



**AAPH Africa Academy
for Public Health**
Research | Training | Practice



Scaling up essential interventions to
improve nutrition and health among
school aged children and adolescents in
Tanzania and SSA

Adolescent Health situation in Tanzania

- In Tanzania, 12 million of the 54 million citizens are adolescents aged 10 – 19 years.
- The age group is projected to reach 30 million by 2050.
- Adequate nutrition during the adolescence period creates a second opportunity for growth.
- This is especially for children who have experienced nutritional deficits during their early life.
- Deficits experienced in early life continue through to adolescence and adulthood.

Adolescent Health Situation in Tanzania

- The process of;
 - Economic development
 - Urbanization
 - Modernization
- Has been linked to simultaneous existence of under and over nutrition (***Double burden of malnutrition***).
- Mainly caused by replacement of traditional diets by energy dense diets high in fats, sugar and salt as well as increase of a sedentary lifestyle.

The Gap

- Adolescents are undergoing intense physical and cognitive developments.
- Vast efforts are towards under 5 children, women of reproductive age (WRA) and adults interventions.
- Scarce evidence on adolescent raises a need to develop tailored interventions for the age group.
- Adolescents' age group have unique health needs which differ from children and WRA.
- Evidence related to WASH practices; Sexual reproductive health; Nutritional status; Dietary patterns and quality.



Findings from conducted surveys

ARISE Network:

AAPH together with Harvard T.H. Chan School of Public Health founded the Africa Research, Implementation Science, and Education (ARISE) Network which currently includes 21 institutions in 9 Sub-Saharan African countries:

African countries:

- Botswana
- Burkina Faso
- Ethiopia
- Ghana
- Nigeria
- South Africa
- South Sudan
- **Tanzania**
- Uganda



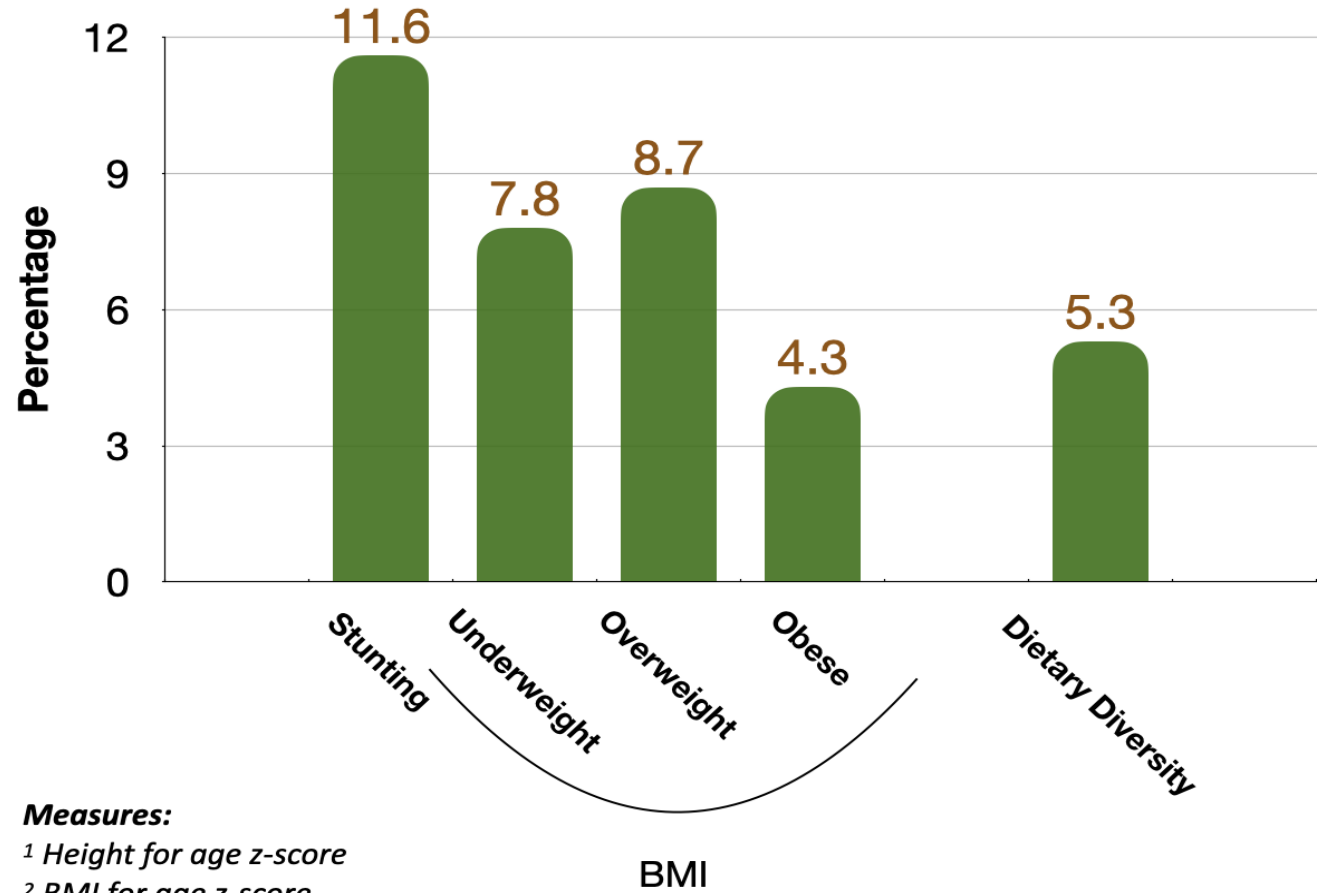
Formative School Health and Nutrition Assessment

- Conducted in **Tanzania, Ethiopia, Sudan, Burkina Faso and South Africa.**
- To better understand the policy surrounding school health environments, individual and population-level risk factors, and the current state of adolescent health.
- Aims to support the design, delivery and scale-up of high impact nutrition and health interventions through schools.
- Assessment done on three levels:
 1. Policy environment and existing interventions.
 2. The school food environment.
 3. State of nutrition and health for in-school adolescents ages 10-14.

Formative School Health and Nutrition Assessment

Drivers of DBM;

- ✓ Age
- ✓ Gender
- ✓ SES
- ✓ HH siblings

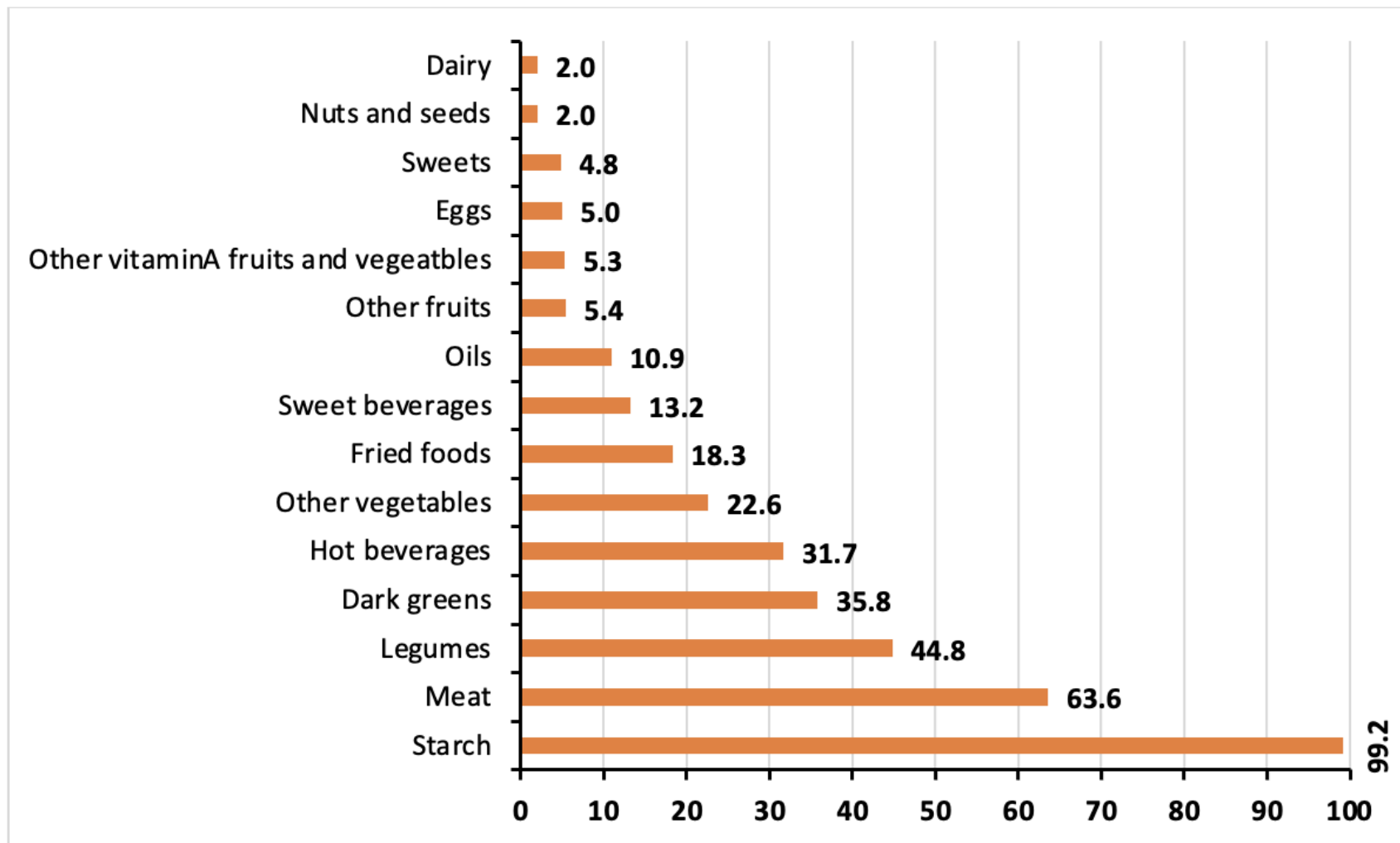


Measures:

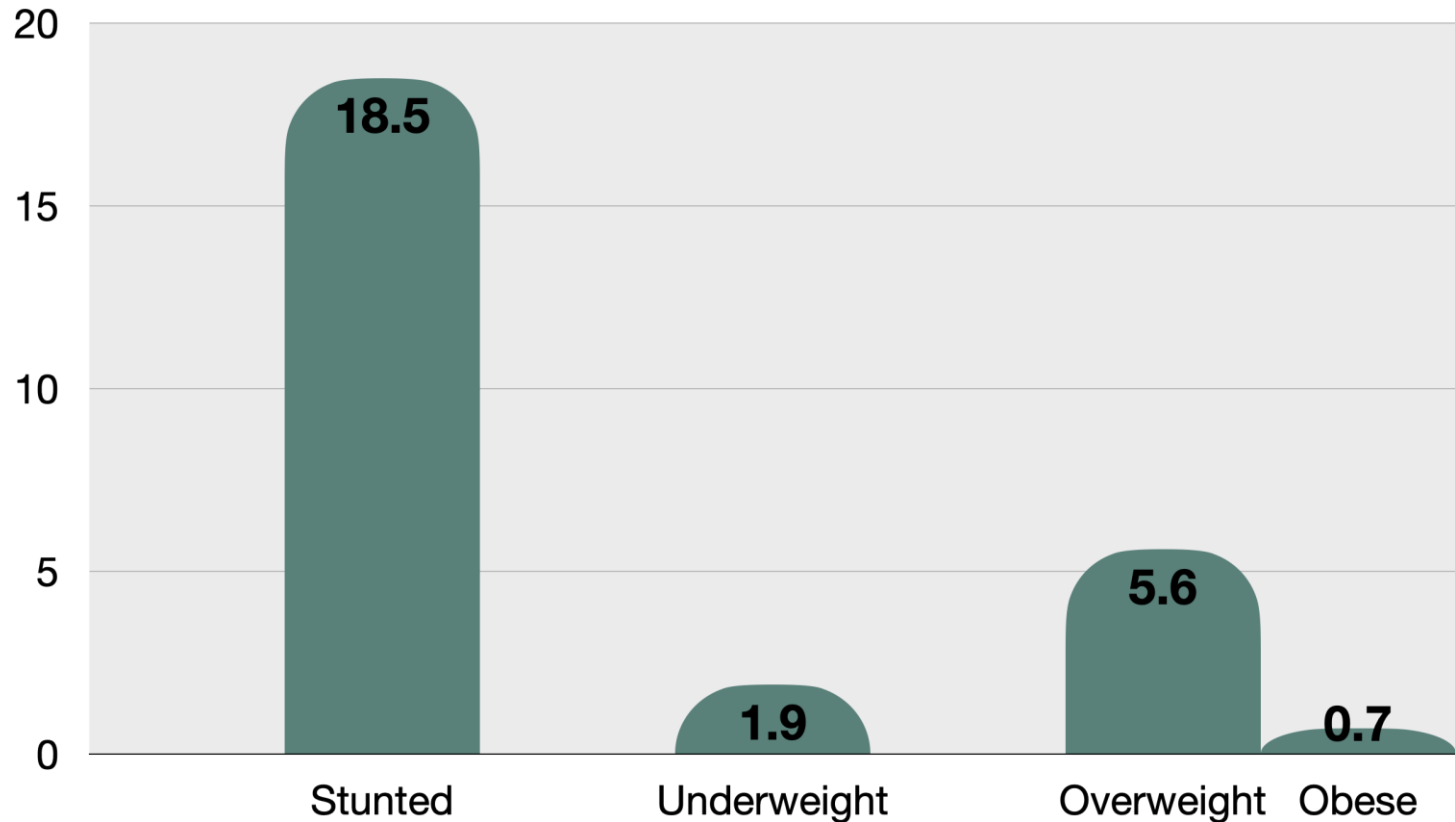
¹ Height for age z-score

² BMI for age z-score

Formative School Health and Nutrition Assessment



Improving Maternal and Adolescent Nutrition (IMAN) in Mbeya region.





Ongoing Studies

Adolescent Nutrition and Health Formative School – Health Assessment in Tanga.

- Longitudinal data on adolescent health risks, behaviors and outcomes is critical to track progress over time and inform interventions and policies.
- Digital platforms will set the stage for future remote studies and/or interventions at relatively lower costs hence reaching more adolescents.



Adolescent Nutrition and Health Formative School – Health Assessment in Tanga.



- 3 rounds of cross-sectional surveys.
- The 1st and 3rd rounds will employ mixed methods approach.
- The 2nd round will use a pilot digital platform for data collection.

Scaling-up high-impact micronutrient supplementation interventions to improve adolescents' nutrition and health in Zanzibar

- What is the optimal supplement to be provided to adolescents (iron/folic acid alone or adding other essential nutrients)?
- Multiple micronutrient deficiencies co-exist, and additional benefits are possible with the provision of MMS.
- WHO guidelines on adolescent health call for countries with high prevalence of multiple nutritional deficiencies to consider the benefits of using MMS that include IFA.



The Meals, Education, and Gardens for In-School Adolescents (MEGA) Project

- To implement and evaluate a comprehensive, school-based nutrition intervention package among secondary schools in Chamwino, Dodoma.
- Cluster randomized design and mixed methods evaluation.
- The intervention package includes:
 - School gardens
 - School meal programs
 - Agriculture education
 - Nutrition education
 - Water, sanitation, and hygiene (WASH) education
 - Community workshops on gardening and nutrition.

The Meals, Education, and Gardens for In-School Adolescents (MEGA) Project

- Findings from this study will inform the scale-up of future school and community-based interventions.



Conclusion

- Adolescents are facing the double burden of under and overnutrition.
- Interventions are urgently needed to prevent associated diseases in adulthood.
- Exploration of approaches for improving adolescent health:
 - Detailed assessments of the school food environments
 - Tracking overall diet quality of in-school adolescents
 - Provision of nutrition education
 - Promotion of school gardens and supplementation interventions

