Highlight 2: Vegetable Consumption for Healthier Diets in Nigeria

Sufficient vegetable consumption is critical to a healthy diet: vegetables provide diversity to the diet, are rich in essential micronutrients, and are a key component in the battle against noncommunicable diseases. Recent research suggests that in a sustainable and healthy diet vegetables may make up as much as half the daily plate (Willet et al. 2018). Yet accessing vegetables remains difficult for large groups of consumers. Moreover, for urban consumers in Nigeria, like their counterparts in other parts of Africa and around the world, eating vegetables is not always practical: for these time-strapped people, buying and preparing fresh produce can seem like an impossible task. With rapid growth in cities occurring alongside a fast increase in rates of overweight and obesity, uncovering what can motivate and create willingness and ability to change vegetable eating habits is critical.

Researchers in A4NH’s Food Systems for Healthier Diets flagship conducted a study of vegetable purchasing habits and consumption behavior in Nigerian cities to identify what innovations and interventions might facilitate this change. The researchers studied food choice determinants as well as people’s perceptions of their own consumption and knowledge of vegetables.

What they found, detailed in a December 2018 article published in Sustainability, reinforced concerns: according to a survey in the Lagos and Ibadan areas, only 11 percent of urban households reported consuming leafy vegetables at least once or twice a week, and just 16.6 percent reported consuming nonleafy vegetables at the same frequency. Survey households—especially those with lower socioeconomic status—also reported consuming only a small variety of vegetables. Additional qualitative research showed that barriers to improvement are significant and include the availability and affordability of vegetables, convenience of buying them, food safety concerns, and cultural and religious beliefs. Health, on the other hand, was an important motivator in Nigerian households’ consumption of vegetables, as vegetables are generally considered healthy. People’s ability to prepare vegetables and their knowledge of the importance of eating vegetables might also provide opportunities for increasing consumption.

To address issues of availability and convenience, A4NH researchers from Wageningen University & Research in the Netherlands and partners from the Federal University of Technology, Akure in Nigeria, have launched an intervention called Veg-On-Wheels to deliver fresh, washed vegetables. Through this project, fresh vegetables are sourced, cut, washed, and hygienically packaged. They are then delivered directly to consumers’ homes in refrigerated coolers at affordable prices, reducing transportation costs and preparation time. This approach is based on similar mobile marketing operations for Fan Milk in Nigeria and is expected to be particularly successful in reaching time-strapped consumers facing barriers in affordability and accessibility of fresh produce of good quality. While results of the Akure study are yet to come, preliminary results indicate that the Veg-On-Wheels approach may be successful and could be scaled up in other cities. Soon after the experiment began, a competitor had already entered the market using a comparable approach.

While the Veg-On-Wheels project is taking concrete steps to address barriers to vegetable consumption in urban Nigeria, this research also underscores the importance of sound insights into the food choice motives among these consumers. The A4NH researchers note that any changes in the buying behavior of Veg-On-Wheels customers will need to be carefully reflected on from this perspective; was it, in fact, the combination of availability and convenience that drove purchases? Perhaps the intervention picked up other perceived benefits, such as food safety or trust in vendors. In the wider sense, such insights must come from more frequent monitoring of the determinants of food choices and improved questionnaires and other tools for assessing consumer motives. Results can strongly influence consumer engagement and public awareness strategies.

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