Awareness of the Recent Change in the Nutrition Label

Olivia Meza, Michael Moh, Molly Camarena, Gurinder Bains, Lida Gharibvand, Georgia Hodgkin

Contact: Michael Moh, mmoh@llu.edu

DEPARTMENT OF NUTRITION AND DIETETICS, LOMA LINDA UNIVERSITY

Introduction

The Nutrition Facts panel as it is recognized today was developed by Dr. David Kessler in 1994 during his tenure as the commissioner of the FDA.[1] A new label was announced on May 20, 2016 to increase awareness about food content, clarify the amount of food in a package, and to present information that has been recently and scientifically updated.[2] Several studies have researched the food label and the association between knowledge and dietary intake. However, these studies examined the 1994 version of the label and results fell short of desired outcomes.[3] Since the announcement of the new label, very little promotion has taken place to make consumers aware of the changes that have taken place.

Purpose

To identify whether consumers have been made aware of the 2016 nutrition label update.

Methods

- Data were collected on 232 participants 18-years old and above.
- An anonymous, self-administered questionnaire was provided to participants via email or in person consisting of 18 questions divided into two sections: nutrition label and demographics (Table 1).
- Statistical analysis was completed using SPSS. Data were tested using chi-squared test of homogeneity and Fisher's Exact Test.

Table 1: Frequency (%) of Demographic Characteristics

	Frequency (%)		Frequency (%)		Frequency (%)
Gender		**Exercise**		**Occupation**	
Male	84 (36.6)	I agree	169 (73.8)	Agriculture	1 (0.4)
Female	148 (63.8)	I do not agree	60 (26.2)	Arts/ Entertainment	12 (5.4)
Race		**Special Diet**		Construction	2 (0.9)
White/Caucasian	112 (48.7)	Yes , for medical condition	17 (7.4)	Education	42 (18.8)
African American	4 (1.7)	Yes, for fitness/ health goals	87 (38.0)	Engineering/ Science	4 (1.8)
Asian/Pacific Islander	37 (16.1)	No	125 (54.6)	Finance	7 (3.1)
Native American	2 (0.9)	**Nutrition Education**		Government	4 (1.8)
Latino	62 (27.0)	Yes	118 (51.3)	Health Care/ Fitness	22 (9.8)
Other	6 (2.6)	No	112 (48.7)	Hotel/ Food Service	5 (2.2)
Number of Children		**Marital Status**		Human Resources	1 (0.4)
0	150 (64.7)	Single	120 (51.7)	Legal/Law	5 (02.2)
1	27 (11.6)	Married	101 (43.5)	Military	
2	38 (16.4)	Divorced	11 (4.7)	Real Estate	2 (0.9)
3	11 (4.7)	**Number in Household**		Retail/ Sales	20 (8.9)
4	5 (2.2)	1	32 (13.8)	Student	47 (21.0)
		2	75 (32.3)	Technology	7 (3.1)
		3	53 (22.8)	Transportation	
		4 or more	72 (31.0)	Unemployed	5 (2.2)
				Other	34 (15.2)

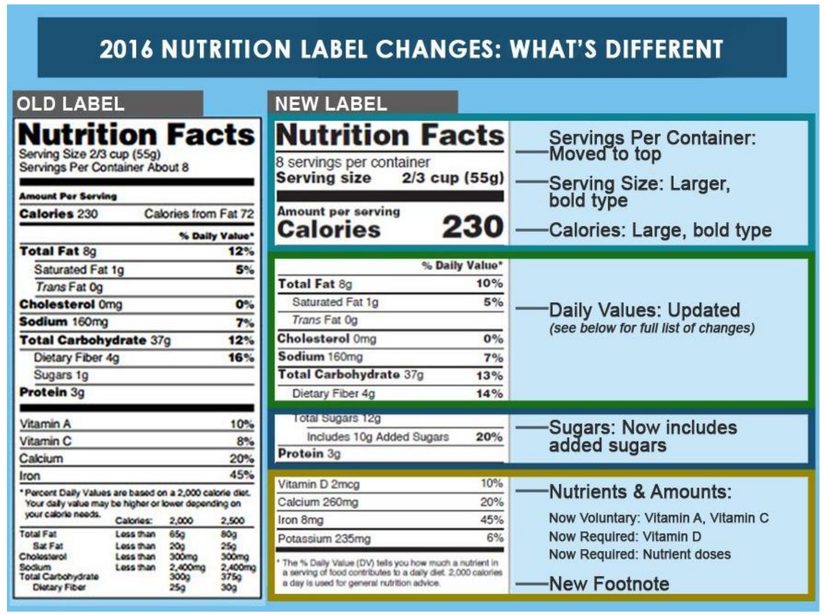

Table 2: Frequency (%) of Awareness of Recent Change of Nutrition Label by Group

Group	Frequency (%) YES	Frequency (%) NO	P-Value
Gender			0.245
Male	19 (22.6)	65 (77.4)	
Female	41 (27.7)	107 (72.3)	
Education			0.124
Some college or below	14 (20.0)	56 (80.0)	
College graduate or higher	46 (28.2)	117 (71.8)	
Income			0.002
<$24,000	15 (45.5)	18 (54.5)	
$25,000-99,999	27 (29.0)	66 (71.0)	
>$100,000	15 (15.5)	82 (84.5)	
Ethnicity			0.23
White/Caucasian	37 (33.0)	75 (67.0)	
African American	0 (0.0)	4 (100)	
Asian	9 (24.3)	28 (75.7)	
Native American	0 (0.0)	2 (100.0)	
Latino	13 (21.0)	49 (79.0)	
Other	0 (0.0)	6 (100.0)	

Table 3: Frequency (%) of Identification of New Nutrition Label by Group

Group	Frequency (%) OLD	Frequency (%) NEW	P- Value
Gender			0.312
Male	14 (16.7)	70 (83.3)	
Female	30 (20.3)	118 (79.7)	
Education			0.547
Some college or below	13 (18.6)	57 (81.4)	
College graduate or higher	31 (19.0)	132 (81.0)	
Income			0.146
<$24,000	9 (27.3)	24 (72.7)	
$25,000-99,999	20 (21.5)	73 (78.5)	
>$100,000	13 (13.4)	84 (86.6)	
Ethnicity			0.202
White/Caucasian	21 (18.8)	91 (81.3)	
African American	0 (0.0)	4 (100.0)	
Asian	8 (21.6)	29 (78.4)	
Native American	1 (50.0)	1 (50.0)	
Latino	12 (19.4)	50 (80.6)	
Other	0 (0.0)	6 (100.0)	

Results

- There was a significant difference in the awareness of the recent change in the nutrition label by income level (P = 0.002) (Table 2)
- There was no significant difference in the awareness of the recent change in the nutrition label by gender (P = 0.245), education level (P = 0.124), and ethnicity (P = 0.230) (Table 2)
- There was no significant difference in the identification of the new nutrition label by gender (P = 0.312), education level (P = 0.547), income level (P = 0.146), and ethnicity (P = 0.202) (Table 3)

Conclusion

- Our findings suggest the majority of participants are not aware of the updated nutrition label change.
- However, when presented with the images of the old and new nutrition label, most participants were able to identify the updated version.
- Early and adequate nutrition education could improve shopping and healthful eating habits.
- The intent of the new label to bring awareness of realistic serving sizes and their calorie load appears to have not been met.

Recommendations

- Create greater awareness of the new nutrition label in the general population through social media, radio, and television.
- Increase the proportion of nutrition research funding allocated for education and promotion of improved shopping and eating habits.
- Reexamine conclusions drawn from prior research to compare reproducibility of results between the old vs. new label.
- Future research should be conducted on a broader population with economically and culturally diverse backgrounds.

References

1. Institute of Medicine. 2003. Dietary Reference Intakes: Guiding Principles for Nutrition Labeling and Fortification. Washington, DC: The National Academies Press.
2. Center for Food Safety and Applied Nutrition. Labeling & Nutrition - Changes to the Nutrition Facts Label. U S Food and Drug Administration Home Page. https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm385663.htm. Accessed April 2, 2018.
3. Ollberding NJ, Wolf RL, Contento I. Food Label Use and Its Relation to Dietary Intake among US Adults. Journal of the American Dietetic Association. 2011;111(5, Supplement):S47-S51.