**Dietary Diversity**

*Dietary Diversity* is the variety of foods or food groups in a person's or household's diet. Dietary diversity is one way to assess the nutritional quality or adequacy of diets and reflects access to a variety of foods.

**Key Points**

I. **Different Foods** contain different vitamins, minerals, nutrients, and phytochemicals.

II. **By eating a variety** of foods, we are more likely to get different vitamins, minerals, nutrients, and phytochemicals that can help prevent nutrient deficiencies and chronic diseases.

III. **Researchers measure** dietary diversity as an indicator of diet quality for supporting nutrition and health.

IV. **Higher Levels** of dietary diversity are associated with higher socio-economic status as well as higher levels of food security.

V. **Dietary diversity is linked** to biodiversity in agricultural communities.

**Why Dietary Diversity is Important**

Approximately 60% of all American adults live with at least one preventable chronic disease, such as cardiovascular disease, high blood pressure, type 2 diabetes, and cancers. Scientific evidence indicates that poor nutrition, including a lack of dietary diversity, contribute to the development of chronic disease. Since different foods contain different vitamins, minerals, nutrients, and phytochemicals, eating a diverse diet helps to ensure that you get all of the nutrients needed to support nutrition and health.

Dietary diversity is used to measure nutritional quality and adequacy of diets. Data from 60 countries shows that 36% of children are fed the minimum recommended level of dietary diversity. Low dietary diversity in children is linked to nutrient deficiencies that lead to a range of health conditions such as anemia and stunted growth. The World Health Organization recommends preventing chronic malnutrition through the consumption of a diverse range of nutrient-dense and locally available foods.

Additionally, studies show that dietary diversity is linked with biodiversity. Increased dietary diversity is not only positive for human health, but it is also associated with increased biodiversity, which is a positive for environmental health.
**How to Measure Dietary Diversity**

There are several ways of measuring dietary diversity. The Household Dietary Diversity Score (HDDS) is the most common way. The **HDDS is calculated by adding up how many food groups are consumed** by an individual or household in one day[^9]. Individuals are asked to report their food consumption for a period of 24 hours, and their reported diets are placed into food groups to calculate their HDDS score[^9]. These food groups will include:

1. cereals
2. white tubers and roots
3. vegetables
4. fruits
5. meat
6. eggs
7. fish and other seafood
8. legumes, nuts, and seeds
9. milk and milk products
10. oils and fats
11. sweets
12. spices, condiments, beverages[^9]

**Consumer Practices to Improve Dietary Diversity**

1. **Eat the rainbow!** Foods that are naturally different in color have different nutrients and phytochemicals[^10][^11]. Eating healthy foods of all the colors of the rainbow is a great way for both kids and adults to improve their dietary diversity.

2. **Keep a food journal** to record what you are eating, especially in different seasons. Use your journal to track your dietary diversity for a week. Then, try to increase your dietary diversity by adding new healthy or local foods to your diet.

3. **Try out a new recipe** each week that uses fresh in-season ingredients. Try featuring nutrient-dense ingredients, like salmon, berries, dark leafy greens, or potatoes.

**Institutional Practices to Enhance Dietary Diversity**

1. **Offer a variety of nutrient-dense foods** and prepared foods using a variety of different recipes that are accessible and culturally relevant.

2. **Work with local farms** to source different varieties and types of nutrient-dense crops.

3. **Showcase a variety of seasonally available nutritious foods** through cooking demonstrations, tastings, and food fairs. Highlight the food’s nutritional importance, seasonality, and contribution to dietary diversity.

**References**


**Acknowledgments**

Funding for this publication was provided by the National Science Foundation (NSF RII Track-2 FEC OIA 1632810), Montana INBRE, and the Center for American Indian and Rural Health Equity at Montana State University (supported by the National Institute of General Medical Sciences of the National Institutes of Health under Award Numbers P20GM103474 and P20GM104417). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Science Foundation and the National Institutes of Health. Our gratitude to Angie Mangels for the beautiful fruit and vegetable illustrations featured here.