

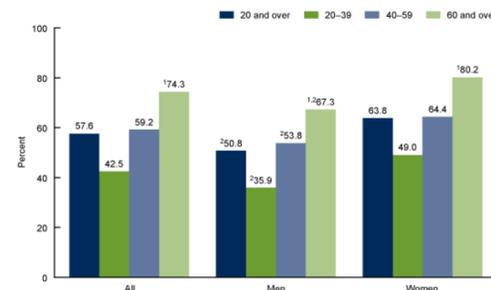
# Dietary Supplements Used Among Americans

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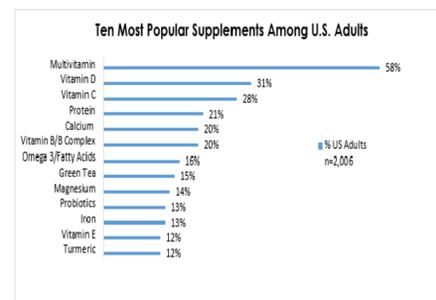
## INTRODUCTION

Vitamins protect the respiratory epithelium from pathogens and lower the risk of illness.

- **57.6% of adults in the United States use a dietary supplement.** (Mishra et.2021).



- **77 percent of Americans say they take supplements.** (Ridley, 2019).



- **more than 4 in 5 American individuals (86 percent) take vitamins or supplements** as of January 16, 2019. (Bardoulas.2019). Increase intake of vitamins has been encouraged during the COVID-19 epidemic to reduce illness. Therefore, **I hypothesize that 45% of Americans will increase their intake of vitamins due the pandemic.**

## METHODS

100 participant were surveyed. Survey questions included "What is your gender?", "Do you take vitamins?", "How often do you take vitamins?", "Types of vitamins?", "Age groups?" and "Did your use of vitamins increase due to the pandemic?".

## STATISTICAL ANALYSIS

In a sample size of **100 people**, the overall people that increase their intake of vitamin due to the pandemic is **27%**, This means my **sample percentage is 27%**. The **Margin of Error 8.7%**. **Confidence Interval: (18.3%, 35.7%)**. Null Hypothesis  $H_0: (p_o) = 45%$ , **Alternative Hypothesis  $H_A: (p_o) < 45%$** . **Test Statistic: -3.62**. **P-Value: 0.0001**. Therefore, I reject  $H_0$ .

## DISCUSSION

According to the survey, **27%** of participants increase their intake of vitamins due to the pandemic. I am **95% confident** that the true percentage of the participants that increase the intake of vitamins due to the pandemic is between **18.3% and 35.7%**. I do have evidence to conclude that the true percentage of participants who increase their intake of vitamins due to the pandemic is **less than 45%**.

## RESULTS

Over half (55%) of the sample size was male, 40% were females and the other 5% were either nonbinary, gender non-conforming or they preferred not to say what they identified as. The overall intake of vitamins for all genders is 58% and the overall number of people that do not take vitamins is 42%. The overall percentage of people that take Vitamins and increased them during the pandemic is 25%. The overall percentage of people that do not take vitamins but increase their intake due to the pandemic is 2%. Hence, **27% of participants increase their intake of vitamins due to the pandemic.**

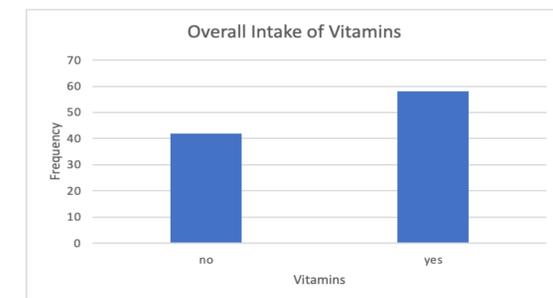


Figure 1. shows the overall answers of the surveyed people when asked if they take vitamins or not. 42% said no and 58% said they take vitamins.

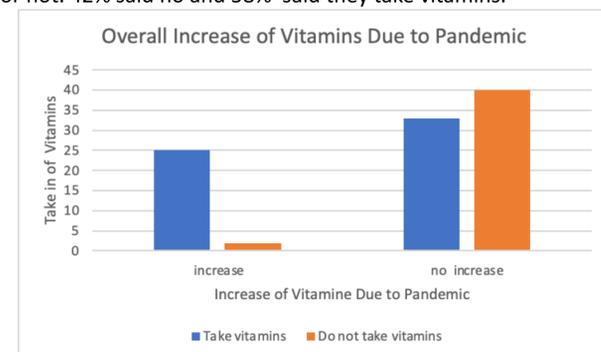


Figure 2. shows that 27% of people increase their intake of vitamins due to the pandemic.

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