

EDUCATING RILEY COUNTY SENIORS IN BASIC NUTRITION

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Kansas State University

K-STATE RESEARCH AND EXTENSION

- Serves all 105 counties
 - Provides information on a variety of topics
- Preceptor
 - Virginia (Ginny) Barnard, MPH
 - Family and Consumer Sciences Agent
 - Focus:
 - Food and Nutrition
 - Food Safety
 - Health and Safety
 - Indoor Environments



RILEY COUNTY SENIORS' SERVICE CENTER

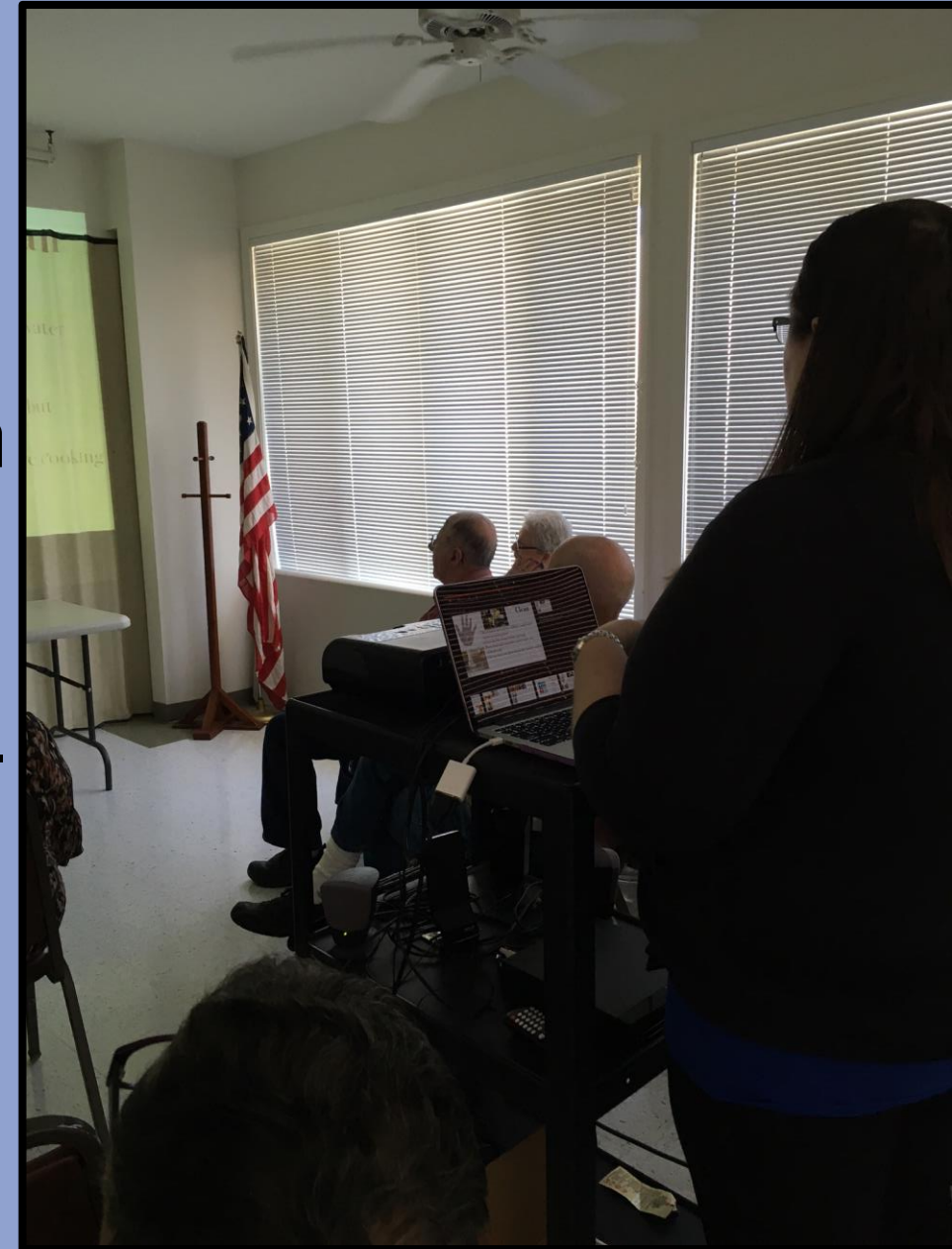


<http://www.seniorsservicecenter.org/>

- Provides services and activities for those 60 years old and older in Manhattan and Riley County
- Programs & Services:
 - Health and Wellness
 - Personal Growth
 - Arts and Crafts
 - Safety
 - Financial Planning
 - Community Involvement

WHAT

- 6-week course on basic nutrition
 - Met once a week for six weeks
 - Combination of PowerPoint presentation, hands-on and interactive portions, and take-home material
 - Encouraged attendees to ask questions before, during, and after sessions



LAST SESSION



WHY

- The proportion of older adults in the United States continues to steadily rise
- Few educational programs focus on older adults' nutritional needs
- Preventing illnesses can reduce burden on the healthcare system
- Fixed income and limited resources

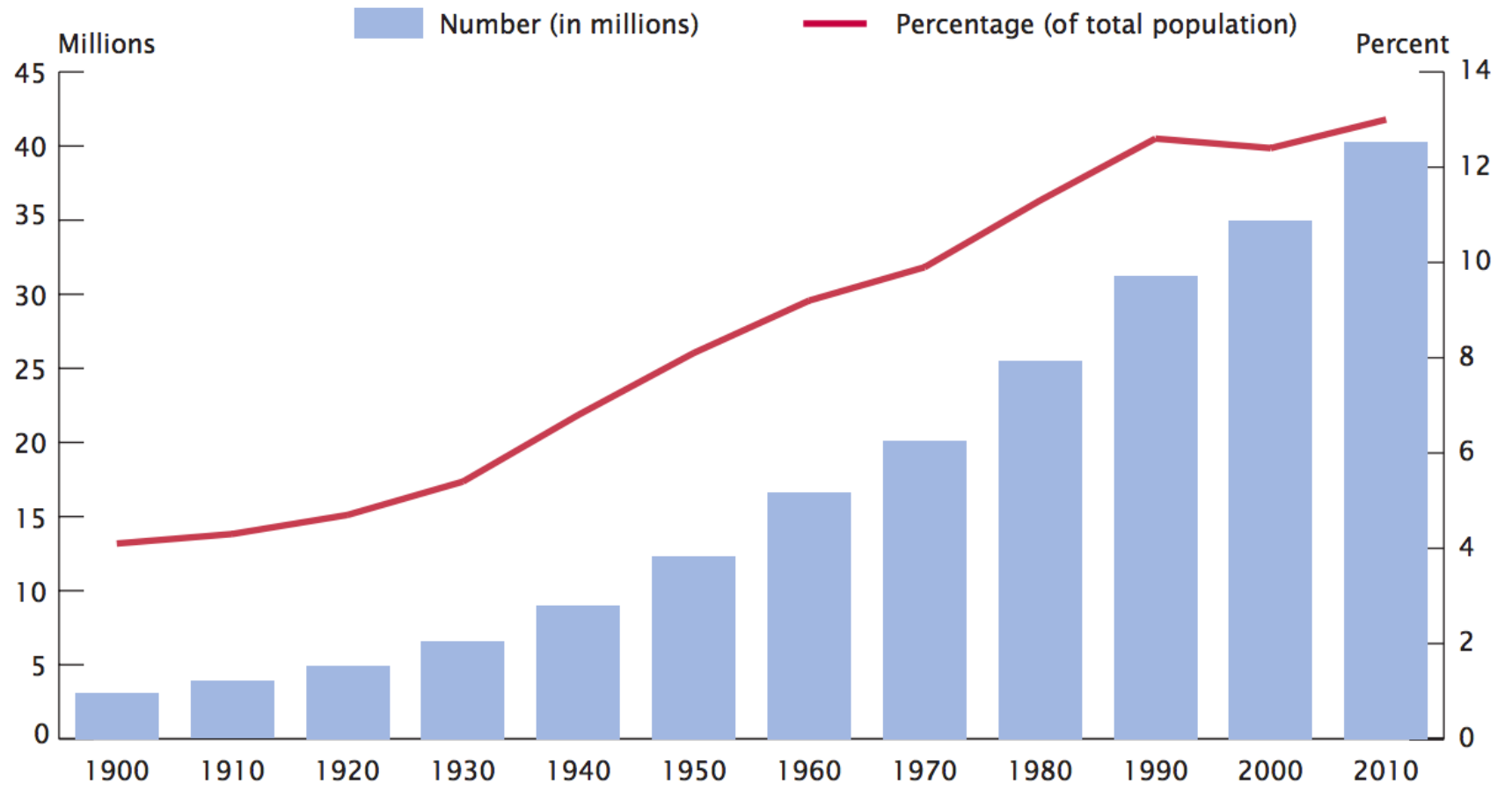


WHY

Figure 2.

Population 65 Years and Older by Size and Percent of Total Population: 1900 to 2010

(For more information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)



Sources: U.S. Census Bureau, decennial census of population, 1900 to 2000; 2010 Census Summary File 1.

WHY

- National Institutes of Health
- National Institute on Aging

What's On
Your Plate?



<https://www.nia.nih.gov/health/publication/whats-your-plate>

Tufts
UNIVERSITY

MyPlate
for Older Adults

<http://hnrca.tufts.edu/myplate/myplate-for-older-adults/>

Let's eat
for the health of it

https://www.fns.usda.gov/sites/default/files/27_DGCB-LEFTHOI.pdf

NIH Senior Health

Built with You in Mind

<https://nihseniorhealth.gov/eatingwellasyougetolder/benefitsofeatingwell/01.html>

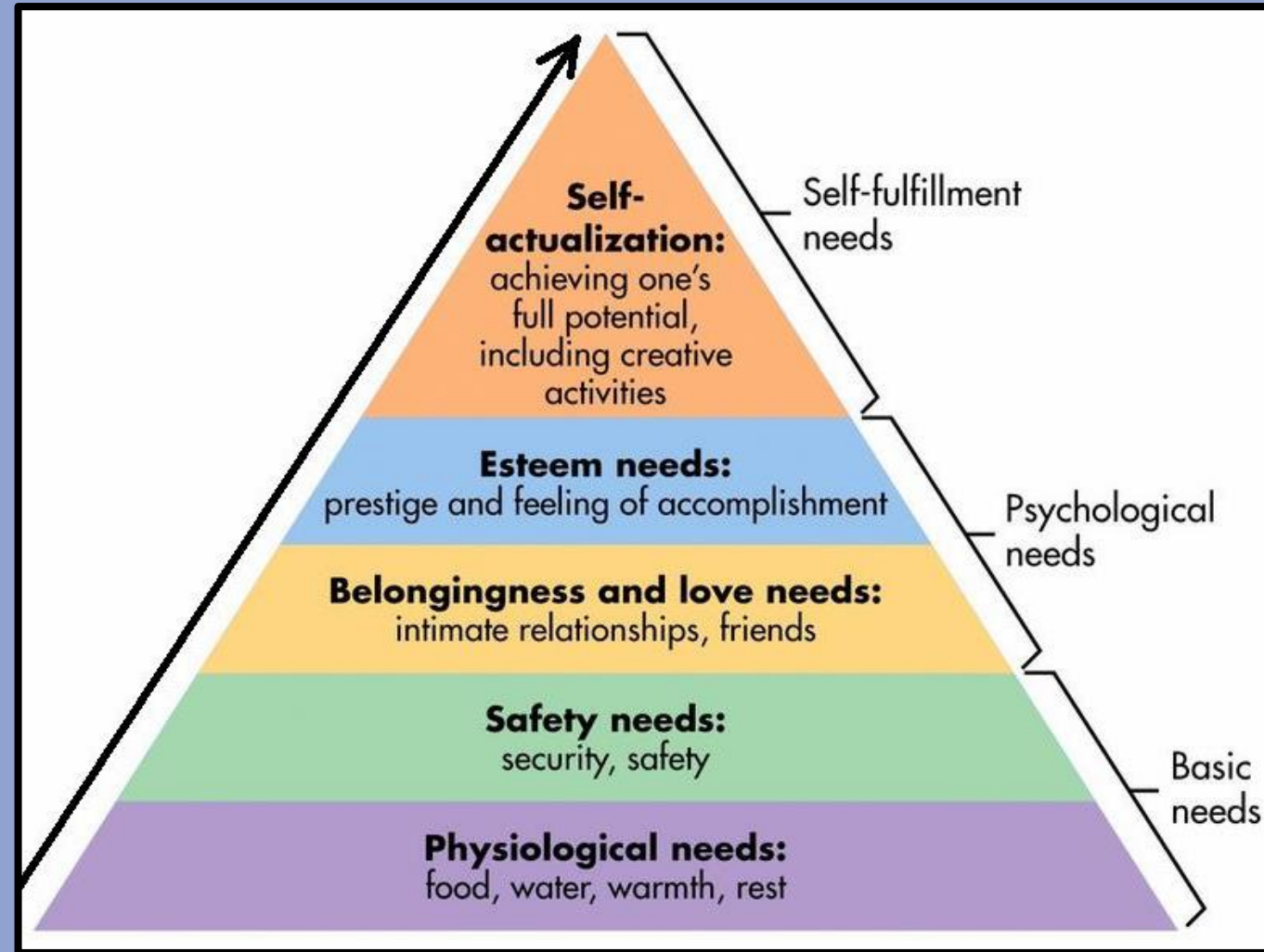


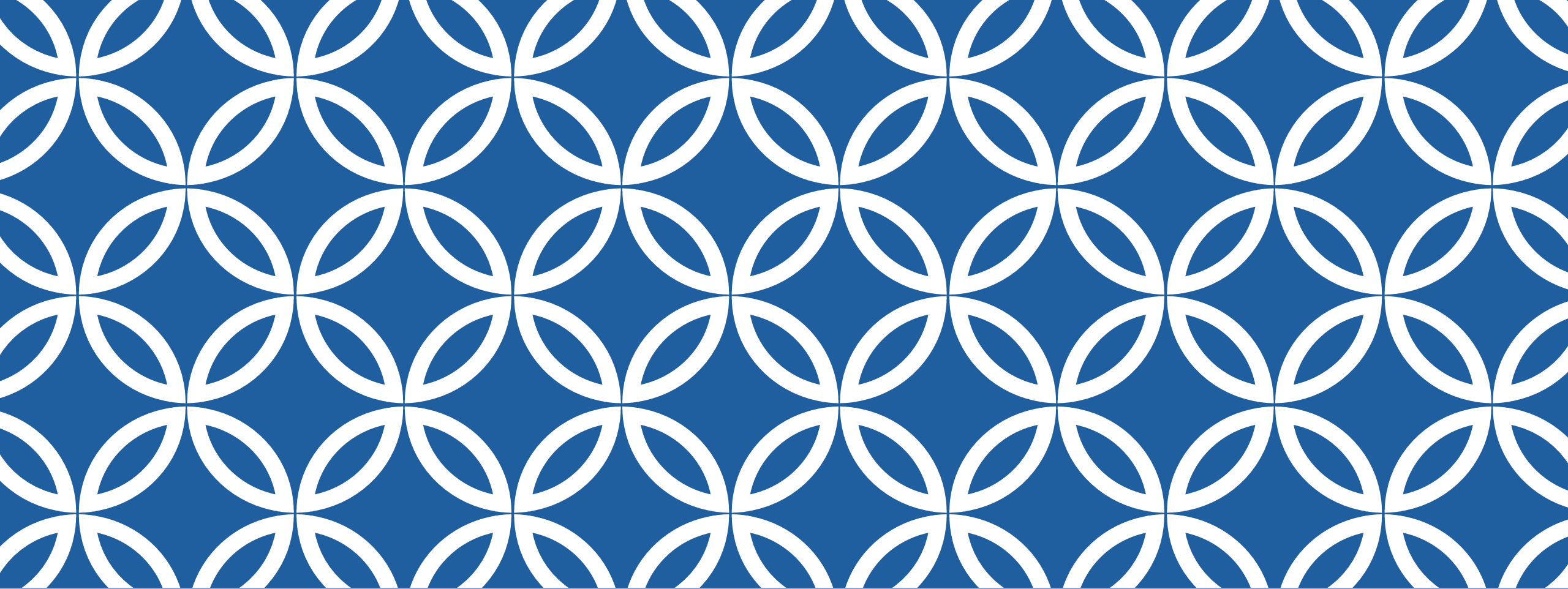
WHY

- Older adults account for (65+ years old):
 - 44% of hospital care
 - 38% of emergency room medical services responses
 - 35% of prescriptions
 - 26% of physician office visits

WHY

- A large percentage of older adults live on a fixed income
- Maslow's Hierarchy of Needs
- Many local resources are available to help find the basic needs





**CREATE AND PRESENT A BASIC
NUTRITION PROGRAM**

**FOCUS AND
SCOPE OF FIELD
EXPERIENCE**

Understand

Understand how to organize and implement a nutrition program to an underserved audience.

Identify

Identify recruitment methods or ways to reach target population.

Recognize and implement

Recognize and implement methods to keep participants motivated and engaged.

Evaluate

Evaluate program using pre- and post-assessments created based on material presented during the duration of the program.

Gain

Gain an understanding of community-based public health programs.

LEARNING OBJECTIVES

ACTIVITIES PERFORMED

1. Created materials for recruitment.
2. Before the program, get feedback from target population about class they would attend and information they would be interested in learning more about.
3. Prepare, organize, and conduct a minimum of six nutrition education lessons.
4. Evaluation and assessment of program design and implementation, as well as participant behaviors.

PRODUCTS DEVELOPED

- Flyer for program recruitment
- Weekly presentation
- Take-home material
- Pre- and post-assessments for program evaluation

Do you have questions about nutrition and how it affects you?



What's on My Plate?

a program to help you get the most out of your food

What: a 6-week course about nutrition

Where: Riley County Seniors' Services Center

When: Tuesdays at 9:30am starting April 5

Provided by Riley County K-State Research & Extension
110 Courthouse Plaza, Rm B220
Manhattan, KS 66502
785-537-6350

K-State Research & Extension is an equal opportunity provider and employer.

EXAMPLES

Lesson 2: Nutrition Labels

Food nutrition labels provide a lot of important information in a quick-to-read format.

Nutrition labels include the following information:

- Serving size
- Servings per container
- Calories per serving
- Calories from Fat
- Total Fat
- Saturated Fat
- Trans Fat
- Cholesterol
- Sodium
- Potassium
- Total Carbohydrate
- Dietary Fiber
- Sugars
- Proteins
- Various Vitamins

The first thing to look at is the serving size of the food item, as well as how many servings are in each package.

Second, the label lists the calories *per serving* and calories from fat.

★Remember, if you consume the entire package and it has multiple servings, you have to multiply the rest of the label by the number of servings you consume.

These nutrients should be limited, especially saturated fat, trans fat, cholesterol, and sodium.

Get enough of these nutrients, vitamins, and minerals.

Limit added sugar in foods and drinks.

The **% Daily Value** is based on a 2,000 calorie diet. If the recommended calories for you are lower than 2,000, these values will be larger. If the recommended calorie intake for you is higher than 2,000 calories, these values will be smaller.

Nutrition Facts

Serving Size 2/3 cup (55g)
Servings Per Container About 8

Amount Per Serving
Calories 230 Calories from Fat 72

	% Daily Value*
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Lesson 4: Healthy Living

Metabolism

- How your body gets energy from food
- This slows with age
- You need less food to get the energy your body needs

"Calories In, Calories Out"

- The more calories you eat, the more active you need to be
- If you eat more than your body needs, you gain weight.
- If you eat less than what your body needs, you loose weight.
- If you need nutrients, but you also need less calories, you need to eat more **nutrient dense** foods.

Calorie Dense

Foods that high in calories for the amount of food

These may or may not have helpful nutrients

Examples: regular dairy products, non-lean meats, vegetable-based oils

Nutrient Dense

Foods that give you tons of nutrients without a lot of calories

Examples: high-quality proteins (chicken, turkey, fish), tomatoes, cabbage, low-fat or fat-free dairy, dark green leafy vegetables, berries & stone fruit

Empty Calories

High calorie foods with little nutritional value

Examples: potato chips, sugar-sweetened drinks, candy, baked goods, and alcohol

Water

Benefits of water:

- Proper food digestion
- Absorbing nutrients from food
- Helps to get rid of waste

Rough estimate for intake needs:

- Take body weight and divide in half
- The number that you get is the amount to drink each day in ounces

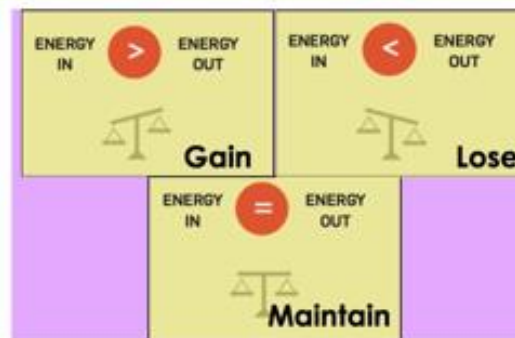
E
X
A
M
P
L
E
S

Tracking

- Writing down what you eat is a great way to track
- There are many different ways to track what you eat
 - Notebook or food journal
 - Phone application (MyFitnessPal)
 - Websites (supertracker.usda.gov)
 - Printable forms

Balancing Calories

- It is important to balance calories from eating and drinking with physical activity.
- Track to know!
 - One way to know that you are active enough is to track food intake for a few days and see how much you eat and drink



WEIGHT	lbs	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215
kg		45.5	47.7	50.0	52.3	54.5	56.8	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7
HEIGHT	in/cm																								
		Underweight				Healthy				Overweight				Obese				Extremely Obese							
5'0"	152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5'1"	154.9	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
5'2"	157.4	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39		
5'3"	160.0	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
5'4"	162.5	17	18	18	19	20	21	22	23	24	25	26	27	28	29	30	31	31	32	33	34	35	36	37	
5'5"	165.1	16	17	18	19	20	20	21	22	23	24	25	26	27	28	29	30	30	31	32	33	34	35	35	
5'6"	167.6	16	17	18	19	20	21	21	22	23	24	25	26	27	28	29	30	31	31	32	33	34	34		
5'7"	170.1	15	16	17	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33			
5'8"	172.7	15	16	16	17	18	19	19	20	21	22	23	24	25	26	27	28	29	30	31	32	32			
5'9"	175.2	14	15	16	17	17	18	19	20	20	21	22	23	24	25	26	27	28	29	30	31	31			
5'10"	177.8	14	15	15	16	17	18	19	20	20	21	22	23	24	25	26	27	28	29	30	30				
5'11"	180.3	14	14	15	16	16	17	18	19	20	21	21	22	23	24	25	26	27	28	29	30				
6'0"	182.8	13	14	14	15	16	17	18	19	20	21	21	22	23	24	25	26	27	28	29					
6'1"	185.4	13	13	14	15	15	16	17	18	19	20	21	21	22	23	24	25	26	27	27					
6'2"	187.9	12	13	14	14	15	16	16	17	18	19	20	21	21	22	23	24	25	26	27					
6'3"	190.5	12	13	13	14	15	15	16	16	17	18	19	20	21	21	22	23	24	25	26					
6'4"	193.0	12	12	13	14	14	15	15	16	17	17	18	19	20	21	22	23	24	25	26					

<https://www.nursesstore.com/blog/calculating-a-bmi-score/#Vx8BZKMrJ04>

Remember to visit the **Go4Life** website to see great resources for physical activity and tracking tools!
(www.nia.nih.gov/Go4Life)

SESSIONS

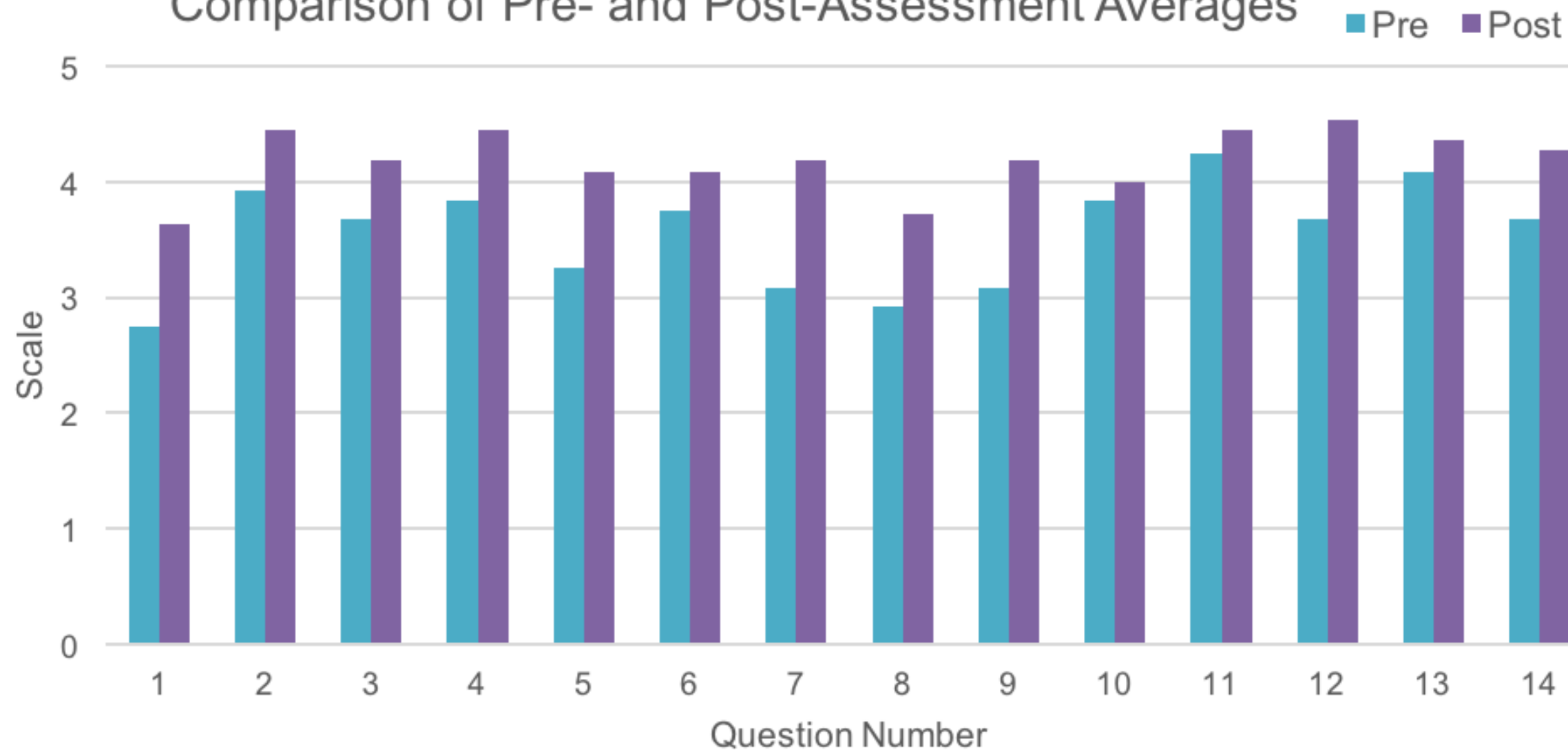
1. Nutrition Basics
2. Nutrition Labels
3. A Focus on Nutrients
4. Healthy Living
5. Shopping Tips
6. Food Safety

PROGRAM ASSESSMENT

- Pre- and post-assessments were performed at the first and last sessions.
- The average of each question were used in a paired t -test to see if the program was effective or not.
- The table below summarizes the information from the paired t -test:

	Mean	Standard Deviation	t -Statistic	p -Value
Pre	3.6	0.46	7.58	<0.001
Post	4.2	0.27		

Comparison of Pre- and Post-Assessment Averages



Date: _____
Initials: _____

Please choose the best answer to the following questions based on your current behaviors. Use the following scale: **5=Agree Completely, 4=Agree, 3=Neutral, 2=Disagree, 1=Disagree Completely.**

1. I am confident that I am eating the correct amount of calories daily.
2. I know what kinds of food I need to eat on a daily or weekly basis to get the nutrients that I need.
3. I am familiar with common serving sizes.
4. Food labels are easy to read, and I know what nutrients are important on the labels.
5. I use nutritional labels on foods to make decisions on what to eat or what not to eat.
6. I know what foods are important for healthy fats, protein, and carbohydrates.
7. I know what vitamins and minerals I need to consume.
8. I prepare meals without adding salt, fats, or sugars.
9. I understand the difference between nutrient-dense and calorie-dense.
10. I know how to lose weight, maintain weight, or gain weight.
11. I am active on 3 or more days in a week.
12. I am confident in my ability to obtain and prepare food.
13. I compare prices (unit price and total price) before making purchases.
14. I know the correct temperatures that food needs to reach in order to be safe.

5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1

1. I am confident that I am eating the correct amount of calories daily.

Change of 0.88

7. I know what vitamins and minerals I need to consume.

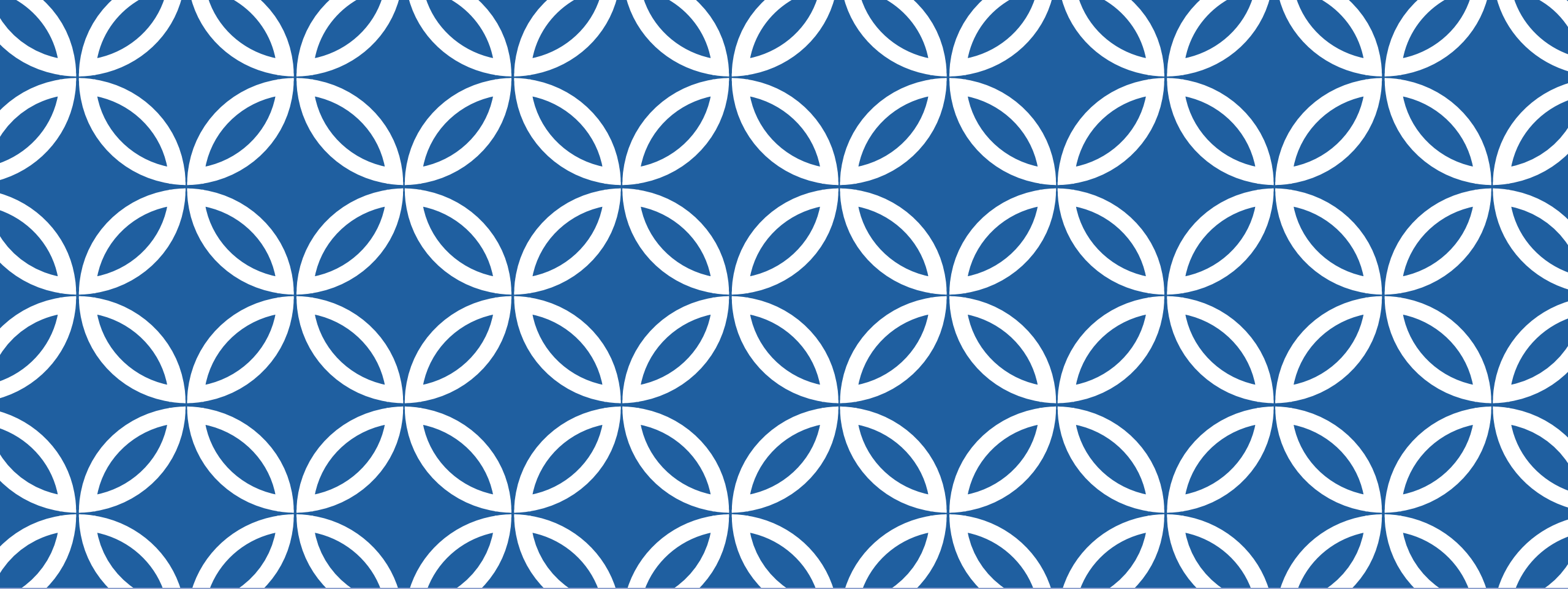
Change of 1.1

9. I understand the difference between nutrient-dense and calorie-dense.

Change of 1.1

12. I am confident in my ability to obtain and prepare food.

Change of 0.87



CONCLUSION



ALIGNMENT WITH PUBLIC HEALTH COMPETENCIES

- Biostatistics

- Presented the many ways to collect and interpret data
- Field Experience: Analysis of pre- and post-assessment results

- Environmental Health Sciences

- Understanding the risk of toxic events and response
- Field Experience: Applied in session six, which covered food safety

- Epidemiology

- Introduction to natural history of disease, study design, issues with health prevention and promotion
- Field Experience: Used as a base to design sessions and determine evaluation type

ALIGNMENT WITH PUBLIC HEALTH COMPETENCIES

- Health Services Administration
 - Understanding of past and current healthcare systems, problems with healthcare system design, values of health
 - Field Experience: Foundation for program to prevent intervention of healthcare system
- Social and Behavioral Sciences
 - Individual vs. social responsibility of health, individual behavior change theory, community interventions, social structural factors of health
 - Field Experience: Used when preparing sessions on healthy living and community resources

01

Loved the ability
to transfer
coursework into
reality

02

Gained insight
into community
health programs
and why they are
important

03

Solidified love for
helping others
and building
relationships with
attendees

CONCLUSION

ACKNOWLEDGEMENTS

- Major Professor
 - Dr. Ric Rosenkranz
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 - Dr. Mark Haub
 - Dr. Sara Rosenkranz
 - Dr. Linda Yarrow
- Riley County Research & Extension
 - Virginia (Ginny) Barnard
- MPH Program
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 - Barta Stevenson, Program Assistant
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QUESTIONS?

thank



YOU