



Cultivating **AWESOME** school children: The NGTS initiative in Malaysia

Jul 31, 2024





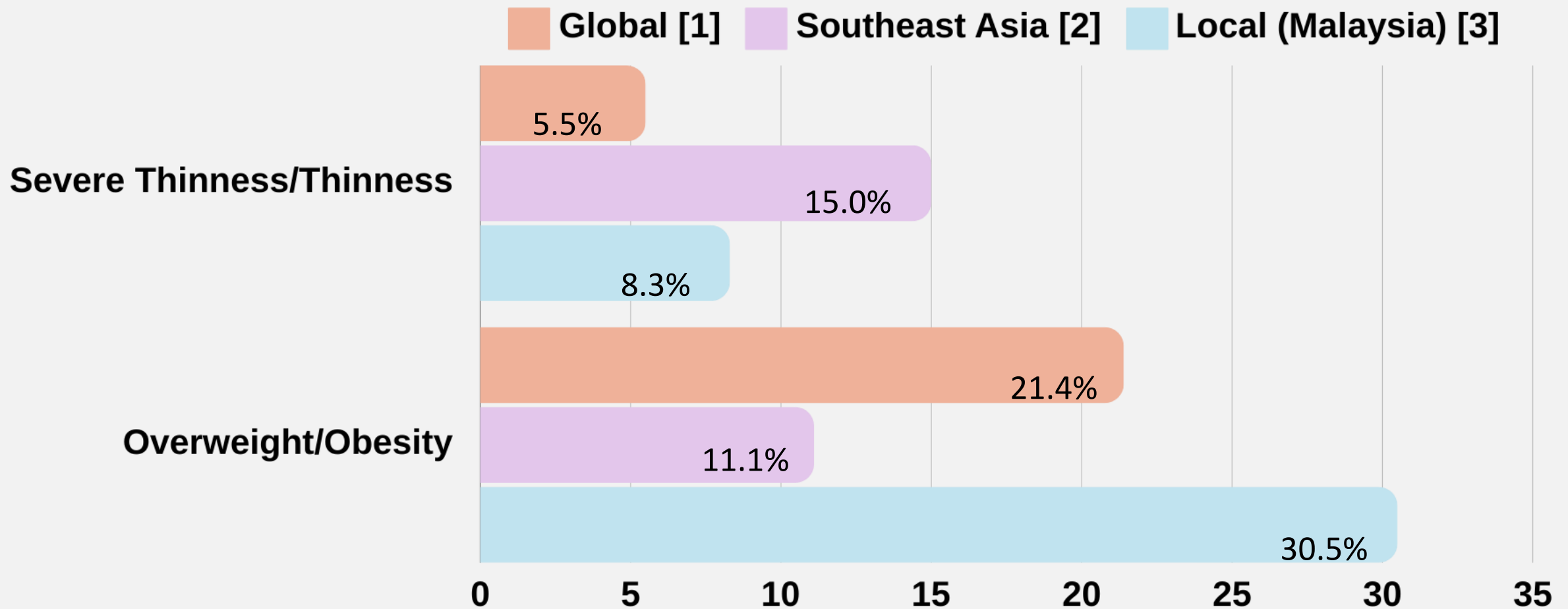
Developing **AWESOME** school children and adolescents
(**A**ctive, **W**ell-nourished, **S**mart Of **M**E)



Outline

- **Background**
- **Overview of NGTS program**
- **NGTS at REAL School Malaysia**

Prevalence of Malnutrition among Adolescents



Background

- Optimal nutrition throughout lifecycle includes ensuring good nutritional status by promoting good nutritional practices among school children and adolescents
 - School-age children: **Building healthier habit from early age (for health and learning ability)**
 - Adolescents: **second growth spurt and puberty, for learning ability, preparation for entering adulthood** (productivity and reproductive function)
- General nutrition issues among school children and adolescents in SEA: anemia, skipping breakfast, low intake of fruits and vegetables, high intake of sugary/salty/fried foods

Why School-based?

High school participation rate
(>90% for primary level; 80-90% for secondary level, in general)

The time that students spend at school and regular contact of teachers with students

Building good character and life skill (including skill in nutrition) is part of key learning objectives in school

Students and parents look up to teachers, who can take on roles as educators, role models, and coaches

School health program as a delivery platform for nutrition education

Study findings: successful school-based obesity prevention program, physical activity behaviours, nutrition knowledge and anemia prevention behaviours

NGTS Program Goal

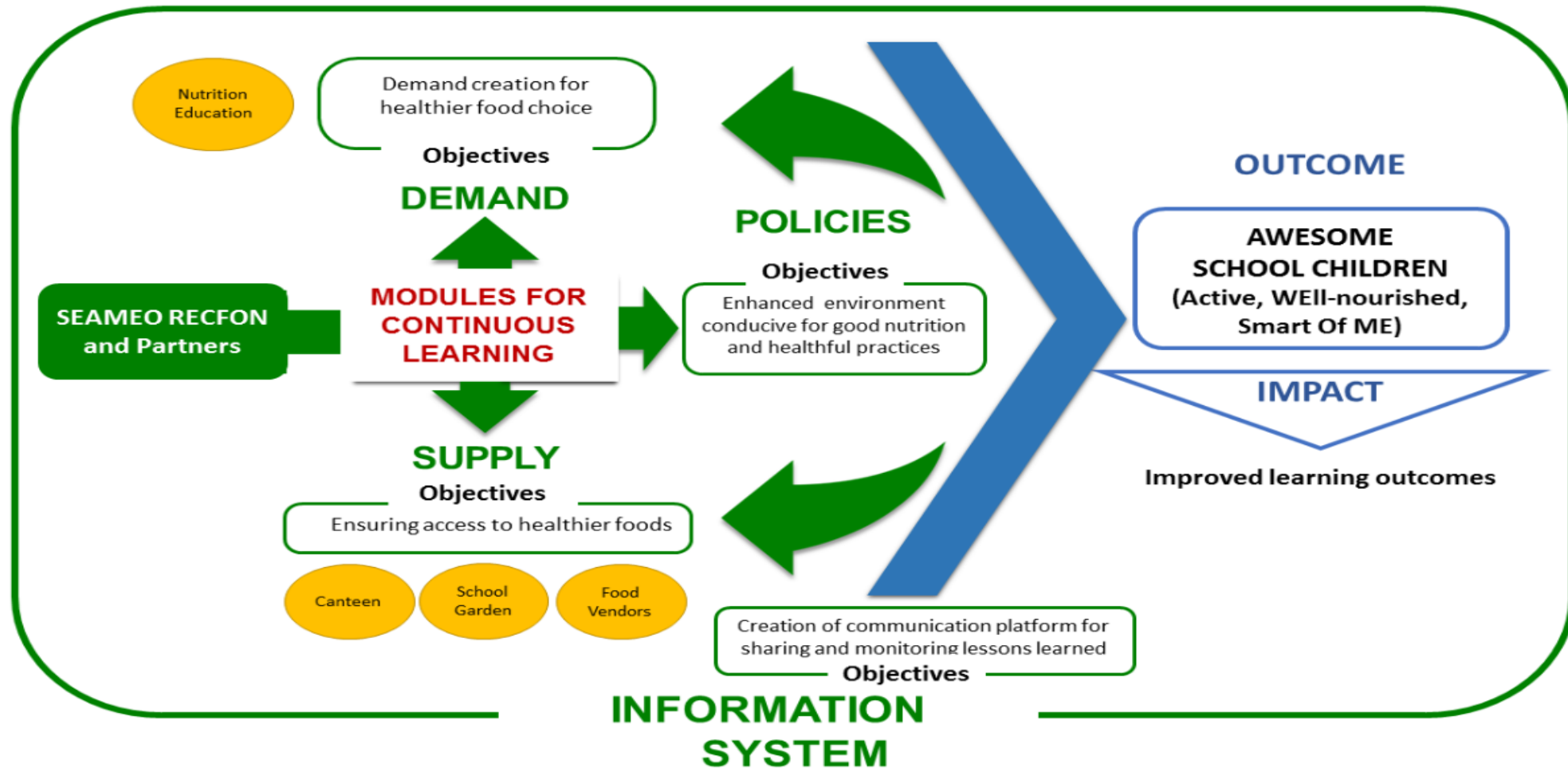
A school-based multisectoral program emphasizing the **role of schools as effective media for character building education** that is centered toward good nutritional practices both in school and at home

Goal: AWESOME students (Active, Well nourished, Smart Of ME)

Target groups: Primary schools, Secondary schools, Vocational schools



DeSPiS (Demand-Supply-Policy-Information System)



DeSPiS (Demand-Supply-Policy-Information System)

- School community to create demand towards healthier lifestyle
- Through disseminating information, building skill activities

1. DEMAND

- Ensuring healthier food supply at school and home by providing healthier food environment

2. SUPPLY

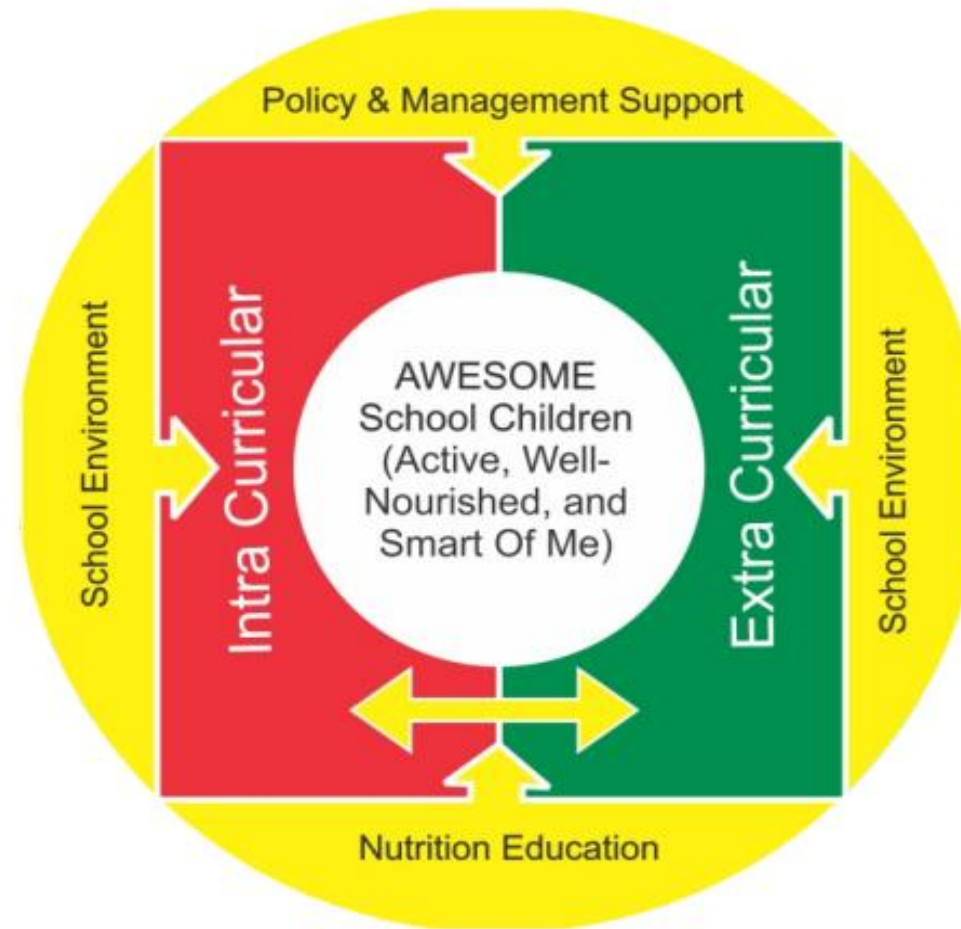
- Supporting the adoption of healthier habits through relevant school policy (and beyond school)

3. POLICIES

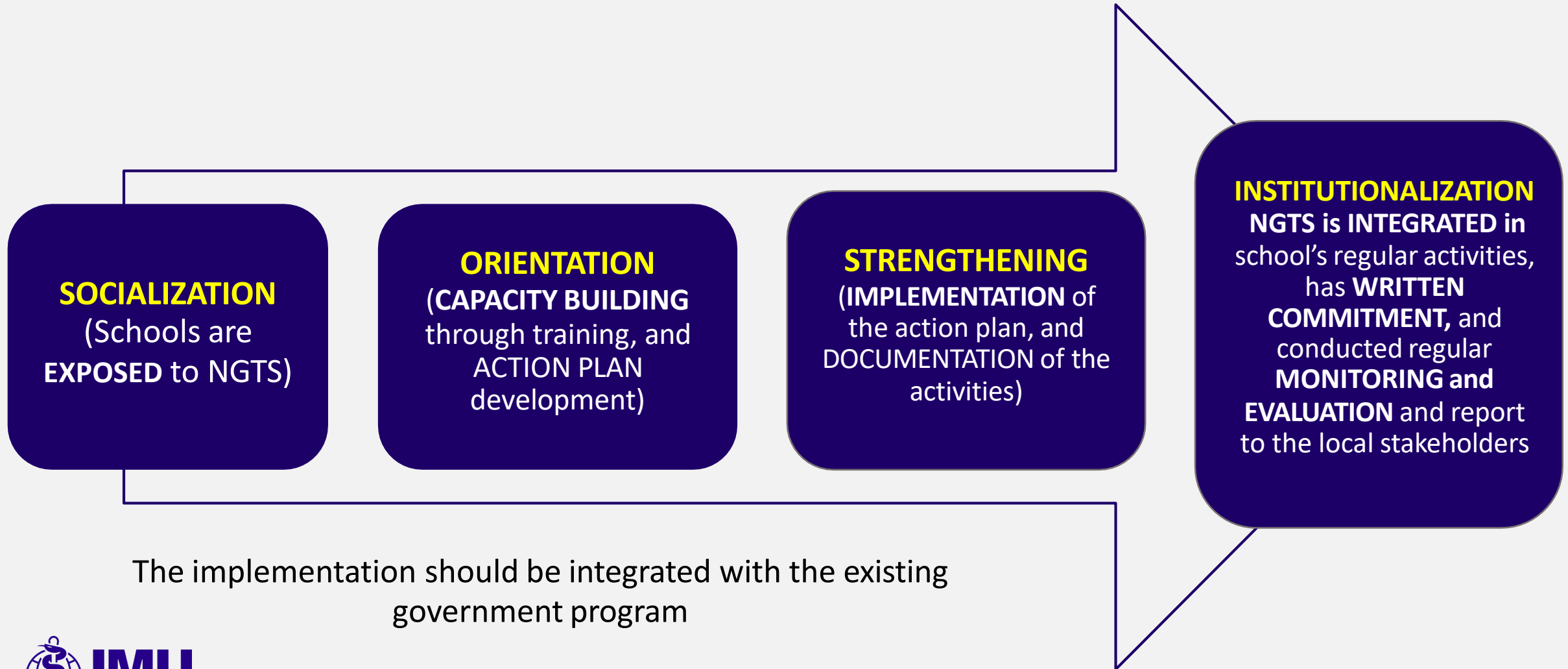
- Documenting NGTS implementation for evaluation and sharing best practices

4. INFORMATION SYSTEM

NGTS Program Framework



Implementation Stages of the NGTS Programs



NGTS Journey So Far

Conceptualization & approval of RECFON Governing Board

2016

- Approval of SEAMEO Council for scaling up in SEA countries
- Establishment of SEA SBNP Working Group

2017

Piloting in Indonesia in 7 locations (83 schools)

2019

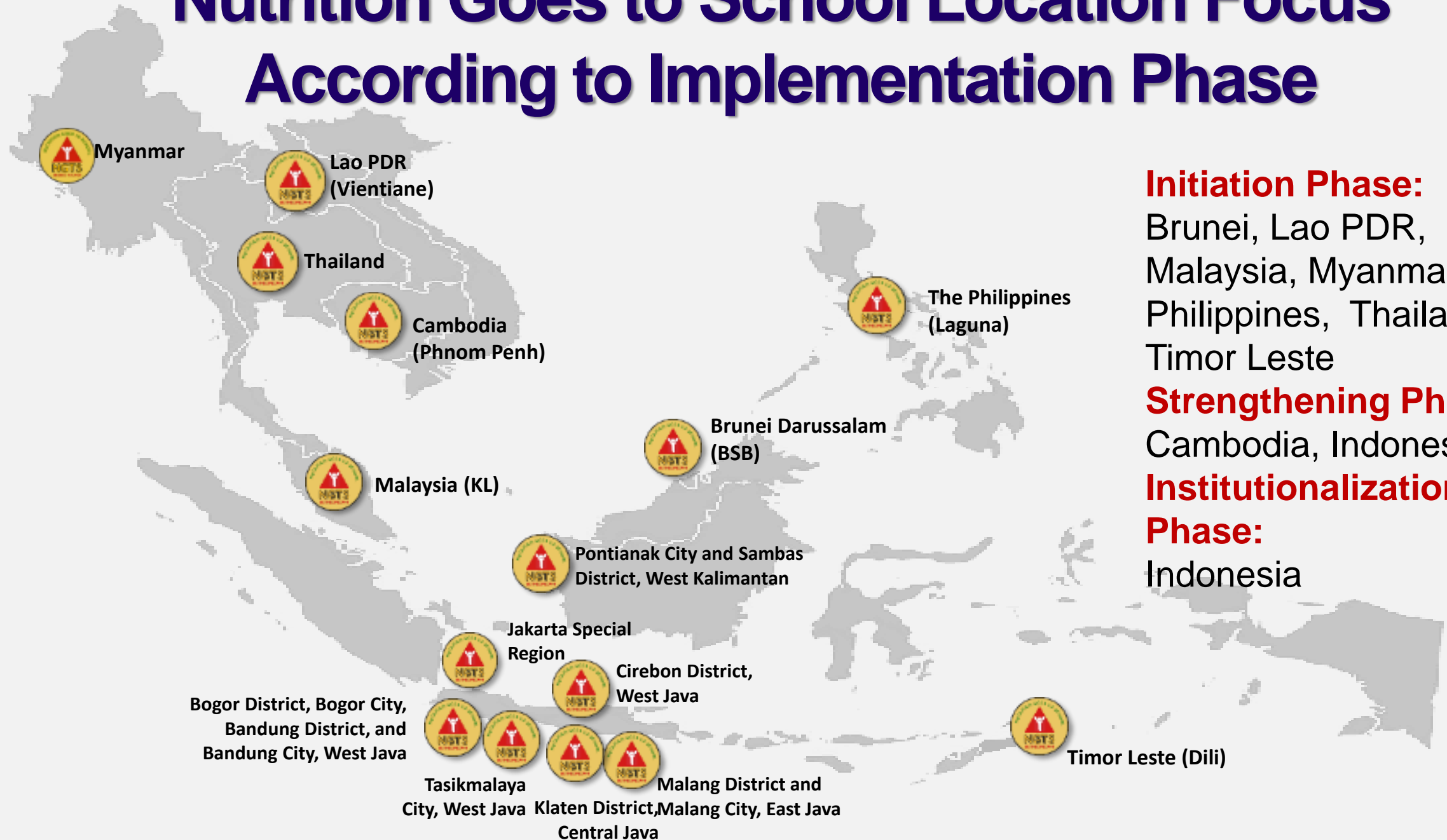
- Scaling up in Cambodia (4 vocational schools)
- Documentation of Best Practices in Indonesia

2022

- Institutionalization in pilot schools in Indonesia
- Scaling up in Malaysia and Lao PDR

2023

Nutrition Goes to School Location Focus According to Implementation Phase



Initiation Phase:

Brunei, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Timor Leste

Strengthening Phase:

Cambodia, Indonesia

Institutionalization Phase:

Phase:

Indonesia



Steps of NGTS Program in REAL



- Private School

- Distribute school readiness e-form to selected schools
- Analyze school readiness

- Proposed invitee: MOE, MOH, district education, participated schools, other related resource persons, IMU & RECFON
- Present school readiness form
- Present overview of NGTS program
- Agree on NGTS training design

- Give capacity building on adolescent nutrition and health, and NGTS program for school principals and teachers
- Develop action plan for NGTS implementation

- School implement the action plan
- IMU and RECFON give technical assistant and monitor NGTS implementation at schools

Situational Analysis/ Needs Assessment

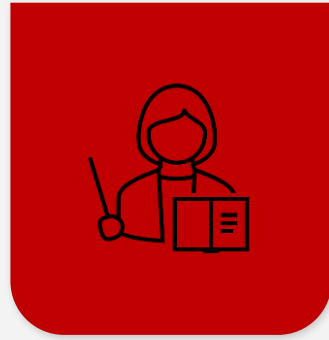
School Readiness Assessment

- Consists of 27 questions
- The assessments include:
 - Availability of functional 'school health program/activities at school and school written commitment
 - Availability of the team, learning materials, trained teachers
 - Availability of school canteen, garden, water clean supply, internet connection
 - Availability of relevant extracurricular, school's social media



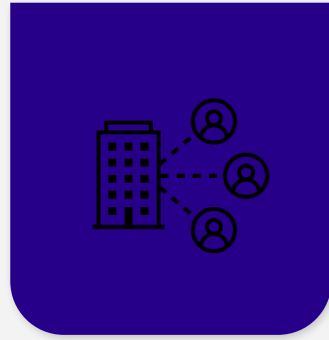
Nutrition
problem

No



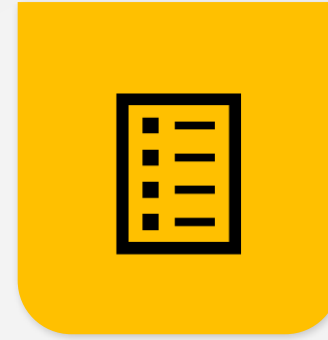
Teacher
Professional
Development

Opportunities for
training beyond
expertise needed



Student
Engagement

Increase student
involvement in
canteen activities



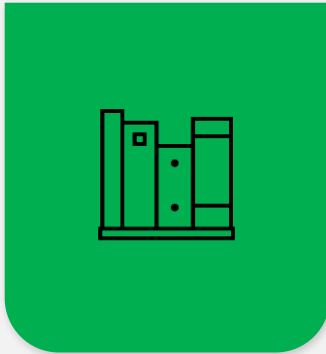
Formal
Commitment

Establish a written
commitment to
health and
nutrition programs



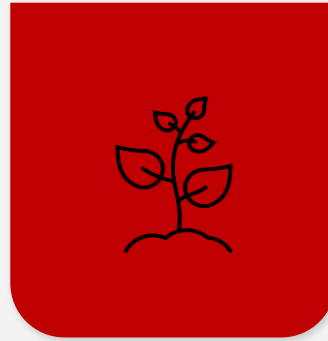
Monitoring and
Evaluation

Implement a
monitoring and
evaluation system
for programs



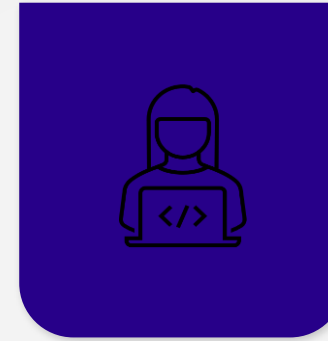
Health Education Materials

The school can further improve access and utilization by students



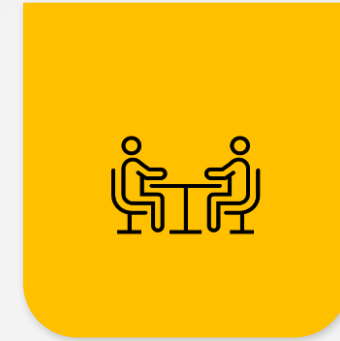
School Garden

Expanding student participation in the school garden



Student Engagement in IT

Encouraging students to use these resources for educational purposes could further enhance their digital literacy



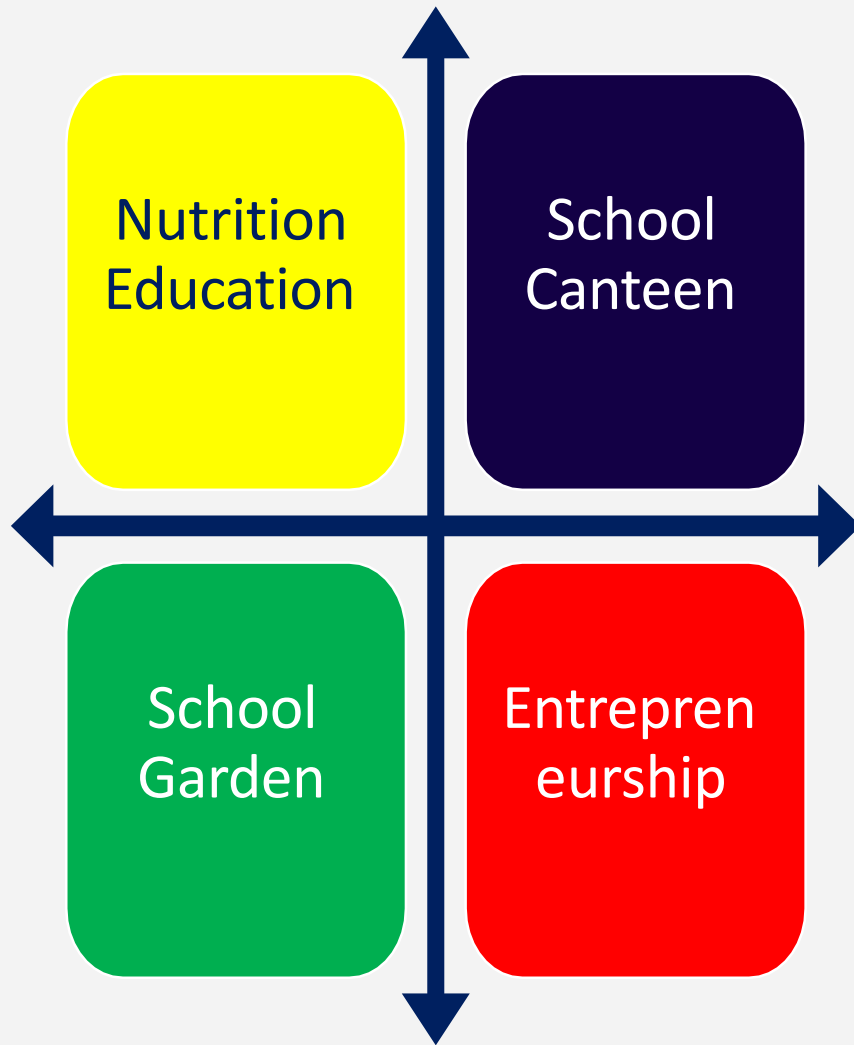
Community Engagement

Building stronger partnerships

NGTS Components:

Nutrition Education

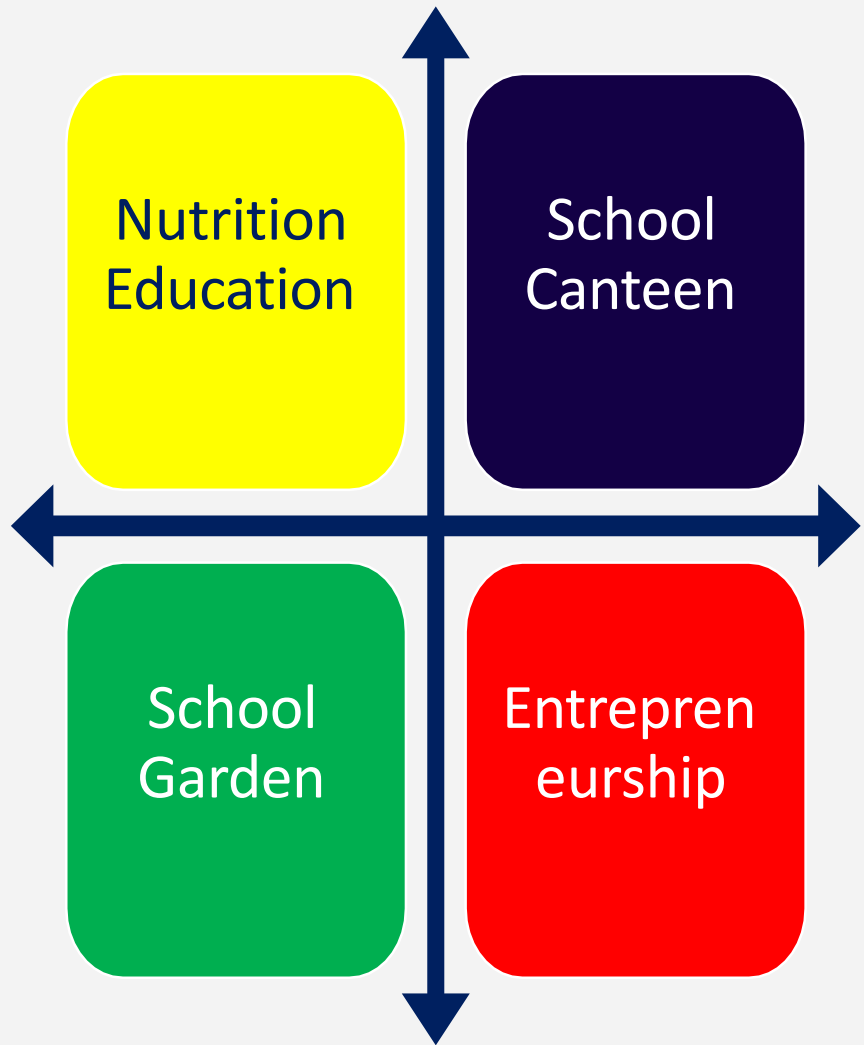
- Include food consumption, personal hygiene, physical activity
- Include dissemination of information and translation of the knowledge into practices



NGTS Components:

School Canteen

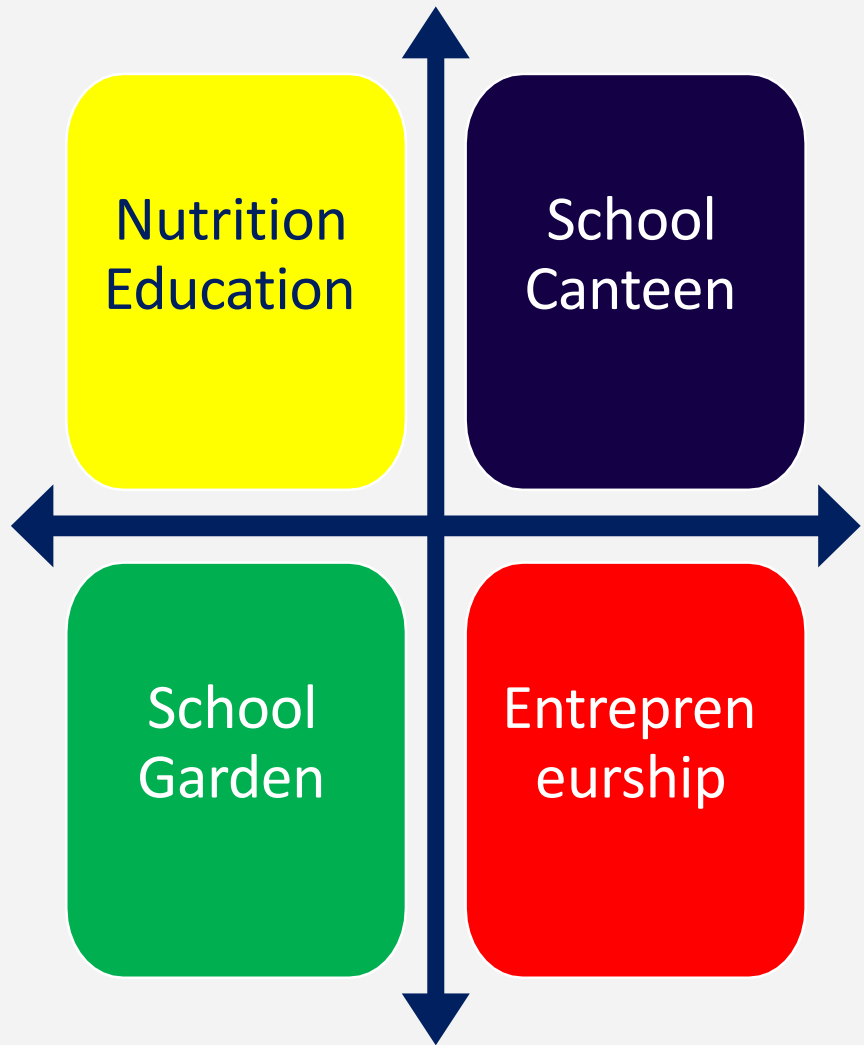
- As one of food suppliers and media for nutrition education
- As media for entrepreneurship building



NGTS Components:

School Garden

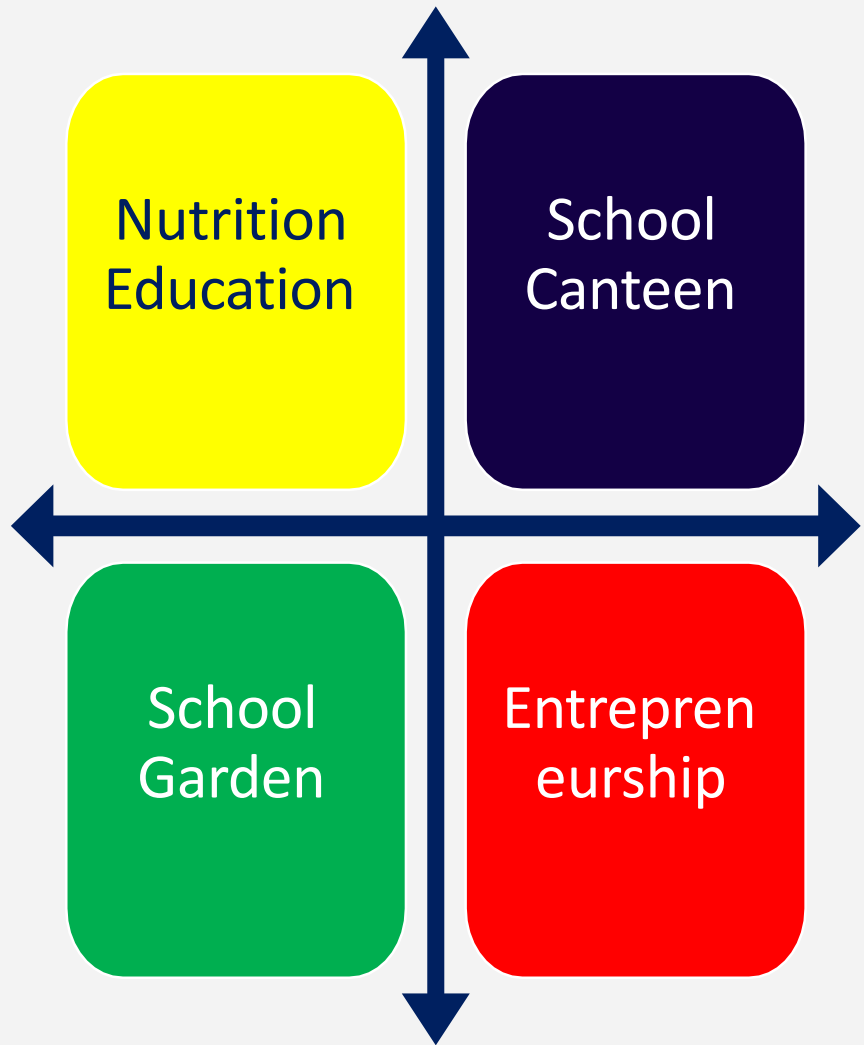
- Planting nutrient-rich food plants in school garden
- Use of harvest for entrepreneurship activities, for consumption
- School garden as media for nutrition education



NGTS Components:

Entrepreneurship

- Creating entrepreneurship activities related with nutrition, such as in-charge in supplying food in school canteen



NGTS TRAINING AT REAL SCHOOL

01



Mode of delivery

Hybrid

02



Mode of session

Lecture, Hand-on activities and assignment

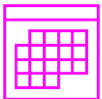
03



Total hours

30 hours

04



Date

Nov – Dec 2023

05



Language

English

06

Partipicants

8 teachers, 1 canteen owner and 1 adminsitratve staff

Goal & Objectives of the NGTS Training

Goal

To mainstream food and nutrition education in classroom and extra-curricular activities toward healthy living among school children and adolescents

Objectives:

Upon the completion of the training, the participants will be able to:

1. Understand all topics on the NGTS components (based on key messages per topic)
2. Apply the procedures for anthropometric measurement and nutritional status assessments for their students
3. Conduct nutrition education through microteaching as an orientation for the actual practice in their respective schools
4. Use the proposed action plans for the implementation of NGTS program in their respective school

Curriculum Structure

No	Topic	Training Hour		Total Training Hour
		Synchronous	Asynchronous	
A	Basic Training Topic			
1	Adolescent Nutrition (Incl. Anthropometric assessment and adolescent personal hygiene)	2	4	6
	<i>Subtotal</i>	2	4	6
B	Core Training Topic			
1	National Nutrition Guidelines	2	0	2
2	Healthy School Canteen	1	1	2
3	School Garden for Nutrition Literacy and Nutrition Entrepreneurship	1	0	1
4	Nutrition Education, Lesson Plan Development, and Microteaching	5	3	8
	<i>Subtotal</i>	9	4	13
C	Supporting Training Topic			
1	School Based Management (SBM) of Health and Nutrition Program	2	0	2
2	Overview and Management of the NGTS program	3	5	8
3	Building Learning Commitment (Incl. Overview of training)	1	0	1
	<i>Subtotal</i>	6	5	11
	Total	17	13	30

Nutritional Assessment (n=172)

Mean Age: 16 ± 1.49 years old

Ethnicity

Chinese – 136 (53.3%)

Gender

Male – 91 (52.9%)

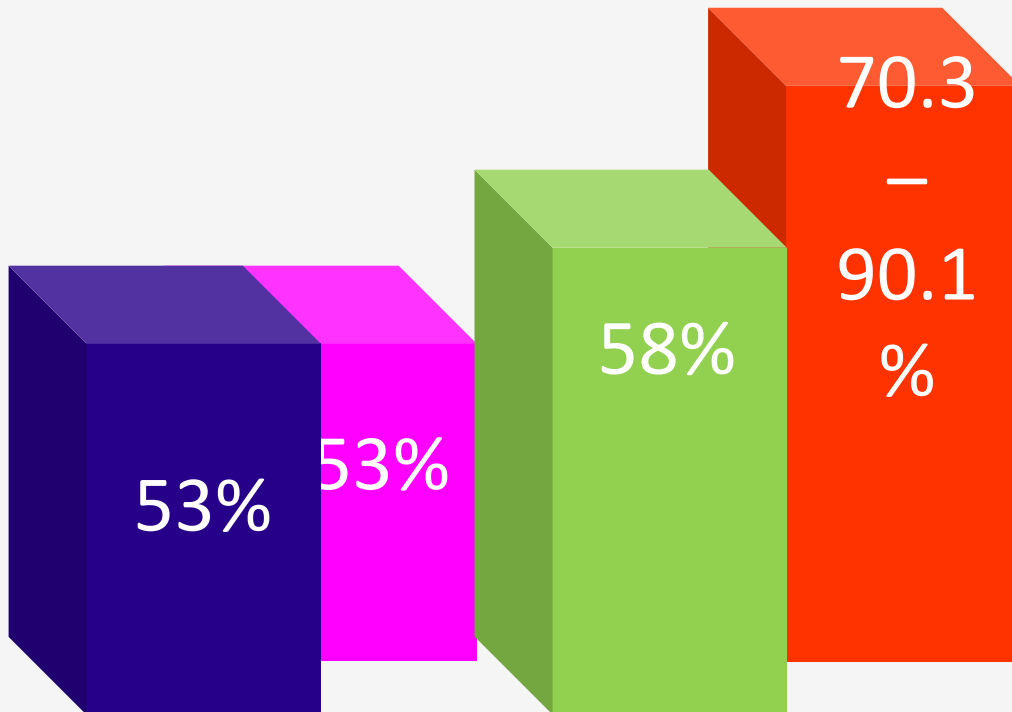
Parent's education level

Tertiary and above – 99 (57.6%)

Parent's Employment status

Mother – Employed 121 (70.3%)

Father – Employed 155 (90.1%)

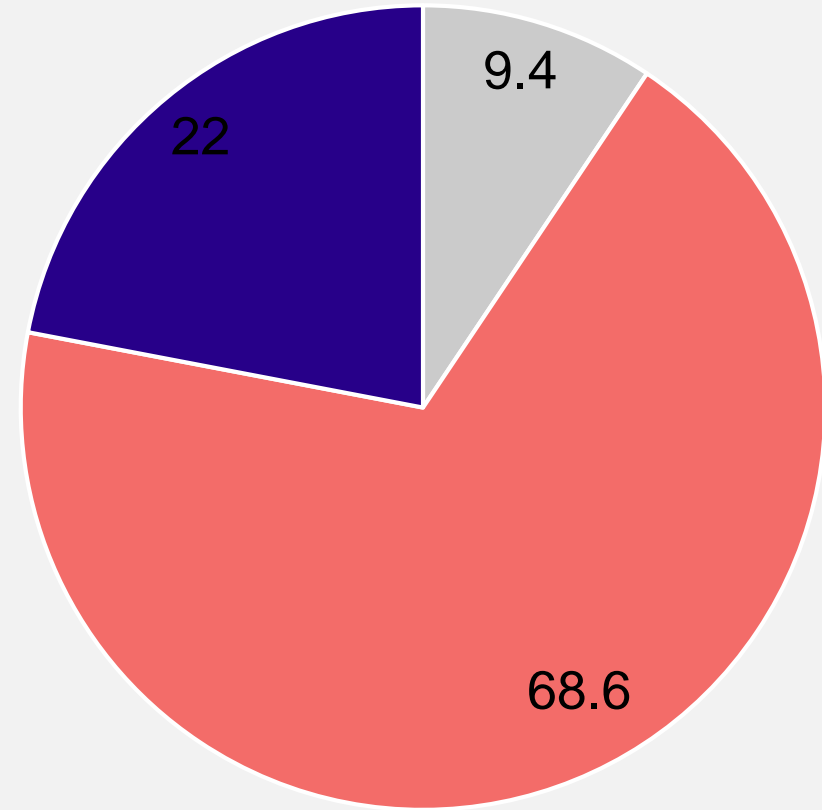


BMI-for-age z-score (n= 172)

BAZ (mean \pm SD): -0.11 ± 1.38

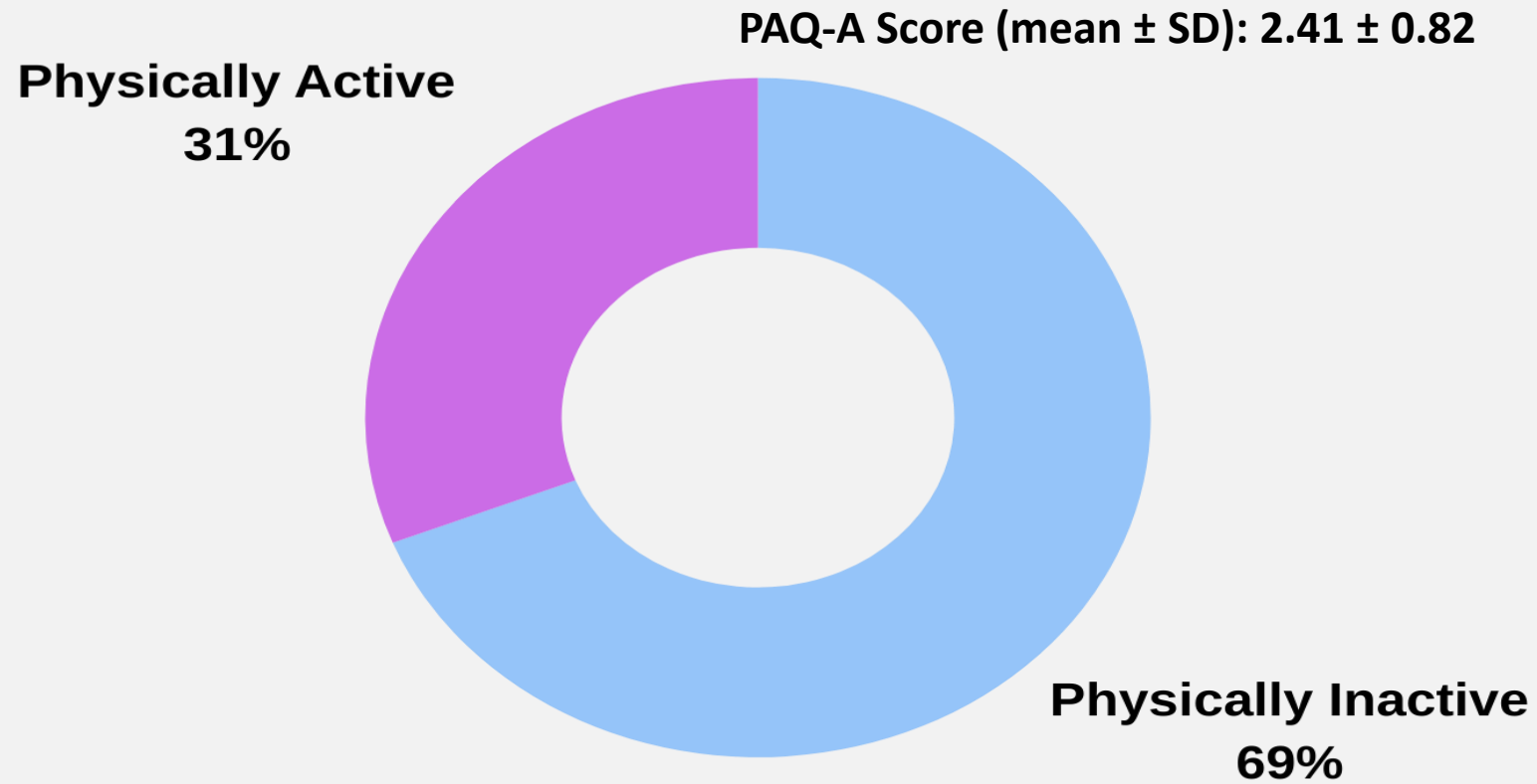
National Health and Morbidity Survey
(NHMS) 2022: Adolescent Health Survey
(AHS) 2022 data [3]:

- Thinness: 8.3%
- Overweight/Obesity: 30.5%



■ Thinness ■ Normal ■ Overweight/Obesity

Physical Activity (n=172)

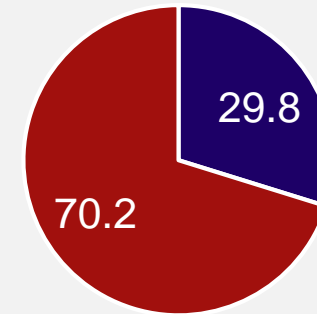


Sleep Duration (n= 172)

Sleep Duration:

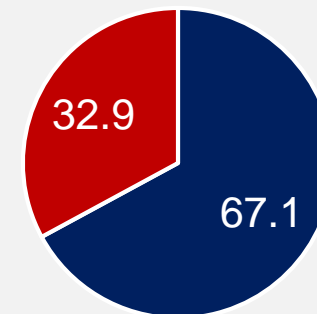
- Weekday: 6.66 ± 1.89 hours
- Weekend: 8.16 ± 2.16 hours

Weekday



■ Good ■ Poor

Weekend



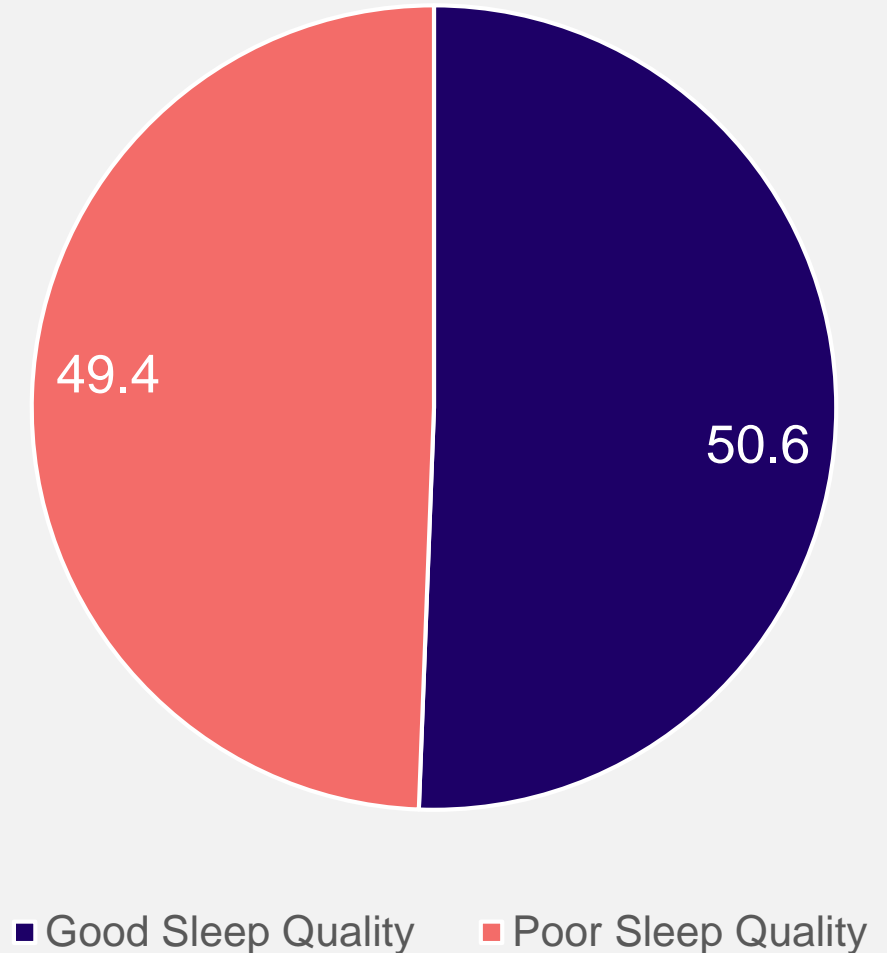
■ Good ■ Poor

Sleep Quality (n=172)

CASQ Score (mean \pm SD): 41.88 \pm 9.91

Gan, et al. among Malaysian adolescents
in 2019 data [9]:

- Poor Sleep Quality: 35.9%
- Good Sleep Quality: 64.1%





Thank you.

TEAM

Yong Heng Yaw
Judhiastuty Februhartanty
Jesus C Fernandez
Chong Pei Nee
Luh Ade Ari Wiradnyani
Yang Wai Yew
Serene Tung En Hui
NGTS Group

IMU Education Sdn Bhd
199201005893 (237397-W)

Formerly known as International Medical University.

No. 126, Jalan Jalil Perkasa 19
Bukit Jalil, 57000
Kuala Lumpur, Malaysia
603 8656 7228
imu.edu.my

Insert footnotes here (if any).



Thank you.

For more information please contact:

Dr Yong Heng Yaw

Registered Nutritionist (MAHPC(NUTR)00471)

Nutrition Lecturer

Division of Nutrition & Dietetics

School of Health Sciences

IMU University

Email: hengyawyong@imu.edu.my

IMU Education Sdn Bhd

199201005893 (237397-W)

No. 126, Jalan Jalil Perkasa 19

Bukit Jalil, 57000

Kuala Lumpur, Malaysia

603 8656 7228

imu.edu.my