




Mahnoor Ayub



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 English (Professional)

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Personal Profile: Quick, sharp, confident and ingenious **Food Scientist** with a strong outgoing personality, superior communication skills, and great work ethics. Having a background in **Product Development & Nutrition**, I am specialized in developing healthy and innovative food products. I urge to tackle current & upcoming food-related business in the food industry with artistic vision, mind and strong values; motivated to creatively innovate & improvise food that can fulfil the demand of growing food challenges and contribute in the advancement of food industry.

EDUCATION

Master in “Food Innovation and Product Design” (FIPDes) **September 2017-September 2019**

Erasmus Mundus Scholar - Studied in the following universities (obtained 3 degrees)

Lund University | Lund, Sweden *February 2019-July 2019*

- Master’s Thesis

University of Naples Federico II | Naples, Italy *September 2018-January 2019*

- Master’s in “Food Science and Technology” | *Specialized in Healthy Food Design*

Dublin Institute of Technology | Dublin, Ireland *January 2018-June’2018*

- Master’s in “Culinary Innovation”

AgroParisTech University | Paris, France *September 2017-January’2018*

- Master’s in “Nutrition, Food Science and Engineering”

BS (Hons.) in Food Science and Nutrition **October 2012-June 2016**

Government College University | Faisalabad, Pakistan

Specialization: Human Nutrition and Dietetics (HND)

PROFESSIONAL EXPERIENCE

Research Fellow | International Iberian Nanotechnology Laboratory | Braga, Portugal **October 2020-Present**

Project: “Development of Oleogels for ice creams as a healthier substitute”

- To design the framework of the project for ideation and prototyping.
- Scientific research and prototyping of the samples.
- Implementation of the research and results for final product development.

Research Assistant | Lund University | Lund, Sweden **February 2019- July 2019**

Project: “Development of Nutrient-Rich Probiotic Beverage based on Fermented Quinoa”

- Designed project framework and ideation of the product.

- Evaluated the results by conducting chemical analysis including phytate extraction and analysis, protein analysis, mineral extraction and analysis, microbial analysis etc.
- Conducted sensory evaluation to monitor organoleptic acceptance among consumers.
- Validated the flaws in the projects with respect to physical, chemical, sensorial and nutritional profile for future recommendations.

Techniques and Equipment Used: *Fermentation, Prototyping, Sensory Evaluation - Freeze-Drier, Protein Analyser, Spray-Dryer, Spectrophotometer, Mineral analyser, Centrifuge Machine*

Lecturer & Health Instructor | Angels International College | Faisalabad **January 2017-June 2017**

- Assisting and designing food related activities and teaching about health and its relationship to food.
- Was responsible to teach students different cooking techniques to maintain shelf life of food along with important tools of nutrition.
- Teaching nutrition course and formulating new food recipes encouraging students to make innovative food products.

Consultant Nutritionist | Al-Rehman Clinic | Faisalabad, PAK **June 2016-January 2017**

Consultant Nutritionist | Sial Medical Centre | Faisalabad, PAK **September 2016- December 2016**

- Communicating and counselling patients regarding weight management and diet related issues.
- Developing healthy diet plans according to different needs (health issues) of people and motivating patients to follow the diet plan.
- Formulating existing recipes for patients according to their requirements for weight loss management with respect to fitness and disease management.

Internee | Aziz Fatimah Hospital | Faisalabad, PAK **March 2016- May 2016**

- Developing and modifying Medical Nutrition Therapies (MNTs) with food to tackle health issues of patients; For example, developing smoothies and snack bars for personalized issues.
- Communicating needs of different patients with food in the form of diet charts and developed counselling techniques to convince and to handle different mentalities of people.
- Interviewing patients in wards and during health camps and suggesting their diets accordingly under the supervision of supervisor.

RESEARCH PROJECTS

1. Development of a “Nutrient-Rich Probiotic Beverage based on Fermented Quinoa” with enhanced nutrient profile (Master’s Thesis)

Worked as a guest food researcher in Lund University (Sweden) for the development of an instant-mix beverage utilizing quinoa as the main ingredient. The project aimed to reduce phytate content of quinoa to enhance mineral bioavailability, to get a probiotic claim and sensory acceptance of final beverage by consumers. Fermentation, freeze-drying, chemical analysis and sensory evaluation were the key steps used to successfully achieve all desired goals at the end of the project. Research is intended to be published soon.

2. Development of “Hybrid Beef Burgers” that resemble best the textural characteristics of a full beef meat burger using unique texturized vegetable proteins (TVPs) (Master’s Project)

I worked as a product developer during my Masters on a multinational French food company’s project (confidential) collaborated with AgroParisTech University (Paris, France). The project involved intensive bibliography research to discover maximum possible plant-based sources for the development of meat analogues. Successful prototyping was

done with selected TVPs and final product was selected via sensory evaluation. The project is going to be launched in the market.

3. Scientific and theoretical development of a food product claiming the “reduction of skin aging” for European Food Safety Authority (EFSA) Dossier (Master’s Project)

A unique work done during my Masters in University of Federico II (Italy), where using scientific research, I developed (theoretically) a beverage (Instant-mix tea) called Berryoo including anti-oxidants, polyphenols and collagen characteristics for the potential reduction on skin aging and proved its efficiency using scientific approaches as a model report to be submitted in EFSA.

4. Creation of an innovative “Gluten-Free Plant-Based Pizza” for Celiac Patients (Master’s Project)

This project, in collaboration with Dublin Institute of Technology involved the development of an innovative food product for Irish Market. After intense market and consumer research was done, I developed a prototype using pure vegetable base in the pizza to tackle need of gluten-free products for celiac patients in the current market. The project was drawn from ideation till sensory evaluation and fulfilled the objects of being gluten-free, nutrient-rich, plant-based and innovative.

5. Medical Nutrition Therapies (MNTs) research and development for treating various health issues (Bachelor’s Internship)

During my bachelors, I did my internship in Aziz Fatimah Hospital where I learnt to develop different medical nutrition therapies (e.g. using iron rich food like red beans for the development of food recipes for anaemic patients) for patients having different health problems (Obesity, diabetes, hypertension etc.). I dealt with patients personally in the hospital and interviewed them for their health issues and prepared diet plans and MNTs for them to improve their specific health issue with food to maximum approach.

SKILLS

- **Research and Scientific report writing-** Wrote several scientific reports and writing research papers.
- **Communication skills-** Skills gained during work experience as Radio Broadcaster, Tour guide and presenting at various international platforms.
- **Equipment handling skills-** Texture analyzer, Freeze- dryer, Advance protein analyzer, spectrophotometer, spray-dryer, mineral analyzer etc.
- Competent with Microsoft office programs and windows operating system.

HONORS AND ACHIEVEMENTS

- **Received Erasmus Mundus Scholarship** - A highly competitive programme (choosing candidates from all over the world) which gives specialized training in product development in 4 European top institutes with 3 Master degrees and 2 diplomas.
- Received **professional communication award** for master thesis during my graduation ceremony in Paris, France.
- Awarded with a laptop on the basis of merit for securing 1st division by **Chief Minister of Punjab, Pakistan** during bachelors.

INTERNATIONAL CONFERENCES

- International Conference on "**Global trends in Safe and Healthy Food and Lyallpur Food and Poultry Products Festival**", Organized by Institute of Home and Food Sciences, Government College University, Faisalabad, (March 7-8, 2016).

- 3rd International Conference on "**Functional foods and Nutraceuticals**" **Nutricon 2013 and Food and Nutrition Expo**", Organized by Institute of Home and Food Sciences, Government College University, Faisalabad, (December 4-5, 2013).
- 2nd International Conference on "**Future Perspective of Food Processing Industry in Pakistan and 2nd Food and Nutrition Expo**", Organized by Department of Food Science, (December 11-12, 2012).

CERTIFICATES

- Participated in summer school on "**Sensory Evaluation**" held in Ireland by Dublin Institute of Technology (June 2018).
- Participated in the industrial workshop by "**The Chocolate Garden of Ireland**", at Carlow, Ireland (June 2018).
- Certified for being Supervisor in Science Nexus 2017 at Angels International College, Faisalabad, Pakistan (March 2017).
- Participated in "**Egg Festival for Egg Products Competition**", Organized at Government College University, Faisalabad (March 2016).
- Participated in the "**National Competition for Food Products Development**", Organized by Department of Food Science, Nutrition and Home Economics, Faisalabad (May 2015).
- Involved in the product making for "**Vitamin D: The sunshine tonic and its relationship for calcium absorption**", Organized by Department of Food Science, Nutrition and Home Economics (October 2014).
- Attended workshops of "**Teaching Methodologies and Effective teaching strategies and techniques**". Held at Sacred Heart Convent High School, Faisalabad (January 2014).

LANGUAGE SKILLS

- English – Business Fluent (**IELTS**; 7 Bands)
- Italian – Beginner Knowledge
- Urdu – Native

HOBBIES

Travelling, Cooking, Photography, Singing and Volunteering