

The Public Health/ Community Nutrition Dietitian

COURSE: CHAPTER 5

BOOK: CHAPTER 8

Levels of Prevention

Primary

- Prevent disease /injury before it ever occurs
- By :
 - Preventing exposures to hazards
 - Altering unhealthy or unsafe behaviors
 - Increasing resistance to disease or injury

Secondary

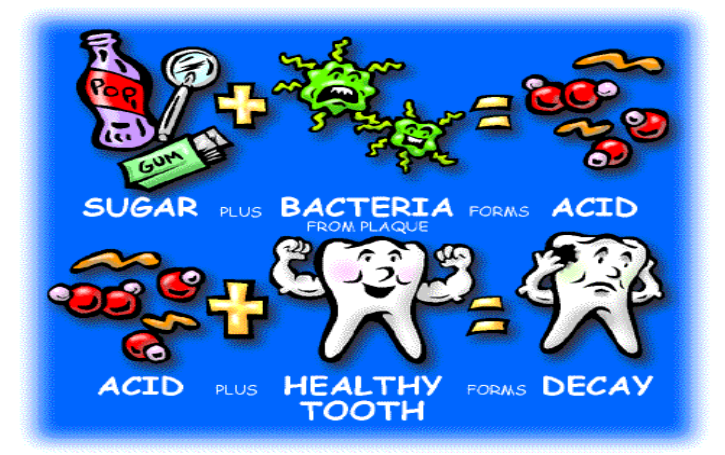
- Reduce impact of a disease or injury that has occurred
- By:
 - Detecting and treating as soon as possible to halt or slow progress
 - Encouraging personal strategies to prevent re-injury or recurrence

Tertiary

- Soften the impact of an ongoing illness /injury with lasting effect
- By:
 - Helping people manage long-term, often-complex health problems and injuries in order to improve as much as possible their:
 - Ability to function
 - Quality of life
 - Life expectancy.

Determine the level of prevention in the following examples:

1. Legislation to ban the use of asbestos
2. Self-management programs for those with hypertension
3. Regular mammograms and self-check exams to detect breast cancer for high risk groups
4. Daily, low-dose aspirins to prevent further strokes in people at risk
5. Stroke rehabilitation programs
6. Immunization against hepatitis B virus
7. Use of fluoridated toothpaste
8. Insulin therapy in type II diabetes
9. Hearing tests for construction workers



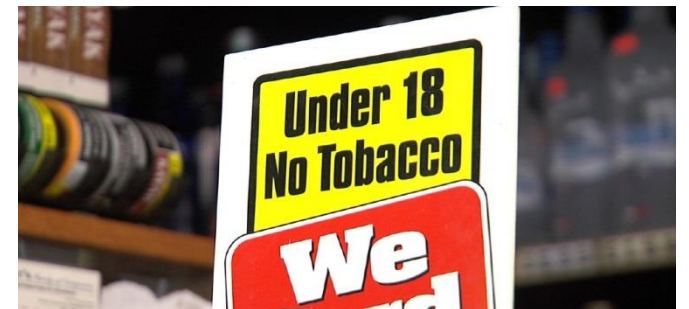
AND Position Statement

“It is the position of the Academy of Nutrition and Dietetics that primary prevention is the most effective and affordable method to prevent chronic disease, and that dietary intervention positively impacts health outcomes across the life span. Registered dietitians and dietetic technicians, registered, are critical members of health care teams and are essential to delivering nutrition-focused preventive services in clinical and community settings, advocating for policy and programmatic initiatives, and leading research in disease prevention and health promotion”

Components of Prevention

1. Personal Health: this deals with prevention issues at the individual level (ex: improving diet to control hypertension)
2. Community-Based: targeted towards groups (ex: five a day campaign)
3. Social policies / Systems Based: focuses on changing policies and law (example: tobacco ban for under 18 years)

Community nutrition needs to make appropriate and coordinated use of each



Components of Prevention

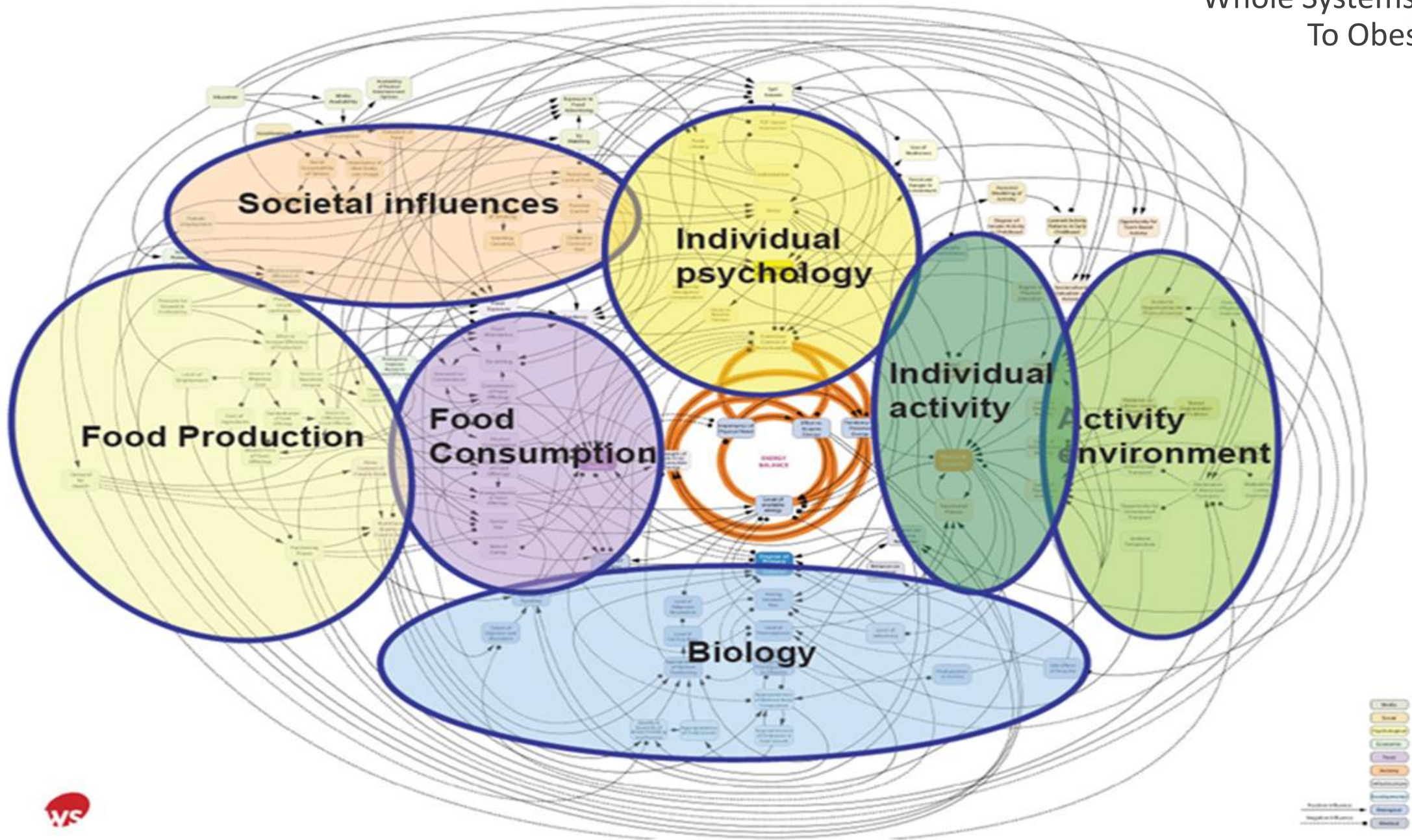
Personal Health

Community
Based

Social
Policies/Systems

Class discussion example:

Childhood obesity



Definitions

- **Clinical dietetics** utilises scientific principles and methods in the treatment of illness, by optimising the nutritional status of individuals in an institutional environment.
- **Community dietetics** utilises scientific principles and methods in the treatment of illness, by optimising the nutritional status of individuals in a community setting.
- **Community and Public Health Nutrition** utilises scientific principles and practice in the promotion and prevention of nutrition related illness, by optimising the nutritional status of communities, sub-populations and whole populations.

Community Nutrition Professionals

- ❖ The “community dietitian,” “community nutritionist,” or “public health nutritionist” provides nutrition services to identified groups

- ❖ They establish links with other professionals involved with a broad range of human services, including:
 - Child care
 - Services for the elderly
 - Educational institutions
 - Community-based research

Public Health Nutritionist

- He/she is usually required to have, at a minimum, the master's degree.
- He/she may not always be a registered dietitian nutritionist (RDN).
- Familiar with the field of public health. (Assessment of health needs, applying preventive measures, and intervening with treatments and rehabilitation)
- Needs to understand the nutritional needs across the life cycle, use computer technology efficiently, and be aware of multiethnic needs and a diverse population.
- Understand the fundamentals of nutrition, food science, and dietetics
- Have an underlying knowledge of human physiology, chemistry, biochemistry, epidemiology, statistics, and behavioral sciences.
- Collaborate with community leaders and other professionals

The Focus

- ❖ Community Nutrition Professionals focus on promoting *optimum health and preventing disease* in the community by using a population focus and a client or personal health service approach.
- ❖ Community nutrition is influenced by the collective beliefs and practices of everyone in the community. For instance, it is estimated that about 70 percent of all premature deaths in the United States are caused by environmental factors and individual behaviors. Also, 190 billion dollars/ year are the costs of healthcare for obesity alone.

The Focus

- ❖ Dietitians need to continue to demonstrate the value they bring to helping solve the economic burden of rising health costs that are estimated to be in the billions each year.



What is Health Economics?

Health economics is an applied science that aims to understand the behavior of individuals, health care providers, public and private organizations, and governments in decision-making. Health economists apply the theories of production, efficiency, disparities, competition, and regulation to better inform the public and private sector on the most efficient, cost-effective and equitable course of action.

<https://www.jhsph.edu>

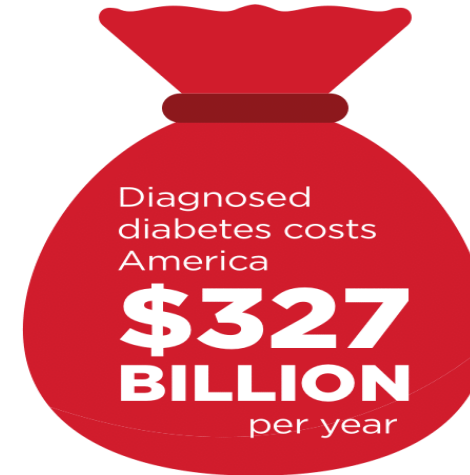
The Staggering Costs of Diabetes



More than
30 MILLION AMERICANS
have diabetes



Health care costs for Americans with diabetes are **2.3x GREATER** than those without diabetes



84 MILLION
Americans have prediabetes



\$1 IN \$7

Health care dollars is spent treating diabetes and its complications



Today, **4,110** Americans will be diagnosed with diabetes. Additionally, diabetes will cause **295** Americans to undergo an amputation and **137** will enter end-stage kidney disease treatment.

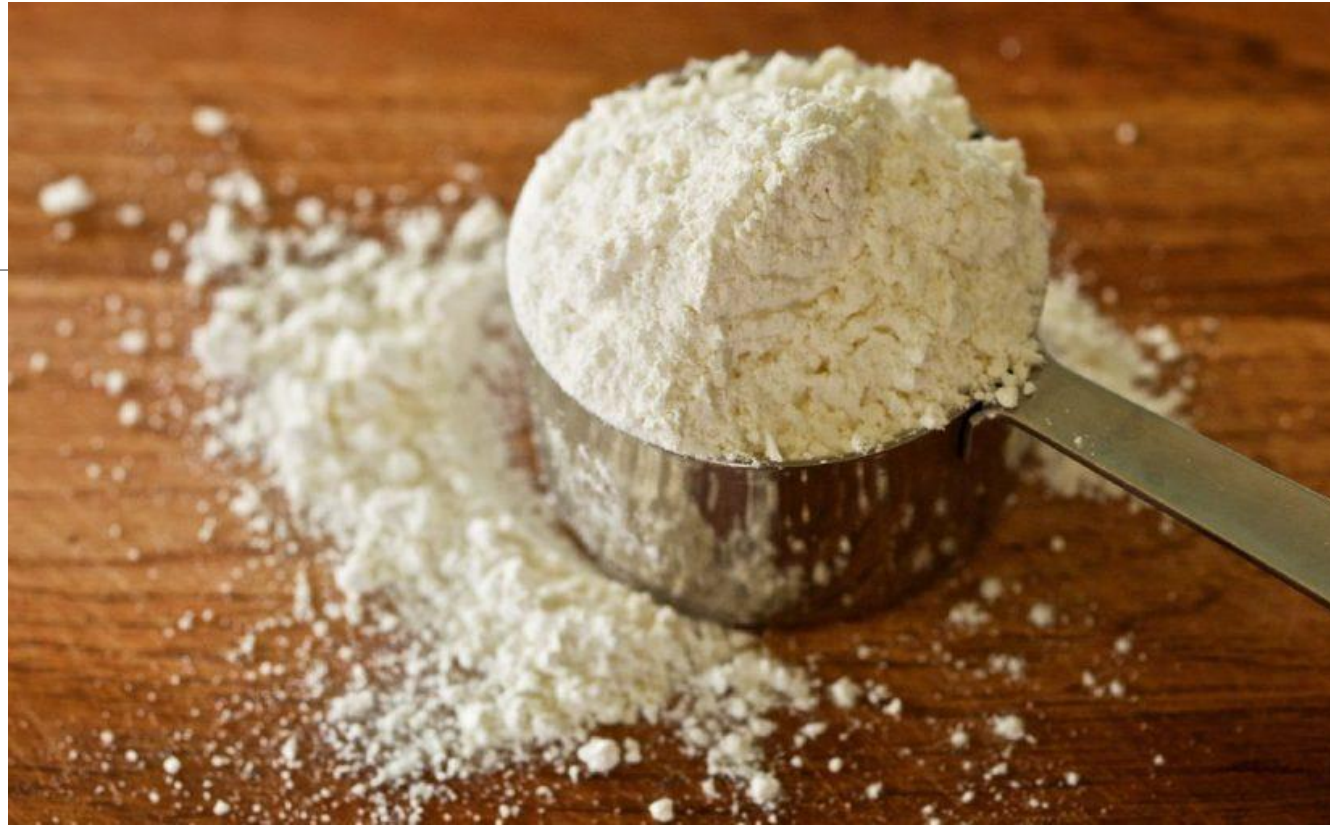
Work Setting for Community Nutritionists

1. Federal, state, local health agencies.
2. Neighborhood/community health centers.
3. Industry.
4. Ambulatory care clinics.
5. Home health agencies.
6. Specialized community projects.
7. Institutions and hospitals.
8. Private practice.
9. Nonprofit private centers.
10. School nutrition programs
11. Area Agencies on Aging

Public Health Approach Characteristics

- Interventions that promote health and prevent communicable and chronic diseases by managing or controlling the community environment.
- Directing money and energy to the problems that affect the lives of the largest number of people in the community.
- Targeting the underserved or unserved by virtue of income, age, ethnicity, heredity, or lifestyle that are vulnerable to disease, hunger, or malnutrition.
- Collaboration of the public, community leaders, policy makers, administrators, and health and human services professionals in assessing and responding to community needs and consumer demands.
- Monitoring the nutritional health of the people in the community to ensure that the public health system achieves its objectives and responds to needs.

Examples of Interventions



In 2005, the Palestinian Authority decided to mandate the fortification of wheat flour with eight vitamins (Vitamins A and D, B-1, B-2, niacin, B-6, folic acid, and B-12), and 2 minerals (iron and zinc) as a strategy to reduce risk of micronutrient deficiencies due to reduction in the consumption of milk, eggs, and meat, poultry and fish.







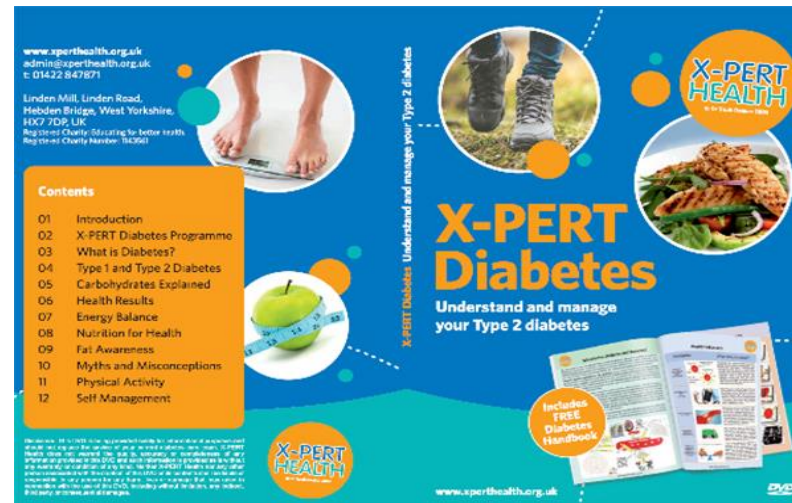
كتيب صحة الأم والطفل

Mother and Child Health Handbook



تم تمويل هذا الكتيب بدعم من الوكالة الدولية للاجئين الفلسطينيين (UNRWA) بالتعاون مع الوكالة اليابانية للتعاون الدولي (JICA) والوكالة اليابانية للتعاون الدولي (JICA).



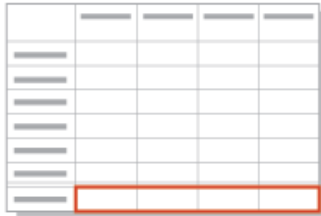




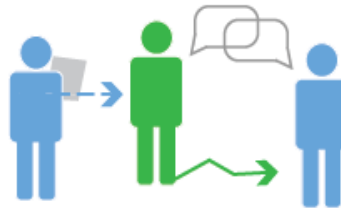
Typical activities of the community nutrition RDN

1. Assessment and prioritizing nutrition problems for various age and population groups.

DATA ANALYSIS



INTERVIEWS & OBSERVATIONS



FOCUS GROUP

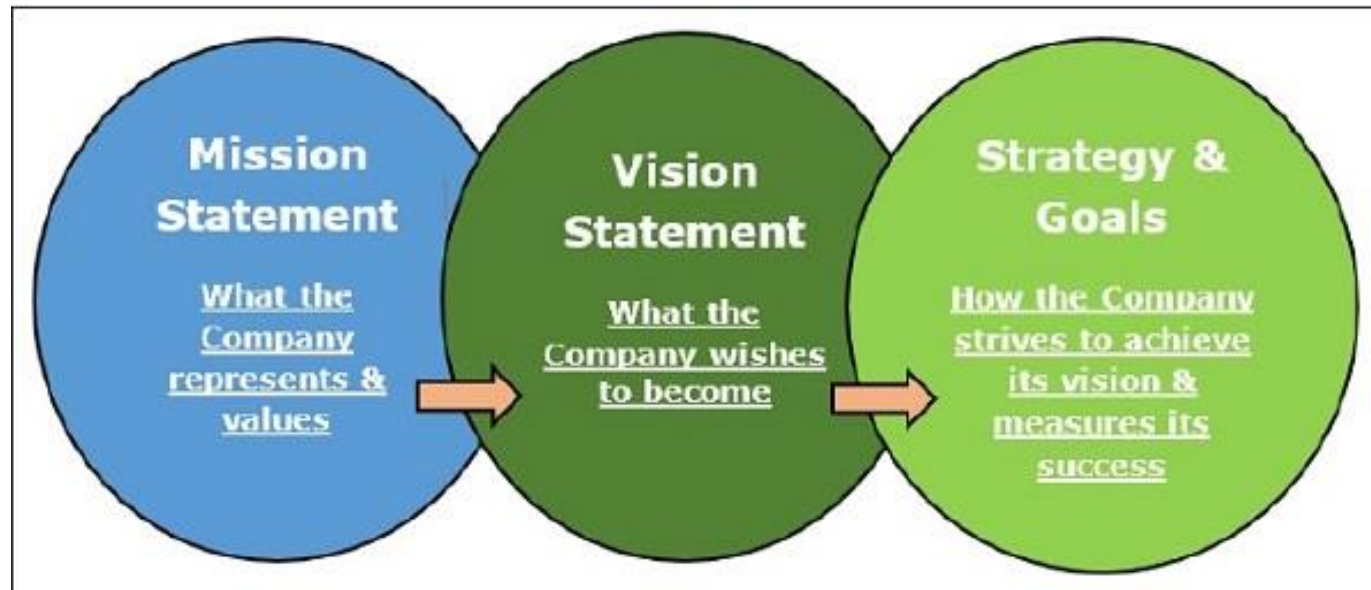


USE CASE



Typical activities of the community nutrition RDN

2. The integration of nutrition services into the overall agency mission, goals, and plans.



Example: FAO

منظمة الأغذية والزراعة
للأمم المتحدة



الرؤية

صون التنوع البيولوجي للأغذية والزراعة وتشجيع استخدامه دعماً للأمن الغذائي العالمي وللتنمية المستدامة، من أجل أجيال الحاضر والمستقبل.

المهمة الأساسية

اعترافاً بأن الموارد الوراثية للأغذية والزراعة تمثل شاغلاً مشتركاً لجميع البلدان، حيث إن البلدان جميعها تعتمد على الموارد الوراثية للأغذية والزراعة التي يكون منشؤها في أماكن أخرى، تسعى الهيئة جاهدة إلى وقف فقدان الموارد الوراثية للأغذية والزراعة، وإلى كفالة الأمن الغذائي العالمي والتنمية المستدامة بتشجيع صون تلك الموارد واستخدامها المستدام، بما في ذلك تبادلها، والحصول على المنافع الناجمة عن استخدامها وتقاسمها العادل والمنصف.

Typical activities of the community nutrition RDN

3. Multidisciplinary team membership.



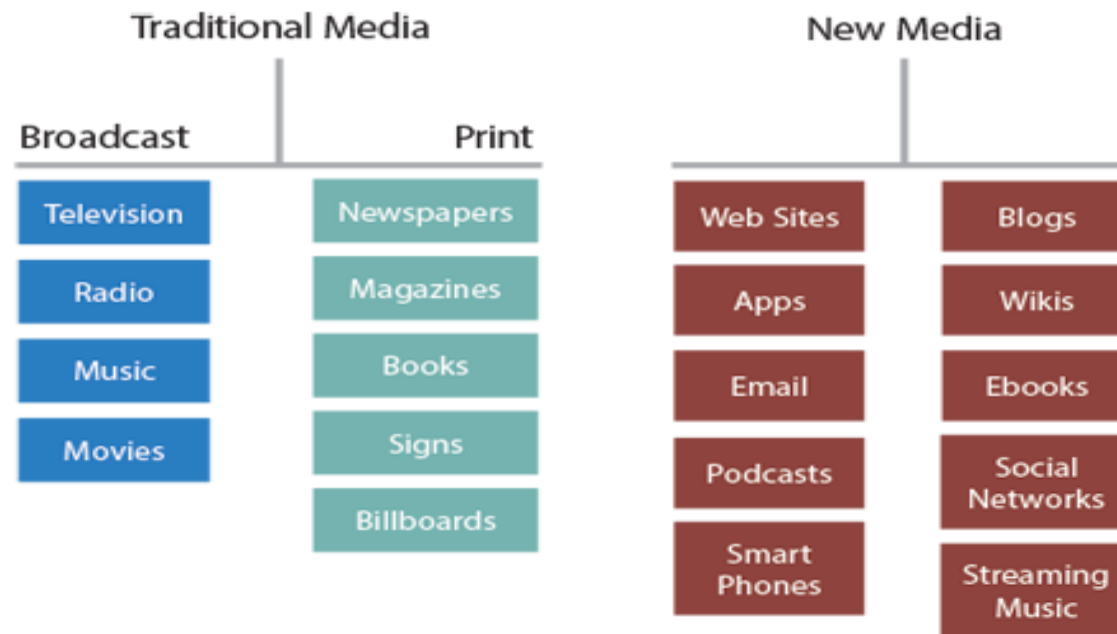
Typical activities of the community nutrition RDN

4. Selection and/or development of nutrition education materials or approaches appropriate for individuals or small groups within the target population.



Typical activities of the community nutrition RDN

5. Media strategies used in print, broadcasting, and telecommunications to reach population groups.



Typical activities of the community nutrition RDN

6. Training of other agency staff and providing technical assistance to other staff.
7. Ethical considerations in all programs and services offered.
8. Serving as a resource to the public, media, business, and industry.

Career Outlook

- ❖ Community nutrition practice is changing and has expanded opportunities.
- ❖ Community nutritionists will need to be more proactive and creative in assuming their responsibility. Ways dietitians can help to meet community health needs include:
 - Involvement in [policy decisions](#)
 - Obtaining advanced [clinical skills](#), and advanced study in [epidemiology and research methodology](#)
 - The use of [evidence-based research](#)

Career Outlook

Food availability, food safety, health disparities among ethnic groups, nutrition information, and misinformation are all impacting public health.

❖ Food availability

Food availability: sufficient quantities of food of appropriate quality, supplied through domestic production or imports, including food aid

❖ Food Security

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life

❖ Health Disparities

Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health

Career Outlook

Being familiar with global goals is also key in community practice.

❖ SDGs

17 Goals to Transform Our World

“The [Sustainable Development Goals](https://www.un.org/sustainabledevelopment/) are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet.”

<https://www.un.org/sustainabledevelopment/>

Career Outlook

Previously: Millennium development goals (To achieve by 2015)



SDGs: For the year 2030



United Nations Sustainable Development Goals – Goal 2 (Zero Hunger)



How? (www.fao.org)

1. Put the furthest behind first
2. Pave the road from farm to market
3. Reduce food waste (<https://www.youtube.com/watch?v=VGTPKKOVoz4>)
4. Encourage a sustainable variety of crops
5. Make nutrition a priority, starting with a child's first 1000 days