# **Research question:**

Is there a significant connection between the ratings of the cafeteria and grades in BNDS's international department? We are interested in this area because food is a necessity for students' everyday living and studying. Therefore, understanding students' degree of satisfaction with the food is extremely important. Currently, we have heard different evaluations about the food in the school's main restaurant. We suspect there might be a difference in the degree of satisfaction with the food in the restaurant among different grades in the international department, on account of that students' taste of flavor, the feeling of freshness, and standards could have changed as the years passed by.

## **Introduction:**

The objective of this research proposal is to assess and compare different grades' ratings of BNDS's cafeterias as a whole. This is an observational study. The main goal is to find out if students' degree of satisfaction with the school's restaurants surely changes as time passes by and what may be the causes. Besides, the research also aims to provide insights into the quality, variety, cleanliness, service, and price aspects of cafeterias to support informed decision-making and potential improvements in cafeteria services, since individuals will rate based on these factors.

# **Background Research:**

To make sure the question asked to individual students are specific, helpful, and comprehensive, thorough background research has been conducted. The following three relevant resources were utilized:

#### First resource:

High School Students' Recommendations to Improve School Food Environments: Insights From a Critical Stakeholder Group by Yuka Asada PhD, RD, Alejandro G. Hughes MPH, Margaret Read MA, Marlene B. Schwartz PhD, Jamie F. Chriqui PhD, MHS.

#### Second resource:

Factors in the School Cafeteria Influencing Food Choices by High School Students by Christine Shannon MPH, RD, Mary Story PhD, RD, Jayne A. Fulkerson, Simone A. French.

#### Third resource:

Increasing the attractiveness of college cafeteria food: A reactance theory perspective. By West, Stephen G.

## Sampling and Experimental Design:

**Variables**: The main variables to be studied are the general degree of satisfaction, food quality, variety, cleanliness, service, and price.

Type of Study: This research is an observational study.

**Data Collection**: Data will be collected by randomly surveying at least 20 students for each grade in the international department.

**Scope of Inference**: While the data collected will provide valuable insights into the evaluated cafeterias, it is important to note that the findings may not establish causal links. However, the

results can provide valuable information for a school's better decision-making.

# **Exploratory Data Analysis:**

**Descriptive Statistics**: Summary statistics will be calculated for each variable (general satisfaction, food quality, variety, cleanliness, service, and price) to provide an overview of the data.

**Visualization**: Visualizations such as bar charts, box plots, or scatter plots will be created to visually analyze the ratings.

**Simulations and Test Procedures**: a Chi-square test of homogeneity (independence) will be conducted to identify any significant differences or trends among the grades.

By performing exploratory data analysis, the research aims to uncover patterns, relationships, and potential areas for improvement in the evaluated cafeterias.