# Introduction to the Profession of Dietetics

COURSE: CHAPTER 1

BOOK: CHAPTER 1

#### What is a dietitian?



#### Dietitian vs Nutritionist

Dietitian: A professional who translates the science of food and nutrition to enhance the health and well-being of individuals and groups.

Nutritionist: A professional with academic credentials in nutrition; he or she may also be an RD.

#### Dietitian vs Nutritionist

Nutritionist will usually have completed <u>a tertiary qualification</u> in any number of fields, including nutrition, food science and public health. The main role of a nutritionist is to <u>help people</u> <u>achieve optimal health by providing information and advice about health and food choices</u>. Nutritionists have expertise in a range of services including public health nutrition, community health, education related to nutrition, research, nutrition consultants and advisors, public health and health promotion officers, community development officers, quality and nutrition coordinators, food technologists, media spokespeople and more.

<u>Dietitians</u> are <u>tertiary qualified</u> in food, nutrition and dietetics. Qualified dietitians have undertaken a course of study that has <u>included supervised and assessed professional practice</u> in public health nutrition, medical nutrition therapy and food service management. Dietitians may work in many of the same settings as Nutritionists. In addition to private clinical practice, hospitals and the medical nutrition industry. They provide expert nutrition advice for people of all ages and prescribe dietary treatments for many conditions

#### Dietitian vs Nutritionist

#### "Every Registered Dietitian Is a Nutritionist, but Not Every Nutritionist Is a Registered Dietitian"

- Academy of Nutrition and Dietetics

#### Dietetics

→ Derived from the word "dieto", meaning diet or food

Mistaken as practices aimed specifically at losing weight (E.g., diet cola)

Historical perspective?



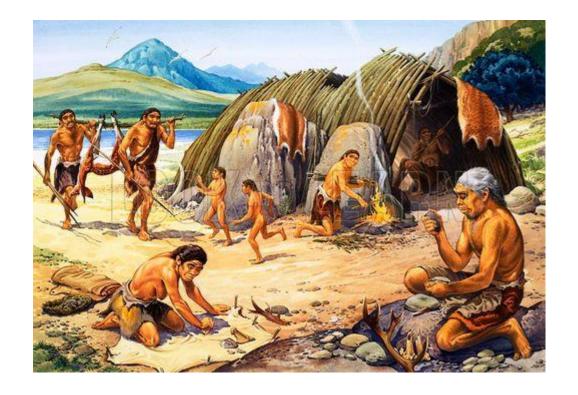




## A close-up look on "The Paleo Diet"

https://www.youtube.com/watch?v=un95qXQf001

Watch and discuss thoughts



#### The Paleo Diet

- Founded by Dr. Loren Cordain. Also known as the Paleolithic diet, Stone Age diet, huntergatherer diet and caveman diet.
- A dietary plan based on foods similar to what might have been eaten during the Paleolithic era, (2.5 million to 10,000 years ago)
- Reasoning? The discordance theory
- Advantages vs Disadvantages?

In	Out	
Meat (especially game meat), poultry, fish, and shellfish	Any food that is processed, man-made or prepackaged	
Fresh fruits	All grains	
Fresh vegetables	Legumes (including peanuts)	
Eggs	Dairy	
Seeds	Salt	
Nuts	Sugar	
Olive, coconut and flaxseed oils	Vegetable oils	
	Potatoes	

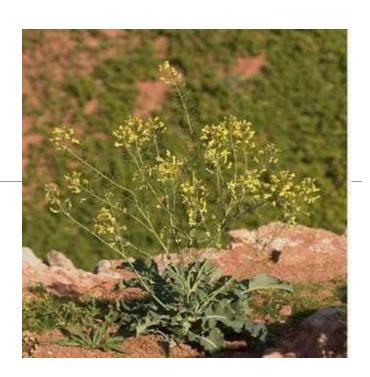
## Diet Accuracy?







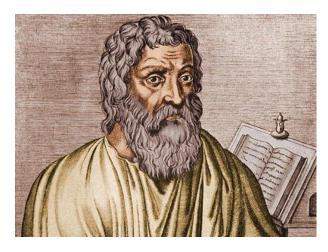






## Historical Perspective of Dietetics

"Let food be thy medicine and medicine be thy food"



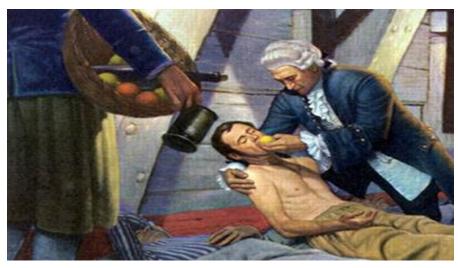
"If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health"

- Hppocrates

## Historical Perspective

- 18<sup>th</sup> Century: Information concerning digestion, respiration, and metabolism researched and understood by chemists and physicians
- Mid 1800's: The previous led to the discovery of substances in foods that were responsible for many of the effects described much earlier in the etiology of disease. Fats, carbohydrates, and amines were known by the mid-1800s
- Early 1900's: Discovery of vitamins and minerals

## Early practices were based on trial and error ...



James Lind & Scurvy

"The most sudden and visible good effects were perceived from the use of oranges and lemons,"

#### William Beaumont's experiments



## William Beaumont Experiments

Watch (Time: 00:00- 01:45): <a href="https://www.youtube.com/watch?v=pqgcElaXGME&t=1s">https://www.youtube.com/watch?v=pqgcElaXGME&t=1s</a>

- ➤ William Beaumont was the only physician on an island (Fort Mackinac) in 1822 when Alexis St. Martin, a 19-year-old French Canadian, was accidentally shot by a gun. St. Martin survived, but with a fistula in the stomach region.
- From 1825 to 1833, 238 experiments on St. Martin were conducted. In 1833, Beaumont published his book: Experiments and Observations on the Gastric Juice and the Physiology of Digestion.
- > The following were Beaumont's most important contributions:
- 1. Accurate and complete description of gastric juice
- 2. The influence of mental disturbance on secretion of gastric juice
- 3. First comprehensive study of motions of the stomach
- 4. A table of the digestibility of different articles of diet.



### Early practice of dietetics

Using diet for treatment of disease is an ancient practice. The regulation and recognition of the profession (dietitian) became official in 1917

Some early uses of dietetics:

- Cooking Schools
  - Included cooking instruction, laboratories sessions in chemistry and special classes for the sick.
- The schools trained many of the men and women who were in charge of food service in hospitals and the Red Cross during World War I.
- Hospital Dietetics
- Food selection was not a major concern, menus were monotonous and featured a few foods.
- Florence Nightingale is credited with improving the food supply and sanitary conditions in hospitals
- Clinics
- The Frances Stern Clinic in Boston was one of the leading food clinics, which provided diets for the sick poor.
- The Military
- Dietitians played important roles during the Civil War and World Wars I and II

## Academy of Nutrition and Dietetics (AND)

Previously known as the American Dietetics Association (Before 2012)

Founded in 1917 in Cleveland. 39 charter members and 1\$ dues. Lulu Graves was the first president

https://www.eatright.org/

Published its first **journal** (see next slide) in 1925 "Journal of the American Dietetic Association"

Changed in 2012 to Journal of the Academy of Nutrition and Dietetics

Visit: <a href="https://jandonline.org/">https://jandonline.org/</a>

Purpose:

"providing an opportunity for the dietitians of the country to come together and meet with the scientific research workers and to see that the feeding of as many people as possible be placed in the hands of women trained to feed them in the best manner known."



#### Definitions

- A "periodical" is any publication that comes out regularly or occasionally
- A "magazine" is a periodical with a popular focus, i.e. aimed at the general public, and containing news, personal narratives, and opinion.
- A "journal," or "scholarly journal," is a scholarly periodical aimed at specialists and researchers. A journal is a collection of articles.

#### **Examples:**

- Journal of Obesity & Weight Loss Therapy
- Journal of Nutrition Science Research
- Journal of Food and Dairy Technology
- Journal of Clinical Nutrition & Dietetics
- Journal of Diabetic Complications & Medicine
- Journal of Food & Industrial Microbiology

• ....

#### Areas of Pratice

#### Four Areas of Practice were identified:

- 1. Dietotherapy
- 2. Teaching
- 3. Social welfare
- 4. Administration

#### Now known as:

- 1. Medical Nutrition Therapy / Clinical Nutrition
- 2. Education
- 3. Community Nutrition
- 4. Food and Nutrition Management

#### Dietetics Profession

Profession: An area of practice with the following characteristics: <a href="mailto:specialized knowledge">specialized knowledge</a>, <a href="mailto:continuing education">continuing education</a>, a code of ethics, and a commitment to service for others.

Characteristics of a profession:

- 1- Specialized knowledge
- 2- Continuing education
- 3- A code of ethics
- 4- A commitment to service for others.

## Specialized knowledge

- ❖1919: At least 2 years of college was first recommended, which later became a 4-year requirement or a 2-year course for institutional managers.
- Courses for the <u>bachelor's degree</u> were specified
- \* Hospital training of 6 months was added to the educational requirement.
- ❖1987: <u>standards of education</u> were established, by which dietetics education focused more on the outcomes of the educational process.
- ❖The ADA set up <u>a review process</u> that periodically updated educational requirements as the profession grew and matured.
- \* <u>ACEND</u> (Accreditation Council for Education in Nutrition and Dietetics) is the accrediting agency for education programs preparing students for careers
- https://www.eatrightpro.org/acend/accreditation-standards-fees-and-policies/2017-standards latest standards (2017)

## Continuing Education

- ❖1960s: a requirement of 75 hours of continuing education each 5 years was initiated.
- ❖ A wide number of educational events were recognized as meeting this requirement and were given credit accordingly.
- \* Continuing professional education is a well-established function of the Academy through the center for professional education, which offers conferences, annual meeting events, and other opportunities.

#### Code of ethics

- ❖ 1942: A code of ethics for its members was developed
- ❖The code was updated and expanded over the years
- Published jointly by the Academy and the Commission on Dietetic Registration, it provides guidance to dietetic practitioners in their professional practice and conduct

#### Service to others

- The seal of the Academy carries the motto, "Quam Plurimis Prodesse," which means, "benefit as many as possible."
- ❖ Dietitians recognize a professional commitment to help the public attain optimal health and quality of life through the practice of good nutritional habits.



- In 1917, requirements were lenient to bring in as many practitioners. These, however, were gradually changed as it became based on specified education and practical experience.

- Categories of membership: Active, honorary, international, retired, student.

- The association is identified as an educational and scientific non profit organization

- 1969: RD title was established

### 5 steps to become an RDN

- Complete a <u>bachelor's degree</u> and receive a verification statement from an ACENDaccredited program (Note, effective January 1, 2024, a graduate degree will be required to be eligible to take the Commission on Dietetic Registration)
- 2. Complete an ACEND-accredited <u>supervised practice</u>
- 3. Pass the Commission on Dietetic Registration's dietetic registration exam.
- 4. Gain <u>licensure</u> in your state of practice, if applicable.
- Maintain <u>continuing education</u>.

#### Other positions:

#### 1. Managers

Currently, the Association of Nutrition and Foodservice Professionals (ANFP) is as an organization for food managers (Previously: Hospital, Institution, and Educational Food Service Society (HIEFSS) in 1960)

A voluntary certificate program leads to "Certified Dietary Manager"

2. Dietetic Technician Registered (DTR).

Also requires educational standards, practice, and a national exam

#### - Legislative activity

An early example of legislative activity is the Dietitians promoting for a bill to grant military rank to dietitians serving in WWI. A more recent example: the passage of the School Lunch Act Bill.

Each year, the Academy identifies key legislative issues for particular attention and activity by the Washington office and members.

- Dietetics Practice Groups (DPGs) were established in 1978. Open membership to dietitians with interest/practice in a specific area.
- This provides networking opportunities, programs, and continuing education for members.
- Specialized practice groups enable members to improve their job performance, gain insight into specialized areas of food and nutrition and network with colleagues

#### **DPGs**

- 1. <u>Clinical Nutrition Management DPG</u>: Managers of clinical nutrition programs across the health care continuum. Develop and implement nutrition programs.
- 2. <u>Behavioral Health Nutrition DPG</u>: Empower members to be the food and nutrition experts in the areas of eating disorders, intellectual and developmental disabilities, addictions and mental illness.
- 3. <u>Diabetes Care and Education DPG</u>: Promotes quality diabetes care and education.
- 4. <u>Dietitians in Nutrition Support DPG</u>: Integrate the science and practice of enteral and parenteral nutrition in order to provide appropriate nutrition support therapy to individuals encompassing adults, pediatrics, inpatients, outpatients, home care and transplantation.
- 5. <u>Hunger and Environmental Nutrition DPG</u>: Connects nutrition experts in food and water security, health, agriculture, and the environment to foster thriving sustainable and accessible food and water systems.

- 6. <u>Nutrition Entrepreneurs DPG</u>: Helps members achieve their professional and financial potential by providing the tools to build and maintain a successful nutrition-related business.
- 7. Oncology Nutrition DPG: The Oncology Nutrition DPG provides dietetic professionals with resources and networking opportunities to deal with the complexities of oncology practice.
- 8. <u>Pediatric Nutrition DPG</u>: Promote nutritional well-being as part of a healthy lifestyle for all infants, children and adolescents.
- 9. <u>Public Health/Community Nutrition DPG</u>: Work in partnership with other health professionals and stakeholders to serve the public through the promotion of optimal nutrition, health and well-being.
- 10. Renal Dietitians DPG: Provide medical nutrition therapy in dialysis facilities, clinics, hospitals, university settings and private practice.
- 11. <u>Women's Health DPG</u>: Focuses on education, research and policy initiatives in Women's Health.
- 12. <u>Management in Food and Nutrition Systems DPG</u>: Management in Food and Nutrition Systems members are managers of food, nutrition and other services who work in a variety of settings.
- 13. <u>School Nutrition Services DPG</u>: School Nutrition Services DPG members are involved in child nutrition programs at every level.

#### Where Dietetians work?

Table 1-1. Primary Area of Practice by Dietitians (Percent)

Practice Area	2007ª	2009 <sup>b</sup>	2011°	2013 <sup>d</sup>	2015°
Clinical dietetics	55	56	56	57	57
Food and nutrition management	12	12	12	12	11
Community nutrition	11	11	11	11	10
Consultation/business	11	8	8	8	8
Education/research	6	7	7	6	7
Other	5	6	6	6	7

- Professional Partnerships

The academy currently maintains liaison with > <u>140 allied groups</u> and associations, which advance mutual efforts.

Example: A longstanding affiliation with the American Public Health Association and the American Diabetes Association has resulted in the development of the diabetic exchange lists

## Diabetes exchange list

The exchange list is a tool to help you plan healthy meals and snacks

Sample Exchange List				
Food group:	You can have:	Or exchange it for:		
Fruit (each serving contains about 15 grams carbohydrates)	1 small or medium piece of fresh fruit	1/2 cup fruit juice, or canned or chopped fruit		
Vegetable (each serving contains about 5 grams carbohydrates)	1 cup raw vegetables	1/2 cup cooked vegetables or vegetable juice		
Starch (each serving contains about 15 grams carbohydrates)	1 slice or ounce bread	1/2 cup pasta, cereal, starchy vegetable		
Sugar, honey, molasses	1 teaspoon	4 grams carbohydrates		
Milk (does not include cream, yogurt or cheese)	1 cup milk	12 grams carbohydrates and 8 grams protein		
Meat	1 ounce meat, fish, poultry, cheese or yogurt	1/2 cup dried beans		
Fat (includes nuts, seeds and small amounts of bacon and peanut butter)	1 teaspoon oil, butter or margarine	5 grams fat		

#### Other Alliances

American Public Health Association (APHA): Grants allowed the ADA to sponsor workshops on programmed learning

American Diabetes Association (ADA): exchanges speakers with the Academy at conferences and annual meetings

American Hospitals Association (AHA): Hospitals employ many dietitians who contribute to patient care. Hospital-accrediting bodies (e.g., the Joint Commission) include nutrition and food services in their surveys regarding the quality of the services.

The Food and Nutrition Science Alliance (FANSA): A partnership of seven professional scientific societies whose members have joined forces to speak with one voice on food and nutrition issues

The academy initiated many programs that reach out to the public:

- 1. Website: eatright.org
- 2. Toll free number
- 3. National Nutrition Month
- 4. Dial-a-dietitian program
- 5. A program to train dietitians to serve as spokespersons for the profession
- 6. It continuously participates in national projects and campaigns.
- 7. Position papers: these papers have been extensively reviewed and reflect the most scientifically accurate views of the academy in a specific area of dietetics. (See: <a href="https://www.eatrightpro.org/practice/position-and-practice-papers/position-papers">https://www.eatrightpro.org/practice/position-and-practice-papers/position-papers</a>)

المهنة: المهنة الصحية التي تعنى بتغذية الأصحاء والمرضى بفئاتهم وأعمار هم المختلفة بما في ذلك تخطيط الحميات الغذائية ووصف الوجبات الغذائية وإدارتها وتقديم الاستشارات في هذا المجال. الخصائي التغذية: الشخص المرخص له بممارسة المهنة وفقاً لأحكام هذا النظام. فني تغذية: الشخص المرخص له بالعمل تحت إشراف اخصائي التغذية وفقاً لأحكام هذا النظام. مركز التغذية: المركز المرخص له بتقديم الاستشارات والخدمات في مجال التغذية وفقاً لأحكام هذا النظام.

#### يشترط للحصول على مزاولة مهنة فني التغذية ما يلي:

- أن يكون فلسطيني الجنسية أو من رعايا الدول التي تعامل الفلسطينيين بالمثل أو زوج/ زوجة لفلسطيني.
  - 2. أن يكون حاصلاً على شهادة الثانوية العامة.
- 3. أن يكون حاصلاً على دبلوم من معهد أو كلية متوسطة معترف بها لا تقل مدة الدراسة في أي منها عن سنتين أو شهادة معادلة لها معترف بها من الجهات المختصة.
  - 4. اجتياز الفحص المقرر لمزاولة المهنة.
    - 5. أن يكون عضواً مسجلاً في النقابة.
  - 6. أن لا يكون قد أدين بجناية أو بجنحه مخلة بالشرف أو الأمانة ما لم يكن قد رد إليه اعتباره.

#### يشترط للحصول على مزاولة مهنة اخصائي تغذية ما يلي:

- 1. أن يكون فلسطيني الجنسية أو من رعايا الدول التي تعامل الفلسطينيين بالمثل أو زوج زوجة لفلسطيني.
  - 2. أن يكون حاصلاً على شهادة الثانوية العامة.
- 3. أن يكون حاصلاً على الشهادة الجامعية الأولى (البكالوريوس) أو ما يعادلها على الأقل في علم التغذية من جامعة متخصصة بتدريس هذه المهنة ومعترف بها من الجهات المختصة.
- 4. أو أن يكون حاصلاً على الشهادة الجامعية الثانية (الماجستير) أو الثالثة (الدكتوراة) في علم التغذية من جامعة أو كلية معترف بها من الجهات المختصة إذا كانت الشهادة الجامعية الأولى لغير الحاصلين على بكالوريس تغذية.
- وأن تكون لديه خبرة عملية في مجال التغذية لا تقل عن سنتين لحملة شهادة الماجستير وسنة واحدة لحملة شهادة ( الدكتوراة ) من مؤسسة صحية مرخصة لغير الحاصلين على بكالوريوس تغذية.
  - 6. اجتياز الفحص المقرر لمزاولة المهنة.
  - 7. أن يكون عضواً مسجلاً في النقابة ذات العلاقة.
  - 8. أن لا يكون قد أدين بجناية أو بجنحة مخلة بالشرف أو الامانة ما لم يكن قد رد إليه اعتباره.

مجالات عمل أخصائي التغذية:

1. العمل في المستشفيات أو المراكز الصحية الخاصة.

2. العمل في مراكز التغذية.

3. العمل في المراكز الرياضية.

4. العمل كأخصائي تغذية خاص.

اختصاصات فنى التغذية

يختص فني التغذية بما يلي:

أ. مراقبة إعداد وتقديم الأغذية والوجبات الغذائية.

ب. المحافظة على سلامة الطعام في المستشفيات ومراكز التغذية وفقاً للشروط الصحية.

ج. مساعدة اخصائي التغذية في عمله.

#### يحظر على من يمارس المهنة ما يأتى:

إعطاء وصفة طبية دوائية.

إجراء الفحوصات المخبرية.

الجمع بين ممارسة مهنة التغذية وأية مهنة أخرى باستثناء مهنة التدريس في الجامعات والمعاهد شريطة تعيين شخص ممارس للمهنة مؤهل ومتفرغ حسب النظام المنصوص عليه لإدارة المركز.

يحظر السماح لغير المسجلين حسب النظام بالعمل في أي مركز للتغذية.

يحظر فتح أكثر من مركز تغذية خاص إلا إذا كانت شركة.

يحظر إدارة أكثر من مركز من قبل اخصائي التغذية.

استعمال المركز لغايات غير الغايات التي رخص من أجلها وعرض أية مواد غذائية أو دوائية أو أجهزة طبية في المركز بقصد البيع. نشر الإعلانات والنشرات الدعائية عن المركز دون موافقة وزارة الصحة.

#### Definitions

- I. Academy of Nutrition and Dietetics. The professional organization for dietitians. Formerly known as the American Dietetic Association.
- II. Dietetic practice group (DPG). An organized group of Academy of Nutrition and Dietetics members with similar interests in an area of practice or a particular subject area.
- III. Dietetic technician. A graduate of an approved dietetic technician program.
- IV. Dietitian. A professional who translates the science of food and nutrition to enhance the health and well-being of individuals and groups.
- Nutritionist. A professional with academic credentials in nutrition; he or she may also be an RD.
- VI. Registered dietitian (RD). A dietitian who has fulfilled the eligibility requirements of the Commission on Dietetic Registration.

#### References

- 1- Dietetics, Practice and Future Trends. Esther A. Winterfeldt; Margaret L. Bogle; Lea L. Ebro, Johns & Bartlett, 5th edition, 2018. (Chapter 1)
- 2- www.eatright.org
- 3- <a href="https://www.health.harvard.edu/diet-and-weight-loss/the-paleo-diet-back-to-the-stone-age">https://www.health.harvard.edu/diet-and-weight-loss/the-paleo-diet-back-to-the-stone-age</a>
- 4- https://health.ucdavis.edu/welcome/features/2014-2015/06/20150603 paleo-diet.html
- 5- <a href="https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/paleo-diet/art-20111182">https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/paleo-diet/art-20111182</a>
- 6- https://thepaleodiet.com/about-the-paleo-diet/