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Guest Editorial

TO END MALNUTRITION IN AFRICA, WE NEED TO MAKE NATIONAL FOOD CONSUMPTION AND MICRONUTRIENT SURVEYS ON THE CONTINENT FASTER, CHEAPER, AND EASIER TO IMPLEMENT

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To end malnutrition in Africa, we need to make national food consumption and micronutrient surveys on the continent faster, cheaper, and easier to implement

Nigeria has the highest population in Africa and the highest number of malnourished children. After a 20-year wait, Nigeria recently launched the preliminary report [1] of its third-ever national food consumption and micronutrient survey. This is an important milestone because these data can help end malnutrition in the Giant of Africa if they are used to underpin policymaking [2]. Indeed, to end malnutrition in Africa, we need new and timely data like this.

As a nutritionist who has worked closely with policymakers on policies and programs to improve nutrition, I am hopeful about the use of the report results. I know that ''without good data we are flying blind [2].'' If we cannot see the problems and diagnose them correctly, then we are limited in our ability to make transformative policy and programming decisions. Without data, our promise to end hunger and all forms of malnutrition by 2030 remains a pipe dream.

On the one hand, I recognize that there is already an incredible amount of data and information available, and more are being generated daily that can help improve food security and nutrition in Nigeria and across Africa. But on the other hand, I know that data gaps still exist to guide action and inform policymaking, and that's where a study like the National Food Consumption and Micronutrient Survey can be so useful.

What I see in my work is that there is a continued mushrooming of initiatives to help nutrition stakeholders and decision-makers to find a balance between when to collect new data and when to re-use existing data. This is good because it will ensure that existing and new data is used by decision-makers to transform nutrition. A promising one is the Micronutrient Data Innovation Alliance (DInA)[i] which convenes diverse national, regional, and global stakeholders to improve the availability, quality, accessibility, and use of micronutrient-related data to support national-level decision-makers. All these initiatives are essentially advocating for improved coordination among the various stakeholders and decision-makers. In addition to better coordination, we need to make National Food Consumption and Micronutrient Surveys in Africa faster, cheaper, and easier to implement.

The Nigeria national food consumption and micronutrient survey conducted in 2021 [3] was implemented using computer-assisted personal interviewing (CAPI), allowing more rapid provision of data than in previous surveys (1968 and 2001). In 2001, for example, the information on what people eat which was collected using

an interactive 24-hour recall method required enumerators to collect data on paper while in the field and later use a tedious and error-prone process to digitize that data – essentially double work. In 2021, the survey used the novel INDDEX24 Mobile Application [4] to capture dietary intake data, which made the data collection easier. Nigeria is the first country to use this innovative dietary intake assessment tool in a large-scale survey. This is a big improvement from 20 years ago. And although this digitalization required initial investments in different food-related databases, these are strategic resources that then set up the country for all future surveys of this kind.

That nutrition surveys are expensive has been used as both a reason and an excuse not to collect timely data because it can cost millions of dollars. However, without credible data, information on what interventions work, for whom, when, where, how, and why remains elusive. For micronutrient surveys, the cost of analyzing biological markers of interest can limit how many nutrients a survey seeks information on and how often these surveys are conducted. But it is possible to harness advances in technology to develop inexpensive assessments. For example, a Sandwich ELISA technique [5] that costs USD 5 per sample has been used in the past 14 years to detect iron deficiency, vitamin A deficiency, and inflammation. More and better-quality data has improved our understanding of iron deficiency, for example, and helped develop better and more targeted solutions. Nutrition stakeholders must advocate for more inexpensive tests.

The time delay between the end of data collection and the availability of usable data and actionable information can be a source of frustration for many stakeholders. Some data do take longer to process than others. This is true in surveys that combine food consumption and micronutrient surveys. However, in recognizing that nutrition problems are often complex, with many root causes, and that it is impossible to make full sense of either dietary data or micronutrient survey data when looking at them in isolation; then for the present, a level of patience is called for.

As we advocate for increased Government goodwill to prioritize the inclusion of national food consumption and micronutrient surveys in their fiscal policies and budgets, researchers need to explore advances in digital technologies and modern data analytic methods to make the process between data collection and identifying effective solutions faster. To make it easier for countries to conduct national food consumption and micronutrient surveys in the ideal 5-year cycle, we must make these surveys faster, cheaper, and easier to implement.

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References

1. **Federal Government of Nigeria & International Institute of Tropical Agriculture.** (2022). National food consumption and micronutrient survey 2021: preliminary report. Ibadan, Nigeria: IITA, (324p.). https://cgspace.cgiar.org/handle/10568/125113

2. **Annan Kofi** (2018). Data can help to end malnutrition across Africa. Nature 555, 7. https://doi.org/10.1038/d41586-018-02386-3

3. **Maziya-Dixon B, Akinyele IO, Oguntona EB, Nokoe S, Sanusi RA and E Harris** (2004). Nigeria Food Consumption and Nutrition Survey 2001–2003. https://pdf.usaid.gov/pdf_docs/PNADC880.pdf

4. **Rogers BL, Somé JW, Bakun P, Adams KP, Bell W, Wafa S and J Coates** (2021). Validation of the INDDEX24 mobile app vs. a pen-and-paper 24-hour dietary recall using the weighed food record as a benchmark in Burkina Faso. *Bri J Nutr,* **128(9),** 1–41. Advance online publication. https://doi.org/10.1017/S0007114521004700

5. **Erhardt JG, Estes JE, Pfeiffer CM, Biesalski HK and NE Craft** (2004). Combined measurement of ferritin, soluble transferrin receptor, retinol binding protein, and C-reactive protein by an inexpensive, sensitive, and simple sandwich enzyme-linked immunosorbent assay technique. *J Nutri*, **134(11),** 3127–3132. https://doi.org/10.1093/jn/134.11.3127

[i] https://micronutrientforum.org/micronutrient-data-innovation-alliance/

Mercy Lung'aho, the Biomarker and Anthropometry Lead for the Nigeria National Food Consumption and Micronutrient Survey, is a research scientist based at IITA, Ibadan. With a decade of experience across Africa, she advocates for more attention to nutrition in the field of agriculture. Mercy received her Ph.D. in Food Science and International Nutrition from Cornell University. She is a founding Steering Committee member of the Micronutrient Data Innovation Alliance (DInA). She is a member of the American Society for Nutrition (ASN), the African Nutrition Society (ANS) and a registered nutritionist with the Kenya Nutrition and Dietetics Institute (KNDI), among others.