

# Welcome!

## Social Determinants of Health and Nutrition: Supporting a Healthy Diet

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- Discuss integration of Social Determinants of Health (SDOH) within a Master's Entry into Professional Nursing Foundations course
- Address the importance of students understanding how personal, social, economic, and environmental factors impact health and the ability to adhere to prescribed regimens
- Provide an overview of the assignment and active learning strategy used within the course





# Curriculum Integration

- Integrating Social Determinants of Health (SDOH) within nursing curriculum is essential
- SDOH “are the conditions in the environment where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks” (AACN, 2021)

# Student Outcomes

- Recognize SDOH challenges to accessing nutritious foods
- Recognize how the ability to access food impacts health and wellness
- Engage with concepts by developing an educational brochure, and
- Learn how to improve access to nutritious foods





# Student Competencies

- Begin to identify basic nursing interventions that promote health to improve outcomes and safety.
- Assist the individual to engage in self-care management
- Understand the nurse's role in facilitating health and healing through compassionate caring.
- Respect individuals' and families' self-determination in their healthcare decisions.
- Identify personal, system, and community resources available to support self-care management.
- Demonstrate empathy for the individual's life experience.
- Begin to advocate for practices that advance diversity, equity, and inclusion.





# Assignment

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- Within a foundational Master's Entry into Professional Nursing (MEPN) course, an active learning strategy addressing SDOH related to nutrition was developed as a portfolio assignment



## Student Work Before Class

- Pework
  - Reading about SDOH and access to food that supports health on the Healthy People 2030 website
  - Nutrition chapter
  - Complete a concept map and relate how SDOH impacts the nutritional status of patients



## During Class

- Class starts with an overview of nutrition followed by reinforcing SDOH and nutrition using the concept map as the basis for discussion.





# Class Activity

- Create an educational patient brochure and identify a specific diet of their choice.
  - provide an overview of the diet and reasons why an individual may be on this diet
  - suggest foods an individual can have or must avoid
  - create a recipe using ingredients from a dollar store for an individual/family on a budget with the cost of recipe and servings
- Student reflection

# Class Lecture

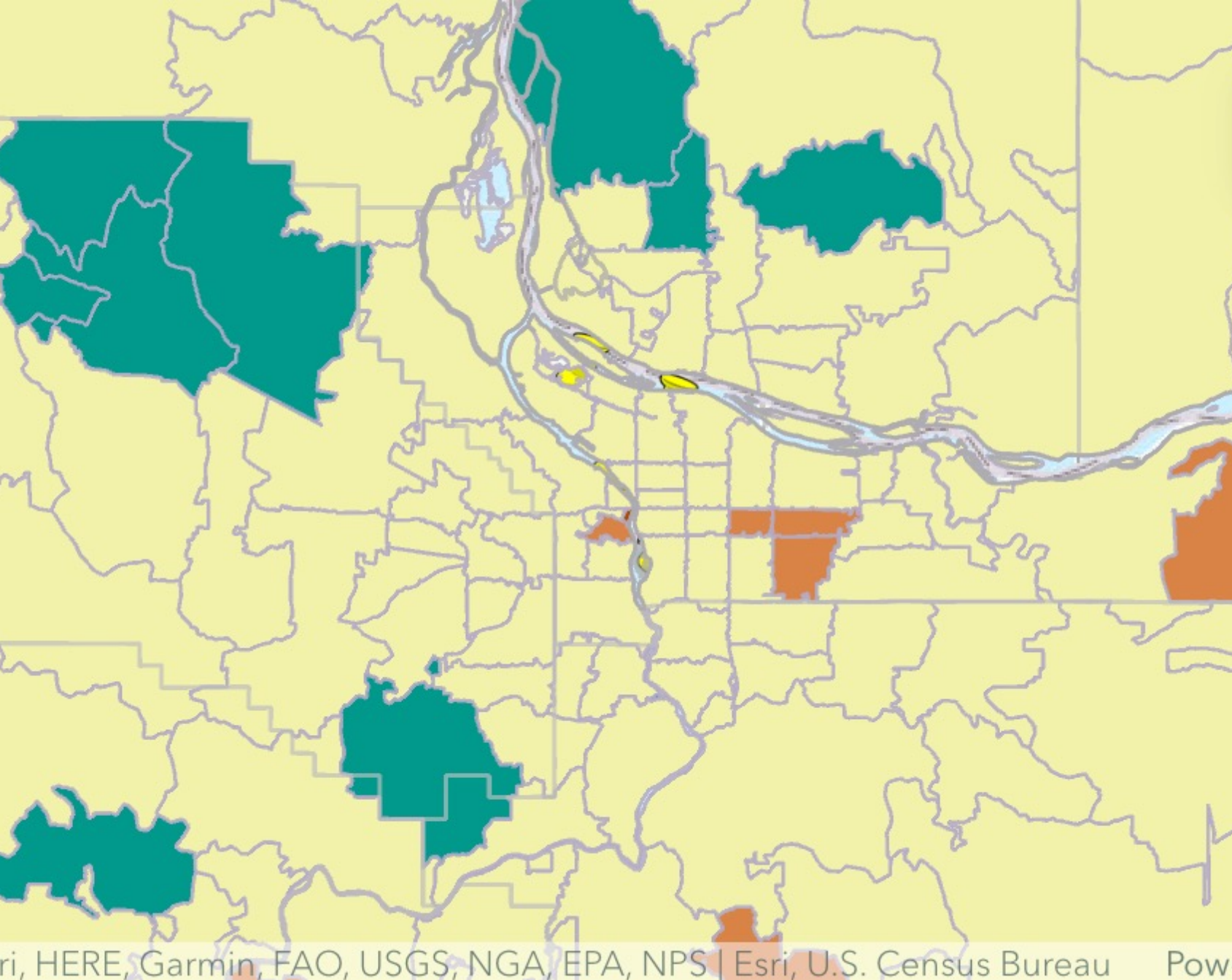
- Looking at interrelated concepts
- What is nutrition
- Screenings and labs
- Populations
- Assessment, intervention, evaluation
- Diets
- Then we start the activity





Nutrition activity



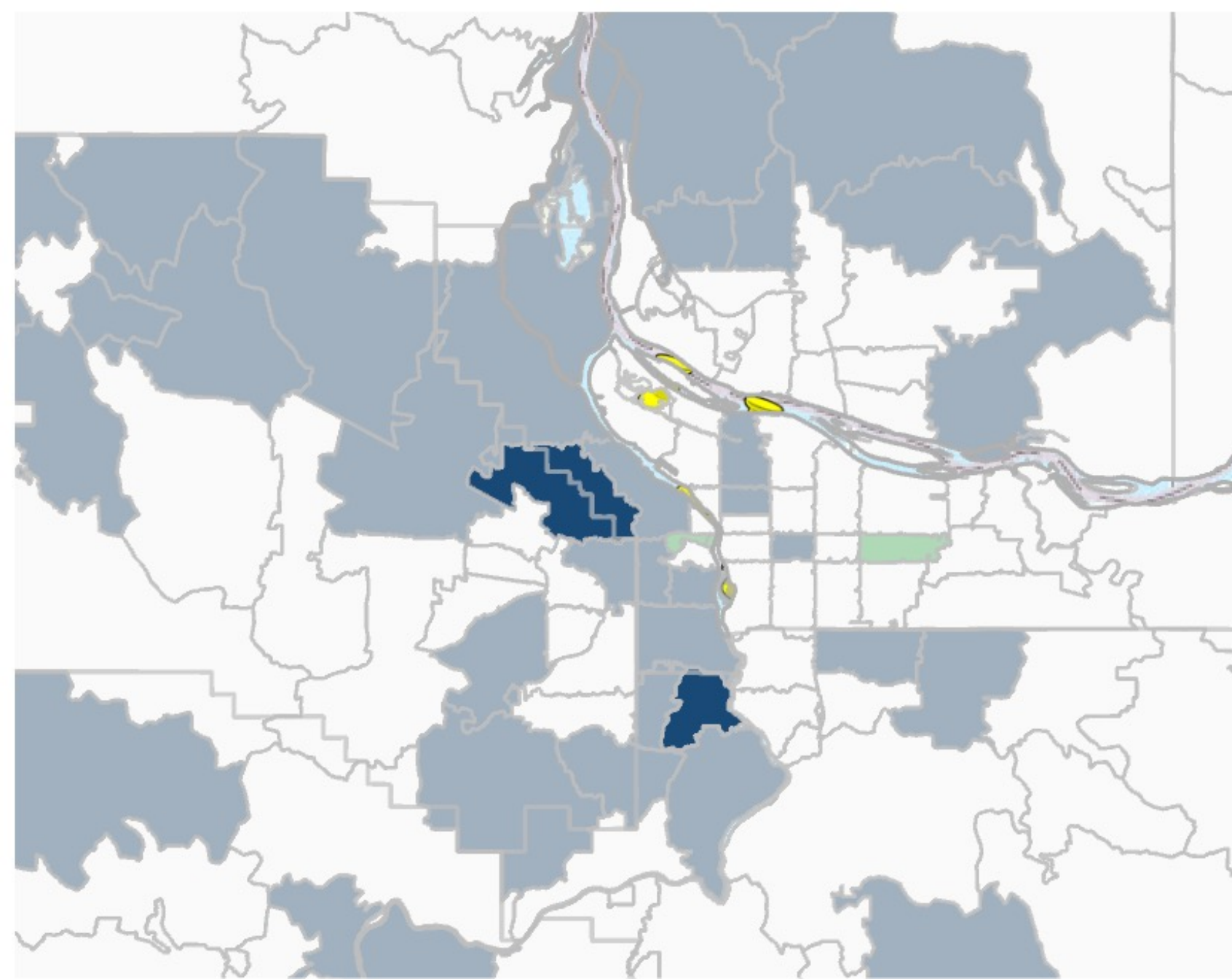


## Unemployment

- Green = 0.0%-3.5% unemployment
- Yellow = 3.51-10% unemployment
- Orange = 10.1-16.7% unemployment

# Median income

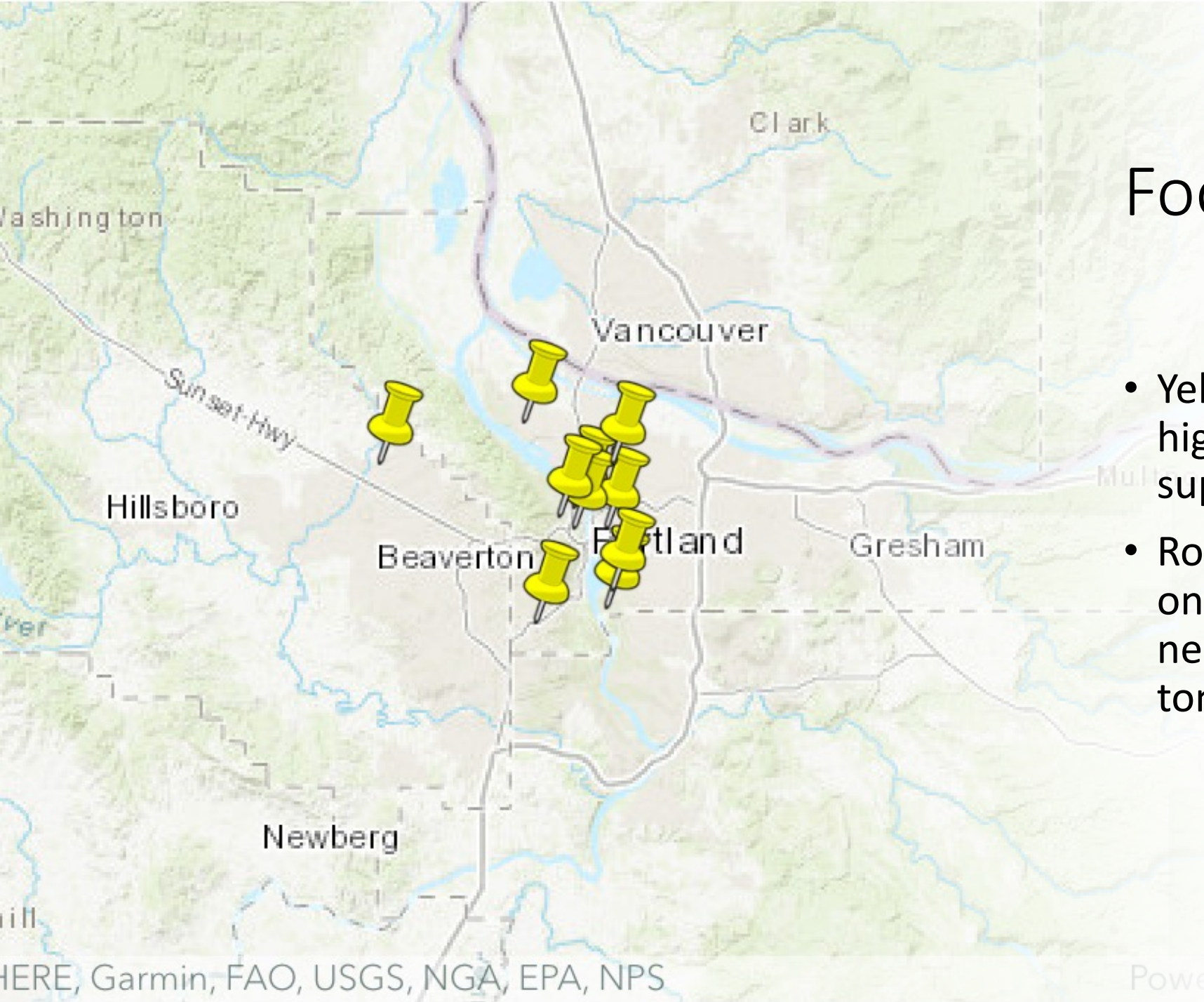
- Blue = highest income >\$125k
- White-gray = \$50-124k
- Green = \$13k-50K





# Food deserts

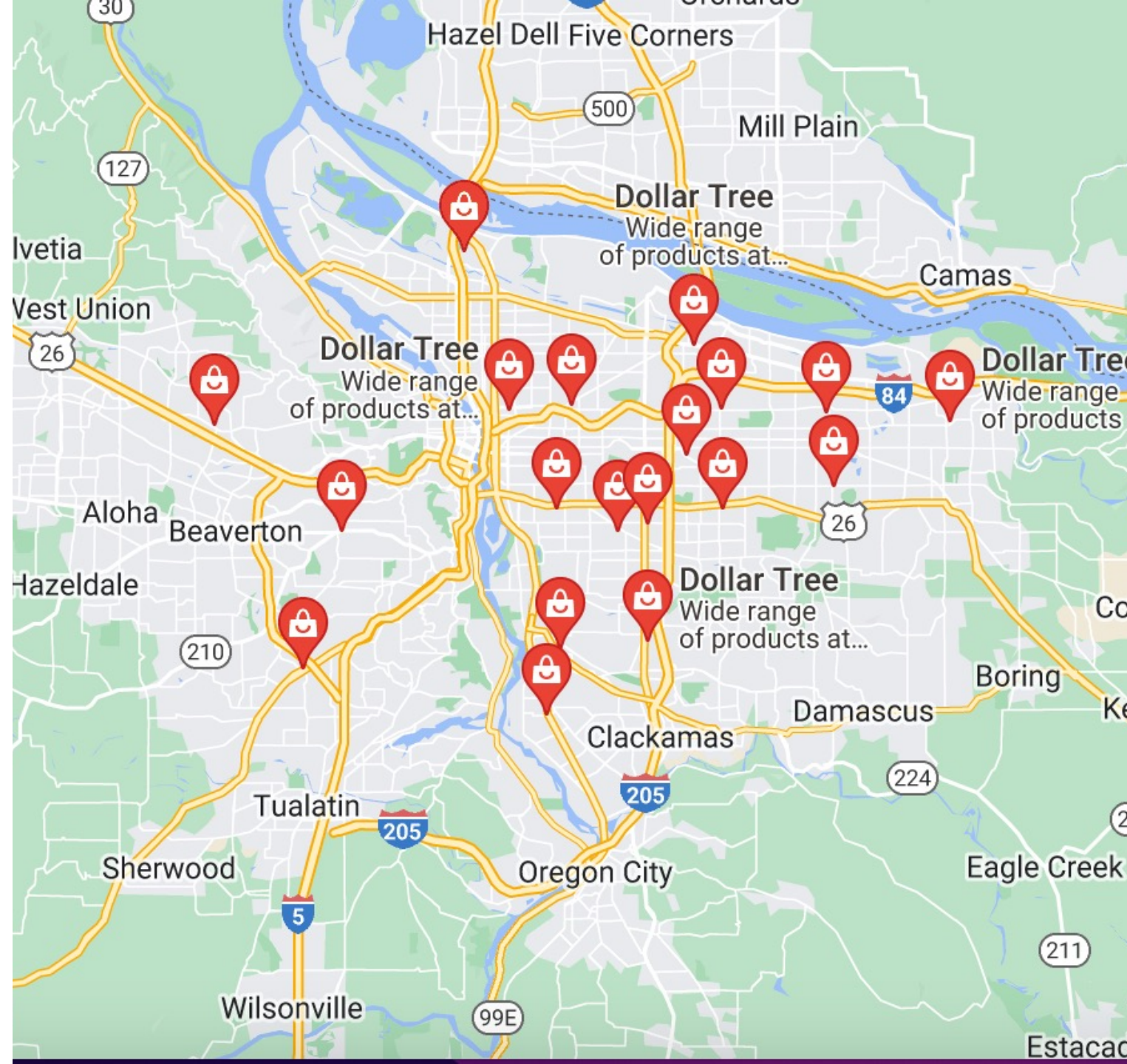
- Yellow pins represent highest clusters of supermarkets
- Rockwood neighborhood one of the poorest neighborhoods without a ton of access to food





# Dollar Tree

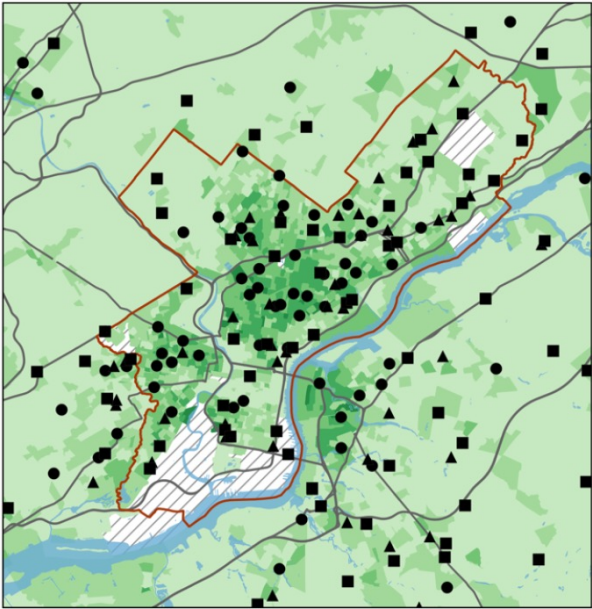
- Direct correlation between presence of Dollar stores and food deserts
- As neighborhood supermarkets close, Dollar stores move in and aggressively develop the site





Dollar Stores and Demographics — Philadelphia, Pennsylvania

Households Below the Poverty Line

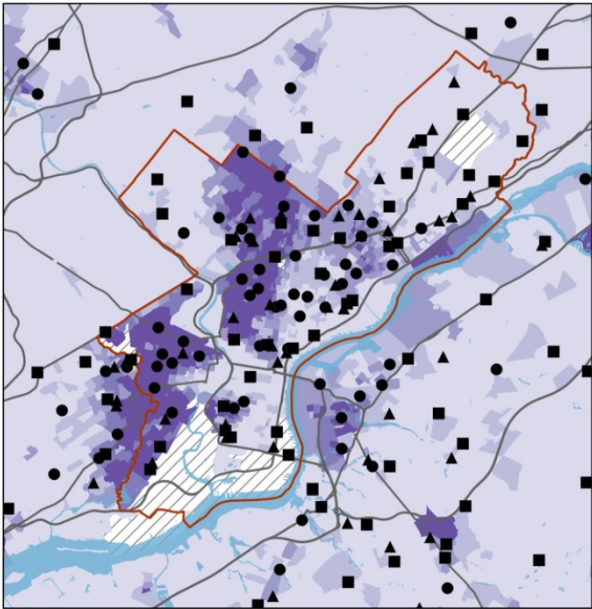


Percentage (Below Poverty Line)  
/// No Data  
0% 20% 40% 60% 80% 100%

● Family Dollar  
▲ Dollar General  
■ Dollar Tree

City limits  
Road  
Water

Population Identifying as Black or African American,  
Alone or in Combination

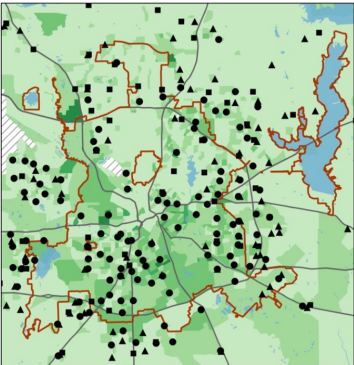


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Dollar Stores and Demographics — Dallas, Texas

Households Below the Poverty Line

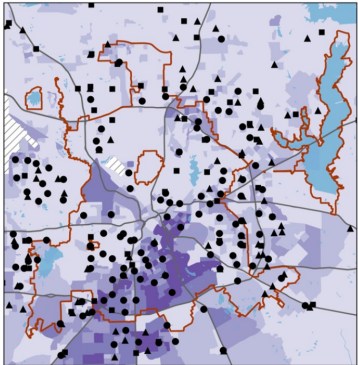


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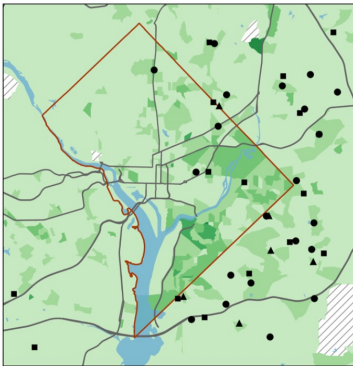


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Dollar Stores and Demographics — Washington D.C.

Households Below the Poverty Line

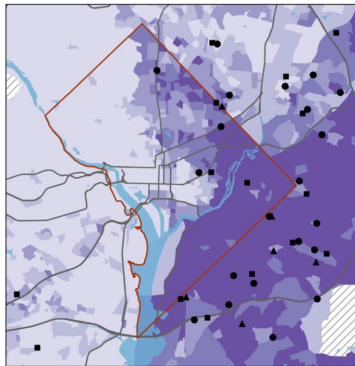


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# So how do we teach our patients?

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- With the knowledge:
- That not everyone has access to “fresh fruits and vegetables”
- That not everyone has access to ingredients
- That not everyone can afford our nutrition recommendations





# Family budgets in **the Portland/Vancouver/Hillsboro metro area**

**For a two-parent, two-child family in the Portland/Vancouver/Hillsboro metro area**, it costs **\$8,612** per month (**\$103,344** per year) to secure a modest yet adequate standard of living.

Here's a breakdown of how much it costs for a two-parent, two-child family to get by in **the Portland/Vancouver/Hillsboro metro area**:

🏠 **Housing:** \$1,536 per month • \$18,432/year

🍽️ **Food:** \$864 per month • \$10,371/year

👨‍👩‍👧 **Child care:** \$1,726 per month • \$20,716/year

Monthly costs range from **\$946** for a single-child family to **\$1,966** for a family with four kids.

🚌 **Transportation:** \$1,211 per month • \$14,534/year

🏥 **Health care:** \$1,110 per month • \$13,323/year

💰 **Other necessities:** \$870 per month • \$10,437/year

🗳️ **Taxes:** \$1,294 per month • \$15,531/year

Family of 4 with  
annual income of  
\$63,000 (barely above  
minimum wage)  
\$5,250 per month  
pre-tax  
\$4,000 after tax  
(includes high  
deductible insurance)

- Rent \$1600
- Cell phones \$100
- Internet \$100
- Utilities \$150
- Childcare \$800
- Medication \$250
- **Food \$400**
- Savings \$100
- Debt payments \$150
- Car payment \$175 - \$12k car on 7-year loan
- Gas/Insurance \$175



## Activity

- Groups of 3-4
- Come get a recipe
- You will need to make the recipe "heart healthy" or "consistent carb"
  - American Heart Association or Diabetic Diet
- Only using resources from Dollar Tree/Dollar General
- Limit of \$10-12 total to serve 4



# Additional rules

- Assumptions:
  - that you have basic spices in the house
  - basic cooking utensils
  - a basic knowledge of cooking
- Think about portion sizes
- Must be moderately "balanced"
  - Not just carbs
- Consider how much time it will take to prepare your meal
- No spaghetti or basic rice and beans or bean and cheese burritos



# Heart-Healthy Eating Plan

What you eat makes a difference to your heart. A heart-healthy eating plan emphasizes vegetables, fruits, and whole grains, includes fat-free or low-fat dairy products, and limits foods high in saturated fat and sugar-sweetened beverages and sweets. Use the guide below to determine how much you should eat from each food group.\*

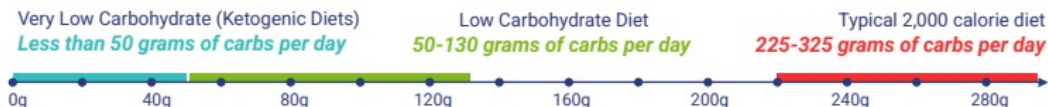
Food Group	Heart-Healthy Options
 <b>Whole Grains</b> Bread, cereal, starchy vegetables, rice, and pasta (6 ounces for women and 8 ounces for men)	<ul style="list-style-type: none"> <li>♥ Whole grain versions of sliced bread, sandwich buns, dinner rolls, pita, English muffins, bagels</li> <li>♥ Unsalted, low-fat crackers (such as graham crackers), pretzels, and popcorn</li> <li>♥ Cooked hot cereals (not instant) and whole grain cold cereals</li> <li>♥ Rice and pasta (such as whole grain noodles, spaghetti, and macaroni)</li> </ul>
 <b>Vegetables</b> (without added fat) (2½ cups)	<ul style="list-style-type: none"> <li>♥ Fresh, frozen, or no-salt-added canned vegetables (such as green beans, string beans, carrots, cabbage, tomatoes, squash, broccoli, and okra)</li> </ul>
 <b>Fruits</b> (2 cups)	<ul style="list-style-type: none"> <li>♥ Fresh, frozen, canned (in fruit juice rather than syrup), or dried fruits</li> </ul>
 <b>Fat-free or low-fat milk and milk products</b> Milk, yogurt, and cheese (3 cups)	<ul style="list-style-type: none"> <li>♥ Fat-free or low-fat (1 percent) milk</li> <li>♥ Fat-free or low-fat yogurt</li> <li>♥ Cheeses lower in fat and sodium</li> </ul>
 <b>Protein</b> Meat, poultry, fish, eggs, nuts, seeds, and legumes (5½ ounces)	<ul style="list-style-type: none"> <li>♥ Chicken or turkey without the skin</li> <li>♥ Fish</li> <li>♥ Lean cuts of beef, such as round, sirloin, chuck, loin, and extra-lean ground beef</li> <li>♥ Lean cuts of pork, such as the leg, shoulder, tenderloin, and lean ham</li> <li>♥ Eggs</li> <li>♥ Cooked dry beans and peas (such as field peas, crowder peas, black-eyed peas)</li> <li>♥ Frozen butter beans and lima beans</li> <li>♥ Nuts and seeds</li> </ul>
 <b>Fats and oils</b> (less than 22 grams of saturated fat)	<ul style="list-style-type: none"> <li>♥ Soft tub margarine</li> <li>♥ Oils (canola, corn, safflower, olive, peanut, or sesame)</li> </ul>
 <b>Sweets and added sugars</b> Limit sugar and other sweeteners. Ask your healthcare provider about how much sugar or other sweetener is okay for you.	<ul style="list-style-type: none"> <li>♥ Frozen desserts (such as frozen juice pops, low-fat frozen yogurt, or low-fat ice cream)</li> <li>♥ Low-fat cake and cookies (such as angel food cake, fig bar cookies, ginger snaps, animal crackers, vanilla wafers, and graham crackers)</li> </ul>

\*Serving sizes depend on how many calories you need, which is based on your age, gender, and physical activity.

## LOW CARB DIET for Type 2 Diabetes



**What is a low carb diet?** A low **carb** diet limits your intake of carbohydrates from foods like grains, starchy vegetables, fruit, sugary snacks, and beverages and emphasizes foods from proteins, non-starchy vegetables, and healthy fats.



Meal with ~16g of carbs	Meal with ~47g of carbs	Meal with ~150g of carbs
4-5 oz Grilled Fish or Chicken 0g carbs 3 cups Mixed Salad 5g carbs 1 oz Feta Cheese and Olives 1g carbs 2 tbsp Ranch Dressing 2g carbs 1/2 Avocado 8g carbs	1/2 cup Brown Rice 22g carbs 1/2 cup Black Beans 15g carbs 4-5 oz Steak 0g carbs 1.5 cups Grilled Vegetables 10g carbs	2 slices Pepperoni Pizza 70g carbs 4 pcs Mozzarella Sticks 30g carbs 1/2 cup Marinara Sauce 10g carbs 12 oz Regular Soda 40g carbs

**How does a low carb diet help my diabetes?** Reducing your carb intake also reduces your body's **blood sugar** and **insulin** levels. When your insulin levels are low, your body stops storing extra sugar as fat, and starts using stored fat for energy. This can make it easier to lose weight and have more energy!

### BENEFITS OF LOW CARB DIETS

WEIGHT LOSS	REDUCED BLOOD PRESSURE	REDUCED HUNGER & CRAVINGS	BLOOD SUGAR CONTROL	INCREASED ENERGY

**What are carbs?** Carbs (i.e., carbohydrates) are a nutrient that is broken down by the body into sugar (glucose). There are 3 types of nutrients: carbs, fat, and protein.

**What is blood sugar (or blood glucose)?** Blood sugar is the level of sugar in your blood after you body breaks down nutrients into glucose for energy.

**What is insulin?** Insulin is a chemical released when you eat carbs. Everyone needs insulin to live.

The American Diabetes Association supports individualized eating plans for people with type 2 diabetes.

A word cloud featuring the word "difficult" in a large, bold, black font at the center. Surrounding it are numerous other words in a lighter blue font, varying in size and orientation. The words include: "interesting", "challenging", "surprising", "sad", "put", "fun", "eye", "open", "good", "hard", "informative", "perspective", "poverty", "frustrate", "activity", "correlation", "opening", "eye", "hard", "informative", "perspective", "nutrition", "poverty", "frustrate", "activity", "correlation", "opening", "eye", "hard", "informative", "perspective".

difficult

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poverty

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activity

correlation

opening

eye

hard

informative

perspective

nutrition



# What did you learn from this activity?

- “Learned how it can be difficult to find heart healthy diets/ fruits and veggies on a budget at certain stores”
- “Food deserts suck and it should be talked about more”
- “That I take my resources for granted. The project makes it clear of the disparities that exist and how it impacts health”
- “I learned how socioeconomic status greatly impacts nutrition and food availability. I can imagine how difficult it would be to adhere to dietary recommendations if a patient lives in poverty. Being healthy is not as simple as "making healthy choices" when your choice is severely limited”





# What will you include in your patient teaching after this activity?

- “I will be more mindful of the barriers many patients face to planning healthy, affordable meals, especially when feeding a family.”
- “It may be difficult to find healthy food options depending on where you live and we can put a plan together to find some healthy options within your dietary restrictions”
- “I would include education regarding food resources that they could look into (e.g. food stamps, SNAP benefits, etc)”
- “Ways to make heart healthy and low carb meals without fresh produce. I want to do the hard work so they don’t have to”



# Conclusion



Students need an understanding of SDOH and its impact on patients and the populations we care for

This helps student to

provide compassionate care

identify resources to help individuals engage in self-care and encourage self-care

demonstrate empathy

advocate



Q&A

