Why nutritious school meals are more important than ever: Examples from WFP Analysis and Programming.

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Rome, November 2020

Nutritious School Meals
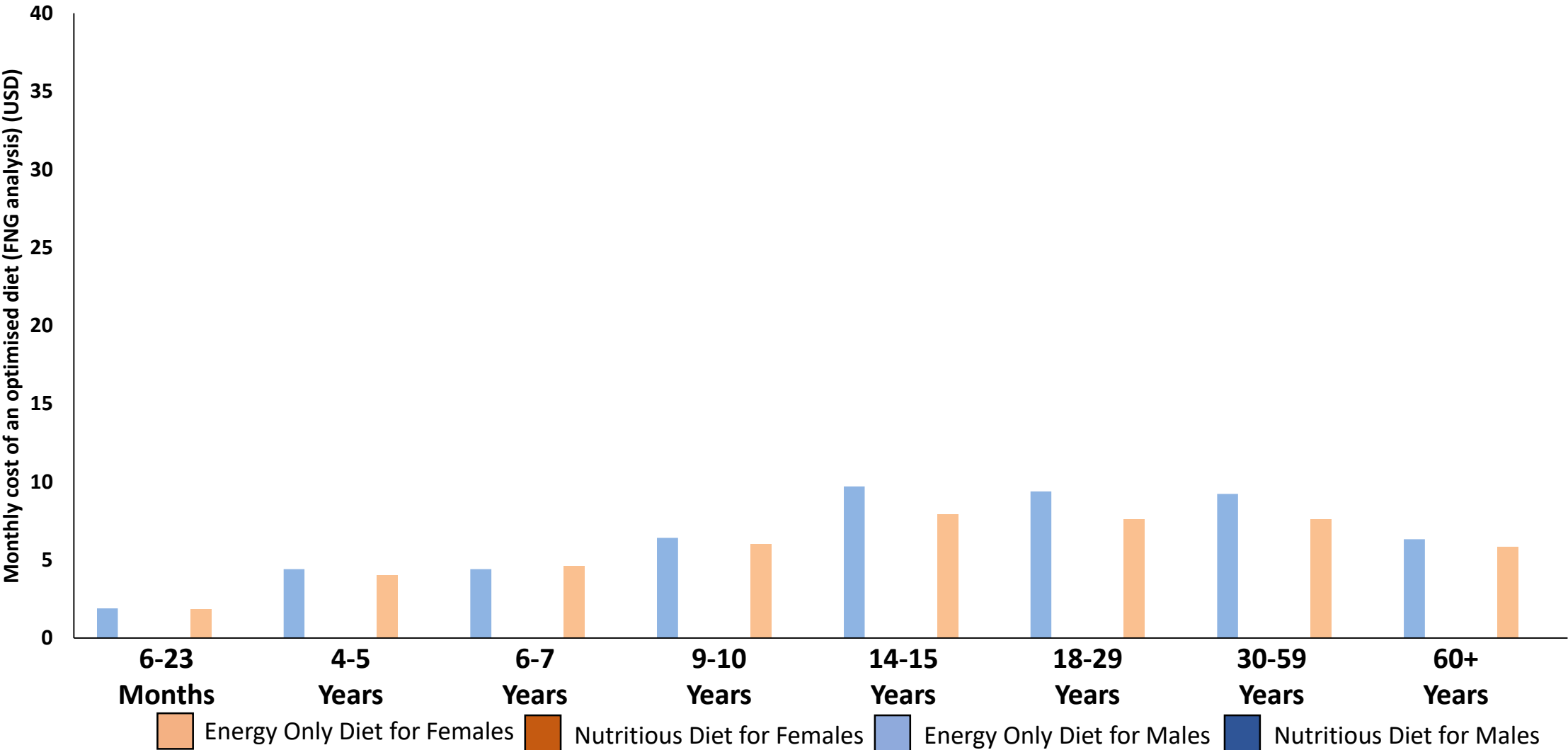# Are more important than ever:

- **Malnutrition** in all its forms is a **global challenge.**

- **Nutritious diets,** protective against malnutrition, **cost five times more** (average) than diets that meet only energy needs, and would be unaffordable for more than 3 billion people, in every region.

- **COVID-19,** as well as other shocks, has compounded **access to nutritious diets,** food insecurity and the **risk of malnutrition.**

SOFI 2020

Whilst there is little change in the cost of energy-only diets, the cost of nutritious diets increases substantially during middle and secondary school years, especially for girls.
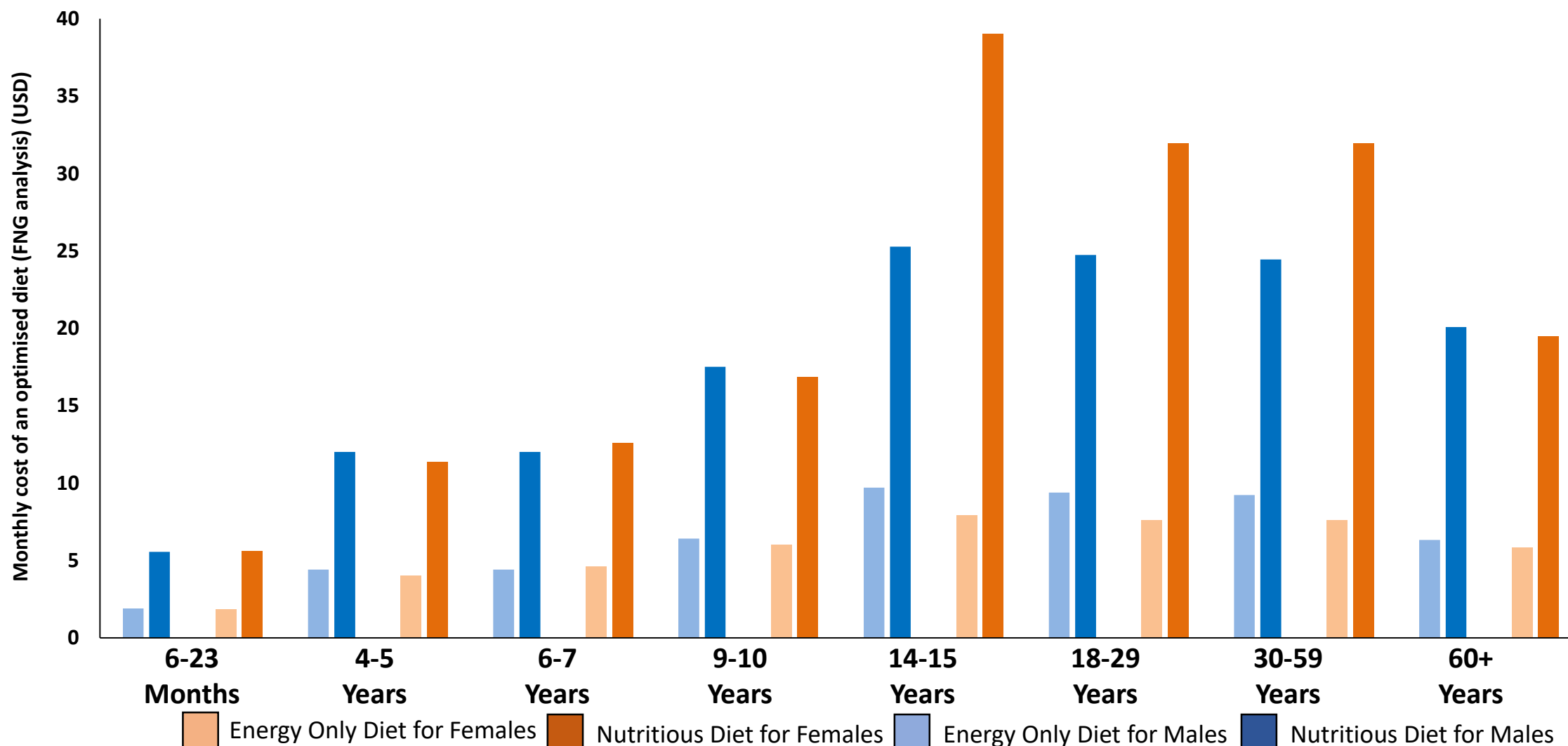
Ethiopia

*Higher nutritious diet costs for female infants represent differences in average body weights. As female infants weigh slightly less (on average) than males, higher nutrient density is required to provide nutritious diets.

FNG 2020

Whilst there is little change in the cost of energy-only diets, the cost of nutritious diets increases substantially during middle and secondary school years, especially for girls.

Ethiopia

Monthly cost of an optimised diet (FNG analysis) (USD)

Legend:
- Energy Only Diet for Females
- Nutritious Diet for Females
- Energy Only Diet for Males
- Nutritious Diet for Males

X-axis categories: 6-23 Months, 4-5 Years, 6-7 Years, 9-10 Years, 14-15 Years, 18-29 Years, 30-59 Years, 60+ Years

*Higher nutritious diet costs for female infants represent differences in average body weights. As female infants weigh slightly less (on average) than males, higher nutrient density is required to provide nutritious diets.

FNG 2020

Multiple nutritional vulnerabilities may be relevant In the design of school meals, especially for adolescents.

Bangladesh

Age and sex-specific BMI cutoffs applied as defined by WHO
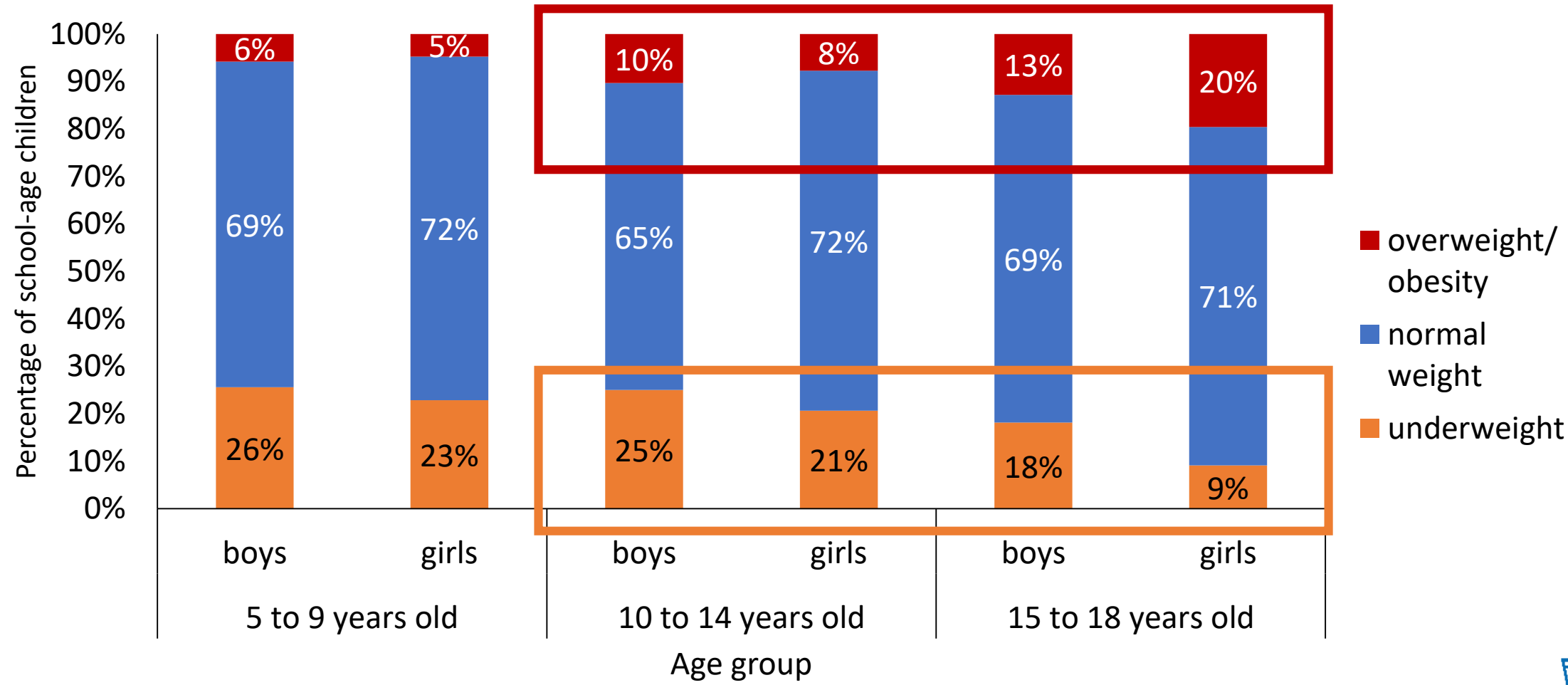
Challenges to making school meals more nutritious:

- School meal budgets
- Food availability and price shocks
- Procurement and Infrastructure
- Capacity
- Sustainability
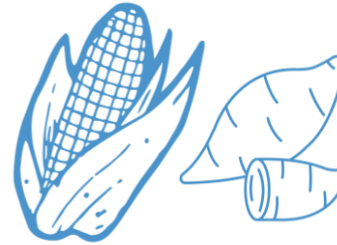- COVID – School closures and Market Access

Options for making school meals more nutritious:

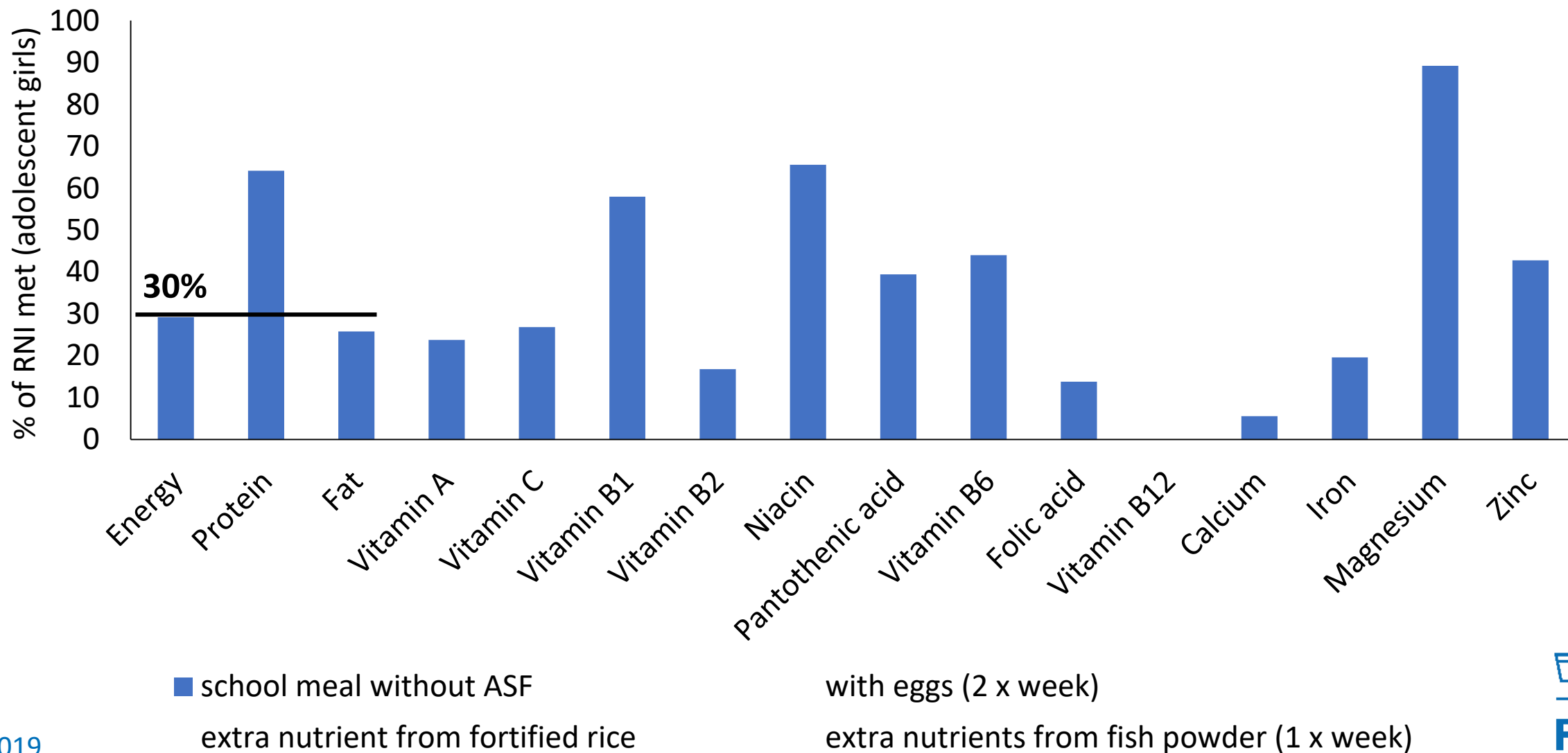- Inclusion of local nutritious foods.

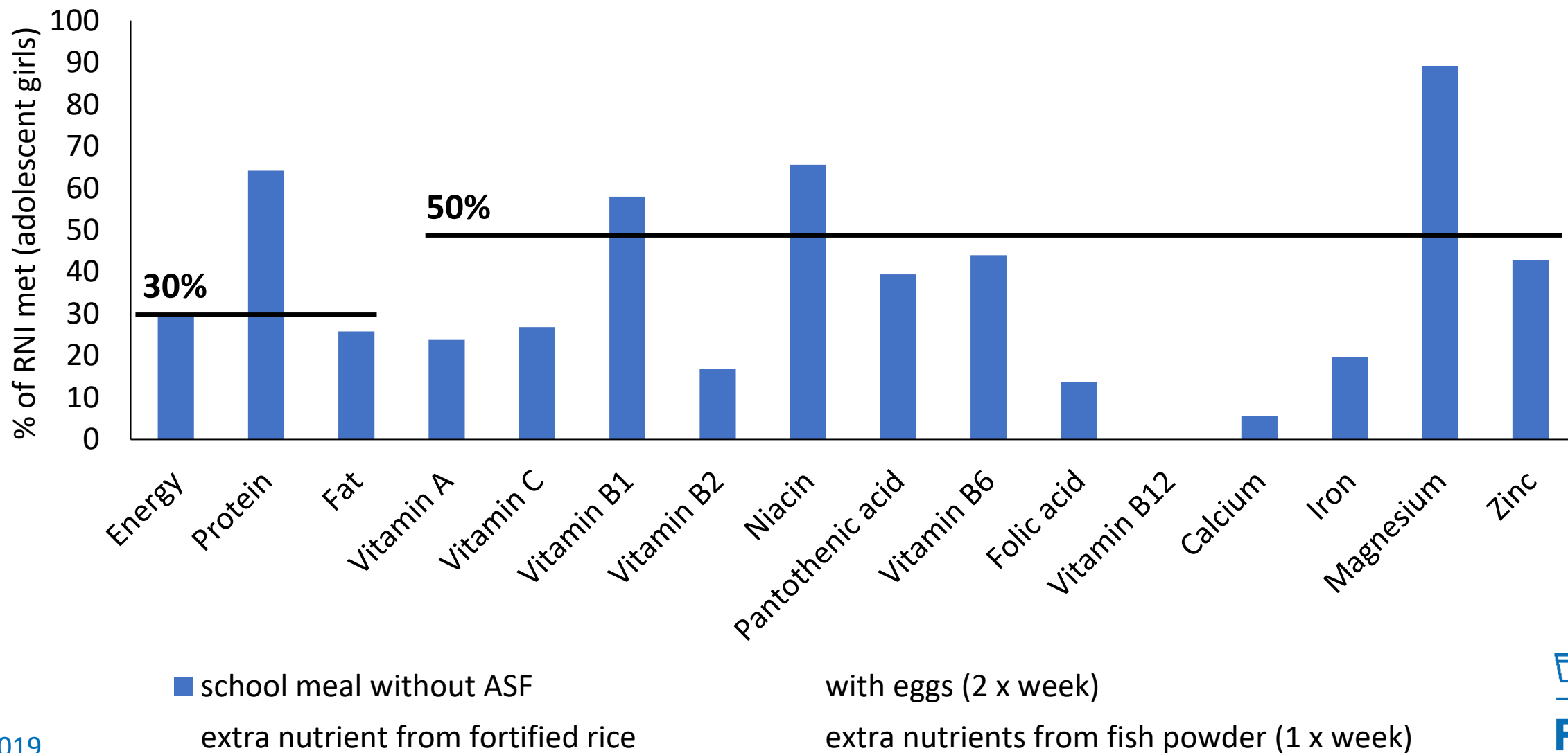- Use of biofortified foods

- Fortified staples.

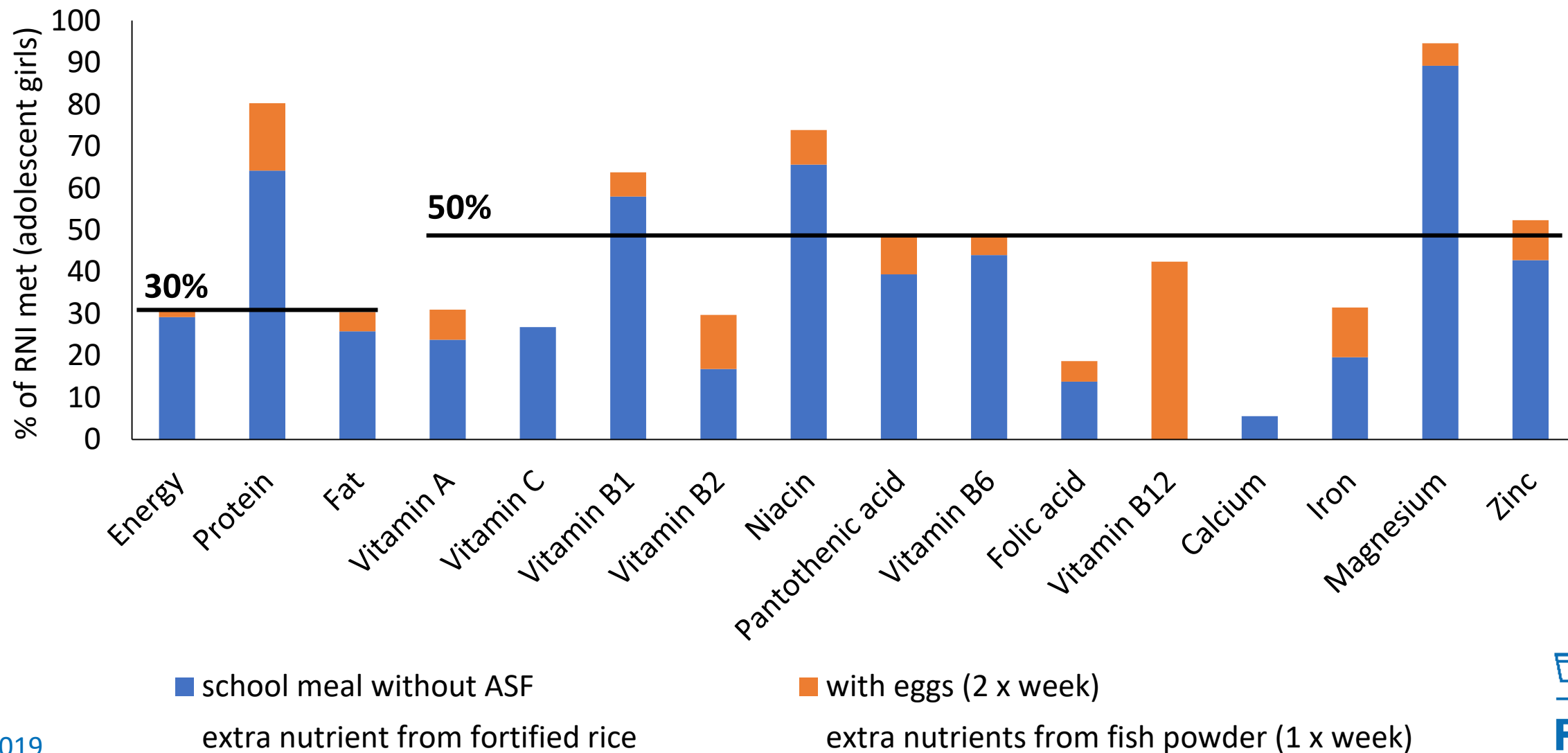- Use of supplements or micronutrient powders.

Animal source foods and fortificants add essential nutrients to school meals

Bangladesh

Bar chart showing % of RNI met (adolescent girls) for various nutrients, with a 30% reference line:

- Energy: ~29
- Protein: ~64
- Fat: ~26
- Vitamin A: ~24
- Vitamin C: ~27
- Vitamin B1: ~58
- Vitamin B2: ~17
- Niacin: ~66
- Pantothenic acid: ~40
- Vitamin B6: ~44
- Folic acid: ~14
- Vitamin B12: 0
- Calcium: ~5
- Iron: ~20
- Magnesium: ~89
- Zinc: ~43

Legend:
- ■ school meal without ASF
- with eggs (2 x week)
- extra nutrient from fortified rice
- extra nutrients from fish powder (1 x week)

CotD 2019

FNG

Animal source foods and fortificants add essential nutrients to school meals

Bangladesh

% of RNI met (adolescent girls)

50%

30%

Energy, Protein, Fat, Vitamin A, Vitamin C, Vitamin B1, Vitamin B2, Niacin, Pantothenic acid, Vitamin B6, Folic acid, Vitamin B12, Calcium, Iron, Magnesium, Zinc

■ school meal without ASF

with eggs (2 x week)

extra nutrient from fortified rice

extra nutrients from fish powder (1 x week)

CotD 2019

FNG

Animal source foods and fortificants add essential nutrients to school meals

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Energy · Protein · Fat · Vitamin A · Vitamin C · Vitamin B1 · Vitamin B2 · Niacin · Pantothenic acid · Vitamin B6 · Folic acid · Vitamin B12 · Calcium · Iron · Magnesium · Zinc

■ school meal without ASF   ■ with eggs (2 x week)

extra nutrient from fortified rice   extra nutrients from fish powder (1 x week)

CotD 2019

FNG

Animal source foods and fortificants add essential nutrients to school meals — Bangladesh

CotD 2019

Animal source foods and fortificants add essential nutrients to school meals

Bangladesh

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- school meal without ASF
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CotD 2019

FNG

Combining Micronutirent Powder, Fortified Oil and Animal-source foods could increase the extent to which school meals meet nutriet targets.
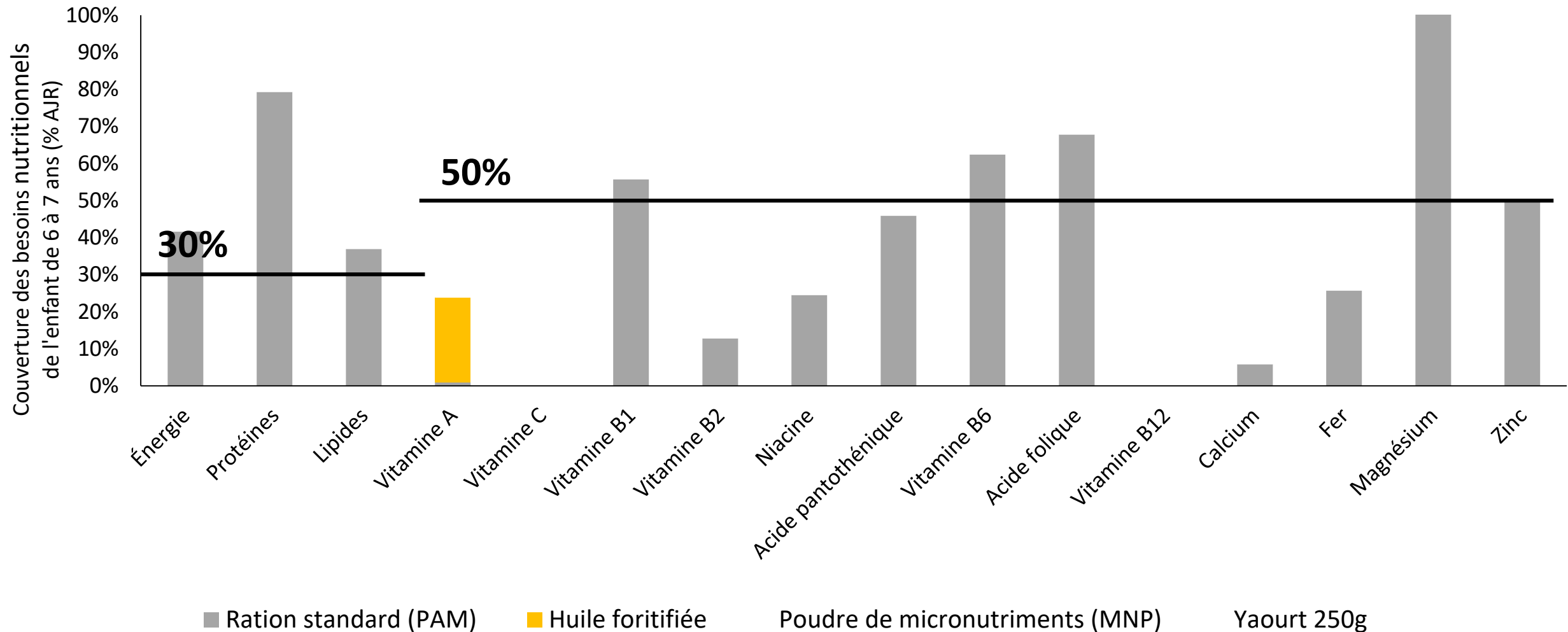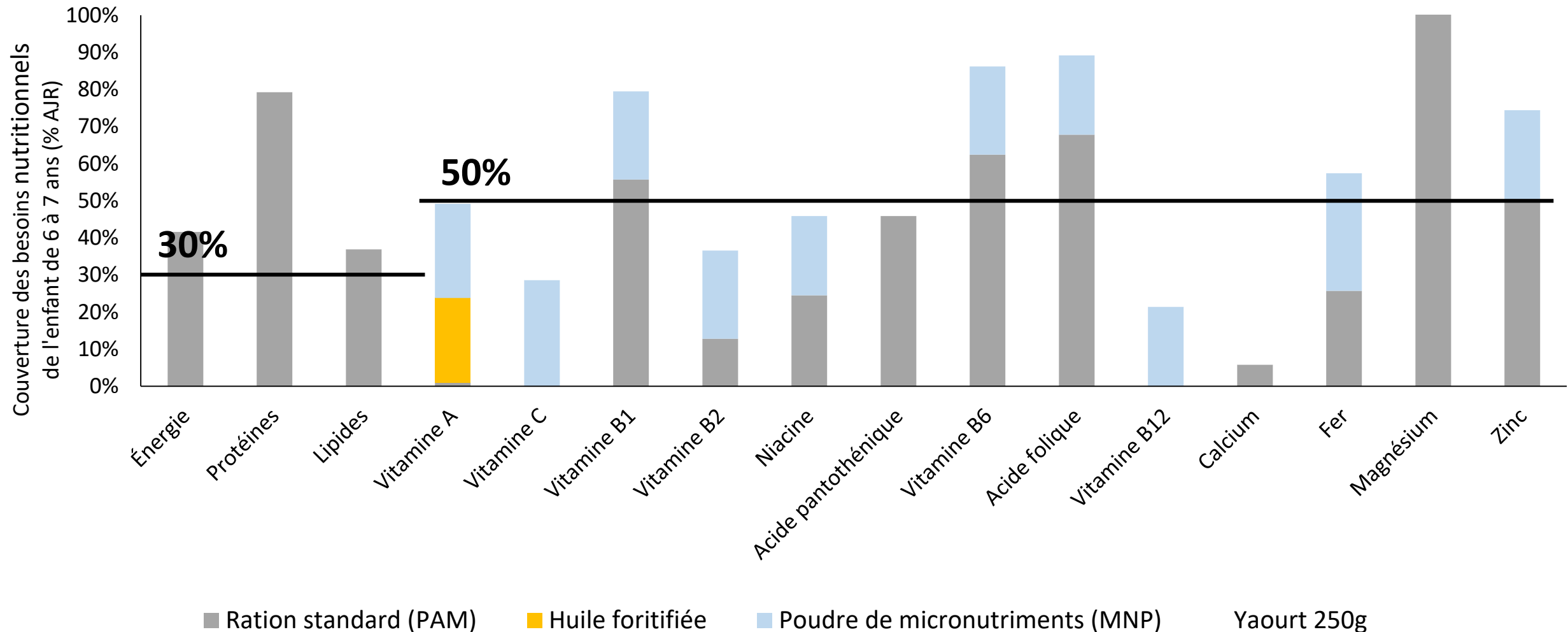
Burkina Faso

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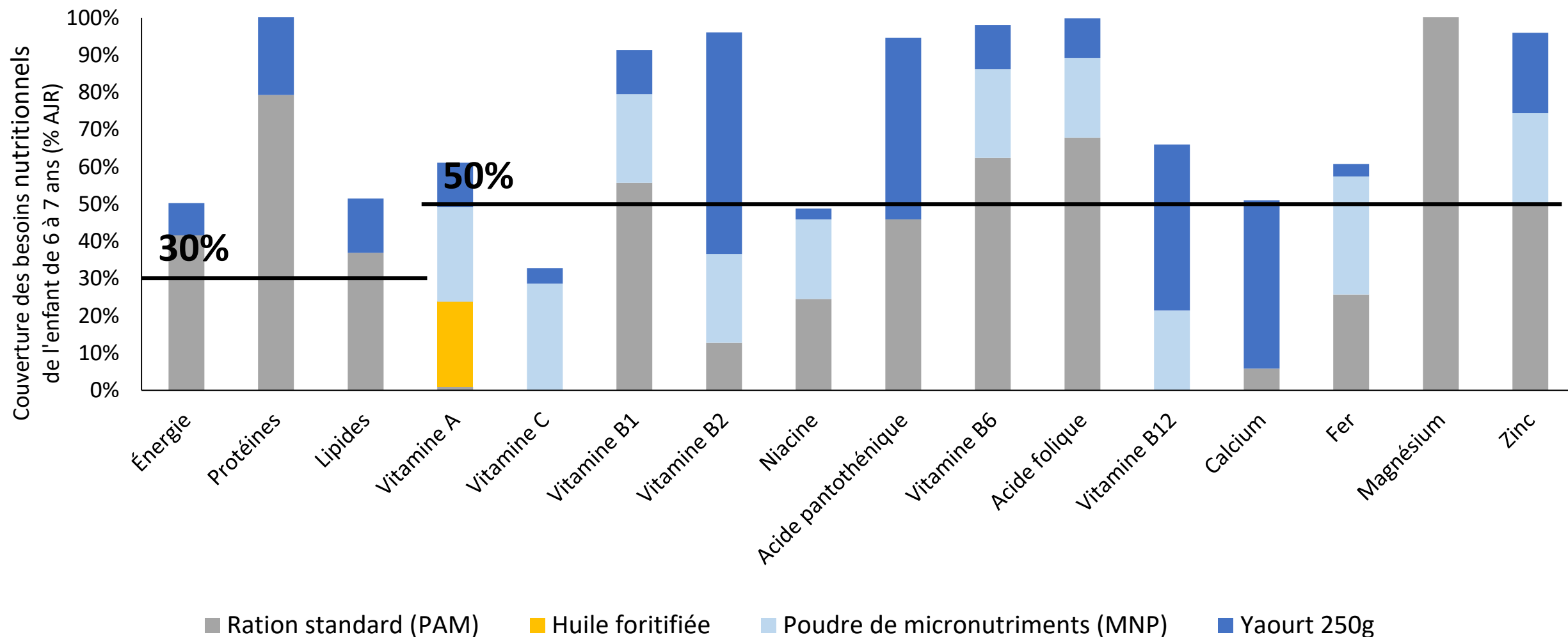Burkina Faso

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Burkina Faso

Incorporating fresh, local foods into school meals can improve dietary diversity and micronutrient adequacy.

Rwanda

Existing, staple-heavy meal

60% of energy needs

42% of micronutrient needs*
for a child 6-7 years

- 640g of cooked maize meal (normal)
- 100g of cooked beans

*refers to mean adequacy ratio (average across micronutrients)

How modelling about nutritious school meals is being used in programming:

How this modelling has been applied to programme decisions:

Bangladesh: Introduction of government micronutrient targets to 50% of RNI and incorporation of nutritious foods to meet targets.

Rwanda: Integration of improved recipes in draft national guidelines.

Philippines: Inclusion of fortified rice in school meals, initially as a pilot and then as part of standard programming.

Niger: Design of pilot programme targeting adolescent girls with nutritious meals.

How programming has been adapted under COVID-19:

Senegal: Increasing coverage of school feeding programming

- Average rice consumption of nearly 200g/day.
- Original school meal pilot: Fortified rice introduced in 1 region, 200+ schools, ~55,000 children
- **With COVID-19, coverage will increase, expanding to 2 additional regions, ~300 additional schools, and ~60,000 additional children**

Peru: Take home rations to replace school meals

- After successful launch of fortified rice in the national school feeding programme, programme was reaching >2 million children throughout the country.
- **Recognition of increased health & nutrition threats related to COVID-19 -> Transition to take home rations for students (monthly).**

Final messages

- School meals have great potential to make nutritious diets more accessible.
- There are multiple options and no 'one size fits all'; important to consider local context and feasibility and preferences.
- Inclusion of nutritious foods in school meals should not be a standalone intervention, strongest when coupled with education and behavior change.

Thank you!