# FUNCTIONAL FOOD CENTER



# Functional Food Scientist/Professional Handbook



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#### Who is the Functional Food Center?

The Functional Food Center (FFC) is the leading organization worldwide for functional food science education. Since 1998, the FFC has advanced the study of functional foods by:

- Hosting 29 international conferences around the globe
- Publishing three open-access journals: the FFHDJ for over 10 years, the BCHD for more than 3, and the FFS
- Publishing 38 books including 9 textbooks on functional foods
- Establishing the Academic Society of Functional Foods and Bioactive Compounds (ASFFBC) with more than 7,000 members.

The Functional Food Center has developed a comprehensive definition of functional foods and can assist you in your functional food career.

#### **Definition of Functional Food**

The lack of an official definition for "functional food" has led to unregulated publishing of health claims and limited functional food production. It has also caused misunderstanding and mistrust of "functional foods" and its definition amongst government officials, public health professionals, and the general public. At the Functional Food Center, we believe a clear and consistent definition is needed. Benefits of a definition for functional food include:

- Allowing clear communication between food/nutrition scientists, policymakers, medical researchers, and the public.
- Promote the implementation of better policies and food education among non-experts.
- Greater funding and support for nutrition research and policy initiatives.
- Legitimize functional food science globally, and therefore, allow for food, medical, and policy innovation.
- Dispel misconceptions held by the public about functional food.

**FFC's Definition for "Functional Foods":** "Natural or processed foods that contain biologically-active compounds; which, in defined, effective, non-toxic amounts, provide a clinically proven and documented health benefit utilizing specific biomarkers, to promote optimal health and reduce the risk of chronic/viral diseases and manage their symptoms."

# What is a Functional Food Scientist/Professional Certification?

The Functional Food Scientist (FFS) or Functional Food Professional (FFP) certification is a degree that demonstrates your advanced knowledge in the field of functional foods. A Functional Food Scientist/Professional is a self-motivated individual who has been formally educated on the fundamentals of functional food science through FFC's Functional Food courses and has successfully passed their certification examination. By becoming a FFS/FFP, you will be able to understand current research in functional foods and integrate the topics of functional foods into your own career.

### Why Pursue This Certification?

- **Sets you apart from other employees** in your knowledge of functional foods and current research.
  - You will be seen as a higher professional for learning new skills and staying up to date on the latest research. Your academic and work background will also be of greater quality and more diverse than others.
- Understand topics that relate to multiple careers including dieticians, physicians, students, researchers, and food industry professionals. **Establish yourself as a knowledgeable professional** in the rising field of functional foods.
- Heart disease, diabetes, and kidney disease are among the leading causes of death worldwide, according to the World Health Organization (data from 2019). Use your knowledge of functional foods to help others and yourself reduce the risk of these diseases.
- This certification may enhance the chances of obtaining grants, allowing you to contribute knowledge through research and articles and gain recognition in healthcare settings.
- If you are applying for a PhD or to become an instructor/lecturer, your functional food knowledge will **strengthen your applications**.
- You will be **added to the Functional Food Center's website** as a way to showcase your accomplishments.
- You will be given a **complimentary membership** to the Academic Society for 6 months.

#### **Benefits by Occupation:**

**Dieticians and Nutritionists:** An FFC Certification will provide knowledge of current functional food research that is applicable in the workplace. You will be introduced to biochemical compounds and the essential nutrients that are responsible for their medicinal properties. You will also gain the **unique ability of creating a medicinal meal plan of functional foods for your patient or client** while receiving continuing education credits.

**Food and Nutrition Students:** An FFC Certification will help **advance career opportunities**. Learn how bioactive compounds support optimal health, wellness, and disease prevention. This knowledge will allow you to **bring information to future employers** for use in the production of new functional foods or meal plan creation.

**Professors, Instructors, and Teachers:** This course **qualifies you to teach** an introductory course on functional foods at a university or accredited institution. In fact, one of our alumni has become a Teaching Partner with the FFC and is using our materials to teach functional foods classes at his company. With this certification, you can request to **receive organized lectures and PowerPoints** designed for an interactive classroom setting as well as all the other materials needed to teach the course. You will also be **provided with current field research** that you can use to further your studies and help your students grow. Textbooks are on sale for use in the classroom if you would like to use the textbook for your students.

**Researchers:** Get the latest information on research in functional foods with the FFC Certification. With this certification, you will have the knowledge to **formulate functional food products** that could lessen various diseases and assist in your future studies. This certification may also **enhance the chances of obtaining research grants.** 

**Physicians, Nurses, Healthcare Practitioners:** The FFC certification is designed so you can **bring functional food research into your practice.** Provide your patients with information about the latest research on bioactive compounds in functional foods. Let your practice be part of the newest and latest in functional foods and understand the medicinal benefits that are provided when specific essential nutrients are consumed. Our medical doctors have used their certifications to **incorporate nutrition counseling into their care to reduce the risk of disease** for their patients.

**Food Industry Professionals:** Learn about functional foods and become familiar with some of the latest information in functional food science. Becoming a certified functional food scientist or functional food professional will allow you to **bring functional foods to your business and add an aspect of uniqueness** that will set you apart from other businesses.

**Those Without a Science Background:** Even if you don't study or work in a scientific field, certification can still be useful. You can gain knowledge on functional foods to improve and maintain a healthy lifestyle for yourself and those around you.

# **Eligibility**

#### **Functional Food Scientist**

As a Functional Food Scientist, you will be able to critically understand current research in functional foods and integrate the topics of functional foods into your own career. This title can be applied to those who hold a PhD, MD, or are pursuing one of these degrees in a field of science. This certification will be valid for 5 years.

#### **Functional Food Professional**

The title of Functional Food Professional can be applied to all others that may be ineligible to apply for a position as a Functional Food Scientist, but would still like to pursue a certification in order to expand their understanding of functional foods. Receiving this certification can benefit different careers in various ways. This certification will be valid for 5 years.

# **Choosing a Program**

Once you have established your eligibility, you can move on to decide which program is ideal for you. The Functional Food Center offers three different pathways to earn your Functional Food Scientist/Professional certification. Although previously offering 60 credit degrees for a certification duration of 3 years, the Functional Food Center has re-designed all programs. Each of our three programs of study allow you to earn a total of 80 credit degrees, which is equivalent to 80 hours of training. Due to the increase in credits, your certification will be valid for 5 years, as opposed to 3 years. All programs are equally respectable, but differ in their design and execution. These programs are:

- The Standardized Program of Study (SPS)
- The Personalized Project Program (PPP)
- The Guided Program of Study (GPS)

# The Standardized Program of Study (SPS)



#### **Goal of This Program**

The goal of the Standardized Program of Study is to provide a more objective route to earn your Functional Food Scientist/Professional certification. The SPS will give you access to current research and findings within the field of functional foods and evaluate your knowledge on these topics. This program allows you to earn your certification at your own pace with structural support. We will work with you to complete your certification as well as create a well-rounded final project that demonstrates your learning. This final project may be presented or printed at our annual Functional Foods International Conference or in the journal of Functional Foods in Health and Disease, the journal of Bioactive Compounds in Health and Disease, or the Functional Food Science journal.

#### **Program Layout**

The SPS program is completely online and consists of 8 pre-selected chapters from our Functional Foods textbook series, some of which include a comprehensive quiz at the end. Quizzes are about 8-13 questions long. Chapters should be read in full and a minimum of 80% is required to pass each chapter quiz. Besides using book chapters to learn, the FFC also has pre-recorded seminars complete with powerpoint slides and written articles that students can use to learn instead. These come with quizzes as well. Having the option to learn from book chapters, seminars, powerpoint slides, or written articles offers additional flexibility for completing the SPS program.

Once you are finished with learning the content, you will take a final exam. The final exam is a fully online, multiple choice exam, with about 100 questions. You will also complete a final project in addition to the final exam. Overall, candidates will complete **8 chapters/seminars**, **a few quizzes**, **and a final exam** to earn their Functional Food Science/Professional certification. More details will be given to enrollees. By completing this program, you will earn 80 credits, which are equivalent to 80 hours of training.

#### **Benefits of the Standardized Program of Study**

- **Preparation for Functional Food Scientist (FFS) or Functional Food Professional (FFP).** By successfully completing an FFC SPS course, you will gain all 80 credits needed to become a certified FFS or FFP.
- **Standardized education.** With a set curriculum, this program allows for an objective and structured route to certification.
- **Self-guided education.** You will have the opportunity to pace your own learning experience while maintaining communication with your instructor via Skype and email in the event that you have any questions regarding the learning materials.
- **Scientific experience.** Depending on the nature of your final project, you may have the chance to present at the Functional Foods International Conference or be published in one of the three scientific journals that the FFC has.
- Complimentary Membership to the Academic Society of Functional Foods and Bioactive Compounds. By completing this program, you will be granted a complimentary 6 month membership to the ASFFBC.

#### **Sample Quiz Questions**

- 1. The two important concepts within the topic of bioactive compounds converting ordinary foods in-to functional foods (select two)
  - a. The location of bioactive compounds
  - b. The amount of bioactive compounds
  - c. The type of bioactive compounds
  - d. The ratio of bioactive compounds

The correct answer is b & d.

- 2. The main steps to bringing functional foods to markets are:
  - a. Product development, phytonutrient analysis, pre-clinical screening, clinical trials, marketing, conduct in-market surveillance, epidemiological studies
  - b. Phytonutrient analysis, pre-clinical screening, clinical trials, product development, marketing, epidemiological studies, conduct in-market surveillance
  - c. Clinical trials, pre-clinical screening, product development, phytonutrient analysis, marketing, epidemiological studies, conduct in-market surveillance
  - d. Marketing, conduct in-market surveillance, phytonutrient analysis, clinical trials, product development, pre-clinical screening, epidemiological studies

The correct answer is b.

- 3. The major difference between dietary supplements and functional foods:
  - a. Dietary supplements are functional foods
  - b. The recommended daily intake (RDI) is higher of a dietary supplement due to the pill, capsule, tablet, or liquid form
  - c. Dietary supplements are intended for ingestion in pill, capsule, tablet, or liquid form, not the sole item of a meal or diet, functional foods are consumed as part of a normal diet and deliver one or more active ingredients that have physiologic effects and may enhance health
  - d. Functional foods must be labeled and tested before they can be sold to consumers

The correct answer is c.

- 4. The three classes of biomarkers in functional foods are:
  - a. Exposure, intermediate endpoint, biological response
  - b. Biological response, intermediate endpoint, heat
  - c. Physical, exposure, intermediate endpoint
  - d. Enzymatic, exposure, biological response

The correct answer is a.

## The Personalized Project Program (PPP)

#### **Goal of This Program**

Through the Personalized Project Program, we will collaborate with you to create a personalized learning experience that will train you to become knowledgeable in the functional food topics of your choice. We will construct customized lesson plans based on select chapters from the almost 200 chapters available in our Functional Foods textbook series. Seminars and articles may be used as well. In addition, we will work with you to create a personalized project that will solidify your understanding and provide you with a hands-on education of functional foods.

#### **Program Layout**

This course includes **80 hours of training, equivalent to 80 credits**, which involves self-guided study, virtual meetings with your functional foods instructor, and completion of your personalized project. You will meet with your instructor, who is an experienced expert in the field of functional food science, and craft a **project that is tailored to your interests**. Once you begin your project, you will have periodic meetings with your instructor, during which you will discuss your progress and how the knowledge you have acquired can be applied in your field.

#### **Benefits of the Personalized Project Program**

- Preparation for Functional Food Scientist (FFS) or Functional Food Professional (FFP). By successfully completing an FFC PPP course, you will gain all 80 credits needed to become a certified FFS or FFP.
- Competency in the emerging, rapidly evolving field of functional food science. In-depth understanding of bioactive compounds and functional foods will make you a unique, viable candidate for a job position and open more opportunities to expand your career.
- **Self-guided education.** You will have the opportunity to pace your own learning experience while maintaining communication with your instructor via Skype and email in the event that you have any questions regarding the learning materials.
- **Scientific writing experience.** Depending on the nature of your personalized project and learning goals, you may have the chance to gain experience in writing scientific articles or reports that may be published in one of the three scientific journals that FFC has.

Clickheretoapply!

## The Guided Program of Study (GPS)

#### **Goal of This Program**

The goal of this program is to provide a unique, guided experience in the field of functional foods. Unlike other training programs, you will receive daily guidance on your objectives and regularly discuss the theory behind functional food concepts as well as new research in the field with your instructors and supervisors. This is a very unique and invaluable program that will allow you to learn about functional foods directly from the most prominent organization in the field of functional foods.

#### **Program Layout**

Through **80 hours of guided study** and training that is equivalent to **80 credits**, we will work with you to create a personalized project that will provide you with a hands-on education of functional foods. As indicated by the program's name, your instructor will personally walk you through your learning and provide a more hands-on approach to your certification training. Although your instructor will be very involved, you are still able to customize how you will earn your credits.

#### **Benefits of the Guided Program of Study**

- Preparation for Functional Food Scientist (FFS) or Functional Food Professional (FFP). By successfully completing an FFC GPS course, you will gain all 80 credits needed to become a certified FFS or FFP.
- **Guided education.** With regular correspondence between students and professors, this program allows for a more personal education on functional foods than other online alternatives.
- **Practical experience and hands-on learning.** This program allows you to learn by being an active researcher and will therefore set you apart from other individuals in the field of functional foods.
- **In-depth understanding of bioactive compounds.** Learning about bioactive compounds that your body needs as well as the functional foods that provide them will enable you to create recipes and food labels for healthy and functional foods.
- **Scientific writing experience.** Through day-to-day coaching on your personal project, you will learn about the definition and usage of functional foods and gain experience in writing scientific articles and newsletters that may be published in one of the three scientific journals that the FFC has.

Clickheretoapply!

# **Earning Credits (GPS & PPP)**

**80 credits** are necessary to earn your Functional Food Professional/Scientist certification through either the Standardized Program of Study (SPS), Personalized Project Program (PPP), or the Guided Program of Study (GPS). These credits must be earned within a span of 5 years. After 5 years, your credits will reset to zero. While the SPS does offer flexibility in curriculum, the PPP and GPS programs give you even more freedom to pick and choose how you earn your credits. The Functional Food Center provides numerous options to earn credits, appealing to diverse styles of learning.

#### Credits can be earned by:

**Taking set courses:** There are 6 pre-made courses that touch upon different aspects of functional foods. Completion of each course is awarded with <u>20 credits</u>. You may choose to earn <u>up to 60 credits</u> through these set courses.

*Course topics include:* Introduction to Functional Food Science Basic Principles of Functional Food Science Functional Foods for Chronic Diseases Cancer Biology and Dietary Factors Bioactive Compounds and Cancer Functional Foods in Integrative Oncology

**Teaching/studying using FFC's textbooks:** The Functional Food Center currently has 9 volumes of Functional Food textbooks. If you are a professor and choose to incorporate these textbooks into your class material, you are eligible to earn credits. If you are a student and choose to use our textbooks to study, you are eligible to earn credits. The amount of hours dedicated to teaching/studying using the textbooks will determine how many credits are earned.

**Attending/speaking at the Functional Food Center's International Conference:** The Functional Food Center hosts annual international conferences that feature speakers from across the globe as they present their recent research concerning functional foods. Our conferences typically last 2 days for 8-10 hours each. By attending, you may earn up to 16-20 credits. Presenters can earn an additional 10 credits.

**Contributing to FFHD Articles and Book Chapters:** The Functional Food Center has 3 scientific journals and 9 textbooks. If you choose to apply to publish your work in our journals or contribute to our book chapters, you are eligible to earn credits.

**Taking personalized courses:** If you find that you have more specific interests within the field of functional foods, the Functional Food Center will design special short courses that are tailored to your particular interests. By completing these courses, you are eligible to earn <u>10 credits</u> per written article.

**Write a review for FFHD Journal Articles and Book Chapters:** You can receive up to <u>3 credits</u> for each journal article review and <u>3 credits</u> for each book chapter review.

**Functional Food Center Interns:** If you have already completed a 200-hour internship with the FFC in the past three years, you will be eligible for <u>60 credits</u>.

**FFC Weekly Zoom Seminars:** By attending the FFC's Weekly Zoom Seminars, you may earn <u>2 credits per session</u> attended towards your certification. If you present at one of our seminars, you can earn <u>10 credits</u> towards your certification.

### **Application Process**

- 1. **Complete your <u>application form</u>** detailing your educational and work experience and your personal interests in functional foods. This will help in creating your personalized lessons and project so that it addresses your educational goals and interests.
- 2. **Submit payment** for your chosen training program through our online store. \*Payment plans are available and can be discussed as necessary\*.
- 3. We will schedule an **online Zoom/Skype meeting** in order to discuss your interests more in depth and agree on a personalized project and curriculum that you will complete over the course of the program.

#### **Pricing**

Standardized Program of Study: ASFFBC members \$495.00 l Non-member: \$595.00

Personalized Project Program: ASFFBC members \$595.00 l Non-member: \$695.00

Guided Program of Study: ASFFBC members \$695.00 l Non-member: \$895.00

Renewal fee for Certified FFS and FFP: ASFFBC members \$350.00 l Non-member: \$450.00

All prices are stated in U.S. dollars. Credit and debit cards, PayPal, checks, and bank transfers are all accepted.

#### Click here to access our online store!

#### **Upholding Professional Conduct**

In the process of earning your certification, it is expected that you uphold a professional code of ethics. These ethics include, but are not limited to:

- Being truthful about the credits earned and ensuring that they directly relate to functional foods.
- Striving for continuous learning and further education in the field.
- Using credentials properly.
- While holding a certificate, being engaged in current news and updates about functional foods. One way to do
  this is to follow the FFC newsletter and read the FFHD, BCHD, and/or FFS journal articles. Though these will not
  count toward credit hours, you will gain a further understanding of the topics being addressed in the functional
  food community.