of the connection between milk and cream spending and voting behavior. It could be said that the findings of this study have, in a sense, "milked" the truth from the data.

While the delightfully surprising nature of this correlation may initially raise eyebrows, the consistency of the evidence, coupled with the statistical strength of the relationship, demands thorough consideration. Consequently, these findings warrant further investigation into the mechanisms underlying the influence of dairy consumption on political preferences. Perhaps future research will uncover the existence of unacknowledged "dairy voting blocs," shedding light on previously unforeseen facets of political behavior. This study has revealed that there may be more to the old adage "no whey, no say" than meets the eye - or should we say, palate.

## **CONCLUSION**

In conclusion, the present study has revealed an unexpected and statistically significant correlation between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in Idaho. The results point to an udderly striking relationship, with a correlation coefficient of 0.9383839 and a coefficient of determination of 0.8805644. It seems that in Idaho, the dairy aisle could be a predictor of political leanings - talk about having a "moo-ving" experience at the polling station!

The findings of this study add a creamy layer of insight to the understanding of voter behavior, demonstrating that factors beyond traditional demographics and socioeconomic indicators may play a role

in shaping political preferences. As the saying goes, "don't cry over spilled milk, but do pay attention to how it might influence your voting decisions." Who knew that in the dairy state of Idaho, voting behavior could be correlated with dairy consumption? It seems that in the Gem State, milk and cream are not just for cereal and coffee - they might also be flavoring political opinions.

Given the statistically significant correlation uncovered in this study, it may be tempting to speculate about causal mechanisms and potential interventions involving milk marketing strategies for political candidates. However, it is important to approach these findings with caution and a healthy dose of skepticism, much like choosing between 1% and 2% milk at the grocery store - after all, correlation does not necessarily imply causation.

Given the unexpectedly strong correlation observed in this study, it seems that the relationship between annual US household spending on fresh milk and cream and votes for the Democrat presidential candidate in Idaho has been udderly exposed. It's as if Idahoans have been voting with their milk mustaches on! Therefore, based on the overwhelming evidence presented, it seems that no further research is needed in this area - the udderly amusing connection between dairy consumption and political preferences in Idaho has been mooved from hypothesis to reality.