

## **Abstract**

My hypothesis is that I think it will be hard to tell the difference between all 4 milk choices. I think it will be hard because milk tastes all the same to me.

I wanted to do this experiment because I usually drink 2% milk. I've tasted other milks and thought they all taste the same as 2%. I wanted to see if everyone else thought they all tasted the same, too. Also, as I started doing research, I was interested in finding out if one milk was healthier for me than the one I always drink.

In conclusion, my hypothesis was correct. Next time I would use more milk choices. For example: Chocolate milk, almond milk & goat milk. One thing that I would keep is, how I had the same number of adults & children taste test. Overall, I thought it was a good experiment and my taste testers had fun drinking milk!

## Background Research

I researched the different types of milk to see if I could find out what makes each milk different from one another. I wanted to see if there were big differences that would make a person tell by tasting the difference or not.

88% of the milk you are likely to drink is actually water! Milk is full of protein and two main types are whey and casein. Milk is full of Vitamin A. Milk is also a great source of Calcium.

Whole milk will help with heart disease, diabetes and some cancers. Whole milk is about 3.5% fat. Whole milk is about 150 calories.

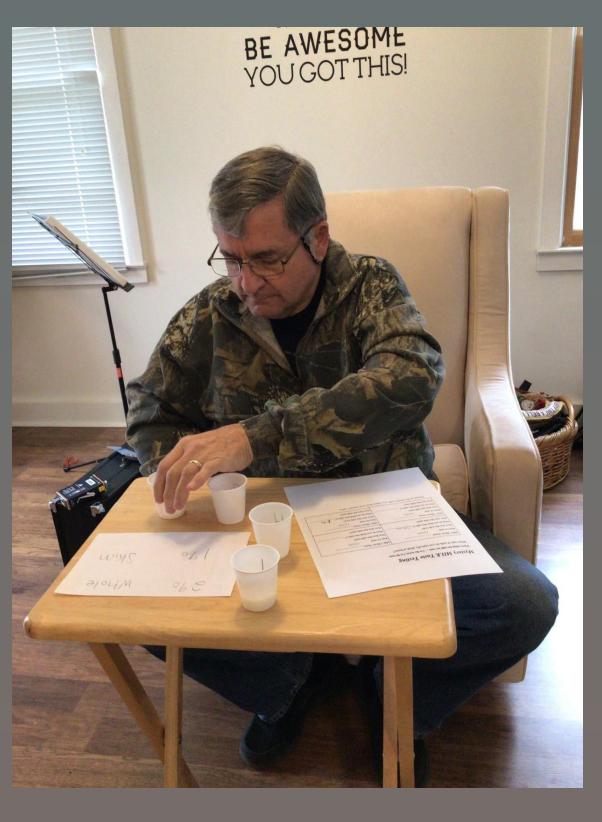
Skim milk has the lowest fat around 0.3%. Skim milk is 90 calories. It has 0 grams of fat.

If you look at the pictures above, they show that there are not huge differences between 1% and 2% milks.

## Procedures

Gather your materials. Give your taste tester the 4 cups of milk. Each cup is labeled with a number that matches the milk type. For example, you would write #1 on the cup of milk that has skim milk in it. You would write #2 on the cup that has whole milk in it and so on. Write it down on a piece of paper so only you know which milk is in each cup. Then you ask your taste tester to taste each cup of milk and fill out the worksheet. When they are done, you see which milks they have chosen correctly and write the "REAL" name of the milk on the worksheet.

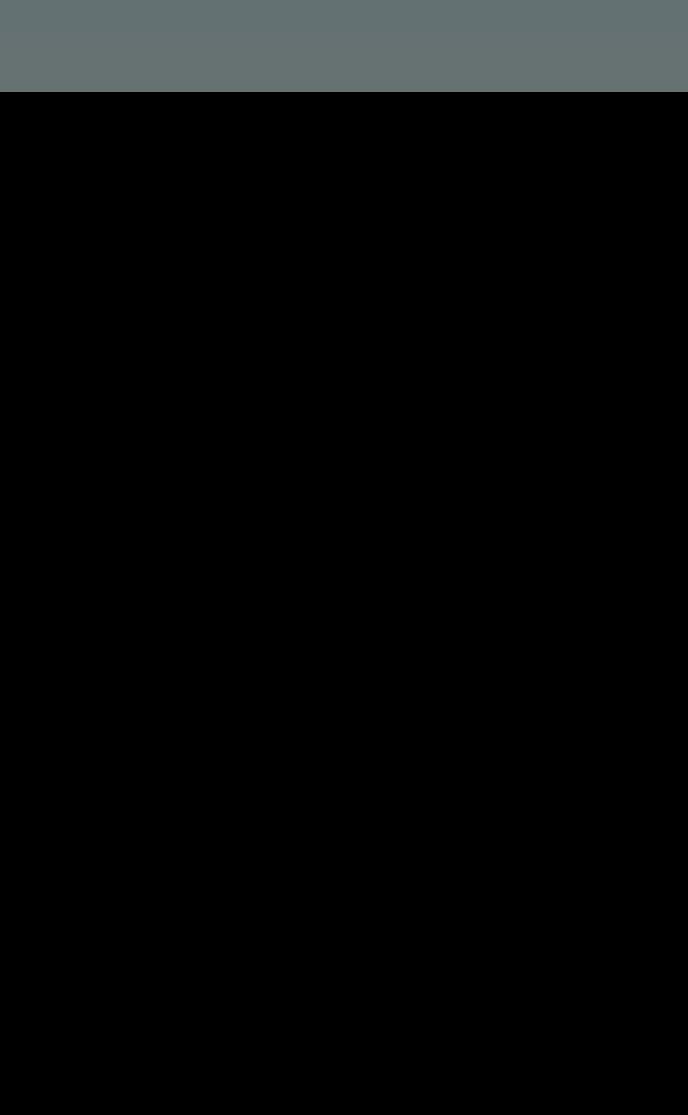
## Experiment



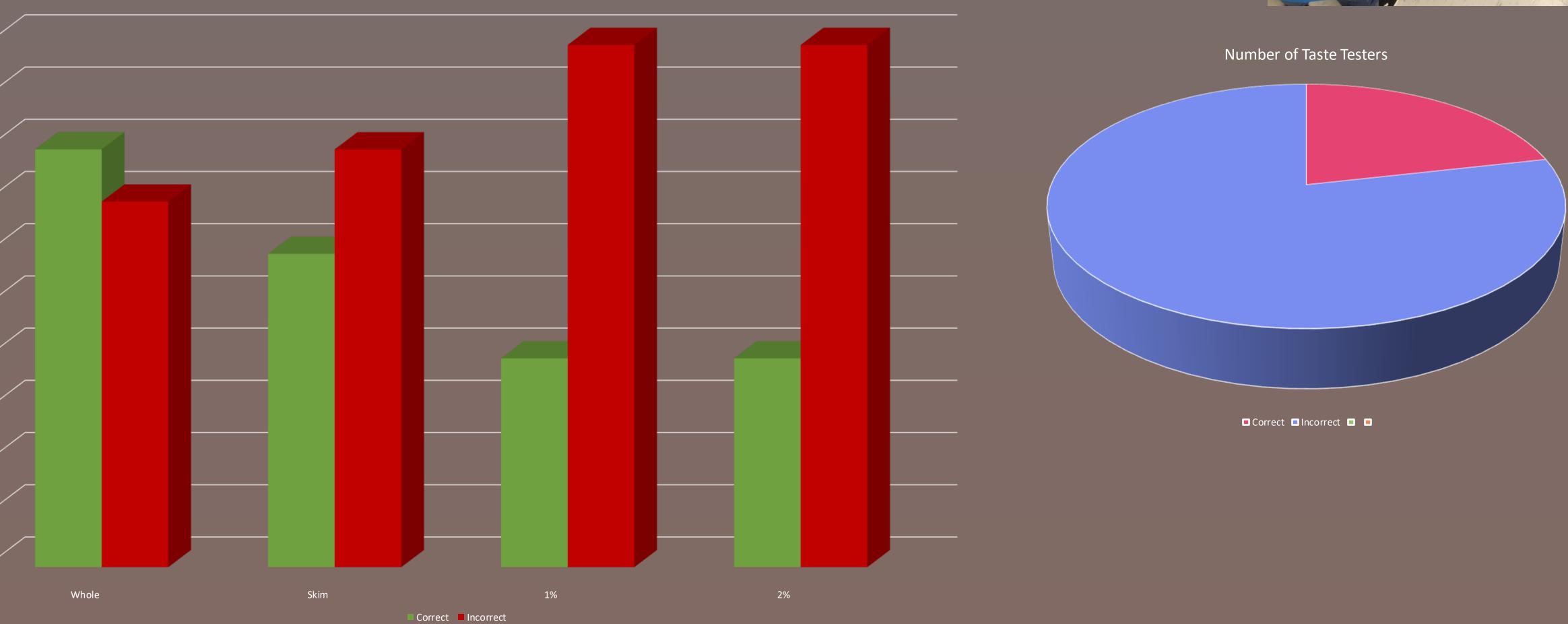
## Data Tables

# Got Milk?

In a blind taste test, can you tell the difference between 1%, 2%, Skim and Whole milk?



Blind Taste Test





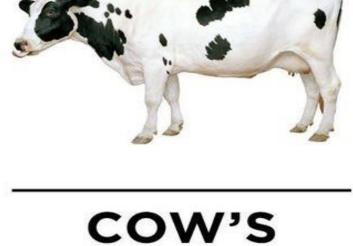
Whole Mill Creamy Whole milk contains 3.5% fat by weight, the same amount found when it leave the cow. Vitamin D is added to most milk produced in the U.S. to enhance the absorption of calcium.



reduced-fat low-fat milk Fat and calo levels are reduced in these version but they have the same complete nutrient package a whole milk.



Fat-free Milk (also knowr as non-fat or skim milk) From slender cows. Kidding Fat-free milk has no more than 0.2% milk fat. So it's the lowest in calories but, again, has just as many nutrients as whole milk.



## MILK

#### SKIM

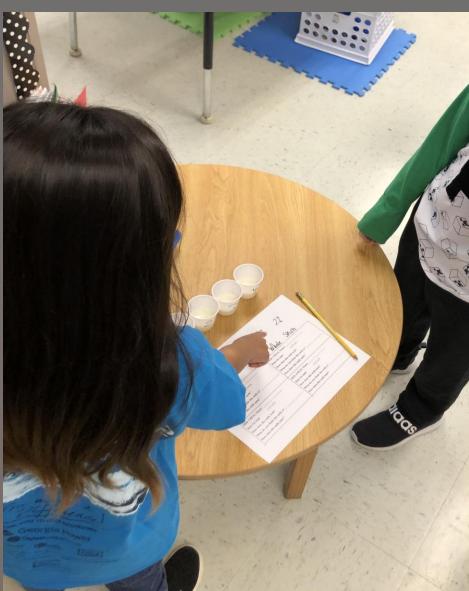
- BEST FOR: WEIGHT LOSS 80 CALORIES
- FAT-FREE NEARLY THE SAME AMOUNT
- OF VITAMINS AND MINERALS AS WHOLE
- TASTE IS A LITTLE WATERY

#### LOW-FAT

- BEST FOR: EXTRA FLAVOR
- 100/120 CALORIES • 3g SATURATED FAT
- OF RED MEAT AND CHEESI

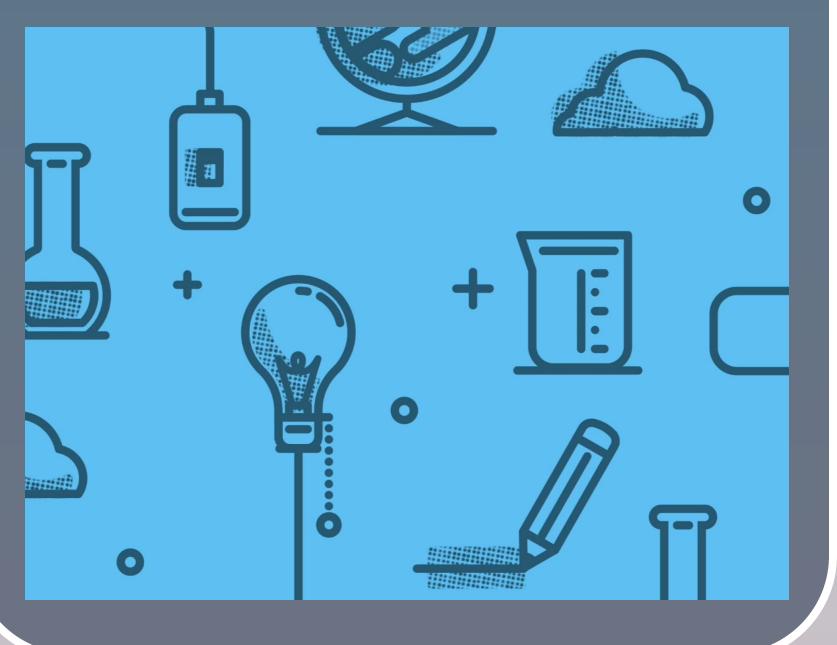
#### WHOLE

- BEST FOR: OCCASIONAL MILK
- DRINKERS • 5g SATURATED FAT
- OK FOR UP TO 1 CUP A DAY CUT BACK ON SNACK AND
- SWEETS IF YOU WANT WHOLE



#### Conclusions

In conclusion, my hypothesis is right. When looking at my graph, only one column has more correct answers. 8 people were able to tell that it was Whole milk. The rest (1%, 2% and Skim) have more incorrect which shows that it was hard to tell the difference between all 4 milk choices. 6 people could not tell that it was skim milk. 10 people could not tell that it was 1% or 2% milk. This is why I think that all 4 milks must taste similar since it was difficult for so many people to tell the difference.



### Materials

- Whole milk
- 1% Milk
- 2% Milk
- Skim milk
- 4 plastic cups
- Sharpie to write # 's on the cups
- Pencil

### References

Skim Milk vs. Whole Milk: Which is Healthier? <u>www.dailyburn.com</u>

Toddlers: Whole Milk vs. Skim Milk www.thefoodieskitchen.com

12 Interesting and Amazing Fact About Milk <u>www.tonsoffacts.com</u>

#### Mystery MILK Taste Testing When rating the milk for taste --- 1 is the worst, 5 is the best

What type of milk do you typically drink at home?

Milk 1 REAL Name: Rate for taste 1 2 3 4 5 How does this milk look? What do you think this milk is

Milk 2 REAL Name: Rate for taste 12345 How does this milk look? What do you think this milk is Milk 4 REAL Name: What do you think this milk is

- How does this milk taste? Milk 3 REAL Name: Rate for taste 12345 How does this milk look? What do you think this milk is? How does this milk taste?
- How does this milk taste? Rate for taste 1 2 3 4 5 How does this milk look? How does this milk taste?
- Mystery Milk Taste Test Worksheet