

# NOURISHING NIGERIA: HIGHLIGHTS FROM THE 2021 NATIONAL FOOD CONSUMPTION AND MICRONUTRIENT SURVEY

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## KEY MESSAGES

- Nigeria is faced with a critical challenge with a high proportion of its population living with various forms of malnutrition and associated ill health. The need for up-to-date and comprehensive data to inform targeted solutions is critical. The 2021 National Food Consumption and Micronutrient Survey (NFCMS) plays a pivotal role in providing crucial data on dietary intake and micronutrient status. This survey serves as a cornerstone for evidence-informed policy formulation and programme development.
- Key findings from the survey reveal concerning trends in diet quality and nutrient inadequacy, especially in animal-sourced protein and essential micronutrients for women and children. The consumption of biofortified crops remains low, and there is limited access to fortifiable and fortified foods. Additionally, the prevalence of stunting among children is over 30%, with emerging concerns about obesity. Anaemia rates are notably high, particularly due to folate deficiency, although iodine levels generally exceed recommended intakes.
- The NFCMS 2021 provides valuable insights and highlights the need for strategic investments in agriculture, nutrition, and food systems. While progress has been made, there is a clear imperative for improved implementation and expanded coverage of nutrition interventions across diverse population groups.



# INTRODUCTION

Nigeria, classified as a country with a high burden of malnutrition, faces persistent challenges of malnutrition and related health issues. The public health concern is widespread, although the scale and scope vary across regions, by wealth and sex, as well as across the urban-rural divide. Malnutrition takes on various forms, encompassing undernutrition, overweight and obesity, and deficiencies in essential micronutrients such as vitamins and minerals. Moreover, the number of diet-related non-communicable diseases (NCDs) and the prevalence of weight- and diet-related type 2 diabetes in adults is also increasing significantly.

Poor diet quality is seen as a key determinant of malnutrition. As progress in stunting reduction slows and the incidence of NCDs and associated conditions continues to rise, the need for high-quality, comprehensive and up-to-date data becomes ever more urgent. Without such data, effectively addressing the multifaceted scope and causes of these food and nutrition challenges becomes more difficult.

The NFCMS 2021 emerged as a critical response to these challenges. The survey's primary goal was to assess the micronutrient status and dietary intake of women of reproductive age (15-49 years), including pregnant and lactating women, as well as children (6-59 months). Additionally, the survey assessed the micronutrient status of non-pregnant adolescent girls (10-14 years), identifying key factors associated with poor nutrition. A representative sample of 14,820 respondents was selected for the survey, which encompassed four key components: socioeconomic and demographic information, dietary intake, anthropometrics, and micronutrient status analysis using biomarkers.

The comprehensive data generated by NFCMS 2021 provides a solid foundation for evidence-informed policy formulation and programme development, paving the way for a healthier and better-nourished Nigeria. These findings will not only complement the objectives of the National Multisectoral Plan of Action for Food and Nutrition (NMPFAN 2021 – 2025) but also align with the priority actions outlined in the Nigeria's Food Systems Transformation Pathways. Importantly, both the NFCMS 2021 and NMPFAN 2021 – 2025 are consistent with the policy direction of the current administration, as outlined in the National Development Plan (2021-2025) and the Nigeria Agenda (2050).

This brief outlines the main findings of the survey concerning food insecurity, accessibility, and nutritional insufficiency, particularly among women of reproductive age and children. It proceeds to highlight several implications drawn from the data that policymakers must confront, followed by suggestions for policy measures aimed at mitigating identified dietary deficiency and improving nutrition outcomes.



# KEY FINDINGS

Significant patterns in food insecurity, accessibility issues, and nutrient deficits are shown by the NFCMS, which provides important insights into dietary patterns. These are some of the main issues that the findings highlight that impact vulnerable population groups.

## Nutrient Intake Inadequacy



Animal-sourced protein contribution is low, with over 30% of women failing to meet protein intake requirements.



Inadequacies exceeding 50% are observed in women's intake of Calcium, Vitamin C, Vitamin B1, Vitamin B2, Folate, and Vitamin B12.



Children face severe inadequacies (>50%) in Calcium, Vitamin B2, Folate, and Vitamin B12, with lesser severity in Iron, Zinc, Vitamin A, and Vitamin B1.



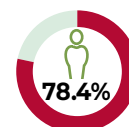
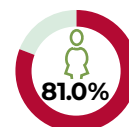
## Food Insecurity

79.0% of the sampled households were food insecure, with 57.0% being moderately food insecure and 22.0% severely food insecure.

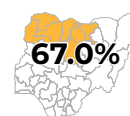
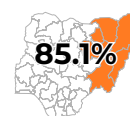
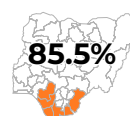


**moderately or severely food insecure**

Slightly higher proportion of female-headed households (HHs; 81.0%) classified as food insecure compared to male-headed HHs (78.4%).



Severe food insecurity was highest in the South-South (85.5%) and North-East (85.1%) and lowest in the North-West (67.0%).



## Infant and Young Child Feeding (IYCF)



Meal frequency aligns with recommendations, but dietary diversity is low, with only 41.4% achieving a minimum acceptable diet<sup>1</sup>.



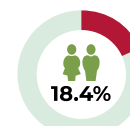
Sweetened beverages were consumed by 24.4% of children, with the highest consumption (31.0%) observed in the 18 – 23 month age group. Notably, 18.4% of children aged 6-11 months also consumed sweet beverages. Urban areas showed higher consumption rates.



children



18-23 months



6-11 months



Unhealthy foods, such as ultra-processed cereals, noodles, biscuits, cakes, and fried starchy foods, were consumed by 54.9% of children aged 6 – 23 months and 58.7% of children aged 24 – 59 months. Urban areas exhibited higher consumption rates for both age groups at 70.2% and 78.6%, respectively.



6-23 months **54.9%**



24-59 months **58.7%**



Urban areas, both age groups **70.2% & 78.6%**

<sup>1</sup> Minimum Acceptable Diet (MAD) a measure of the nutritional adequacy of a child's diet.

## Biofortification and Fortification Coverage

There is limited consumption of biofortified crops, with only 3.4% consuming yellow cassava, 4.7% consuming orange-fleshed sweet potato, and 13.5% consuming orange maize. These percentages include the consumption of food derivatives made from these biofortified crops.

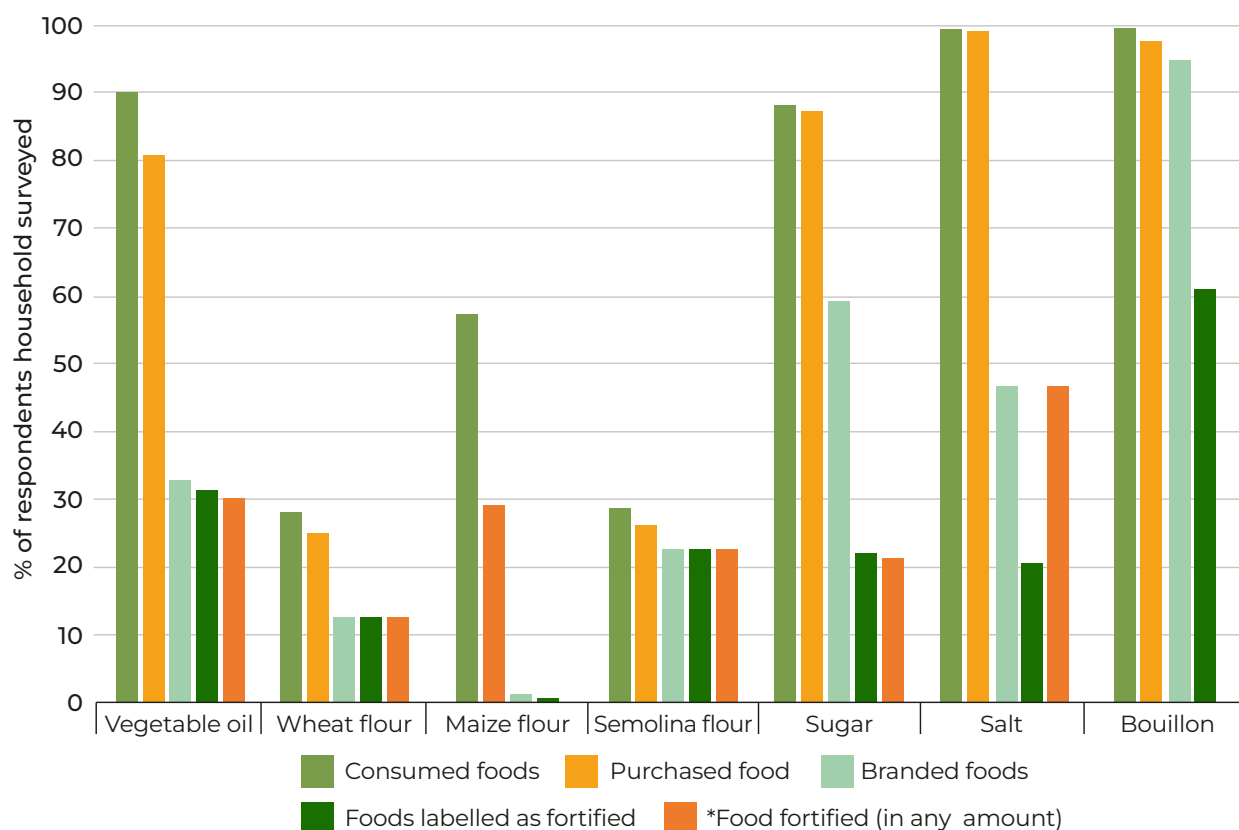
Despite these low percentages, these figures represent a significant increase from assessments conducted about five years ago, indicating some success in transitioning to biofortified foods among the Nigerian population. However, there is still considerable work to be done to further improve the consumption rates of biofortified crops and enhance the overall nutritional status of the population.

The consumption of fortifiable and fortified foods varied across different items, with higher rates observed for vegetable oil (90.3%), sugar (88.2%), salt (99.2%), and bouillon (98.9%), compared to flours such as maize flour (57.4%), wheat flour (28.2%), and semolina flour (28.7%).



- o Vegetable oil was consumed by 90.3% of respondents, with only 32.9% being branded and 31.4% labelled as fortified.
- o Wheat flour was consumed by 28.2% of respondents, of which 12.9% was branded and fortified.
- o Maize flour was consumed by 57.4% of respondents, but only 1.2% was branded and 0.5% was fortified.
- o Semolina was consumed by 28.7% of respondents, of which 22.8% was branded and fortified.
- o Sugar was consumed by 88.2% of respondents, with 59.4% being branded and only 22.2% labelled as fortified.
- o Salt was consumed by 99.2% of respondents, with 46.6% being branded and only 20.8% labelled as fortified.
- o Bouillon was consumed by 98.9% of respondents, with 94.3% being branded and 60.7% labelled as fortified.

**Figure 1:** Coverage of Selected Food Vehicles among Households of the sampled Non-Pregnant Women at National Level



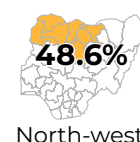
## Anthropometry

### Children 6 – 59 months

- Prevalence of stunting is 33.8%, with the highest rates observed among the 24-35 months age group (39.8%) and in the North-west zone (48.6%). Stunting is more pronounced in rural areas, reaching 40% prevalence.



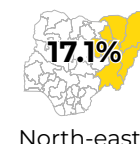
**33.8%**  
Stunting



- Wasting affects 11.5% of children, with the highest rates found in the 6-11 months age group (25.4%) and in the North-East region (17.1%).



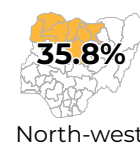
**11.5%**  
Wasting



- Underweight prevalence stands at 25.5%, peaking among children aged 12 – 23 months (27.6%) and in the North-West (35.8%).



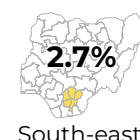
**25.5%**  
Wasting



- Overweight prevalence is 1.5%, with the lowest rates in the 48 – 59 months age group (0.6%) and the highest in the South-East (2.7%).



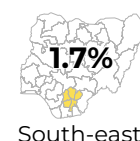
**1.5%**  
Overweight



- Obesity prevalence is 0.6%, reaching a peak of 1.7% in the South-East.



**0.6%**  
Overweight



### Adolescent girls 10 – 14 years

- Stunting prevalence is 21.7%, higher in rural areas (25.8%) and among those in the poorest wealth quintile (33.2%).
- Thinness<sup>2</sup> affects 15.4% of adolescent girls.
- Overweight prevalence is 3.1%, with 1.1% classified as obese.

### WRA 15 – 49 years

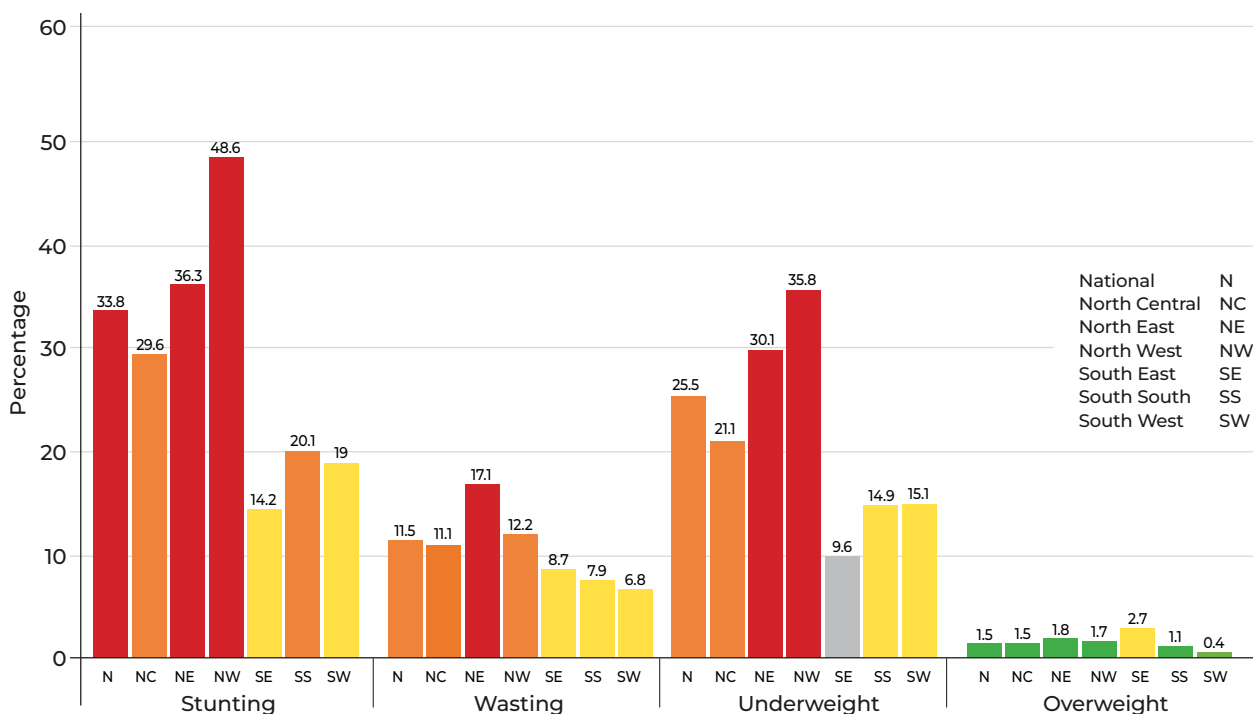
- Thinness prevalence is 14.2%, with the highest levels in the North-East (20.9%) and North-West (21.7%).
- Overweight prevalence is 15%, reaching a peak of 21.2% in the South-East.
- Obesity prevalence stands at 8.1%, with the highest level recorded in the South-East (15.4%).



<sup>2</sup> Thinness is defined as body mass index (BMI) of <18.5 kg/m<sup>2</sup> for WRA ≥20 years and as BMI-for-age Z-scores (BAZ) <-2SD in WRA <20 years/adolescent girls.



**Figure 2:** Anthropometric status for children (aged 6-59 months), Nigeria 2021. [Using 2006 WHO Child Growth Standards].



## Coverage of Nutrition Specific Interventions

Children aged 6-59 months in the last 6 months (preceding the survey)



**27.5%**

Deworming



**25%**

Vitamin A  
supplementation



**14.9%**

Nutrition  
counselling



**7.1%**

Iron/micronutrient  
powder sprinkles

Children aged 6-59 months in the last 12 months (preceding the survey)



**2.4%**

Therapeutic feeds/  
plumpy nut

Pregnant Women



**86.4%**

Iron/Folic acid in  
the past 7 days



**69.9%**

Iron/folic acid  
yesterday



**44.7%**

At least one  
ante-natal  
clinic visit



**33.6%**

Nutrition  
counselling  
(what to eat)



**30.7%**

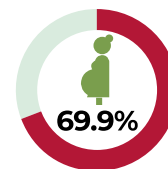
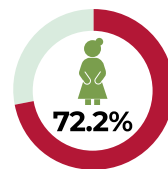
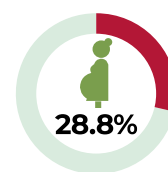
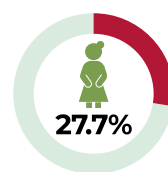
Nutrition  
Counselling  
(breastfeeding)

## Diet Quality



Dietary diversity in women is low, with only 27.7 % of non-pregnant and 28.8% of pregnant women achieving minimum diversity. The mean minimum dietary diversity score<sup>3</sup> of women (MDD-W) irrespective of pregnancy or lactating status is 3.6 out of a possible score of 10.

More than two-thirds of women (72.2% of non-pregnant women and 69.9% of pregnant women) had a Global Diet Quality Score<sup>4</sup> (GDQS) between 15 and 23, which corresponds to a moderate risk of poor diet quality outcomes. 15.9%, 71.4%, and 12.7% of non pregnant, non-lactating Women of Reproductive Age (WRA) are at high, moderate, and low risk of poor diet quality outcomes, respectively.



## Micronutrient Status

### Iron deficiency and iron deficiency anaemia

#### Children 6 – 59 months:

- Iron deficiency prevalence stands at 20.7%, with 8.4% experiencing iron deficiency anaemia.



#### Adolescent girls 10 – 14 years

- Iron deficiency affects 4.2% of adolescents, while iron deficiency anaemia prevalence is 1.5%.



#### WRA 15 – 49 years

- Iron deficiency prevalence is 10.0%, with 4.6% experiencing iron deficiency anaemia.



#### Pregnant Women

- Iron deficiency affects 26.1% of pregnant women, with 10.5% experiencing iron deficiency anaemia.



## Other Micronutrient Deficiencies

#### Children 6 – 59 months:

- Vitamin A deficiency prevalence is 31.3%, and 35.2% are zinc deficient.



#### Adolescent girls 10 – 14 years

- Vitamin A deficiency affects 23.6% of adolescents, with 7.3% experiencing Vitamin B12 insufficiency, 2.0% deficient in Vitamin B12, and folate deficiency prevalent in 91.3%.

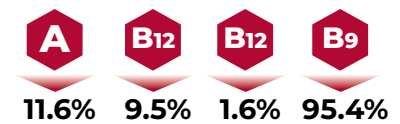


<sup>3</sup> Minimum dietary diversity score (MDD-W) measures the proportion of women 15-49 years of age who consumed food items (at least 15g) from at least five out of the ten defined food groups the previous day or night.

<sup>4</sup> Global Diet Quality Score (GDQS) - The GDQS is a food-based metric of diet quality for assessing nutrient adequacy and risk factors for non-communicable diseases (NCDs).

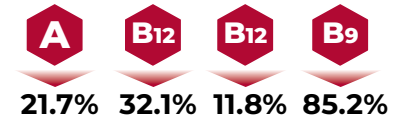
### *(Non-Pregnant) WRA 15 – 49 years*

- Vitamin A deficiency prevalence is 11.6%, with 9.5% experiencing Vitamin B12 insufficiency, 1.6% deficient in Vitamin B12, and folate deficiency prevalent in 95.4%.



### *Pregnant Women*

- Vitamin A deficiency affects 21.7% of pregnant women, with 32.1% experiencing Vitamin B12 insufficiency, 11.8% deficient in Vitamin B12, and folate deficiency prevalent in 85.2%.



### **Iodine**

- The levels of urinary iodine observed in pregnant and non-pregnant women of reproductive age are above recommended intakes.



### **Key Drivers of Anaemia**

The risk factors influencing the incidence and severity of anaemia vary across the different population groups.

#### *Children 6 – 59 months:*

- Micronutrient deficiencies (iron, zinc, vitamin B12), inflammation, helminth infections, and malaria, were significant contributors to anaemia.



#### *Adolescent girls 10 – 14 years*

- Iron deficiency was the primary nutrient deficiency linked to increased anaemia prevalence. Inflammation and malaria were also notable factors.



#### *WRA 15 – 49 years*

- Deficiencies in iron, vitamin A, zinc, and folic acid were linked to higher anaemia prevalence, along with inflammation and malaria.

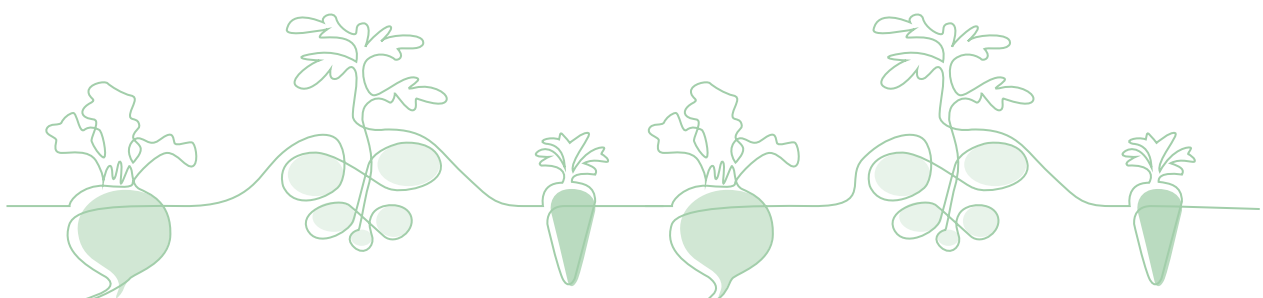


#### *Pregnant Women*

- Iron and vitamin A deficiencies, along with H. pylori infection, were major drivers of anaemia.



Overall iron deficiency, inflammation (acute and chronic) and malaria were consistently associated with an increased likelihood of anaemia across all age groups.





# IMPLICATIONS

To address the detected dietary gaps and guarantee improved public health outcomes, the survey emphasises the urgent need for focused policy initiatives. It is imperative that policymakers take note of these issues and carry out focused initiatives to improve nutritional well-being and dietary diversity.

## Nutrient Intake Inadequacy

- The overall diet (of women and children) appears to be low in essential amino acids crucial for optimal growth and development.
- Food-related micronutrient inadequacy is still a problem and inadequate intake of essential nutrients such as iron, zinc, vitamin A, and various B vitamins can have significant health implications, particularly among Women of Reproductive Age (WRA) and children under 5 years of age.

## Food Insecurity

- Food insecurity is widespread in the country and is severe affecting both urban and rural, male/female – headed households, and in all wealth quintiles.

## Infant and Young Child Feeding (IYCF)

- A minimum acceptable diet is essential to ensure appropriate growth and development for feeding infants and children aged 6 – 23 months. Without adequate diversity and meal frequency, infants and young children are vulnerable to malnutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality.
- Children in urban areas appear to be adopting potentially unhealthy dietary choices, raising concerns about the long-term impact on their well-being. Evidence indicates that consumption of sugar-sweetened beverages (SSBs) and unhealthy foods in childhood may increase BMI Z-score, percentage body fat, or odds of overweight/obesity (low certainty of evidence).

## Biofortification and Fortification Coverage

- There has been a significant increase in the consumption of biofortified crops compared to assessments conducted approximately five years ago, indicating some success in transitioning towards biofortified foods. However, much work remains to be done to further improve these consumption rates.
- Low levels of consumption may be because most farmers of biofortified crops produce them for their own consumption. Therefore, the crops are not available in the market for non-producers to buy and consume.
- There is difficulty in assessing the true coverage of fortification interventions. Bulk sale by producers and “retailing by measure” (in which food items such as grains, spices, or liquids are sold by weight or volume, often in traditional markets) to consumers have implications for food safety and quality because it will be impossible to ascertain conditions under which the food item has been kept.

## Anthropometry

- In Nigeria, efforts have predominantly focused on reducing stunting rates, but the prevalence of stunting continues to be high. There is a crucial need for a shift in approach.
- Wasting is the most immediate, visible, and life-threatening form of malnutrition. It results from the failure to prevent malnutrition among the most vulnerable children.

- Monitoring and early treatment of wasting may eventually reduce the number of children and adolescents that become eventually stunted and ensuring that WRA go into the reproduction process with an advantage of good nutritional status.
- Obesity as a critical and emerging issue in Nigeria.

### **Coverage of Nutrition Specific Interventions**

- Low coverage of nutrition-specific interventions can lead to increased rates of malnutrition, with severe consequences for immune function, and physical and cognitive development, individual's productivity, and overall economic potential particularly in children.
- Malnutrition can have inter-generational consequences, as undernourished mothers are more likely to give birth to undernourished children, perpetuating the cycle of malnutrition and the associated health and developmental issues.
- There is a clear need for improved implementation and expanded coverage of essential nutrition interventions and services across diverse population groups to increase overall nutritional status and maternal-child health.

### **Diet Quality**

- Dietary diversity remains suboptimal, especially for women, underscoring the need for interventions to ensure micronutrient adequacy in their diets, with particular concern for pregnant and lactating women.
- A diversified diet (higher MDD Score) signifies adequate consumption of essential nutrients. It is considered as an important indicator of dietary quality and access to a variety of food. A higher dietary diversity is associated with better health and reduced risk of various chronic diseases.

### **Micronutrient Status**

- Suspected high iodine intake requires further exploration and targeted measures to address potential health implications such as thyroid dysfunction, goitre, and thyroid cancer.
- Result reveals a high prevalence of folate deficiency, particularly among adolescent girls and women of reproductive age, warranting targeted interventions.

### **Key Drivers of Anaemia**

- The long-held notion that iron deficiency is the primary cause of anaemia in Nigeria and the associated public health interventions are being called into question by the results from the survey. The data reveal that while iron deficiency remains a significant factor, other causes such as deficiencies in zinc, vitamin B12, vitamin A, and folic acid, as well as inflammation, helminths, malaria, and H. pylori infection, play crucial roles in the incidence and severity of anaemia across various population groups. This indicates that a multifaceted approach addressing a broader range of nutritional and health factors is necessary to effectively combat anaemia in Nigeria.

## **POLICY RECOMMENDATIONS**

The survey provides valuable insights into the state of food security, dietary habits, and nutritional status in Nigeria; however, it is imperative to bridge the gap between data collection and policy implementation. The recommendations offered in this section serve as a roadmap for addressing the identified challenges and leveraging opportunities to improve food security, enhance dietary quality, and promote better nutrition outcomes. By outlining specific policy actions, interventions, and strategies, this section empowers decision-makers to formulate evidence-based policies, allocate resources effectively, and implement targeted programmes that address the needs of diverse population groups. Ultimately, the policy recommendations aim to catalyze positive changes in the food and nutrition landscape, leading to a healthier and more nourished Nigeria.

Survey Domain	Call to Action
<b>Nutrient Intake Adequacy</b>	<ul style="list-style-type: none"> <li>Food system innovations are needed to incentivize the production and consumption of more animal-based protein foods.</li> <li>Prioritize the review of the Food-Based Dietary Guidelines (FBDGs) to ensure they align with current nutritional needs of population groups.</li> </ul>
<b>Food Insecurity</b>	<ul style="list-style-type: none"> <li>Establish food security policies or strategies aimed at poverty reduction and hunger elimination such as programmes like safety-net and public food assistance to increase food consumption among the impoverished and enhance overall food security.</li> <li>Design international trade policy with enhanced food security as a primary objective. This should include the introduction of safeguards to prevent import surges undermining local production; or reducing trade barriers to mitigate the impact of local market disruptions caused by factors like climate change.</li> </ul>
<b>Infant and Young Child Feeding (ICYF)</b>	<ul style="list-style-type: none"> <li>Prioritize existing initiatives focused on enhancing dietary diversity, such as supporting the cultivation of diverse and nutritious crops in home gardens for household consumption.</li> <li>Implement policies and strategies to strengthen institutional delivery of nutrition specific and nutrition sensitive services, while also addressing poverty and providing comprehensive nutrition education to both men and women.</li> <li>Design food environment policies that encourage the consumption of healthy diets, including measures such as nutrient profiling, food labelling, and restrictions on the advertising and sale of unhealthy foods around schools and workplaces.</li> </ul>
<b>Biofortification</b>	<ul style="list-style-type: none"> <li>Implement a market-oriented strategy to expand the production, processing, marketing and consumption of biofortified crops and foods, while simultaneously promoting local cultivation for consumption as appropriate to the specific context.</li> </ul>
<b>Fortification</b>	<ul style="list-style-type: none"> <li>Clarify roles and responsibilities, and empower relevant agencies with adequate resourcing to enforce compliance. It is important to also improve capacity of agencies responsible for large-scale food fortification to monitor and supervise producers.</li> <li>Advocate for increased governmental and industrial accountability for mandatory food fortification building on existing schemes such as the Micronutrient Fortification Index (MFI) and Digital QA/QC.</li> <li>On fortification coverage, evaluate the existing list of fortifiable foods based on consumption patterns identified in the survey to identify new food vehicles suitable for mandatory fortification with essential micronutrients where deficient intake has been established.</li> </ul>
<b>Anthropometry</b>	<ul style="list-style-type: none"> <li>Strengthen food value chains to increase the accessibility and affordability of sustainable, nutritious diets for women of reproductive age. This includes promoting minimum diet diversity with a focus on incorporating animal source foods, pulses, fruits, vegetables, and fortified foods.</li> <li>Management of wasting without medical complications at the community level within existing community structures and using locally available food stuffs combined to ensure delivery of adequate and required nutrients and the use of multiple micronutrient powders. outreach programs.</li> <li>Reduce contamination of crops in farms, enhance food safety in markets and improve food storage and food handling at household level (food hygiene), with a focus on complementary and supplementary foods for young children.</li> </ul>
<b>Diet Quality</b>	<ul style="list-style-type: none"> <li>Support the production and consumption of nutritious indigenous crops that may have been overlooked, while also promoting the adoption of novel foods.</li> <li>Review/develop food-based dietary guidelines for informed food system transformation policies including nutrition education.</li> <li>Align all food systems policies and programmes with food-based dietary guidelines, and widely communicate the guidelines to the public.</li> </ul>

Survey Domain	Call to Action
<b>Metabolic Markers (Malaria, <i>Helicobacter pylori</i> (H. pylori), helminths, elevated plasma glucose, elevated glycated Haemoglobin A1C (HbA1c))</b> <i>These health outcomes may also be present in addition to anaemia</i>	<ul style="list-style-type: none"> <li>Addressing anaemia in populations with a high prevalence of H. pylori, malaria, and helminths requires a multifaceted approach, and may include policy actions targeting the treatment of underlying infections, expanding nutrition interventions for vulnerable populations, revising strategies for iron and essential nutrient supplementation to accurately target at-risk populations, and implementing other public health measures to prevent and control these infections.</li> </ul>
<b>Micronutrient Deficiency/Status</b>	<ul style="list-style-type: none"> <li>Renew commitment to the implementation of the 'Guidelines for the control of micronutrient deficiency in Nigeria as well as address the deficiencies observed, especially for folate and zinc implementing tailored interventions suited to local contexts.</li> </ul>
<b>Key drivers of anaemia</b>	<ul style="list-style-type: none"> <li>There is a need to understand the extent of the relative contribution of each risk factor to the aetiology and severity of anaemia to better inform the design of interventions to reduce anaemia in the vulnerable population groups.</li> <li>Collate and analyse evidence on multiple micronutrient supplements (MMS) for pregnant women and possibly for children 6 – 59 months while implementing recommendations in the National Guidelines on Micronutrients Deficiencies Control.</li> <li>Policy actions aimed at preventing and controlling malaria need to be revised to ensure that vulnerable populations are reached.</li> </ul>

## CONCLUSION

As Nigeria navigates its path toward achieving the goals outlined in the National Multisectoral Plan of Action for Food and Nutrition (NMPFAN 2021–2025) and the Nigeria's Food Systems Transformation Pathways as well as multisectoral plans for food and nutrition across various states, the NFCMS 2021 provides valuable insights into areas of nutrition vulnerability. It stands as an invaluable resource to catalyze and prioritize strategic investments in agriculture, nutrition, and food systems. Due to the quality and scope of the data collected, it also lays the groundwork for evidence-based policies and programmes, providing a baseline for monitoring changes over time, ultimately contributing to a healthier and nourished nation. The significance of nutrition data extends beyond its immediate implications, serving as a potent tool to reinforce social accountability and evaluate progress toward national and global objectives.

The journey toward optimal nutrition is ongoing, and the commitment to these recommendations will be instrumental in ensuring a brighter and healthier future for all Nigerians.





## References

- National Multisectoral Plan of Action for Food and Nutrition (NMPFAN) 2021-2025 <http://ngfrepository.org.ng:8080/jspui/handle/123456789/3255>
- Federal Government of Nigeria (FGoN) and the International Institute of Tropical Agriculture (IITA). 2023. National Food Consumption and Micronutrient Survey 2021. Final Report. Abuja and Ibadan, Nigeria: FGoN and IITA. 520 pp.
- Federal Ministry of Finance, Budget and National Planning. 2021. National Food Systems Transformation Pathways for Nigeria. <https://nationalplanning.gov.ng/wp-content/uploads/2023/09/Pathway-for-Food-A-Call-to-Action.pdf>
- Federal Ministry of Finance, Budget and National Planning. 2021. National Development Plan (NDP) 2021-2025 Volume I [https://nationalplanning.gov.ng/wp-content/uploads/2021/12/NDP-2021-2025\\_AA\\_FINAL\\_PRINTING.pdf](https://nationalplanning.gov.ng/wp-content/uploads/2021/12/NDP-2021-2025_AA_FINAL_PRINTING.pdf)
- Federal Government of Nigeria. Nigeria Agenda (2050) <https://nationalplanning.gov.ng/wp-content/uploads/2023/05/Nigeria-Agenda-2050-Report-Corrected.pdf>

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