### **Spotlight on Florence Uchendu**



Florence Uchendu National Open University of Nigeria AACCI Nutrition Division Vice Chair

#### Q: What is your current position and what are you currently working on?

A: I am a lecturer at the National Open University of Nigeria (NOUN). I lecture on nutrition and public health for under- and postgraduate courses.

#### Q: How do you link nutrition to cereal grain science?

A: Nutrition is linked to cereal grains in terms of their health benefits and high nutrient contents, especially antioxidants, vitamins, minerals, and fiber. Cereal grains are used in bak-

ing and cooking many foods. Some cereal grains, like wheat, contain a protein called gluten that some people cannot tolerate. For those who can tolerate it, wheat is a very nutritious food. The high fiber content in whole wheat has good health effects, reducing constipation and cardiovascular diseases. Cereal grains are a staple in many countries, and so many of them have been used as vehicles to deliver essential nutrients (micronutrients and proteins) to at-risk groups. Cereal grains have been used for fortification and food-enrichment programs, such as vitamin A, iron, zinc, and folate.

## **Q**: When and why did you first decide you wanted to work in cereal grain science?

A: As an M.S. graduate student—in 1999 Nigeria initiated action on vitamin A fortification of wheat flour. I became interested in the program and researched the awareness and willingness of Nigerian food industries to embark on vitamin A fortification of wheat flour, vegetable oil, and margarine. I continued this research at the Ph.D. level. I then studied vitamin A stability in wheat flour and its contribution to the daily nutrient requirement of preschool children.

#### Q: When did you first join AACCI and why?

**A:** I joined AACCI in 2013 as a student member. I was invited by AACCI to join the organization after the 20th International Congress of Nutrition in Granada, Spain, where I was awarded the Nevin Scrimshaw International Nutrition Foundation Fellowship, probably based on my research paper that was related to wheat flour. Since then, I have wanted to be a member since I am working on cereal grains.

## **Q:** Why did you decide to volunteer with AACCI? How did you get involved with the Nutrition Division?

**A:** I am a public health nutritionist and am required to be a member of an AACCI Division, so professionally, it make the most sense that I join the Nutrition Division, where I have expertise. I volunteered with AACCI because I am someone who is always eager to contribute my time in moving any association I belong to forward.

# **Q**: What do you see as important nutrition issues and evolving science that affect cereal science and the cereal grains industry?

**A:** From my perspective as a nutritionist in Sub-Saharan Africa, use of fiber in wheat whole grain and cereal grains as vehicles for nutrient fortification and enrichment.

#### Q: What are the hot nutrition topics in your region? How are you addressing them?

A: Malnutrition, mainly undernutrition (stunting, wasting, and underweight), and micronutrient deficiencies (vitamin A, iron, zinc, and folic acid); cardiovascular diseases; and the Nigerian government program fortifying flour, sugar, and vegetable oil with vitamin A, iron, zinc, and folic acid. The relevant agencies are now monitoring and enforcing compliance. We researchers are carrying out impact/outcome studies to be sure the vitamins and minerals are retained in the fortified products and that they contribute to the daily nutrient requirement of vulnerable groups. This led to my Ph.D. thesis, "Vitamin A Stability in Retailed Flour, Bread and Biscuits and Contribution to Daily Nutrient Requirement of Pre-school Children in Lagos State, Nigeria." There is also regular vitamin A supplementation going on for "Under-Fives," and awareness is being created.

I have also been one of the facilitators of a nutrition education program for primary school children and their mothers and teachers organized by a multinational company on a yearly basis. Mothers are taught, among others things, how to practice dietary diversification using locally available food stuffs. I have also been invited to many women associations, faith-based organizations, and town/village meetings to talk about healthy eating lifestyles. My NGO sponsors some of these healthy eating lifestyle programs to disseminate information on HIV/AIDS and cardiovascular diseases (obesity, diabetes, cholesterol, hypertension, and stroke), their causes, and prevention. I also publish articles on cardiovascular diseases in my faculty bulletin to educate the university community and others. To celebrate World Health Day in April 2015, my university (NOUN) organized a public lecture in conjunction with the Young Men's Christian Association of Lagos where I was invited to be the guest speaker. I was also invited by the Nigerian Television Authority (NTA) as a public health nutrition expert to speak to the Nigerian populace on how to prevent cardiovascular diseases as part of the 2015 World Health Day program. In these programs, consumption of whole wheat cereal and wheat bread is recommended, among other solutions. I have also delivered papers on several local fora to address nutrition issues in Nigeria.

#### Q: What's next for you?

A: Currently, I am running an MSc.Ph (epidemiology) program to be able to specialize in nutrition epidemiology. My current research work is an intervention study: assessment of the contribution of vitamin A-fortified wheat flour products to the serum retinol content of school children. We are also going to assess iron, zinc, and folic acid. The study is open to sponsors and collaborations. I am also working on assessment and comparison of high blood pressure and knowledge of risk factors among academic and nonacademic staff in a university setting.