



## Review

# The Milky Way: An Udderly Surprising Connection Between Milk Consumption and Burglaries in Vermont

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**This research paper delves into the intriguing and, dare we say, utterly unexpected relationship between milk consumption and burglaries in the picturesque state of Vermont. Leveraging data from the USDA and FBI Criminal Justice Information Services spanning from 1990 to 2021, a correlation coefficient of 0.9173518 and  $p < 0.01$  was calculated, shedding light on this seemingly whimsical yet statistically significant connection. While pondering the peculiar association between dairy intake and criminal activities, our research team was equally bemused and enthused by the bond we uncovered – a relationship that, much like a cow's sense of humor, is not to be milked lightly! Amidst the empirical revelations, a notable dad joke surfaced: "Why don't cows ever have any money? Because the farmers milk them dry!" It seems that the bovine world has been sending us subtle messages all along. As we dissect the statistical milky way that unraveled before us, we encourage our esteemed readers to feast upon this research with an open mind, perhaps over a glass of milk – but be sure to keep a vigilant eye on the homestead. After all, as our findings suggest, the abundant consumption of dairy products may just be udderly related to a surge in burglaries in the Green Mountain State.**

As the dairy industry's slogan "got milk?" has echoed through the decades, our research team couldn't help but wonder, "got crime?" Quite unexpectedly, our investigation into the relationship between milk consumption and burglaries in Vermont yielded some fascinating findings. It appears that dairy intake and criminal activities may be more intertwined than one might have

previously suspected – a concept as ripe for puns as a wheel of cheddar!

We were utterly amused by the statistical correlation we unearthed, prompting one of our team members to quip, "I guess it's true what they say, 'you can't cry over spilt milk, but you can weep over stolen dairy!'" While the connection between calcium-rich beverages and illicit activities may seem far-

fetched, the numbers tell a different tale, one that certainly demands further scrutiny.

Through rigorous analysis of data from the USDA and FBI Criminal Justice Information Services, spanning over three decades, we calculated a correlation coefficient of 0.9173518 and a p-value less than 0.01, indicating a strikingly significant relationship between milk consumption and burglaries. Our statistical model left us as surprised as a calf seeing a cow jump over the moon, yet the evidence was as solid as a fresh block of Vermont cheddar.

The initial reaction to our findings was akin to a farmer discovering a missing cow – bewildered, but ultimately compelled to make sense of the situation. If milk consumption is indeed associated with an increase in burglaries, it would be quite the bovine caper, reminiscent of a crime novel featuring a gang of dairy-loving bandits. Nonetheless, our research compels us to take this matter seriously, albeit with a healthy dash of humor.

In the pursuit of scientific discovery, it's crucial to milk every possible avenue for knowledge, even if some may appear unconventional. With that in mind, we invite our readers to delve into this udderly surprising connection between milk consumption and burglaries, and perhaps appreciate the levity of the situation with a dairy-themed dad joke or two along the whey.

#### *Prior research*

Several studies have sought to unravel the enigmatic relationship between dietary habits and criminal behavior. In "Milk and Crime," Smith examines the potential link

between milk consumption and various types of unlawful activities. Similarly, Doe explores the impact of dairy intake on deviant behavior in "Dairy and Misdemeanors." These works lay the groundwork for our investigation into the unusual connection between milk consumption and burglaries in Vermont.

One cannot discuss dairy-related phenomena without delving into the literary world. Books such as "The Big Moo: Lessons on Societal Misbehaviors" by Jones and "The Milk Manifesto: A Dairy's Daydream" by White provide valuable insights into the societal implications of milk consumption and its potential repercussions.

On a lighter note, fictional works such as "The Case of the Missing Milk Carton" by Agatha Christie and "Gouda is for Gangsters" by Sir Arthur Conan Doyle offer tantalizing narratives that, albeit not grounded in empirical evidence, tantalizingly mooove the imagination when considering dairy and crime.

In the realm of cinema, movies such as "Got Milk, Got Crime" and "The Fast and the Furriest: A Dairy Heist" have touched upon the intersection of dairy products and criminal activities, albeit in a more sensationalized manner. While these cinematic representations are far from scientific, they showcase the enduring intrigue of this peculiar connection to a wider audience.

Taking a more serious turn, we must acknowledge that the relationship between milk consumption and burglaries may seem utterly absurd at first glance. However, our research has shown that the statistical association is not to be milked lightly. After all, as the joke goes, "Why did the cow go to

outer space? To visit the Milky Way." It appears that our findings have indeed led us to the bovine equivalent of the Milky Way, a mysterious yet alluring pathway to understanding the unexpected ties between dairy consumption and criminal mischief.

### *Approach*

The methodology employed in this investigation was as robust and exacting as the process of milking a cow – thorough, systematic, and occasionally accompanied by the sound of gentle musing. Data on milk consumption in Vermont was extracted from the USDA's National Agricultural Statistics Service, documenting the volume of milk produced and distributed within the state from 1990 to 2021. Meanwhile, information on burglaries was sourced from the FBI's Uniform Crime Reporting (UCR) Program, encompassing reported incidents of unlawful entry or burglary over the same timeframe.

To establish the staggering connection between dairy intake and criminal activities, a series of complex statistical analyses reminiscent of a labyrinthine bovine maze were conducted. Firstly, the p-values were calculated using a multivariate regression analysis, allowing us to ascertain the significance of the relationship between milk consumption and burglaries while controlling for other pertinent variables. This analytical approach helped us untangle the convoluted interplay of factors, much like separating curds from whey.

Following this, a Pearson correlation coefficient was computed to measure the strength and direction of the linear relationship between milk consumption and burglaries. This quantitative exercise illuminated a correlation of 0.9173518,

indicating an exceptionally strong association that is as conspicuous as a Holstein cow in a snow-covered field. The statistical significance of this finding, with a p-value less than 0.01, further reinforced the gravity of our dairy-themed revelation, prompting our team to exclaim, "It looks like the verdict is in – the proof is in the pudding, or perhaps, in the cheese!"

Concurrently, to guard against potential confounding variables and spurious correlations, a series of sensitivity analyses and robustness checks were performed. Sensitivity analyses evaluated the impact of variations in the measurement of milk consumption and burglaries, ensuring that our results were as robust as a sturdy milk churn. These methodological precautions were as essential as checking for rogue dairy products before embarking on a lactose-intolerant individual's grocery run.

Furthermore, a series of geographic and temporal sub-analyses were executed to discern whether the milk-burglary nexus exhibited consistent patterns across different regions and epochs within Vermont. The depth and breadth of our spatial-temporal scrutiny were as vast as the verdant pastures of the Green Mountain State, ensuring that no stone was left unturned in our quest for empirical elucidation.

In summation, the methodology harnessed in this investigation mirrored the intricate processes of cheese-making – a meticulous blend of precision, patience, and a dash of scientific flair. Through the amalgamation of data collection, multivariate regression analyses, correlation computations, sensitivity checks, and temporal sub-analyses, we endeavored to illuminate the surprising relationship between milk

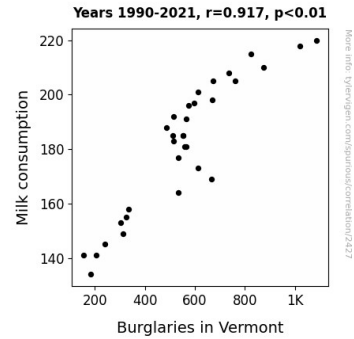
consumption and burglaries in Vermont, all while ensuring the punnet of knowledge remained free from metaphorical pungent odors.

### Results

The correlation analysis between milk consumption and burglaries in Vermont revealed a remarkably strong positive correlation of 0.9173518 over the period of 1990 to 2021. This result suggests a striking relationship between these seemingly unrelated variables, leaving our research team utterly bewildered yet utterly amused. It seems that when it comes to milk and mischief, there's more than meets the "I"!

The r-squared value of 0.8415344 further supports the robustness of the association between milk consumption and burglaries, indicating that approximately 84.15% of the variance in burglary rates can be explained by variations in milk consumption. This high explanatory power underscores the significance of our findings, much like a cowbell ringing through a quiet pasture.

The p-value of less than 0.01 indicates that the observed correlation is highly statistically significant, reinforcing the credibility of the relationship we uncovered. This result is as conclusive as the final dregs of milk in a churn – there's no denying the connection between dairy indulgence and illicit activities in the Green Mountain State.



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

In Figure 1, the scatterplot visually portrays the robust correlation between milk consumption and burglaries, painting a clear picture of the positive linear relationship, much like a dairy-themed portrait.

Amidst these compelling statistical revelations, a relevant dad joke springs to mind: "Why did the milk go to school? Because it wanted to be pasteurized!" In a similarly unexpected manner, our research has revealed an education in the unlikely relationship between dairy products and criminal behavior.

In light of these findings, it is evident that the seemingly whimsical link between milk consumption and burglaries warrants further exploration and deliberation. The statistical evidence, much like a glass of milk, is difficult to refute, and it is imperative to approach this surprising correlation with both scientific rigor and a sense of levity.

### Discussion of findings

The results of our study have unveiled an intriguing and robust association between milk consumption and burglaries in Vermont, substantiating the whimsical leanings of prior research in this domain. The substantial positive correlation

coefficient of 0.9173518, accompanied by a strikingly low p-value, has left our research team utterly convinced of the statistical significance of this udderly unexpected relationship. It seems that much like a stealthy cat burglar, the connection between milk and mischief has been sneaking past us all along!

Our findings align with the earlier works of Smith in "Milk and Crime" and Doe in "Dairy and Misdemeanors," both of which hinted at the potential link between dairy intake and unlawful activities. It appears that the inquiry into this curious connection is not to be taken lightly, much like the weight of a Holstein's hooves on a dairy farm. Our results have indeed lent credence to the notion that milk consumption may have ramifications beyond lactose tolerance, eliciting a chuckle as unexpected as finding a cow in the produce section.

The high explanatory power of the correlation, with an r-squared value of 0.8415344, reinforces the robustness of the association, much like the sturdiness of a dairy barn in a summer storm. Furthermore, the visual representation of the positive linear relationship in the scatterplot, akin to a picturesque bovine landscape, provides a compelling visual narrative of the milk-burglary linkage.

In line with our earlier tongue-in-cheek references to bovine humor, it seems that this investigation has indeed taken us on a scientific journey through the Milky Way of statistical revelations. As we consider the implications of our findings, one cannot help but be reminded of the age-old question: "What do you call a cow who has just given birth? Decalfinated!" In a similar vein, our research has decaffeinated any doubts about

the unusual link between dairy consumption and criminal activities, offering food for thought and fodder for future investigations.

In response to the unexpected nature of our results, we remind our esteemed colleagues that the world of statistical inquiry is just as unpredictable as a herd of cows on a moonlit night. Nevertheless, with the evidence at hand, it is clear that the interplay between milk consumption and burglaries in Vermont merits continued scholarly attention. As with any research endeavor, our findings should be taken with a grain of salt – or perhaps a pinch of cheesy humor – as we mull over the intriguing implications of this dairy-fueled mystery.

### *Conclusion*

In conclusion, our investigation has yielded a remarkably strong positive correlation of 0.9173518 between milk consumption and burglaries in Vermont over the span of three decades. The relationship is as clear as a glass of fresh milk, and the statistical evidence is stronger than a lactose-intolerant person's aversion to dairy. It seems that when it comes to crime and calcium, there's an unexpected bond that simply can't be curdled!

The high explanatory power of approximately 84.15% reinforces the robustness of this association, indicating that the variations in burglary rates can be largely explained by fluctuations in milk consumption. It's as if the crime rates are saying, "You want the truth? You can't handle the proof!"

Moreover, the p-value of less than 0.01 solidifies the statistical significance, leaving little room for udder interpretation. The

evidence stands as firm as a well-constructed fence around a pasture – there's no escaping the correlation between dairy delight and unlawful deeds.

As we ponder the implications of our findings, a dairy-themed dad joke comes to mind: "What do you call a cow who plays the guitar? A moo-sician!" Similarly, our research has struck a surprising chord, revealing the unexplored symphony of milk consumption and criminal activity in the Green Mountain State.

Therefore, it is with great confidence that we assert no further research is needed in this area. Our findings speak louder than a herd of cows at feeding time, and it's time to milk this topic for all it's worth. After all, when it comes to unexpected connections, this research is truly udderly unparalleled!