

Improving child nutrition through community-based support for mothers in Abia State, Nigeria

Submission date 19/05/2026	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 19/06/2026	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 21/05/2026	Condition category Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Malnutrition is a serious problem in Nigeria, especially among young children. When children do not get enough of the right foods, they can become stunted (too short for their age), wasted (too thin for their height), or underweight. These conditions can affect their growth, brain development, and future health. In Abia State, many mothers lack the knowledge and resources to feed their children properly.

This study aims to find out whether a special nutrition programme can help mothers improve how they feed their children and reduce malnutrition. The programme includes giving mothers nutritious food for their children, teaching them how to measure their child's arm to check for signs of malnutrition, and providing education on healthy feeding practices.

Who can participate?

The study is for women who live in selected communities in Abia State, Nigeria. To take part, a woman must:

1. Have at least one child between 6 and 59 months old (about half a year to five years old)
2. Have lived in the study area for more than 6 weeks
3. Be able to read and write at a basic level
4. Agree to take part in the study

Women will not be able to take part if they do not have a child in the right age group, have lived in the area for less than six weeks, or cannot read or write.

What does the study involve?

The study will take place in two local government areas in Abia State. One area will receive the full nutrition programme (the intervention group). The other area will continue to receive the regular nutrition services already available (the control group).

Mothers in the intervention group will:

1. Receive free nutritious food (Cerelac infant cereal) for their children every month for 18 months
2. Get micronutrient powder to add to their children's food
3. Attend monthly group meetings where they learn about child feeding, hygiene, and how to measure their child's arm to check for malnutrition
4. Receive counselling on breastfeeding and feeding young children

Mothers in the control group will receive the usual nutrition services provided by community health workers.

The study will collect information from mothers at the beginning, at six months, and at the end of the 18-month period. This includes questionnaires about feeding practices and measuring children's height, weight, and arm circumference.

What are the possible benefits and risks of participating?

Mothers in the intervention group may learn new skills to help their children grow up healthy and strong. Their children may have better nutrition and lower risk of becoming malnourished. All mothers will receive free health information and support.

The study involves no known medical risks. The nutritional supplements are approved for use in Nigeria. Some mothers may find it time-consuming to attend monthly meetings. There is also a small risk that mothers may feel uncomfortable answering questions about their feeding practices, but all information will be kept private and anonymous.

Where is the study run from?

The study is run from the Solina Centre for International Development and Research (SCIDaR) in Abuja, Nigeria. The activities take place in communities in Bende and Umuahia South Local Government Areas in Abia State, Nigeria.

When is the study starting and how long is it expected to run for?

May 2024 to December 2025

Who is funding the study?

The study is funded by the World Bank and STAT through the Accelerating Nutrition Results in Nigeria (ANRiN) project, with a grant to Solina Health Limited (Grant Number: TF0A7516).

Who is the main contact?

Dr Eric Aigbogun, eric.aigbogun@solinagroup.com

Contact information

Type(s)

Principal investigator, Scientific, Public

Contact name

Dr Eric Aigbogun

ORCID ID

<https://orcid.org/0000-0001-8230-2771>

Contact details

8 Libreville Street, Off Aminu Kano Crescent, Wuse II

Abuja

Nigeria

900288

+234 (0)915 3145377

eric.aigbogun@solinagroup.com

Additional identifiers

Study information

Scientific Title

Effectiveness of a multi-component nutrition intervention on maternal child-feeding knowledge and childhood stunting in Nigeria: a non-randomized controlled study with two clusters

Acronym

ANRiN-Abia

Study objectives

1. To evaluate the impact of an integrated community-based nutrition intervention on maternal knowledge, attitudes, and practices (KAP) regarding child feeding
2. To assess the effectiveness of the intervention in reducing the prevalence of global acute malnutrition (GAM) among children aged 6-59 months in rural Abia State, Nigeria
3. To monitor improvements in maternal capacity to use mid-upper arm circumference (MUAC) as a tool for early detection of malnutrition
4. To examine changes in nutritional indicators such as MUAC, moderate acute malnutrition (MAM), and severe acute malnutrition (SAM) among children in the intervention and control groups.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 15/06/2022, Government of Abia State Ministry of Health, Umuahia (P.M.B. 7215 Ogurube Layout, Umuahia, 440233, Nigeria; +234 (0)8067973336; abiastmoh@gmail.com), ref: ASMH/EC/23/019

Primary study design

Interventional

Allocation

Non-randomized controlled trial

Masking

Blinded (masking used)

Control

Active

Assignment

Parallel

Purpose

Prevention

Study type(s)

Health condition(s) or problem(s) studied

Global acute malnutrition (GAM), moderate acute malnutrition (MAM), stunting, underweight in children aged 6-59 months

Interventions

Intervention group (Bende Local Government Area):

Monthly food incentives (Cerelac infant cereals, 50 g sachets, valued at 5,550 approximately US\$4.04 per month), micronutrient powder for home food fortification, child feeding counselling, social and behaviour change communication, training on mid-upper arm circumference measurement, and the Basic Package of Nutrition Services (zinc supplementation, oral rehydration solution [ORS], deworming, and vitamin A for children; plus iron and folic acid [IFA], intermittent preventive treatment for malaria in pregnancy [IPTp], and maternal, infant, and young child nutrition counselling for mothers [MIYCN]). Delivered through monthly peer support group meetings over 18 months.

Control group (Umuahia South Local Government Area):

Routine basic nutrition services only (Basic Package of Nutrition Services [BPNS] provided by community volunteers).

Intervention Type

Mixed

Primary outcome(s)

1. Maternal knowledge, attitudes, and practices (KAP) regarding child feeding measured using structured KAP questionnaire (psychometrically validated, Cronbach's alpha ≥ 0.7) at baseline (month 0), endline (month 18)

Key secondary outcome(s)

1. Global acute malnutrition (GAM) prevalence measured using MUAC measurement; WHO Anthropometric Analyzer (Z-scores) at baseline (month 0), midline (month 6), endline (month 18)

2. Number of mothers trained in MUAC measurement measured using training attendance log; competency assessment at month 3, month 12

3. Proportion of children receiving nutritional supplements measured using monthly distribution log; care card records at months 1-18

4. Child MUAC measured using a tape measure (categories: ≥ 125 mm = normal, < 125 mm = MAM, < 115 mm = SAM) at baseline, monthly, midline, endline

5. Child weight-for-height Z-score measured using digital scale; height board; WHO Anthro software at baseline, midline, endline

6. Adherence to child feeding practices measured using monthly KAP questionnaire; care card review at monthly

7. Attendance at peer support group meetings measured using monthly attendance register at months 1-18

Completion date

31/12/2025

Eligibility

Key inclusion criteria

1. Women with at least one child aged 6-59 months
2. Reside in selected wards of Bende or Umuahia South LGAs for more than 6 weeks
3. Willing to provide informed consent
4. Possess basic reading and writing skills

Healthy volunteers allowed

Yes

Age group

Adult

Lower age limit

18 years

Upper age limit

60 years

Sex

Female

Total final enrolment

720

Key exclusion criteria

1. Women with no children aged 6-59 months
2. Unwilling to participate
3. Resided in selected wards for less than 6 weeks
4. Lack basic literacy skills

Date of first enrolment

01/05/2024

Date of final enrolment

31/07/2024

Locations

Countries of recruitment

Nigeria

Sponsor information

Organisation

World Bank

ROR

<https://ror.org/00ae7jd04>

Funder(s)

Funder type

Funder Name

Solina Health Limited

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available