



WORKING PAPER

School Meals Case Study: Ecuador

Prepared by the Research Consortium for School Health and
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Historical background

Ecuador is classified as a middle-income country located in western South America, bounded by Colombia to the north, Peru to the east and south, and the Pacific Ocean to the west. The country spans 256,370 km² and is administratively organized into 24 provinces and 9 zones. Its economy is driven primarily by oil exports, agricultural production, and remittances from overseas migrants (1).

The country is characterised by four geographical regions: coastal plain (coast), central inter-Andean highlands (sierra), Amazon rainforest (east) and the Galapagos Islands. Territorial and climatic characteristics define 62 distinct ecosystems at the continental level (2). 47.9% of the land is forest and woodland, 19.0% cultivated pasture and 11.3% permanent crops (3). The climate is tropical, with temperatures ranging from 0 to 25°C, and in the Pacific and Amazonian foothills, the climate is hot, ranging from 15 to 40°C.

According to the last population census (2022), Ecuador has 16,938,986 inhabitants. More than half of the population (63.1%) is located in urban areas, concentrated in the inter-Andean valleys and the coast, with less concentration in the Amazon. The population identifies itself as mestizo (77.5%), indigenous (7.7%), montuvian (7.7%), afro-Ecuadorian (4.8%) and caucasian (2.3%). 2.43% identify themselves as LGTBQ+. The average household size is 3.2 persons, 2.3 children on average per household and almost 4 out of 10 women are representatives or heads of household compared to men. 91.7% of the population uses gas for cooking, 85.2% has access to the public water network, and 97.5% has access to electricity, in addition 80.0% of households have access to mobile telephony and 60.9% to internet (4).

In recent years, Ecuador has faced a wave of violence related to organised crime. In addition, there are serious socio-environmental conflicts associated with mining, logging and oil extraction processes at the territorial level (1,5).

Country profile

Population and economics

Table 1: Key data on population and economic indicators

Total population (2022)	Total population aged 5 to 19	Total number of persons employed in the agricultural sector	Gross Domestic Product per capita (2023)
16,938,986 ^a	4,553,488 (26.8%)	2,752,000 (32%) ^b	6036,44 USD ^c

^a Institute of Statistics and Census Ecuador. Census 2022 <https://www.censoecuador.gob.ec/#>

^b World Bank. GDP per capita. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=EC>

^c Institute of Statistics and Cencos Ecuador. [Bulletin of figures of the PRODUCTIVE SECTOR DECEMBER 2023](#) Data extracted based on the Economically Active Population of the National Survey of Employment, Unemployment and Underemployment (ENEMDU) [Labour Indicators December, 2023](#).

Education

In Ecuador, education and health are fundamental human rights, entrusted to the State and guaranteed in the Constitution of the Republic (6). Public education is secular, compulsory and free for national or foreign children and adolescents from 3 to 18 years of age in the pre-school, basic and high school stages (7).

The Ecuadorian Education System is governed by the Organic Law of Intercultural Education - LOEI(7) in force since 2015. The Ministry of Education (MINEDUC) is the sole governing body at national level. Education is provided at three levels: (i) Initial Education, which has two grades (3 to 4 years); (ii) General Basic Education, which has ten grades (5 to 14 years); and (iii) Baccalaureate, which has three grades (15 to 18 years). In addition, the latter students can opt for a baccalaureate in science or a technical baccalaureate. Educational institutions are public/fiscal (state or municipal funding), private and *fiscomisional*; the latter depend on a promoting entity, which is a non-profit, missionary or secular organisation that directly or indirectly assumes the costs and operation of the educational institution (7).

In Ecuador, 34.4% of its inhabitants are children and adolescents. Of these, 7.6% are children aged 0 to 4 years, 8.3% children aged 5 to 9 years, 9.5% children aged 10 to 14 years and 9.0% adolescents aged 15 to 19 years (8).

For the 2022-2023 school year (final report), the National Education System (NES) had a coverage of 4,194,363 children and adolescents aged 3-19, representing a gross enrolment rate of 92.1% (children enrolled/children registered). Of the children enrolled in this year, 50.4 per cent were male. Of the children enrolled, 7.5 per cent were in pre-school, 71.4 per cent in basic education and 21.1 per cent in high school in public, state and private institutions (9).

Table 2: Number of children in schools and school feeding participants (2022-2023)

Total number of students ^d	Total number of schools ^d	Average class size ^e	Number of children involved in school meals	% of children eligible for free school meals ^f
4,194,363 in the NES (State, private or municipal) Of which: 3,456,460 in public educational institutions (fiscal, fiscal-commissioned and municipal)	16,089 in the NES Of which: 13,026 public educational institutions	Between 35 and 40 students (public educational institutions at the general level) Between 20 and 24 students (private educational institutions)	Total: 2,823,418 Initial education: 260,854 Basic general education: 2,518,797 Baccalaureate: 43,767	81.7%

^d Retrieved from Administrative records 2022-2023. Ministry of Education Ecuador <https://educacion.gob.ec/base-de-datos/>

^e Press release <https://www.lahora.com.ec/noticias/el-numero-de-alumnos-en-las-aulas-influye-en-el-aprendizaje/>

^f Number of enrolled students from beneficiary, public and subsidised schools divided by the number of children participating in the programme. Period 2022-2023.

Food security, nutrition and health

- **Food insecurity:** 36.9% of the population is moderately or severely food insecure at the household level, and 12.7% faces severe food insecurity between 2021 and 2023. In the last seven years, the prevalence of moderate or severe food insecurity has increased by 16.2%, placing Ecuador after Peru in South America (10).
- **Micronutrient deficiency from 5 to 19 years:** Anaemia 3.5% (5-11 years) and 7.0% (12-19 years) (ENSANUT, 2012) (11).

In the latest national health and nutrition survey (ENSANUT, 2018) (12):

- **Stunting from 5 to 19 years:** 19.3%
- **Thinness in children from 5 to 19 years:** 1.8%
- **Overweight in children from 5 to 11 years:** 20.5%
- **Obesity in children from 5 to 11 years:** 10.4%

Expanded data, disaggregated by ethnicity and area, and for children aged from 5 to 11 years and from 12 to 19 years are presented in Annexes (Note 1).

Design and implementation of school meal programmes

Description

Ecuador's School Meal Programme (SMP) was formally established in 1999 by the United Nations. Over the years, it has changed in terms of the state institutions that administer it, the source of funding, as well as the type of food provided. Currently, it is a national programme that distributes a nutritional supplement as a snack for children and adolescents in public and private education throughout the country, providing up to 15% of their daily caloric intake and avoiding fasting periods of more than 4 hours (13).

Since 2016, MINEDUC is in charge of public investment programmes and projects related to the provision of services to provide food, supplements and food complements for school feeding. The programme is guided by the Organic Law on School Meal (OLSM 2020) and its Regulation (RGOLSM 2021) that configure the National School Meal System (NSMS), which aims to guarantee the right to food for this population, outlining modalities, financing, actors and general organisation (14).

Under the law and regulations, MINEDUC is the coordinator of the Inter-institutional Committee for School Meal (IICSM), which also includes the Ministries of Public Health (MPH) and Agriculture and Livestock (MAL), as well as other key actors such as the Institute of Popular and Solidarity Economy, the Decentralised Autonomous Governments (DAG) (local governments) and other technical cooperation agencies. The SMP has two modalities: general and territorial. In the general modality, MINEDUC carries out a centralised contracting process with different supplier industries (13-15). In the territorial modality, the DAG are in charge of implementation.

Objectives

The SMP aims to "improve the distribution and coverage of food as a contribution to the good physical and mental school performance of children and adolescents in Early Education, General Basic Education and High School of the Millennium Educational Units of the Public and Fiscal-Commission Institutions at the national level, during their school day" (13).

Implementation

In the period 2022-2023, and in compliance with the OLSM and RGLOAE, the SMP consisted of two school feeding modalities:

- A **general modality** provides for the distribution and delivery of industrialised rations of fortified products (14,16), implemented universally. In this modality, MINEDUC is in charge of calculating the food rations per child throughout the school cycle in order to calculate and request the programme's budget. The cost of the rations is estimated on the basis of the technical-administrative sheets and the price of the manufacturer who is in charge of covering the whole process.

The school feeding service is contracted through the electronic catalogue of SERCOP (*Servicio Nacional de Compras Públicas*, National Public Procurement Service), on the basis of framework agreements (Note 2 in Annexes) signed with the suppliers of this service (13). The process is carried out through the School Meal Corporate Reverse Auction (SMCRA). The SMCRA is a staged contracting process that also includes actors from family and peasant agriculture and other actors from the social and solidarity economy who participate in order to offer competitive prices for the supply of the SMP (17).

The suppliers are responsible for the entire process of production, storage, distribution and delivery of the food rations directly to the beneficiary educational institutions. This is because MINEDUC does not have warehouses for the storage of the rations (13).

- A **territorial (local) modality** delivers fresh food, linked to local agriculture, taking into account the reality of production, seasonality of production and exchange. This second modality provides hot school breakfast or lunch to 18,029 children nationwide. It is currently in the pilot phase and is organised in collaboration between the World Food Programme (WFP), local governments and MINEDUC (18,19). In the territorial modality, the RGOLSM provides that the SMP will be organised by MINEDUC and the DAGs through agreements between the parties. According to this document, the agreements must establish the processes of administration, funding and economic evaluations (14).

Coverage

In the general modality of the SMP, it delivers rations to the whole country without exception. This delivery is organised into eight aggregates or territorial divisions (Note 3 in Annexes) (17). The snacks benefit 2,823,418 children, representing 81.7% of students involved in Early Education, General Basic Education and High School in the Millennium Educational Units and in public and fiscal-commissioned institutions.

The territorial modality reaches 18,029 children and adolescents in 196 schools in the provinces of Carchi, Imbabura, Bolivar, Chimborazo, Manabí and Santa Elena (19). For this review, no documents or information from key actors were found to report on specific local cases.

Targeting

As mentioned above, the general SMP is designed to provide universal coverage of the Fiscal and State-subsidized Religious Education Units in the face-to-face modality, up to the Baccalaureate level for ages 3 to 18 years old. Within the National Education System, there are other types of educational units and modalities that do not receive the SMP, such as private and municipal educational units^g or virtual, home school or blended learning educational units. There are no other selection criteria, nor have other prioritised groups been identified (13) . Although the general programme is universal, MINEDUC (13) reports that two indigenous communities (Sarayacu and Saraguro) do not receive rations because they do not match their cultural characteristics.

Meal type

In the period 2022-2023, the SMP, in its general modality, delivered industrialised, packaged and fortified food rations (traffic light labelling) (13,16). They function as in-school snacks and are based on standardised data sheets. These rations combine a liquid which may be whole milk, flavoured milk, juice or nectar or milk drinks with cereals, and a solid which may include a cereal bar, baked dough, salt snack, cereal flour or cereal granola (13).

The territorial feeding modality consists of a hot school lunch or breakfast, prepared and served at school, characterised by meeting all macro and micronutrient requirements, by prioritising fresh products from family and peasant agriculture and preparations with local and cultural relevance. This meal provides approximately 500 kcal. The menus are designed with NutrirEC, a software that calculates nutritional compositions by age group and type of food (18).

It should be noted that there are other foods available in schools marketed in school cafeterias or kiosks, which must meet certain nutritional and health criteria regulated by the Ministry of Public Health (18). The products available in such cafeterias are characterised by being high in unhealthy nutrients such as fizzy drinks, fried foods and sweet and salty snacks with labelling.

Nutritional norms

At a general level, for both modalities it is stipulated by law that school meals shall be based on: 1) the Ecuadorian Food Based Dietary Guidelines (*Guías Alimentarias Basadas en Alimentos de Ecuador*, GABAS)^h, 2) shall be nutritious, 3) preferably fresh when safety and quality can be assured, 4) shall contribute to healthy growth and development, and 5) shall be culturally appropriate and local (20).

In particular, the general modality available in the SMP determines the characteristics and type of rations through "technical sheets". These sheets are designed and tested by the IICSM (13). They identify nutritional values and propose minimum values in several indicators such as: nutritional reference characteristics (energy, fat, cholesterol, sugars, vitamins, folic acid, iron, calcium, zinc, among others); physicochemical requirements (pH, thiamine, riboflavin, folic acid,

^g Municipal Education Institutions are administered by local governments with subsidised funding; these schools are not classified as state schools and do not receive the SMP.

^h Ecuador Food-Based Dietary Guidelines: <https://www.salud.gob.ec/guias-alimentarias-gabas/>

vitamin A, D, E, C, B, among others); microbiological limits, among other elements. Of all the types of rations specified in the data sheets, only packaged rations are provided in the programme and not other types of food.

Although all fact sheets must meet criteria of sustainability, food sovereignty, nutritional quality and local supply, among others, no evidence could be obtained to assess these criteria in the provision of rations (Notes 4 and 5 in Annexes).

Another important element is that public procurement procedures require that food items for the SMP be produced or grown in Ecuador. Only in the territorial modality, 35% of the total food must come from family and peasant agriculture (as long as there is supply and quality is guaranteed) (14,20). No information on the percentage of food and inputs of Ecuadorian origin could be recorded for the general modality (13).

Food procurement

Food procurement in both the general and territorial modalities must follow the healthy eating guidelines of the OLSM and the RGOLSM listed above (20). Currently, the SMP, in its general modality, purchases food based on the technical specifications described above. Producers linked to the private food provide the rations in compliance with these guidelines. These actors are organised according to territorial aggregates.

Only under the territorial modality are local, fresh and nutritious meals sourced from smallholder farmers and families provided every day. Literature reports that in the latter modality, local purchases have increased and links between schools and farmers have been strengthened in a equitable manner; however, it is also mentioned that there is no extended evidence to quantify these benefits (18). While the educational institutions and locations benefiting from this modality are reported, there is no published information available for this report. In pilot experiences, the territorial modality seeks to link family and peasant agriculture producers, children's legal caregivers, the teaching community and governing bodies for the provision of fresh food (15). In this case, no documents were found that allow for a complete description of the food provision system.

The OLSM and the RGOLSM state that, for food procurement, it is important to strengthen and coordinate links in production chains in order to integrate small-scale family farming and the popular and solidarity economy into public procurement, managing the space available for collecting and storing products and establishing effective stock management processes. However, for this review, no documents were available to provide further information (14,15). The legislation also encourages the promotion of agriculture among indigenous peoples and nationalities and gender equality (8,14). No documents could be found to assess these parameters.

Legal framework and public policy evolution

The Ecuadorian Constitution (2008) establishes the right to education (arts. 26 to 29; 39, 45, 46). The law on education was reformed in 2011 with the "Law on Intercultural Education" (Ley de Educación Intercultural), whose fourth transitory provision mentions the obligation of the Ministry of Education to provide free school meals in public and private education. In 2020, the OLSM and the RGOLSM were issued and entered into force. In addition, the programme has a

system for organising public procurement of foodstuffs in its two modalities (14,15). Since its inception, the programme has evolved in terms of the type of food rations ordered, the governing bodies and the source of funding (Note 6 in Annexes).

Cost of implementation

The SMP is financed by the General State Budget, according to the law. In 2023, the cost of the entire programme, which includes the general and territorial modalities, was 135,538,628.46 US dollars, according to information from SIGEF Ecuador (*Sistema Integrado de Información Financiera*, Integrated Financial Information System), which is the public information portal managed by MINEDUC Pública.

Table 3. School Meal Programme Costs (2023)

Number of children	2,823,418 children
Average cost of a meal (\$)	0.33 US dollars (MINEDUC, 2023) (unit value per territorial aggregate - Note 7) Territorial modality, 0.56 US cents per child per day (WFP)
Raw material cost (%)	Na
Labour costs (%)	Na
Family involvement	There is no participation in the general modality, but it could be considered in the territorial modality, although no published evidence of its characteristics has been found.
Municipal budget per child per meal	Na
Public budget per child per meal	0.332 US dollars. Total cost per school term per child of US\$49.42 (149 days) ⁱ
Number of teaching days per year in one academic year	200 days
Number of school meal days in one academic year	419,723,252 food rations in one year (200 days). For this year, children received food rations for 149 days, which represents 74.5 per cent of the school year.

Na: Not available.

The number of days received is adapted to the overall budget allocated for the programme throughout the year. In other words, if the budget is lower, the number of SMP days is reduced. No information could be obtained on costs by level of education in the school system or on other details. No information was found on institutional, social, economic and/or environmental benefits in relation to total costs.

Financing

The OLSM and the RGOLSM establish that the Ministry of Education as the National Education Authority will provide the necessary resources for the development of plans and programmes in the public education system. It also states that the budget allocation cannot be decreased during the fiscal year and its resources must be permanently available. In this sense, SMP is financed from the General State Budget, which is regulated in the Constitution of the Republic of Ecuador.

ⁱ Average public budget allocated per child per meal paid to the snack provider.

This budget is related to the country's main sources of income, which continues to be the provision of raw materials. The law stipulates that complementary resources may be provided through international cooperation, public-private partnerships or decentralised municipal governments, channeled through cooperation agreements with the governing body (14).

According to the same law, the budget must cover at least the purchase of food according to technical and administrative guidelines, the hiring of the required personnel, the transport of the food and the supervision of the services. MINEDUC will be in charge of calculating rations according to the number of children enrolled, and will be responsible for all financial management of the programme (20).

In practice, the amount that covers the costs of the general modality, according to MINEDUC's operational plan and budget, is around 50 million dollars. Note 8 in the annexes shows the amounts of funding allocated per year, as well as the list of cooperating entities in charge of strengthening the programme. On the other hand, the territorial modality is configured with shared and complementary resources from the DAGs and international technical cooperation, although there is no information available to specify the characteristics of the financing.

The programme does not have information to assess whether adequate funding is consistent with the objectives and orientation of the programmes and on budget execution versus allocation.

Monitoring and evaluation

The legislation stipulates those actors from the health and agriculture sectors and the National Institute of Statistics and Census, in coordination with MINEDUC will carry out the surveillance, evaluation and monitoring of the national system. In 2023, two types of evaluations were available on the SMP: one on satisfaction and acceptability levels of food rations in the general modality and another on programme results. According to the first evaluation, which was conducted through surveys, 94.1% of children and adolescents agreed to continue receiving food rations. Similarly, 43.6% responded that they like the school meals because: *"It helps me feel encouraged to take classes and play"*; while 20% responded that they do not like them because: *"I do not like the taste or the hardness of some products"* (13). From this evaluation, no information was found on the methodology used. In contrast to these findings, other studies have concluded that children show disinterest in consuming food rations because of their taste, leading to waste in schools and homes (21,22).

Other studies conducted on the SMP, from 2018-2019, report a positive and significant causal relationship in the school promotion rate of students aged 3 to 14 years in educational institutions, especially in rural areas and coastal schools that receive the programme (23,24). The promotion rate is the only measure available in Ecuador, as there are no standardised census-based learning assessments. No other official published documents on the evaluation of the programme could be found. Furthermore, no other results are known on the implementation of the SMP in terms of quantitative indicators on child health and nutrition, household socio-economic factors, and indicators of agricultural production and economy at different scales.

Lessons learned and best practices

Since its inception, the SMP has been constantly evaluated and, in this process, we highlight the following points as lessons learned and best practices:

- In 2021, the country succeeded in creating a law that stipulates guidelines for the implementation of the different modalities of the programme, specifying the institutional framework, the responsible actors, their functions, and the forms of administration.
- The OLSM outlines the duties and obligations of the State with regard to the SMP and is based on human rights, participation, accountability, equality, non-discrimination, sustainability, the promotion of small-scale agriculture and fair trade, gender equality, education and intersectoral work.
- The programme has been allocated funding by law that is not at risk of being reduced.
- The SMP in its general modality is universally accessible to all children in Ecuador and has no limitations in areas of difficult geographical access.
- The SMP is moving forward with the implementation of territorial programmes consistent with healthy and sustainable local food linked to family and smallholder farming and fair trade, where the law stipulates that 35% of the food products used in the programme must come from local family and smallholder farming. This last point stems from the experiences of territorial programmes implemented by WFP and FAO in different territories of Ecuador (Note 9 in Annexes).

Challenges

Like many countries moving towards fair, healthy and sustainable food rationing programmes using local products, Ecuador still faces major challenges, which are mentioned below:

- Research in this area is scarce or non-existent, which limits the possibilities for evaluation and monitoring of the programme for its evolution.
- There are gaps between what the law stipulates and its implementation in the different modalities.
- There are still gaps in the definition of financing, management, infrastructure and local competencies to carry out the territorial modality.
- Public procurement mechanisms are still difficult to access for small-scale family and peasant farmers.
- Health policies are outdated in terms of regulating healthy and sustainable school food environments that are consistent with the current nutritional status of the school population and their families.
- There are no standards based on the latest available evidence on industrialisation and ultra-processing of food and its consequences on health and environmental sustainability to guide the fact sheets used to construct food rations.
- The general modality of the SMP distributes packaged rations on a daily basis, however, there is no data on the environmental impact they generate in terms of food waste and plastic waste.

- There are significant gaps in the programme's intercultural relevance, considering that there are 18 indigenous peoples and 14 nationalities in the country, each with a distinct food culture.
- The implementation of territorial programmes over recent years has not been uniform and depends on the political actors who exercise governance in a given period. Both FAO and WFP have promoted this approach, and there is a challenge to consider its sustainability once these actors hand over the work they have done.

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Annexes

Note 1: Malnutrition in children aged 5-19 years in Ecuador

Type of malnutrition	Age (years)	Year	Prevalence
Stunting	5-11	2018	14.2% (national)
			28.7% (indigenous)
			18.5% (rural)
	12-19	2018	17.7% (national)
			36.2% (indigenous)
			23.8% (rural)
Micronutrient deficiency	5-11	2012	3.5% (Anemia)
			28.1% (Zinc)
	12-19	2012	7.0% (Anemia)
			51.5% (Zinc)
Thinness	5-11	2018	1.9% (national)
			2.1% (rural)
	12-19	2018	2.0% (national)
			1.6% (rural)
Overweight	5-11	2018	20.6 % (national)
			19.7% (rural)
	12-19	2018	22.5% (national)
			20.3% (rural)
Obesity	5-11	2018	14.8% (national)
			12.9% (rural)
	12-19	2018	7.0% (national)
			5.8% (rural)

Sources: National Health and Nutrition Survey 2012 (25) and 2018 (12). Own elaboration.

Note 2: Framework Agreements

The framework agreements were signed in 2016. In December 2016, the National Public Procurement Service (*Servicio Nacional de Contratación Pública*, SERCOP) signed eight.

Framework Agreements with suppliers awarded through the School Meal Corporate Reverse Auction (*Subasta Inversa Corporativa de Alimentación Escolar*, SICAE) for the delivery of food rations to students in regular and special education institutions of public support in urban and rural areas, in the morning and afternoon shifts at the national level from early education to basic general education, and high school students of the Millennium Educational Units.

Since 2017, MINEDUC has initiated procurement processes for the acquisition of food rations at the national level. It should be noted that, according to the aforementioned agreements, the awarded supplier is responsible for the production, storage, distribution and delivery of the food rations directly to the beneficiary educational institutions. Therefore, MINEDUC does not have warehouses for the storage school meals.

The suppliers awarded through this auction are Consorcio El Ordeño - Fortesan, Empresa Laffatoria Cía. Ltda. and Empresa Leche Gloria. S.A. (Lechera Andina). The framework agreements initially had a duration of 24 months (december 2016 to december 2018), however, in order to avoid shortages of school meals in educational institutions, from 2019 extensions of the framework agreements have been managed, within the process of the School Meal Corporate Reverse Auction. To date, 21 purchase orders have been generated, including orders for the delivery of school meals to beneficiaries in educational institutions. Each purchase order includes the price established in the framework agreement, and this price is accepted by the suppliers, who freely sign the purchase order with MINEDUC.

Note 3: Organisation of the SMP by Territorial Aggregates

TERRITORIAL ZONE	NUMBER OF EDUCATIONAL INSTITUTIONS	NUMBER OF BENEFICIARIES
ZONE 1	1.527	289.705
ZONE 2 and 9	1.445	502.548
ZONE 3	1.321	271.394
ZONE 4	2.235	381.538
ZONE 5	2.275	497.521
ZONE 6	1.588	230.508
ZONE 7	1.812	225.561
ZONE 8	654	381.515

Source: General Coordination of Planning MINEDUC. Cut-off date 21-03-2024. Own elaboration.

The 8 territorial aggregates have been formed under the following conditions:

- They are part of the area of influence of one of the logistical centres, i.e. metropolitan or national human settlements;
- They are covered by the analysed road accessibility;
- They meet one of the two student population density conditions.

Note 4: Food Ration Fact Sheets for the School Meal Programme

TECHNICAL DATA	COMPONENT 1	COMPONENT 2	APPROXIMATE KCAL
Fact sheet 1	Fruit nectar	Extruded cereal or salt/sweet biscuit	170-180
Fact sheet 2	Unflavoured UHT milk	Biscuit with filling 2 varieties (red and yellow fruits)	240
Fact sheet 3	Chopped fruit	Extruded or Granola cereal	190-200
Fact sheet 4	Natural fruit puree	Extruded or cereal granola	200-210
Fact sheet 5	Milk with cereals (quinoa, peas, rice)	Biscuit with filling	250
Fact sheet 6	Milk with fruit	Salt/sweet biscuit or salted crackers	230-240
Fact sheet 7	Rice pudding		200
Fact sheet 8	Lupini beans with toast		200
Fact Sheet 9	Milk with fruit	Lupini beans	250
Fact sheet 10	UHT milk with natural flavours	Salted crackers or salt/sweet biscuit	260
Fact sheet 11	Unflavoured UHT milk	Whole fresh fruit	170

Source: Programa de alimentación escolar, 2023 (13).

Note 5: Characteristics of the rations

DAY	LIQUID AND SOLID	NUTRITIONAL VALUE	% DAILY CONTRIBUTION
Monday	UHT milk in 4 flavours + Salted biscuit or granola	Carbohydrates: 37 g, Fat: 8 g, Protein: 8-11 g, Calories: 240, Sugar: 15 g	15,0%
Tuesday	4 flavoured fruit nectar + Biscuit	Carbohydrates: 30 g, Fat: 4 g, Protein: 3 g, Calories: 230, Sugar: 15 g	15,3%
Wednesday	White UHT milk + Cereal bar	Carbohydrates: 34 g, Fat: 5 g, Protein: 8 g, Calories: 210, Sugar: 8 g	14,0%
Thursday	4 flavoured fruit nectar + Biscuit	Carbohydrates: 30 g, Fat: 4 g, Protein: 3 g, Calories: 230, Sugar: 15 g	15,3%
Friday	Milk-based drink with cereals in 2 flavours	Carbohydrates: 20 g, Fat: 3 g, Protein: 6 g, Calories: 150, Sugar: 10 g	10,0%

Source: Programa de alimentación escolar, 2023 (13).

Food details from fact sheets:

- Extruded cereal or salt/sweet biscuit
- Fruit nectar
- Unflavoured UHT fortified milk
- Biscuit with filling
- Fruit and cereal puree
- Salt extrudate or cereal granola
- UHT milk with cereals
- Filled biscuit
- UHT fortified unflavoured whole milk
- Salt/sweet biscuit or salted crackers
- Flavoured UHT fortified milk
- Salted crackers or salt/sweet biscuit

Ministry of Education
 Food plans for weekly distribution

WEEK	PLAN 1 MONDAY	PLAN 2 TUESDAY	PLAN 3 WEDNESDAY	PLAN 4 THURSDAY	PLAN 5 FRIDAY
WEEK 1					
WEEK 2					
WEEK 3					
WEEK 4					

Source: Programa de alimentación escolar, 2023 (13).

The only food item that stands out as fortified is fortified UHT milk, both flavoured and unflavoured. Product characteristics are shown on the next page:ⁱ

ⁱ Compras públicas. (2015). *Compras públicas*. Retrieved from
https://alimentacionescolar.compraspublicas.gob.ec/pdf/FICHAS_TECNICAS.PDF

SPECIFIC ATTRIBUTES OF ECUADORIAN ULTRA-PASTURISED WHOLE MILK, 200 ml (UNFLAVOURED)







1. Reference nutritional characteristics

The nutritional characteristics of the product in 200 ml are as follows:

Macronutrients	Reference range in 200 ml
Energy	110-150 kcal
Total fat	4-6 g
Saturated fats	2-4 g
Trans fats	0 g
Mono-unsaturated fats	1-2 g
Cholesterol	Equal to or less than 25 mg
Sodium	Equal to or less than 130 mg
Total carbohydrates	Equal to or less than 15 g
Dietary fibres	0 g
Sugars	Less than 15 g
Protein	6 g
Vitamin A	Minimum 30%
Vitamin D	Minimum 50%
Folic acid	Minimum 50%
Iron	Minimum 40%
Calcium	Minimum 30%
Zinc	Minimum 25%

Nutritional information determined by theoretical calculation

Criteria for validation of Fact Sheets

 <p>COMPOSITION AND NUTRITIONAL QUALITY <u>Emphasis on meeting caloric and protein requirements.</u></p>	 <p>MONITORING OF NUTRITIONAL STATUS <u>Files that respond to the health profile of the population covered by the School Feeding Programme.</u></p>
 <p>CLASSIFICATION OF SHEETS <u>Proposed classification of sheets based on:</u></p> <ul style="list-style-type: none"> • <u>Cultural and territorial relevance</u> • <u>Food sovereignty</u> 	 <p>TYPE OF FOOD: GENERAL MODALITY <u>Inclusion of a file with whole fresh fruit, targeting local agricultural production (cantonal, parish).</u></p>
 <p>FREQUENCY <u>Proposed distribution of sheets based on:</u></p> <ul style="list-style-type: none"> • <u>Acceptability analysis</u> • <u>Production capacity</u> 	 <p>ENVIRONMENTAL AWARENESS <u>Addressing environmental awareness needs with an intersectoral approach.</u></p>

Source: Programa de alimentación escolar, 2023 (13).

Note 6: Policy Developments

- 1970: The World Food Programme (WFP) delivers donations to the Ecuadorian government for children in poverty.
- 1987: Agreement between the Ecuadorian government and the WFP to implement the School Meal Programme (SMP), providing bread and nutritious drinks.
- 1995: A project is signed with the United Nations Development Programme (UNDP) to support the school snack programme, which provides a drink with biscuit.
- 1999: The SMP is officially established within the Ecuadorian state and its coverage is extended nationwide. However, it continues to receive financial and technical support from the WFP for the next four consecutive years. A meal containing rice, beans, tuna and meat is incorporated into school lunch.
- 2004: The SMP begins to be financed by public funds, but the WFP dominated the purchase and distribution of school breakfast and lunch products.
- 2009: School lunch is abolished.
- 2009-2015: PROALIMENTOS^a was created as an institution attached to the Ministry of Agriculture, later absorbed by the public company called Unidad Nacional de Almacenamiento, which was in charge of purchasing, storing and distributing school food rations; it had a particular interest in benefiting small farmers with the purchase of fresh fruit. Logistical and operational problems arose due to the lack of collection centres in rural areas and the model was abandoned.
- 2010: A snack is added to breakfast.
- 2016: The SMP is managed and administered by MINEDUC. Technical data sheets promoting processed and ultra-processed foods enriched with micronutrients are developed and implemented. The reverse auction model for businesses is applied to the public procurement of food rations.

Source: Programa de alimentación escolar, 2023 (13).

Note 7: Unit ration costs per territorial aggregation

Territorial Representative	Unit value until 17-03-2023 in US cents	Unit value from 17/03/2023 in US cents
Aggregate 1	0.325000	0.335400
Aggregate 2	0.329339	0.337339
Aggregate 3	0.329004	0.337004
Aggregate 4	0.300000	0.309480
Aggregate 5	0.329335	0.337335
Aggregate 6	0.319999	0.327999
Aggregate 7	0.329336	0.337336
Aggregate 8	0.322330	0.331930
Average price	0.323043	0.331728

Source: Provided by MINEDUC 2024. Own elaboration.

Note 8: Funding by year and actors involved

Year	Assigned
2014	35.000.000,00
2015	40.000.000,00
2016	45.000.000,00
2017	48.000.000,00
2018	50.000.000,00
2019	51.000.000,00
2020	51.500.000,00
2021	52.000.000,00
2022	51.500.000,00
2023	52.397.041,00
2024	52.397.041,00

Source: MINEDUC annual operational plans. Reference to item 3 5 08 01. Own elaboration.

Note 9: Successful experiences

As a flagship experience between 2016 and 2019, the WFP (World Food Programme) implemented the project "Complementation of school meals with fresh produce from small-scale local producers" in three provinces and in 327 schools delivered 27,800 school meals. This school meal menu intervention consists of improved snacks (milk, cereal bars, fresh fruit) and hot meals with nutritious local food. A menu covers 30% of the daily requirement of schoolchildren, equivalent to 500 to 600 kcal (26). In the educational institutions, the increase in enrolment was evident. This project also boosted the local economy because the suppliers were from the same localities (18).

In addition to the WFP, a pilot project led by the FAO, based on the Sustainable Schools model, consists of seven axes. It had a short-term, multi-sectoral and transdisciplinary impact. It was carried out in the Portoviejo district between June and December 2021. The pilot benefited 42,688 children and adolescents and 69 producer families involved in family and small-scale farming (*Agricultura Familiar y Campesina*, AFC). It consisted of the delivery of improved school meals. The fruit was delivered directly by AFC associations (27).

At the moment, the WFP is promoting pilot projects on a Decentralised School Meal Model in Rural Schools together with MINEDUC and local governments, making the territorial modality described above feasible. This model proposed for 2023-2025 aims to provide a daily hot meal to students in early education and basic general education in rural schools with a high prevalence of malnutrition and poverty, also promoting the revitalisation of the local economy. Its components include the provision of school meals based on healthy and nutritious fresh produce, respecting the ancestral and traditional knowledge of the population, the development of activities sensitive to nutrition, health and hygiene with a gender perspective, interculturalism and inclusion for social and behavioural change towards healthy habits, equipment and adaptation of infrastructure, capacity building and strengthening of small producers (WFP information document). In addition, agreements have been implemented between the Ministry and international cooperation agencies, focusing on technical assistance for the implementation of the programme.

YEAR	ORGANISATION	DESCRIPTION
2015	FAO	Support in the implementation of school nutrition programmes.
2016	UNICEF	Funding to improve the quality of school feeding.
2017	World Food Programme (WFP)	Projects to ensure food security in rural schools.
2021	USAID	Technical and financial assistance to strengthen the school feeding programme.
2023	FAO	Continued support for improved nutrition and food education.

Source: International Cooperation Information System, SIGECI, Ministry of Foreign Affairs of Ecuador. Own elaboration.