

Introduction

- Health Literacy: “the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others” (HHS)
- Low health literacy = high risk for misunderstanding food label information, greater risk for developing preventable diseases/obesity (ODPHP)
- Nutrition rarely discussed in primary care (Wynn et al., 2010)
- Improved food label literacy → reduced medical costs, prevention/management of chronic diseases

Healthy People 2020 Nutrition Goals

- ✓ Increase consumer consumption of healthy diets, attain healthy body weight
- ✓ Increase physician office visits for nutritional education (ODPHP)

Background & Significance

- Poor food choices → elevated BMI & other disease processes (CDC, n.d.)
- 42.4% obesity in adult males/females, 2017-2018 (CDC, n.d.)
- 1 in 2 Americans read at 8th grade level (Saefer & Keenan, 2005)
- Low health literacy →:
 - poor health status, poor health management, more frequent ED visits, unhealthy diet (CDC, n.d.)
 - increased adult risk for obesity and preventable diseases; food label literacy correlates to self reported dietary behaviors (CDC, n.d.)
- \$106-238 billion annually = cost of poor health literacy (Vernon et al., 2007)
- \$3.8 trillion annually = cost of chronic disease (CDC, 2021)

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Project Focus/Population

Study population: convenience sample, adult patients from study site

Inclusion criteria:

- adults 18+ years old
- patients at project site
- able to speak, read, write, understand English

Aims of education seminar:

- Identify subjects at risk for low health literacy
- Determine if education session can increase food label literacy knowledge

Study Design

- Descriptive study Quality Improvement, pre and post intervention measure on adult literacy of food labels
- Study site: Primary care site in urban area, central NJ
- Descriptive data collected on food label literacy pre/post educational testing, to learn results of training seminar intervention
- Assessment Tool: **Newest Vital Sign** (Pfizer, 2011)

Nutrition Facts		½ cup
Serving Size		4
Servings per container		
Amount per serving		
Calories	250	Fat Cal 120
		%DV
Total Fat	13g	20%
Sat Fat	9g	40%
Cholesterol	28mg	12%
Sodium	55mg	2%
Total Carbohydrate	30g	12%
Dietary Fiber	2g	
Sugars	23g	
Protein	4g	8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

Score Sheet for the Newest Vital Sign Questions and Answers

READ TO SUBJECT: This information is on the back of a container of a pint of ice cream.	ANSWER CORRECTLY	
	yes	no
1. If you eat the entire container, how many calories will you eat? Answer: 1,000 is the only correct answer		
2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have? Answer: Any of the following is correct: 1 cup for any amount up to 1 cup. Half the container. Note: If patient answers "two servings," ask "How much ice cream would that be if you were to measure it in a bowl?"		
3. Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day? Answer: 33 is the only correct answer		
4. If you usually eat 2500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving? Answer: 10% is the only correct answer		
READ TO SUBJECT: Pretend that you are allergic to the following substances: Peanuts, peanuts, latex gloves, and bee stings.		
5. Is it safe for you to eat this ice cream? Answer: No		
6. Ask only if the patient responds "no" to question 5! Why not? Answer: Because it has peanut oil.		

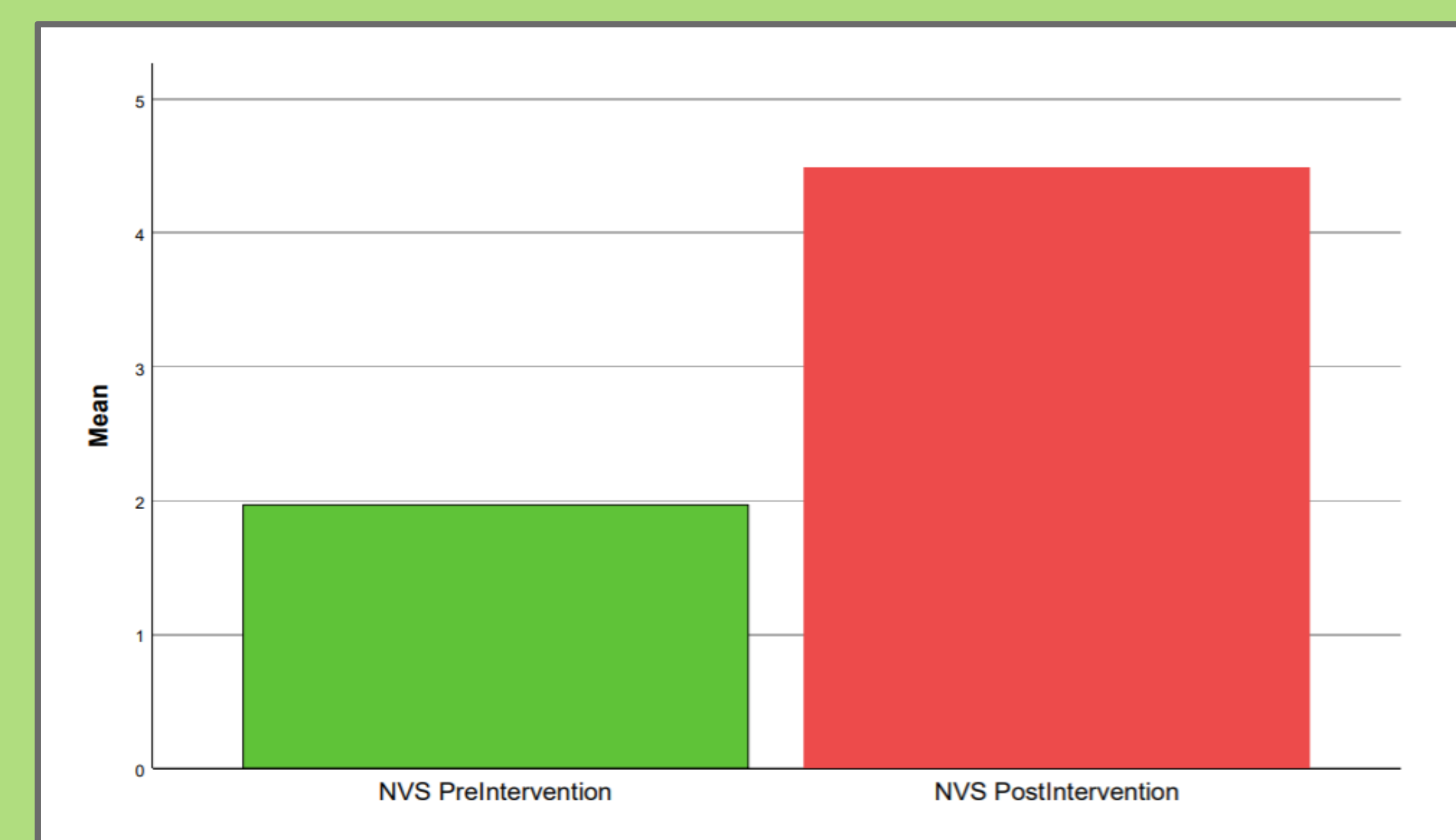
Interpretation: Number of correct answers:
Score of 0-1 suggests high likelihood (50% or more) of limited literacy.
Score of 2-3 indicates the possibility of limited literacy.
Score of 4-6 almost always indicates adequate literacy.

Educational Intervention

- Pre-survey
- 1-hr PowerPoint on food literacy, Q&A
- Post-survey
- Educational Brochure

Descriptive Statistics

Male 35.5 / Female 64.5



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Discussion & Results

- Significant improvement in pre to post scores for male and female subjects, across age levels.
- Strong correlation between pre and post intervention scores.

Limitations

- Sample size
- Lack of longitudinal data
- Participant bias toward reward

TAKEAWAY

- Food label education = improved health literacy
- Food label literacy = healthier food choices
- Assessment of health literacy in primary care communities

