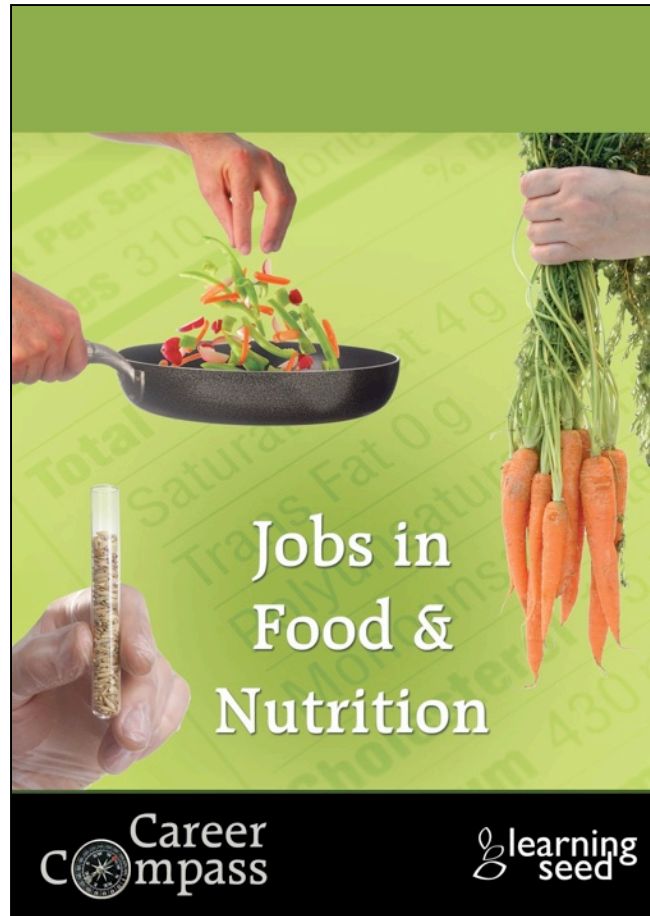


# Career Compass: Jobs in Food & Nutrition



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### Closed Captioning

This program is closed-captioned.

# Summary

This program explores careers in four areas of the food and nutrition industry: food service, product development, health care & nutrition, and agriculture, with a separate segment dedicated to each category. Descriptions of the education, experience and skill development required to be successful, as well as the duties and likely career paths traveled for select positions are delivered through the personal stories of workers in select careers and by supplemental narrative. Besides the central professional's career, additional positions for each industry segment are described. A comprehensive review is presented after each chapter, and a final review recaps all categories at the end of the film.

# Careers in the Food Service Industry

Main Career Covered: Chef

Interviewee: Mindy Segal, Chef and restaurant owner

The restaurant industry employs workers in restaurants, cafeterias, hotels, cruise ships and vacation resorts. This chapter examines technical and practical education provided by culinary schools, as well as the skills and on-the-job training required to work in restaurant kitchens and other facilities that cook food. Students also learn that basic business and math classes pave the way for success in training programs that cover menu planning, estimating food quantities, handling budgets, and ordering supplies.

Mindy Segal describes the chef's role in food preparation, menu development, and management of the restaurant staff. In the fast paced, highly technical world of the kitchen, additional restaurant food producing roles discussed include food prep workers, line cooks, sous chefs, grill workers. Other careers related to food service are food service managers, pastry chefs, and caterers are also reviewed.

# Careers in Product Development

Main Career Covered: Product Development Manager

Interviewee: Judy Lindsey, Food and snack product developer

Developers of new foods and food production processes require problem solving skills and ingenuity if they are to be successful. In this chapter, Judy Lindsey describes the role of the food scientist, or product developer, as the person who best understands the product. The product developer determines the answers to key questions: what goes into the item, whether the ingredients safe, if consumers desire the item, and whether it will be a good value for the money.

To develop the best and safest products, product developers work with food scientists, chefs, manufacturing managers, and marketing staff. A product developer requires a college degree focused on science and engineering, food and nutrition.

Other positions in product development are process and packaging developers. Advanced positions in product development include quality assurance managers and production managers.

# Careers in Healthcare

Main Career Covered: Dietician

Interviewee: Karen Graham, Registered renal dietician

Dieticians plans healthy food and nutrition programs for patients, and measure the body chemistry of a patient with foods that help meet certain criteria. This requires a solid knowledge of both science and nutrition. In this chapter, Karen Graham describes how dieticians work regularly with doctors and other professionals to coordinate nutritional and medical needs. Karen is a renal dietician specializing in patients who have kidneys that no longer function properly and cannot clean the blood.

Students learn that a career as a dietician requires at least a bachelor's degree and a professional certification. Preparation to become a dietician generally includes biology, physiology, mathematics, chemistry, while sociology and psychology are very helpful. Training is ongoing throughout a dietician's career, including certifications based on specialties, such as renal care. The American Dietetic Association considers it mandatory that a registered dietician completes seventy-five hours of continuing education every five years if she is to maintain certification.

Dietitians may enter private practice by starting a consulting company specializing in nursing homes, weight loss, or pediatric nutrition. Other health care careers related to food and nutrition include: health educators, dietetic technicians, and natural health therapists, and pharmaceutical positions.

# Careers in Agriculture

Main Career Covered: Farmer

Interviewee: Tom Oberhaus, Dairy farmer

Farmers, ranchers, and inspectors are at the beginning of food production. They create our food and get it to market. In the last chapter, students meet Tom Oberhaus, a dairy farmer who grows crops and raises animals for food. While Tom's vocation is thousands of years old, the agriculture industry is in a constant state of change. College level courses are beneficial for farming students, as well as existing farmers, so they can keep up with agriculture industry trends, changes, laws and requirements.

Student learn that a farmer's role include those of scientist, entrepreneur, veterinarian, mechanic, and engineer, therefore, courses in biology and math provide a good foundation for farm work. For on-the-farm experience, students join 4-H, Future Farmers of America, and gardening clubs.

While farming may be the most recognized career in the field of agriculture, many other employment opportunities are available horticulture, aquaculture, vertical farming, hydroponics. Additional careers related to farming include veterinarians, soil scientists and agricultural managers.

# Food Service Careers Handout

## Where to work

Restaurants

Cafeterias

Hotels and vacation resorts

Cruise ships

Corporate food service

Catering firms

## Career Options

### Head chef

Prepare food, develop menus, and manage the restaurant staff.

### Sous chef

Assist the head chef in supervising food production for all events and locations.

### Line cook

Cook food; categorized by technique:

Grill worker

Sauté worker

### Prep cook

### Food service manager

Run the daily operations of large restaurants and other institutional food establishments.

### Pastry chef

Produce baked goods; decorates and plates pastries and desserts.

### Caterer

Work closely with clients to design, prepare, and serve menus for events.

## Education and Skills

Culinary schools

On-the job training

Basic business and math

Estimating food quantities

Budgeting

Ordering

Menu planning

## Associations

American Culinary Federation - Certifies cooking schools to ensure their programs meet culinary and academic requirements.

# Product Development Careers Handout

## Where to Work

Consumer products manufacturers

Flavor Chemists Association

The Culinary Federation

American Association of Cereal Chemists

## Career Options

### Product developer

Invent new products. Determine what goes into the item, whether the ingredients safe, if consumers desire the item, and whether it will be a good value for the money.

### Quality assurance manager

Work from a compliance perspective to ensure meet safety and quality standards.

### Research chef

Also called food innovation chefs. Create new foods for restaurant chains, coffee shops, and food manufacturing companies by blending culinary training with the knowledge of food science.

### Process developer

Design new ways to manufacture food products.

### Packaging developer

Design the packages that protect and present food products.

### Auditor

## Education

### Four year degrees in:

Culinary arts

Food science / food chemistry

Math, engineering, microbiology

Chemical engineering

### Certifications in:

Food science

Auditing

Research

## Associations

**American Institute of Baking** – A non-profit organization providing audit services, food safety education, and technical and research services many segments in the food industry.

**Research Chefs Association Certification Commission** - Certifies qualified professionals as Certified Research Chefs and Certified Culinary Scientists.

**Research Chefs Association** - Professional community for food research and development.

# Health Care & Nutrition Careers Handout

## Where to Work

Medical and surgical hospitals

Nursing care facilities

Outpatient care centers

Public health clinics

Home health agencies

Schools

Weight loss institutes

Pharmaceutical companies

State governments

Company cafeterias

Health maintenance organizations

Prisons

## Career Options

### Clinical dietician

Provide nutritional services for patients in institutions.

### Community dietician

Counsel individuals and groups on nutritional practices.

### Management dietician

Oversee large-scale meal planning and preparation.

### Dietetic Technician

Work with a dietician to assist and implement nutritional programs.

### Health educator

Provide information to communities and people to maintain, promote, and improve healthy lifestyles.

### Natural health therapist

Help patients restore balance to their health by using special diets, herbal remedies, and acupuncture.

### Consultant Dietician

Work under contract or in private practice.

## Education

Bachelor of Science

Professional certification

Sociology and Psychology

Continuing education

## Associations

**The American Dietetic Association** – A resource for individuals and students interested in education and credentialing requirements for careers in dietetics and nutrition.

# Agriculture Careers Handout

## Where to Work

Private and corporate farm

Green house

City Farm Food corporation

Plant nursery

Government project

Aquaculture farm

## Career Options

### Farmer

Raises animals and grows food in rural and urban environments.

### Soil Scientist

Study the physical, chemical, and biological composition of soils.

### Agriculture Inspector

Ensure agricultural businesses comply with laws and regulations that govern the health, quality, and safety of meat, poultry, egg products, fruit, and vegetables.

### Agricultural Manager

Oversee the day-to-day activities of farms and ranches.

### Urban Farmer

### Horticulturist

Specialists in the science of growing fruits, vegetables and plants.

### Veterinarians

Care for the health livestock and farm animals.

### Aquaculture technician

Raise and harvest farmed fish; feed stock and monitor water quality.

## Education

Bachelor, Master's in Agricultural Science

Hands-on 4-H experiences

Associate in Applied Science

Courses that monitor industry trends, changes, laws and requirements

High school biology & math courses

Hands-on gardening club experiences

## Associations

**4-H** – A youth organization whose mission is to develop citizenship, leadership, and life skills of youth through mostly experiential learning programs.

**Farm Bureau** – A grassroots organization involved on local, statewide and national levels to help keep farmers informed on issues, legislation and decisions that affect agriculture.

**Future Farmers of America** – Provides and supports agricultural education.

# Suggested Activities

## Food Service

- Spend time with a prep cook in a commercial kitchen and journal your experience.
- Visit a local restaurateur to learn how they use general business and math and in their day-to-day operation.

## Product Development

- Research how food technology has changed the way and what we eat.
- Visit a health food store or yoga center that employs a natural health therapist. Ask them to describe how they arrive at recommending one of these alternative therapies: biofeedback, hypnosis, homeopathy, acupuncture or a diet-based therapy.

## Nutrition & Health Care

- Interview a dietician about their job.
- Visit a health educator at your school or community center to learn how they develop customized strategies to help people create and maintain healthy lifestyles.

## Agriculture

- Research vertical farming in your home city or the nearest big city to learn how they operate.
- Contact a member of your local 4-H or Future Farmers of American and interview them about their career goals and experiences so far.

# Jobs in Food & Nutrition

## Matching Quiz

Match the words in the first column to the best available answer in the second column.

_____	Actually cooks your food; categorized by technique, such as sauté, grill, etc.	1) Aquaculture Technician
_____	Provides nutritional services for patients in institutions.	2) Research Chef
_____	Specializes in the science of growing fruits, vegetables and plants.	3) Line Cook
_____	Works closely with clients to design, prepare, and serve menus for events.	4) Natural Health Therapist
_____	Ensures compliance to laws governing the health, quality, and safety of meat, poultry, and produce.	5) Sous Chef
_____	Invents new products and determines what ingredients are used, whether they are safe, if they are desirable and if they will be a good value.	6) Clinical Dietitian
_____	Raises and harvests farmed fish; feeds stock and monitors water quality.	7) Product Developer
_____	Creates new foods for restaurant chains, coffee shops, and food manufacturing companies by blending culinary training with the knowledge of food science.	8) Agriculture Inspector
_____	Helps patients restore balance to their health by using special diets, herbal remedies, and acupuncture.	9) Caterer
_____	Assists the head chef in supervising food production for all events and locations.	10) Horticulturist

# Jobs in Food & Nutrition

## Matching Quiz Answer Key

<u>3</u>	Actually cooks your food; categorized by technique, such as sauté, grill, etc.	1) Aquaculture Technician
<u>6</u>	Provides nutritional services for patients in institutions.	2) Research Chef
<u>10</u>	Specializes in the science of growing fruits, vegetables and plants.	3) Line Cook
<u>9</u>	Works closely with clients to design, prepare, and serve menus for events.	4) Natural Health Therapist
<u>8</u>	Ensures compliance to laws governing the health, quality, and safety of meat, poultry, and produce.	5) Sous Chef
<u>7</u>	Invents new products and determines what ingredients are used, whether they are safe, if they are desirable and if they will be a good value.	6) Clinical Dietitian
<u>1</u>	Raises and harvests farmed fish; feeds stock and monitors water quality.	7) Product Developer
<u>2</u>	Creates new foods for restaurant chains, coffee shops, and food manufacturing companies by blending culinary training with the knowledge of food science.	8) Agriculture Inspector
<u>4</u>	Helps patients restore balance to their health by using special diets, herbal remedies, and acupuncture.	9) Caterer
<u>5</u>	Assists the head chef in supervising food production for all events and locations.	10) Horticulturist

# Jobs in Food & Nutrition

## Fill-In-The-Blank

Select the correct term from the list below and write it in the blank space. Some terms may be used more than once, while others not at all.

1. \_\_\_\_\_ study the physical, chemical, and biological composition of soils.
2. A technician who works with a dietician to assist in the implementation of nutritional programs is called a \_\_\_\_\_.
3. The \_\_\_\_\_ determines the answers to key questions: what goes into the item, whether the ingredients safe, if consumers desire the item, and whether it will be a good value for the money.
4. While \_\_\_\_\_ may be the most recognized career in the field of agriculture, many other employment opportunities are available.
5. \_\_\_\_\_ plans healthy food and nutrition programs for patients, and measure the body chemistry of a patient with foods that help meet certain criteria.
6. All of the functions and food service workers in a restaurant are managed by the \_\_\_\_\_.
7. \_\_\_\_\_ work from a compliance perspective to ensure meet safety and quality standards.
8. Preparation to become a dietician generally includes biology, physiology, mathematics, chemistry, while \_\_\_\_\_ and \_\_\_\_\_ are very helpful.
9. \_\_\_\_\_ schools help prepare students for the challenges of working in an intense restaurant environment.
10. One career related to product development is the \_\_\_\_\_, who designs the packages that protect and present food products.

culinary	head chef	quality assurance managers
dietetic technician	packaging developer	product developer
horticulture and aquaculture	professional industry cohorts	dieticians
soil scientists	farming	sociology and psychology

# Jobs in Food & Nutrition

## Fill-in-the-Blank Exercise Answer Key

1. **Soil scientists** study the physical, chemical, and biological composition of soils.
2. A technician who works with a dietician to assist in the implementation of nutritional programs is called a **dietetic technician**.
3. The **product developer** determines the answers to key questions: what goes into the item, whether the ingredients safe, if consumers desire the item, and whether it will be a good value for the money.
4. While **farming** may be the most recognized career in the field of agriculture, many other employment opportunities are available.
5. **Dieticians** plans healthy food and nutrition programs for patients, and measure the body chemistry of a patient with foods that help meet certain criteria.
6. All of the functions and food service workers in a restaurant are managed by the **head chef**.
7. **Quality Assurance Managers** work from a compliance perspective to ensure meet safety and quality standards.
8. Preparation to become a dietician generally includes biology, physiology, mathematics, chemistry, while **sociology** and **psychology** are very helpful.
9. **Culinary** schools help prepare students for the challenges of working in an intense restaurant environment.
10. One career related to product development is the **packaging developer**, who designs the packages that protect and present food products.

# Additional Resources

## **4-H**

[www.4-h.org](http://www.4-h.org)

## **American Culinary Federation**

[www.acfchefs.org](http://www.acfchefs.org)

## **American Dietetic Association**

[www.eatright.org](http://www.eatright.org)

## **American Institute of Baking**

[www.aibonline.org](http://www.aibonline.org)

## **Bureau of Labor Statistics**

<http://www.bls.gov/opub/ooq/2002/fall/yawhat.pdf>

## **Career Planning**

<http://careerplanning.about.com/>

## **Cuisinenet**

[www.cuisinenet.com](http://www.cuisinenet.com)

## **Future Farmers of America**

... also called the **National FFA Organization**

[www.ffa.org](http://www.ffa.org)

## **Foodservice.com**

<http://www.foodservice.com/marketing/industry.cfm>

## **Farm Bureau**

[www.fb.org](http://www.fb.org)

## **Research Chefs Association**

[www.researchchef.org](http://www.researchchef.org)

## **Research Chefs Association Certification Commission**

[www.researchchef.org](http://www.researchchef.org)