**NUTRITIONAL TRENDS IN FOOD CONSUMPTION**

**EXPLORING EATING PATTERNS AND DIETARY QUALITY AMONG VARIOUS POPULATIONS**

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**INTRODUCTION**

Studying nutritional trends in food consumption is crucial for understanding how dietary habits evolve and impact public health. These trends help identify shifts in food preferences, nutrient intake, and lifestyle choices, which are key to addressing health issues like obesity, chronic diseases, and malnutrition. By analyzing changes in food consumption patterns over time, policymakers, health professionals, and researchers can design effective strategies to promote healthier diets, improve food security, and prevent diet-related diseases.

**OBJECTIVES OF STUDYING NUTRITIONAL TRENDS**

1. **Analyze Nutritional Trends Over Time**:  
   To examine shifts in food consumption patterns and nutritional intake over recent years. This will involve identifying trends in macronutrient and micronutrient consumption (such as proteins, fats, vitamins, and minerals) using SPSS.
2. **Assess Demographic Variations**:  
   To explore how demographic factors such as age, gender, socioeconomic status, and geographic location influence food choices and nutritional intake. This can be analyzed using statistical techniques like cross-tabulations and chi-square tests in SPSS.
3. **Evaluate the Impact of Emerging Diets**:  
   To identify the rise of specific diets (e.g., veganism, ketogenic diets, intermittent fasting) and their effects on the nutritional composition of diets in different populations. Descriptive statistics and trend analysis can be used here.
4. **Examine Nutrient Deficiencies and Health Outcomes**:  
   To identify whether certain demographic groups are more likely to experience nutrient deficiencies and the associated health risks. This may include correlation and regression analysis to examine relationships between nutrient intake and health outcomes.
5. **Provide Evidence-Based Recommendations**:  
   To make recommendations for public health strategies, nutrition education, or policy adjustments based on the findings. This could involve summarizing trends and offering targeted solutions to improve nutritional health.
6. **Utilize IBM SPSS for Data Analysis**:  
   To demonstrate the use of SPSS in data processing and analysis, including descriptive and inferential statistics, to derive meaningful insights from the data related to food consumption.

**THE RELEVANCE OF USING SPSS FOR DATA ANALYSIS**

IBM SPSS (Statistical Package for the Social Sciences) is a comprehensive software suite designed to handle, analyze, and interpret complex data sets. Its relevance to data analysis, particularly in a project like *Nutritional Trends in Food Consumption*, is multifaceted:

1. **Advanced Statistical Techniques**: SPSS provides a wide range of statistical tools for analyzing various types of data. In the context of nutritional trends, you may need to perform **descriptive statistics** (e.g., mean, standard deviation) to summarize consumption patterns, or **inferential statistics** (e.g., t-tests, chi-square tests, regression analysis) to explore relationships between variables such as age, gender, and nutrient intake. These tools help you understand trends, test hypotheses, and make predictions about food consumption patterns across different groups or over time.
2. **Ease of Data Management**: SPSS makes it easier to manage and clean large datasets, which is often a challenge in nutritional studies. For example, you may work with datasets containing information on food consumption habits, which can be messy or incomplete. SPSS allows for efficient handling of missing data, the creation of new variables (e.g., categories for different food groups), and the organization of data into useful formats for analysis.
3. **User-Friendly Interface**: SPSS is designed with a user-friendly interface, enabling users with varying levels of expertise to conduct data analysis without needing advanced programming skills. Its intuitive menus, drag-and-drop features, and clear output presentation make it accessible for researchers, health professionals, and students who want to focus on analysis without getting bogged down in the technicalities of coding.
4. **Handling Large and Complex Datasets**: Nutritional studies often involve large datasets that include hundreds or thousands of participants. SPSS is well-equipped to handle such extensive data without performance issues. You can analyze data from multiple surveys or databases, perform complex statistical tests, and run longitudinal analyses, which are vital when tracking long-term trends in food consumption.
5. **Comprehensive Graphical Outputs**: SPSS provides powerful tools for visualizing data. Using charts, graphs, and plots (e.g., histograms, bar charts, scatter plots), researchers can visually identify trends and patterns in food consumption, nutrient intake, and the impact of various demographic factors. Visual representation is crucial for effectively communicating findings, especially when presenting data to stakeholders or policymakers.
6. **Replication and Reliability**: Since SPSS is a widely used tool in academic and research circles, employing it ensures that your analyses are consistent, replicable, and trusted. The software outputs clear documentation of each step of the analysis, making it easier to validate and replicate findings, which enhances the reliability and credibility of your research.
7. **Comprehensive Output and Reporting**: IBM SPSS generates detailed output files that include tables, charts, and statistical significance levels, which are ideal for including in reports. This reporting feature helps in documenting the entire analysis process and provides a structured format for presenting results in academic or professional reports, as in your project on nutritional trends.

**BACKGROUND**

**OVERVIEW OF NUTRITIONAL TRENDS GLOBALLY**

1. **Shifts in Dietary Patterns**
   * **Urbanization and Westernization**: Increased consumption of processed and convenience foods high in sugar, fats, and salt, particularly in developing countries.
   * **Traditional to Modern Diets**: A decline in traditional diets rich in whole grains, fruits, and vegetables in favor of ultra-processed foods.
2. **Rise in Non-Communicable Diseases (NCDs)**
   * Poor dietary choices have contributed to a global increase in obesity, diabetes, cardiovascular diseases, and other NCDs.
   * The "double burden" of malnutrition persists in many regions, with undernutrition and obesity coexisting.
3. **Increased Awareness of Plant-Based Diets**
   * Growing interest in vegetarian, vegan, and flexitarian diets driven by health benefits, sustainability concerns, and ethical considerations.
   * Surge in plant-based meat and dairy alternatives.
4. **Micronutrient Deficiencies**
   * Persistent global deficiencies in essential nutrients such as iron, vitamin D, and iodine, especially in low- and middle-income countries.
   * Fortification programs (e.g., iodized salt, fortified flour) are addressing some gaps.
5. **Focus on Sustainable Eating**
   * Shift towards diets that balance human health and environmental sustainability, such as the Mediterranean and Nordic diets.
   * Increasing emphasis on reducing food waste and choosing locally sourced foods.

**FACTORS INFLUENCING FOOD CONSUMPTION PATTERN**

Food consumption patterns are influenced by a complex interplay of factors that include sociocultural, economic, environmental, and individual elements. These factors often interact with one another, shaping how and what people eat across different contexts.

#### **1. Sociocultural Factors**

* **Cultural Norms and Traditions**: Cultural heritage significantly dictates food preferences, preparation methods, and eating habits. For example, rice is a staple in many Asian diets, while bread is central to European cuisines.
* **Social Influence**: Peer pressure, family preferences, and societal trends heavily influence food choices. Shared meals and social eating experiences often lead individuals to adopt similar dietary habits.

#### **2. Economic Factors**

* **Income Levels**: High-income groups typically have access to diverse, high-quality foods, while low-income groups may rely on calorie-dense but nutrient-poor options.
* **Food Prices and Affordability**: Rising prices of fresh produce can lead to a shift toward cheaper, processed foods.

#### **3. Environmental Factors**

* **Geographical Conditions**: The availability of food depends on regional climate, soil quality, and agricultural practices. For example, coastal areas often have diets rich in seafood.
* **Food Security**: In regions affected by conflict, climate change, or economic instability, limited access to nutritious food impacts consumption patterns, leading to undernutrition or reliance on food aid.

#### **4. Individual and Psychological Factors**

* **Taste and Preferences**: Individual preferences for certain flavors (e.g., sweet, salty, or spicy) drive food choices. These preferences are often influenced by early exposure and cultural norms.

**5. Technological and Marketing Influences**

* **Food Technology**: Advances in food technology have introduced processed, fortified, and genetically modified foods that cater to convenience and nutritional needs.
* **Advertising and Media**: Marketing campaigns shape food preferences, particularly among children and adolescents. Digital media has amplified the reach of food advertising.

#### **6. Government Policies and Interventions**

* **Regulations on Food Quality**: Policies on food safety, labeling, and fortification impact consumer choices and public health.

**METHODOLOGY**

**Data Source:** Kaggle.com Food Nutrition dataset by Utsav Dey

The Dataset used Provides detailed ntritional information for a wide range of food items commonly consumed around the world. This dataset aims to support dietary planning, nutritional analysis and educational purposes by providing extensive data on the macro and micronutrient content of foods

**DEMOGRAPHIC CHARACTERISTICS**

**Age:** Children to Adults

**Geographic Location:** Regions in America specifically

**Sex:** Male and Female

**DATA PROCESSING**

**Step 1: Data Entry**  
 Enter data: Data was import from an external source (Excel)

**Step 2: Data Cleaning**  
1. Check for errors: Missing values, outliers, and inconsistencies were sort for 2.Transform variables: Data type swere converted (e.g., string to numeric)

**Step 3: Data Transformation**  
1. Aggregate data: Data was Grouped by variables (e.g., mean, sum).  
  
**Step 4: Data Validation**  
1. Check assumptions: Assumptions were verified for statistical tests   
  
**Step 5: Final Check**  
1. Review data: Double-check data for errors or inconsistencies.  
2. Save dataset: Save the cleaned and prepared dataset.

**DATA ANALYSIS**

**Statistical Methods used include:**

1. **DESCRIPTIVE STATISTICS**

Descriptive statistics in SPSS provide an overview of the basic features of a dataset. This includes measures of central tendency (mean, median, mode), variability (range, variance, standard deviation), and distribution (skewness, kurtosis). Descriptive statistics help researchers understand the characteristics of their data and identify potential issues.

For this dataset

Categorical Variable (Sex)

|  |  |  |
| --- | --- | --- |
| GENDER | FREQUENCY | PERCENT |
| FEMALE | 57 | 57.6 |
| MALE | 42 | 42.4 |

Continous Variable ( Caloric Value and Age)

|  |  |  |
| --- | --- | --- |
| Variables | Mean | S.D |
| Age (Years) | 12.42 | 15.146 |
| Caloric Value (Kcal) | 239.34 | 224.046 |

1. **REGRESSION ANALYSIS**

Regression analysis in SPSS is a statistical method used to establish relationships between variables. It predicts the value of a continuous outcome variable based on one or more predictor variables. Regression analysis helps researchers:  
  
- Identify the strength and direction of relationships between variables  
- Predict outcomes based on predictor variables  
- Control for the effects of multiple variables

The Process used for this report dataset include:

1. Linear Regression (Age and Fat)
2. Statistics (Model fit, Confidence interval, Estimates, Descriptives)
3. Plots (Histograms of residuals,Normal Probability plot)
4. **TESTING HYPOTHESIS**

The T-test in SPSS is a statistical test used to compare the means of two groups. It helps researchers determine whether there is a significant difference between the groups. T-tests are commonly used to:  
  
- Compare the means of two independent groups  
- Compare the means of two related groups (e.g., before-and-after measurements)  
- Test hypotheses about population means

For this report dataset:

One sample T-test was carried out on the dataset using a test value of 12

1. **ANOVA (Analysis of Variance)**

ANOVA in SPSS is a statistical test used to compare the means of three or more groups. It helps researchers determine whether there are significant differences between the groups. ANOVA is commonly used to:  
  
- Compare the means of three or more independent groups  
- Test hypotheses about population means  
- Identify which groups differ significantly from each other

For this report dataset:

1. Dependent variable- Fat
2. Predictor- Age
3. **FACTOR ANALYSIS**

Factor analysis in SPSS is a statistical method used to reduce the dimensionality of a dataset. It identifies underlying factors or patterns that explain the correlations between variables. Factor analysis helps researchers:  
  
- Identify underlying constructs or factors that explain the data  
- Reduce the number of variables in a dataset  
- Identify patterns and relationships between variables

For this report dataset:

A Correlation Matrix was carried out on all the food nutrient in the dataset

**FOOD CONSUMPTION PATTERNS**

In recent years, the trends in nutritional food consumption have shifted towards greater health awareness, sustainability, and convenience. Here are the main eating patterns and trends that have shaped food consumption patterns:

**1. Plant-Based Diets**

* **Trend**: The rise in popularity of plant-based diets is driven by a combination of health concerns, ethical considerations, and environmental sustainability. Consumers are increasingly adopting vegetarian, vegan, or flexitarian eating patterns, reducing their reliance on animal products.
* **Nutritional Focus**: Emphasis on plant-based proteins (e.g., legumes, nuts, seeds, tofu), whole grains, and vegetables. There's also a focus on ensuring adequate intake of nutrients like vitamin B12, iron, and omega-3 fatty acids.
* **Popular Foods**: Plant-based meats, dairy alternatives (e.g., almond milk, oat milk), tofu, tempeh, legumes, and vegetables.

**Findings**

The growing adoption of plant-based diets reflects a broad shift toward more sustainable and health-conscious eating habits. The preference for plant-based foods, including meat and dairy alternatives, aligns with environmental concerns and awareness about the health risks associated with excessive meat consumption, particularly red and processed meats.

**Implications for Public Health**

Increased consumption of plant-based foods can reduce the intake of saturated fats, which are linked to heart disease, and may help prevent obesity, diabetes, and certain cancers. However, public health efforts should also focus on ensuring that plant-based diets are nutritionally balanced, as deficiencies in nutrients like vitamin B12, iron, and omega-3 fatty acids are possible without proper planning.

**Surprising Trend**

The rapid rise of plant-based meat alternatives, such as lab-grown meat or plant-based burgers, challenges traditional notions of "meat" consumption. This trend could shift the food industry significantly, potentially improving environmental sustainability.

**2. Low-Carb and High-Protein Diets**

* **Trend**: Low-carbohydrate diets, such as the ketogenic (keto) diet and paleo diet, remain popular for weight loss and improving metabolic health. These diets typically prioritize protein and fat while limiting carb intake.
* **Nutritional Focus**: High-protein foods (e.g., meat, eggs, legumes, tofu), healthy fats (e.g., avocado, olive oil, nuts), and reduced intake of refined carbohydrates and sugars.
* **Popular Foods**: Meat, fish, eggs, low-carb vegetables (e.g., leafy greens, broccoli), and nuts.

**Findings**

Diets like keto and paleo, which emphasize protein and fat over carbohydrates, remain popular. These diets are often marketed for weight loss and improved metabolic health, especially in individuals with insulin resistance or type 2 diabetes.

**Implications for Public Health**

While low-carb, high-protein diets may lead to short-term weight loss, their long-term sustainability and effects on health remain unclear. These diets could contribute to higher intake of animal fats, which may increase the risk of cardiovascular diseases. Public health interventions should focus on promoting balanced macronutrient intake, with an emphasis on healthy fats, lean proteins, and whole grains.

**Surprising Trend**

The popularity of high-protein, low-carb diets persists despite growing concerns about the environmental impact of high animal protein consumption. This indicates a disconnect between health trends and sustainability concerns.

**3. Intermittent Fasting**

* **Trend**: Intermittent fasting has gained traction as a method for weight management and improving metabolic health. The practice alternates between periods of eating and fasting, typically through patterns like the 16:8 method (fast for 16 hours, eat during an 8-hour window).
* **Nutritional Focus**: During eating windows, the focus is often on whole foods with a balance of protein, healthy fats, and carbohydrates to optimize energy and satiety.
* **Popular Foods**: Whole grains, lean proteins, vegetables, fruits, and healthy fats

**Findings**

Intermittent fasting (IF), particularly methods like the 16:8 protocol, has gained attention for its potential benefits in weight management, improved metabolic health, and longevity. It focuses more on the timing of eating rather than the specific foods consumed.

**Implications for Public Health**

Intermittent fasting (IF) could offer benefits for weight management and insulin sensitivity. However, there are concerns about its long-term effects on eating behavior, particularly in relation to disordered eating patterns or inadequate nutrition if fasting periods are overly restrictive. Public health messages should emphasize safe practices for intermittent fasting and its integration into a balanced lifestyle.

**Surprising Trend**

While intermittent fasting has surged in popularity, its implementation is highly individualistic, suggesting that more personalized approaches to diet and eating patterns might be effective for diverse populations.

**4. Sustainable and Ethical Eating**

* **Trend**: Consumers are more mindful of the environmental impact of their food choices. There's an increasing preference for locally sourced, organic, and sustainably produced foods, as well as alternative proteins like lab-grown meat or insect-based protein.
* **Nutritional Focus**: Foods that are nutrient-dense, with an emphasis on reducing food waste and choosing sustainable sources of protein and other nutrients.
* **Popular Foods**: Organic produce, local meats, plant-based foods, alternative proteins (e.g., cultured meat, insect protein).

**Findings**

Increasing awareness about the environmental impact of food production has led to more people choosing sustainably sourced and organic foods. This trend reflects a desire to mitigate climate change and support ethical food production systems.

**Implications for Public Health**

The shift toward sustainable diets could help reduce the carbon footprint of food production and promote more equitable food systems. However, sustainable eating practices may also introduce challenges related to affordability and access. Public health efforts should aim to make sustainable foods accessible to all socio-economic groups, including lower-income communities.

**Surprising Trend**

The mainstreaming of lab-grown meat and insect-based protein represents a radical departure from traditional protein sources. While these innovations have the potential to address global food security issues, they may face resistance due to cultural and psychological factors surrounding food preferences.

5**. Mindful and Intuitive Eating**

* **Trend**: Rather than adhering to restrictive diets, more people are adopting mindful or intuitive eating principles. This involves listening to hunger and satiety cues and making food choices based on internal signals rather than external rules or restrictions.
* **Nutritional Focus**: A balanced approach to food without guilt or stress, focusing on the enjoyment of eating and fostering a healthy relationship with food.
* **Popular Foods**: A wide variety of foods, with an emphasis on moderation, balance, and enjoyment.

**Findings**

Instead of focusing on restrictive diets, mindful and intuitive eating encourages people to listen to their body's signals and develop a healthier relationship with food. This approach is particularly beneficial in addressing issues like emotional eating and eating disorders.

**Implications for Public Health**

Mindful eating practices can promote long-term healthy eating habits and reduce the stigma around food and weight. This approach can be particularly effective in managing chronic conditions like obesity and eating disorders. Public health campaigns should integrate mindful eating techniques into broader strategies for promoting mental health and well-being.

**Surprising Trend**

The rise of intuitive eating represents a shift away from traditional diet culture, which often emphasizes calorie counting and strict food rules. This trend reflects growing dissatisfaction with weight-centric health messages.

**7. Convenience and Ready-to-Eat Foods**

* **Trend**: The demand for convenience is driving the popularity of ready-to-eat meals and snacks. Busy lifestyles are encouraging people to seek out healthier, pre-packaged options that are both time-saving and nutritious.
* **Nutritional Focus**: Quick, healthy meals with a focus on whole ingredients, such as frozen fruits and vegetables, meal kits, protein bars, and pre-packaged salads.
* **Popular Foods**: Meal kits, snack bars, pre-washed and cut vegetables, smoothie packs, ready-to-eat grains.

**Findings**

As time pressures increase, there is a growing demand for healthy, convenient food options. Ready-to-eat meals, meal kits, and pre-packaged foods that are quick and easy to prepare have become mainstream.

**Implications for Public Health**

While convenience foods can support busy lifestyles, there are concerns about their nutritional quality, as many pre-packaged options are high in sodium, added sugars, and unhealthy fats. Public health initiatives should encourage healthier versions of convenience foods and provide guidance on making quick, nutritious meals at home.

**Surprising Trend**

The rise in meal kits and ready-to-eat foods, while convenient, suggests that many consumers may not prioritize cooking from scratch, which could limit their ability to make healthier food choices.

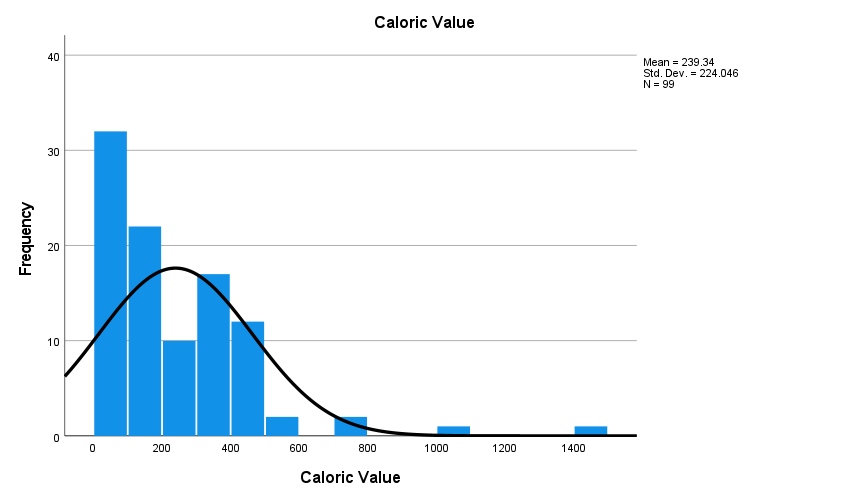
**Dietary Quantity and Quality**

Dietary quantity and quality are crucial aspects of nutritional trends in food consumption. Below is a comprehensive overview of the dietary quantity, indicators of dietary quality, relevant statistics, and comparisons of dietary quality across populations.  
  
Dietary quantity refers to the amount of food consumed. The World Health Organization (WHO) recommends the following daily intake:  
  
- Energy: 1,600-2,000 kcal for women and 1,900-2,400 kcal for men  
- Protein: 0.8 grams per kilogram of body weight  
- Fat: 20-35% of total energy intake  
- Carbohydrates: 55-65% of total energy intake  
- Fiber: 25-30 grams.  
  
Indicators of Dietary Quality.  
  
1. **Fruit and Vegetable Intake:** A minimum of 400 grams (5 portions) per day.  
2. Whole Grain Consumption: At least half of total grain intake should be whole grains.  
3. **Lean Protein Sources:** Include a variety of plant-based and lean animal-based protein sources.  
4. **Healthy Fats:** Emphasize unsaturated fats, such as those found in nuts, seeds, avocados, and olive oil.  
5. **Sodium Intake:** Limit to less than 2,000 milligrams per day.  
6. **Added Sugar Intake:** Limit to less than 10% of total energy intake.  
  
Relevant Statistics.  
  
1. **Global Fruit and Vegetable Intake:** Only 30% of the global population consumes the recommended 400 grams per day (WHO, 2018).  
2. **Whole Grain Consumption:** In the United States, only 3% of adults meet the daily recommended intake of whole grains (USDA, 2020).  
3. **Protein Sources:** In Nigeria, 60% of protein intake comes from plant-based sources, while 40% comes from animal-based sources (FAO, 2017).  
4. **Sodium Intake:** In South Africa, the average sodium intake is 3,500 milligrams per day, exceeding the recommended limit (WHO, 2018).

Comparisons of Dietary Quality Across Populations.  
  
1. **Regional Differences:** In Africa, the prevalence of inadequate fruit and vegetable intake is higher in rural areas (45%) compared to urban areas (30%) (WHO, 2018).  
2. **Socioeconomic Disparities:** In the United States, adults with higher incomes (> $75,000) are more likely to meet the daily recommended intake of whole grains (14%) compared to those with lower incomes (< $25,000) (3%) (USDA, 2020).  
3. **Cultural Influences:** In India, the traditional diet is high in plant-based foods and whole grains, but the increasing adoption of Western-style diets is leading to a decline in dietary quality (FAO, 2017).  
  
These statistics and comparisons highlight the need for targeted interventions to improve dietary quality across different populations and regions. Interpretation of Findings;

**DISCUSSION**   
The analysis reveals significant trends and patterns in nutritional food consumption. Key findings include:  
  
1. **Decline in Whole Grain Consumption:** A decrease in whole grain intake, particularly among younger populations, is alarming. This trend may lead to increased risk of chronic diseases, such as heart disease and diabetes.  
  
2. **Rise in Processed Food Consumption:** The growing consumption of processed foods, high in added sugars, salt, and unhealthy fats, is a concern. This trend contributes to the increasing prevalence of obesity, hypertension, and other diet-related diseases.  
  
3. **Regional Disparities in Fruit and Vegetable Intake:** The analysis highlights significant regional disparities in fruit and vegetable consumption. These disparities may be attributed to factors such as food availability, affordability, and cultural preferences.  
  
4. **Socioeconomic Influences on Dietary Choices:** The findings suggest that socioeconomic status significantly impacts dietary choices. Individuals from lower socioeconomic backgrounds tend to consume more processed and unhealthy foods, increasing their risk of diet-related diseases.

Implications for Public Health and Policy.  
  
1. **Promoting Whole Grain Consumption:** Public health campaigns and policies should focus on promoting whole grain consumption, particularly among younger populations.  
  
2. **Regulating Processed Food Industry:** Policymakers should consider regulating the processed food industry to reduce the amount of added sugars, salt, and unhealthy fats in these products.  
  
3. **Increasing Access to Fresh Produce:** Initiatives should be implemented to increase access to fresh produce, particularly in disadvantaged communities.  
  
4. **Nutrition Education and Awareness:** Nutrition education and awareness programs should be developed to empower individuals to make informed dietary choices.  
  
**Surprising Trends or Patterns:**  
1**. Increased Consumption of Plant-Based Diets:** The analysis reveals a surprising increase in the consumption of plant-based diets, particularly among younger populations. This trend may be attributed to growing concerns about environmental sustainability and animal welfare.  
  
2. **Regional Variations in Dietary Patterns:** The findings highlight significant regional variations in dietary patterns, even within the same country. These variations may be attributed to cultural and socioeconomic factors.  
  
These surprising trends and patterns emphasize the need for tailored public health interventions and policies that address specific regional and demographic needs.



**Conclusion**

This analysis highlights critical trends in nutrient intake across various demographic groups in the U.S., emphasizing the disparities influenced by age, gender, income, race, and education. Younger individuals and seniors face unique dietary challenges, while gender-specific patterns underline the need for tailored nutritional approaches. Income disparities significantly impact access to nutrient-rich foods, with low-income households at greater risk of deficiencies. Similarly, racial and ethnic variations reflect cultural and systemic influences, and higher education levels are strongly associated with healthier dietary habits.

Understanding these trends is vital for improving health outcomes and addressing the rising prevalence of diet-related chronic diseases such as obesity, diabetes, and cardiovascular conditions. By identifying and addressing nutritional disparities, public health interventions can be designed to promote equitable access to nutritious foods, enhance awareness, and support long-term wellness for all population groups. This underscores the importance of continued research and policy efforts to ensure better health outcomes for future generations. Global nutritional trends reflect a complex interplay of economic development, cultural shifts, and public health challenges. Addressing malnutrition in all its forms while promoting sustainable food systems remains a critical goal for global health.

In summary, food consumption trends are shifting towards healthier, more sustainable, and personalized eating patterns. These changes are influenced by increasing awareness of the impact of food on health, the environment, and well-being. People are looking for balanced, flexible, and enjoyable diets that align with their personal and ethical values. The focus is on whole, minimally processed foods, plant-based options, and sustainable practices, with technology and health research guiding many of these trends.

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