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Dairy and Dairy Alternatives: Media Portrayal vs. Nutritional Facts

Megan Stinson
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Abstract

Many people use dairy alternatives in their everyday lives. In particular, society's emphasis on low-fat, low-cal nutrition has created a huge desire for something other than milk in cereal, ice-cream, coffee etc., but are these alternatives actually healthier? In this project, I will examine the media portrayal of three major dairy alternatives, soy-milk, almond-milk, and rice-milk, and whether the nutritional truths, discovered through background research, back up the views and expectations of the consumer, as determined by a questionnaire. I will compare what people think is the healthiest with what the actual facts are.

Introduction

The FDA recommends 2-3 servings of dairy per day in the food pyramid (Fig. 1) (Wiley, 2011: 24). On top of this, milk has a large cultural significance for the United States (Wiley, 2004: 506). For many people, in all parts of the world, this poses a serious issue. Lactose intolerance, or the inability to digest the sugar lactose, has been thrust into the public eye as dairy alternatives begin to gain support. Lactose tolerance, despite seeming to be the norm in the United States, is present in an extreme minority of people, mostly those of European descent (Kingfisher, 1998: 451). As Wiley states in her article, this should not come as a surprise. It is well known within anthropological circles, and within many of the organizations, such as the USDA, that promote dairy and dairy consumption (Wiley 2004: 511).

Along with lactose intolerance, fat intake and dieting are issues that come up many times when discussing whether dairy or dairy alternatives are healthier. For a lot of Americans looking to answer questions about health, fat intake is the number one concern. This was demonstrated to me in my survey and literature review.

Due to the discrepancies between the USDA Food Pyramid and the number of people who are lactose tolerant, I focused on dairy alternatives. Most people, according to the survey I created, either get their information on the nutritional benefits of dairy alternatives from popular media or word of mouth. This causes major confusion as many articles conflict with one another. An example is, in *Almond Milk vs. Soy Milk: Which is Healthier?*, the author states that, "Most natural almond milk choices will have no more than one gram of protein per serving...", whereas in the article *Almond Milk vs. Soy Milk: Which is better for you?* the author states, "One cup of soy milk contains about seven grams of protein compared to the four grams in almond milk" (Fitday 2012, 3FCD 2012). Media portrayal of the dietary benefits of different dairy alternatives is unreliable and, many times, not backed up by evidence, which shows in the discrepancies.

Methods

To avoid making the same mistakes as the popular media articles, I did research from scholarly reviewed journals, as well as using my survey to get some first hand results. The survey was given to 25 people, but due to incompleteness and lack of answers, only 16 of those that were returned were used. In the surveys I looked to determine which dairy products or alternatives were being consumed, and to see if there were any correlations between age or gender and dairy consumption. To have a sense of the actual nutritional content of each dairy alternative I examined (soy milk, almond milk, and rice milk), I bought a carton of each and found the food labels of those brands from the manufacturer's websites. I then compared the results of my survey questions with the nutritional value of each alternative, soy milk, and 2% milk (see handout). I then used that information to compare the nutritional facts with the consumer perceptions of the health benefits as determined by the survey.

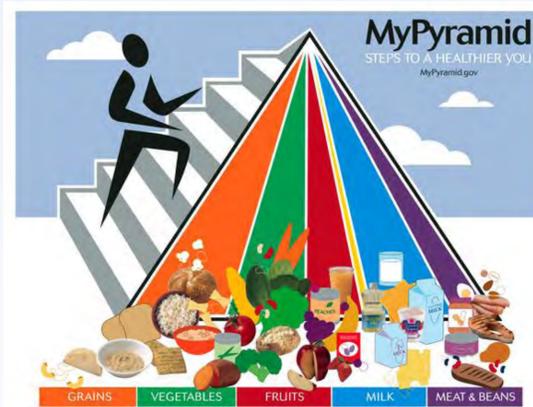


Figure 1. USDA food pyramid. Selected from USDA website.

Survey Results

Breakdown of Dairy Alternatives		Breakdown of Dairy	
Soy	2	Skim	2
Almond	4	1%	3
Rice	1	2%	4
Other	2	Whole	4
		No Preference	1

Table 1. Types of products consumed

Averaged Survey List from Healthiest to Least Healthy	
Healthiest	Almond Milk
2 nd Healthiest	Soy Milk
3 rd Healthiest	Rice Milk
4 th Healthiest	Skim Milk
Least Healthy	2% Milk

Table 2. Surveyor opinions of healthiest to least healthy

Media Portrayal Summary

As mentioned before, there are many discrepancies in information presented in different articles about milk products. This makes it difficult to create a list from healthiest to least healthy. Instead, I created a table showing the ranges of nutrients present in each alternative based on the information from ten different articles. Those results are shown below (Table 3).

Type	Calories	Calcium (%DV)	Vitamin A (%DV)	Iron (%DV)	Protein (g)	Fat (g)
Soy	80-150	30-40	10-15	4-6	4-8	0-6
Almond	40-80	30-45	8-10	4-8	1-4	0-8
Rice	50-120	15-30	8-10	6-8	2-6	0-4
2% Milk	100-180	25-50	9-15	0-4	5-10	3-9
Skim Milk	60-90	30-45	10-15	0-3	4-10	0

Table 3. Ranges of nutrients from popular media articles

Nutritional facts from Products

The nutritional values presented in the table below were collected directly off of the packaging for each dairy alternative and dairy product.

Type	Calories	Calcium (%DV)	Vitamin A (%DV)	Iron (%DV)	Protein (g)	Fat (g)
Soy	90	30	10	6	6	3.5
Almond	60	45	10	4	1	2.5
Rice	120	30	10	6	6	2
2% Milk	122	28	9	0	~8.0	~4.8
Skim Milk	83	31	10	0	~8.3	~0.5

Table 4. Nutritional values from products

Analysis & Conclusions

While it is true that the nutrients presented by popular media sources do not contradict the product labels, it is obvious that the discrepancies between articles can give people an incorrect view of which dairy alternative is the healthiest. The ranges seen here are very broad, and can cause a lot of confusion. If a person were to only read one article in their search for the best dairy alternative, the chances of them finding one that presents the correct values for those nutrients is extremely slim.

Analysis & Conclusions

When comparing nutritional labels, it is clear to see that there is very little difference between most of the dairy alternatives and cow's milk. The only marked differences were seen in protein content and calorie content. There was greater amount of variation in fat content, mostly due to the fact that skim is fat free. The variation between the dairy alternatives and the 2% milk was only approximately 3 grams.

The goal of this research was to find out how the media was portraying dairy alternatives, as well as what the nutritional facts were concerning dairy and dairy alternatives. In my survey, people consistently ranked the alternatives as healthiest, but many were merely guessing or had gathered their information from popular media. These assumptions were correct when looking at calorie and fat content, which were the two major concerns expressed by the survey takers.

Finally, my study showed no correlations between gender and dairy consumption or age and dairy consumption. This came as a surprise. I expected older generations to be more prone to drinking dairy, while the younger ones would be more accepting of alternatives. This assumption stemmed from the fact that dairy alternatives have only recently become more popular, and so the older generations would be more "set in their ways". I also expected women to drink more alternatives than men, but this assumption was due to my own personal experience. The small number of results from the survey means that the lack of correlation may just be from the small sample size. To really study those patterns in depth, a larger sample size would be needed.

References

- Almond Milk vs. Soy Milk: Which Is Better for You?. Fitday Beta. <http://www.fitday.com/fitness-articles/nutrition/healthy-eating/almond-milk-vs-soy-milk-which-is-better-for-you.html>.
- Almond Milk vs. Soy Milk: Which Is Healthier?. 3 Fat Chicks on a Diet. <http://www.3fatchicks.com/almond-milk-vs-soy-milk-which-is-healthier/>.
- Bauer, Joy. Skim, soy, more: Which milk is best?. Today Health. http://today.msnbc.msn.com/id/35976918/ns/today-today_health/t/skim-soy-more-which-milk-best/#.T6g3GcUqmuJ.
- Chandler, Stephanie. 2011. "Nutritional content of soy milk". Livestrong.com. <http://www.livestrong.com/article/365208-nutritional-content-of-soy-milk/>.
- Groce, Victoria. Milk Alternatives and Dairy-Free Beverages. Food Allergies.About.Com. <http://foodallergies.about.com/od/dairy/t/milkalternatives.htm>.
- Kingfisher, Catherine P. and Ann V. Millard. 1998. "Milk makes me sick but my body needs it": Conflict and contradiction in the establishment of authoritative knowledge. Medical Anthropology Quarterly, Vol. 12 No. 4, Pp. 447-466.
- McCabe, Sarah. *Soy Milk v. Almond Milk: Which is better?*. The Herb Companion. <http://www.herbcompanion.com/herbal-living/soy-milk-vs-almond-milk.aspx>.
- "Silk" official website. <http://silksoy.com/content/feel-great?clid=CNaDurCTmrACFYcZQqods0pPXw>.
- USDA Website. www.mypyramid.gov.
- Wiley, Andrea S. 2004. "Drink Milk for Fitness": The Cultural Politics of Human Biological Variation and Milk Consumption in the United States. American Anthropologist, Vol. 106, pp. 506-517.
- 2011. *Reimagining Milk*. Taylor & Francis. New York, NY.

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