

Assessment of daily school lunch and a weekly average of the macronutrients and energy intake and evaluate the key drivers of the local school meals cooked in local schools among teachers and cooks in two provinces, Lao PDR 2024

Somphone Soukhavong¹, Latsamy Siengsounthone¹, Kelley Khamphouxay², Panrawee Praditsorn³

¹Lao Tropical and Public Health Institute, Ministry of Health, Lao PDR, ²Catholic Relief Services, Lao PDR, ³Mahidol University, Thailand

Background:

Since 2002, the Ministry of Education and Sports through the Inclusive Education Center of the Department of Pre-primary and Primary Education and WFP has been implementing School Feeding in 30 districts in the 6 provinces

The School Meal Program is anchored in the belief that good nutrition leads to good health, which improves resistance to diseases and promotes good mental and physical development and children learn better and go to school regularly

Lack of data for the macronutrients and energy intake to access.

Objective:

To assess daily school lunch and a weekly average of the macronutrients and energy intake and evaluate the key drivers of the local school meals cooked in local schools among teachers and cooks in two provinces, Lao PDR 2024

Methods:

- A cross-sectional study was conducted in two Provinces (KM and SVK), Lao PDR.
- Eight primary schools were included in the study.
- Data were collected using face-to-face interviews in three groups: Students (Grades 1 to grade 5); Directors/Teachers and All Canteen providers/staff in each school. By trained data collectors to obtain school meal measurements.
- Data will be coded and entered into Epidata software version 3.1; IMMUCAL, Excel and will be analyzed in STATA software Version 17.0.
- This study was approved by the IRB from NECHR No. 058

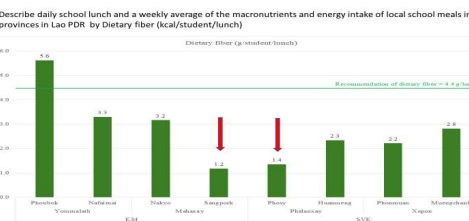
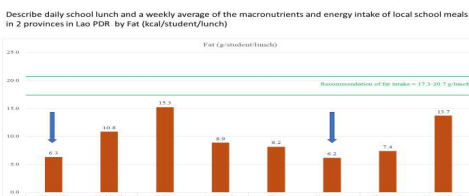
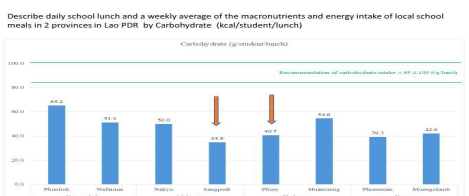
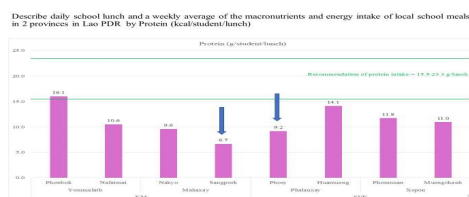
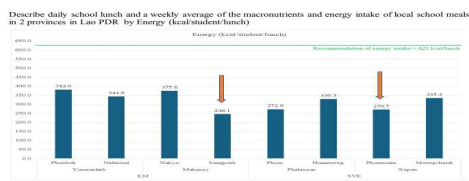
Data training and Pre-test 2-4 May 2024



Keywords: macronutrients, energy intake, primary school lunch.

Preliminary Results:

Describe daily school lunch and a weekly average of the macronutrients and energy intake of local school meals in 2 provinces in Lao PDR
Overall, in two Provinces, four Districts and eight Schools found that: 574 students (male 47.5% and female 52.5%), 26 menu, 5 food groups and 50 food lists and condiments



Overall local school meals are acceptable for students by scoring:

Province	District	School	Overall of local school meals are acceptable (most popular for students by scoring like the appearance of school meals)		Taste of school meals	
			n (%)	n (%)	n (%)	n (%)
KM	Yommalath	Phonboi (n=81)	7 (8.6)	74 (91.4)	6 (7.4)	75 (92.6)
		Nomsalath (n=53)	3 (5.7)	50 (94.3)	2 (3.8)	51 (96.2)
		Nafaimai (n=53)	3 (5.7)	50 (94.3)	2 (3.8)	51 (96.2)
KM	Mahasay	Nakiyo (n=82)	4 (4.9)	78 (95.1)	3 (3.7)	79 (96.3)
		Sangsork (n=58)	2 (3.4)	56 (96.6)	3 (5.2)	55 (94.8)
		Phalanyay (n=77)	6 (7.8)	71 (92.2)	5 (6.5)	72 (93.5)
SVK	Phalanyay	Phomay (n=42)	6 (14.3)	36 (85.7)	6 (14.3)	36 (85.7)
		Phomay (n=95)	11 (11.6)	84 (88.4)	10 (10.5)	85 (89.5)
		Mueangchanh (n=86)	6 (7.0)	80 (93.0)	5 (5.8)	81 (94.2)

In-depth Interview (IDI) among teachers and cooks

The number of participants was 38 persons. Education lowest level was no schooling and the highest-level bachelor's degree.

Age: 24-57 years old. Work experience: 1-22 years old. The school lunch training: 0-5 time

The key drivers of the school meal cooked in local schools among teachers and cooks:

- 1) Human resources and skills: Lack of staff, Cooking Skills, and the level of nutritional knowledge among school staff (teachers, cooks, administrators) directly influence the quality of school meals
- 2) The time available for meal preparation, recipes, and ingredients
- 3) Limited Food Menu Options
- 4) Cooking Facilities and WASH
- 5) Materials and Support
- 6) Storage Options
- 7) Financial Constraints
- 8) Parental and Community Involvement
- 9) Cultural Relevance and Traditional Dishes and Food Environment

Recommendations by directors, teachers, cooks:

Implement training programs for cooks and school staff focusing on basic cooking skills, food safety, and nutrition guidelines for school meals,

Workshops for the cooks to help them learn how to make the most of limited ingredients. Simple recipes that are nutritious and appealing to children could be developed with the help of a nutritionist,

Integrate nutritional education into the school curriculum/campaign and provide teachers/cook/parents and engage them in learning about school meals and healthy eating. Prioritize investments in building or upgrading school kitchens and WASH facilities,

Advocate for increased government funding and development partner

Implement cost-effective meal planning strategies that maximize nutritional value using seasonal produce by the community's product

Involve parents and community members in the menu planning process to ensure that meals reflect cultural preferences and gain community support,

Local partner with local farmers or markets to ensure a steady supply of fresh produce that can be delivered daily or multiple times a week, reducing the need for long-term storage,

Improved Storage Solutions: Invest in proper storage facilities, such as refrigerators, freezers, and dry storage areas. In areas without reliable electricity, consider solar-powered refrigeration options. Supporting water availability, increasing the number of plates and materials, and adding more recipes or ingredients

Next step:

- ✓ Continue to full report writing
- ✓ Prepare for manuscript
- ✓ Sharing the results in Lao PDR and National Conference

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