Due 3/6/23

1. **Health Fair Project (5% of final grade)**
   The health fair will be presented at Cornerstone Christian School, New City, NY on **TBD** per instructor's guidance. Using the principles of teaching/learning; each student will give a health related age appropriate presentation focused on children age five to thirteen. A **minimum of two articles** should be reviewed for evidence. Each student will submit an **annotated bibliography on the articles** read to **prepare for the teaching session**. Students are required to **submit an outline** of their **presentation/ teaching lesson plan** and the annotated bibliography to their lecture and clinical instructor. Grades will be based on a rubric. It is mandatory that all students present at the health fair. Absence on the day of the health fair will result in a clinical failure for the course.

   - **Have kids cut out different sizes for different food groups**
   - **Have kids say what kind of foods go in which food groups**

Topic: Nutrition - ages 4,5, 6-8 (including Healthy vs non-healthy foods)

- **Preschool (4&5) - school age children (6-8)**
- **Presentation for 6-8 should be more advanced and detailed**
- **Two articles in an annotated bibliography**
- **Ages 4 & 5 - Claudia**
  Roberts, M., Tolar-Peterson, T., Reynolds, A., Wall, C., Reeder, N., & Rico Mendez, G. (2022). The Effects of Nutritional Interventions on the Cognitive Development of Preschool-Age Children: A Systematic Review. *Nutrients*, *14*(3), 532. https://doi.org/10.3390/nu14030532
  - **Healthy foods and choices**
    - **Effects of healthy food and supplementation on cognition for the preschool age population**
  - **Non-healthy foods**
    - **How undernutrition affects cognition within the preschool age population**
- **Ages 6-8 - Ryan**
  - **https://www.sciencedirect.com/science/article/pii/S0939475314002609**
  - **F. Rauber, P.D.B. Campagnolo, D.J. Hoffman, M.R. Vitolo, Consumption of ultra-processed food products and its effects on children's lipid profiles: A longitudinal study, Nutrition, Metabolism and Cardiovascular Diseases, Volume 25, Issue 1, 2015, Pages 116-122, ISSN 0939-4753, https://doi.org/10.1016/j.numecd.2014.08.001.**
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  - **Healthy foods and choices**
    - **Benefits of these foods?**
    - **Substitutions if child has allergy or does not like food**

- **Non-healthy foods**
  - **Health issues associated with unhealthy foods**
    - **Obesity**
    - **Diabetes**
    - **HD**
  - **Interventions for health related issues**

Annotated bibliography

F. Rauber, P.D.B. Campagnolo, D.J. Hoffman, M.R. Vitolo, Consumption of ultra-processed food products and its effects on children's lipid profiles: A longitudinal study, Nutrition, Metabolism and Cardiovascular Diseases, Volume 25, Issue 1, 2015, Pages 116-122, ISSN 0939-4753, https://doi.org/10.1016/j.numecd.2014.08.001.

This article touches on the issues of highly processed foods and their effects on children's lipid profiles. This article follows 345 children from the ages of 3 to 8 years old, although they are in Brazil, this information should be usable across different cultural backgrounds. The researchers documented the children's consumption of products like breads, savory snacks and sweets like cookies and candy by collecting 24 hour recall. With this, they used pictures and household measurements to get a more accurate image of portion size. To find the relationship between processed foods and the children's lipid profiles, the NOVA Classification System was used. This system views the extent and purpose of food processing based on three groups: unprocessed and minimally processed, processed culinary ingredients, and processed and ultra-processed products. They then did an objective blind blood test to measure lipid profiles. The results showed that the children in the school age group had lipid levels close to the upper limit in some categories like total cholesterol. Their research showed that there was a correlation between early consumption of highly processed foods and increased lipoprotein levels in children, mainly their total cholesterol and LDL. The article then continues to discuss that

elevated cholesterol levels are associated with increased risk for cardiovascular disease, which is the leading cause of premature death around the world. Having elevated lipid levels earlier in life can possibly lead to earlier signs and symptoms of cardiovascular disease showing up at a younger age in these children's life.

Roberts, M., Tolar-Peterson, T., Reynolds, A., Wall, C., Reeder, N., & Rico Mendez, G. (2022). The Effects of Nutritional Interventions on the Cognitive Development of Preschool-Age Children: A Systematic Review. *Nutrients*, *14*(3), 532. https://doi.org/10.3390/nu14030532

This article is centered on the importance of cognitive development and its dependency on adequate nutrition amongst the pre-school age population. Children that receive inadequate nutrition have an increased risk of developing cognitive abnormalities that can affect growth and developmental milestones. In this article, a systematic review was done to examine nutritional interventions and how they affect cognition. Twelve randomized control trials were conducted on children ages 2-6 who were either well nourished or undernourished. Five out of the twelve studies were supplement-based interventions consisting of guava supplements, DHA tablets, iron supplements, B-vitamins and iodized salts. Three of the twelve trials consisted of multiple-micronutrient food fortification which was added to maize-porridge, rice, wheat, or provided as raw paste. Three of the twelve studies were food-based nutritional interventions that required participants to consume fatty fish with daily meals. The remaining study conducted a dietary intervention that combined the consumption of fortified milk powder and cognitive stimulation.

Findings in this review showed that nutritional interventions have a positive effect on cognitive development amongst undernourished pre-school age children. The nutrient- deficient children who participated in the study and received micro-nutrient supplementation had

significantly consistent cognitive improvement. Adequately nourished children who consumed fatty fish with their daily meals had an improvement in cognitive ability.

Topic: Nutrition
Population: ages 4,5, 6-8

Outline

- Introduction
    - Teach the children about the different food groups
        - Grains
        - Vegetables
        - Proteins
        - Dairy
        - Snacks
    - Try and teach the kids the things different foods have in common.
    - Teach the children about
- Activity 1: 4 and 5 year olds
    - https://www.youtube.com/watch?v=-X-Tzlya06Y&list=PL_sxTJ9bj-VxavHu3JpDZ6sEfjWKOX9LW
    - Have children select which foods go in which food group.
    - Then have the children put the same foods in different sections on their "4 section plate"
- Activity 2: 6-8 year olds
    - https://playtolearnpreschool.us/nutrition-unit/
    - Use a board and have three different categories for the different types of food: really healthy, somewhat healthy, and not healthy at ball. Attach the different types of foods to the different categories.
    - Name that fruit game; participants will be blind folded and given a fruit to taste and try to identify.
- Review with the kids the importance of eating healthy