

INVESTING IN NUTRITION, INVESTING IN WOMEN

Priority Value Chains in Latin America

Why invest in nutrition?

- Malnutrition in all its forms continues to be a major public health challenge worldwide, and progress on improving it has been very slow, with no country on track to meet global nutrition goals and the number of people affected by hunger or unable to afford a healthy diet rising in recent years^(1,2).
- Malnutrition has major negative consequences for individuals and societies, including increasing mortality, reducing wellbeing, shortening lives, lowering economic productivity, and limiting educational attainment⁽³⁾.
- Poor diets are estimated to be responsible for more deaths than any other risk factor, including smoking⁽⁴⁾.
- Malnutrition also has large economic costs: the Food and Agriculture Organization estimates that malnutrition costs the global economy approximately **US\$3.5 trillion per year, or 5% of global GDP⁽⁵⁾**, and the OECD estimates that treating obesity-related diseases will cost **US\$425 billion per year across 52 countries⁽⁶⁾**.



Due to these high social and economic costs, and benefits that cut across sectors and last lifetimes, investing in nutrition is one of the most efficient ways to achieve and sustain human wellbeing.

With increased interest in healthy eating, particularly in emerging markets, nutritious foods also represent a market opportunity for companies. And, given increased regulation, such as soda taxes and bans on certain additives, focusing on nutritious foods can help reduce regulatory risk for a company. It also offers a way to achieve alignment with the 2X Criteria (see box below).

2X

Alignment with the 2X Criteria

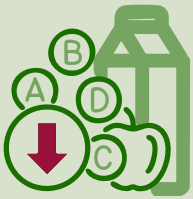
The 2X Criteria challenge aims to **drive investment in women.**

Investments align with the 2X Criteria if they meet basic Environment, Social, Governance, and Accountability requirements; meet at least one of the six 2X Criteria; and provide a time-bound commitment to meeting one additional criterion. One of the six criteria is giving women access to products/services that enhance their wellbeing. Nutritious foods fit clearly within this category – as long as the foods in question align closely to the nutrition needs of women in the target communities, like the foods highlighted here.

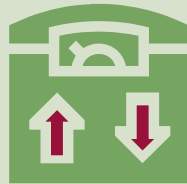
Source: <https://www.2xchallenge.org/2xcriteria>

Why is nutrition a key sector for impacting women and girls?

Women worldwide, but particularly in low- and middle-income countries, suffer a high prevalence of malnutrition.



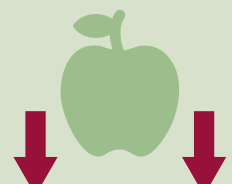
About **63% of adult women in Latin America and the Caribbean** are estimated to be deficient in one or more key micronutrients – while this is slightly lower than in the highest-burden regions of South Asia and Sub-Saharan Africa, it still amounts to **about 24 million women**.⁽⁷⁾



While less than **2% of Latin American women are underweight**, **over 60% are overweight** – and **about 10% have diabetes**, the prevalence of which is growing⁽⁸⁾.



About **17% of women and adolescent girls in the region have anaemia**, with this being significantly higher in certain countries (e.g., Dominican Republic, Guyana, and Haiti)⁽⁹⁾.



Levels of undernutrition are higher among women in poor households and living in rural areas⁽⁹⁾.

Because nutrition underpins many health, educational, and employment outcomes, supporting nutrition for women and adolescent girls can improve their wellbeing and help them achieve their full potential.

Which are the key value chains to support in Latin America to maximise nutritional impact on women and girls?

Applying a rigorous quantitative analysis (see box at right), GAIN has identified priority nutritious foods that are well-matched for the needs of Latin America's women and girls. As shown in the figure below (in which higher scores indicate a more nutritious food), top bets include:

- **Fish and seafood**, like herring, octopus, and crab, which are rich in multiple minerals (including iron, zinc, calcium, potassium, and magnesium) and omega-3 fatty acids. These help address iron-deficiency anaemia while supporting growth, cognition, and immunity, boosting energy levels, and reducing risk of osteoporosis and cardiovascular disease.

Dried fish (when processed with minimal additives) pack a particular punch, since the nutrients in them are highly concentrated. Fish and seafood are not widely consumed in most of Latin America, with less than 20% of women eating them on a given day in most countries.

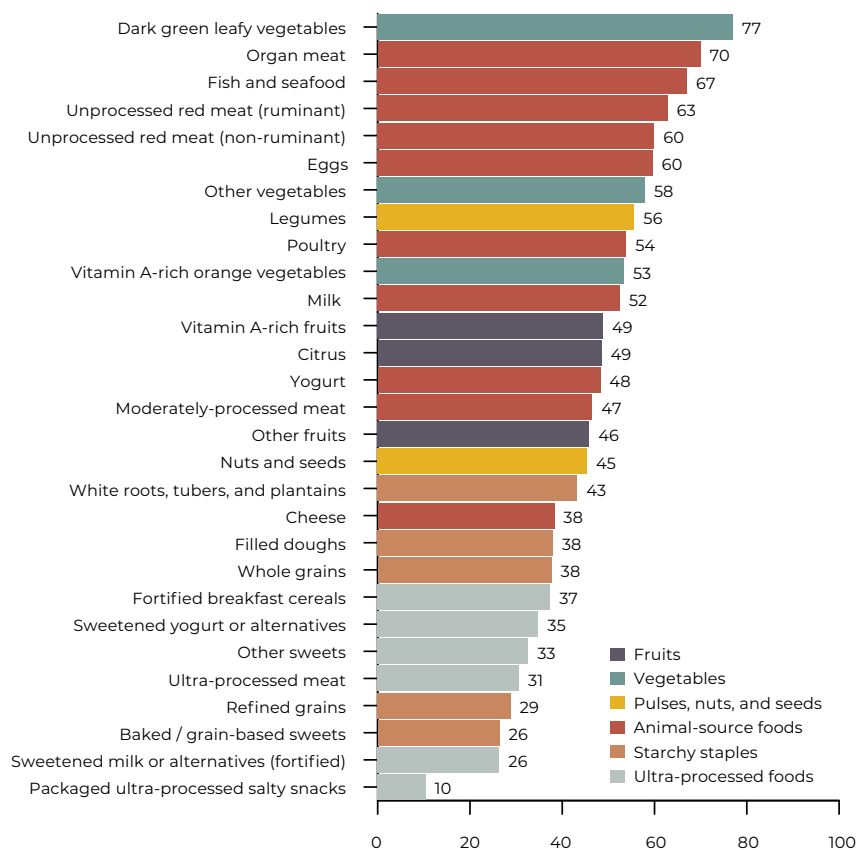
- **Organ meats**, in particular chicken and beef liver, chicken giblets, and other chicken organs. These foods are dense in multiple micronutrients, such as vitamins A and B12, iron, and zinc, which makes them particularly good for combatting night blindness and nutrition-related anaemias, and promoting growth, cognitive, and immune functions. They are central to many Latin American cuisines, but there may remain scope for boosting the consumption of the most nutritious kinds (e.g., liver as compared to tripe or blood sausage).

Methods

The analysis consisted of four steps:

- Reviewing existing research to identify the key nutrition and health challenges faced by women and girls in Latin America.
- Using this to adjust the Nutritional Value Score, a holistic metric for scoring foods' nutritional value, to be tailored to the specific needs of women and girls in the region.
- Using detailed data on composition of locally available, commonly consumed foods from Latin America to calculate scores for **346 unique foods from 30 food groups**.
- Comparing these to data on foods currently consumed to highlight particular 'best bets' for increasing consumption through investment.

- **Dark green leafy vegetables**, in particular spinach and wild and local greens like amaranth leaves, pumpkin leaves, and moringa. These foods are rich in folate, vitamins A and C, iron, calcium, potassium, and magnesium, while also being low in calories and high in fibre, which make them good both for ensuring adequate micronutrient intakes and for obesity prevention. Yet they are not widely consumed in Latin America: in most countries, less than one-third of women eat them on a given day.
- **Vitamin A-rich orange vegetables** like pumpkin and carrots could be impactful in countries where they are not widely consumed, such as Brazil, Nicaragua, and Honduras. In addition to Vitamin A – key to immunity and vision – they are often rich in vitamin C, fibre, and minerals like potassium. Some other vegetables could also make important dietary contributions – though this is a very diverse food category, so the potential benefits vary depending on the type of vegetable. For example, asparagus is rich in folate, vitamin A, potassium, and other vitamins and minerals – as well as fibre. Cabbage and Brussels sprouts are rich in Vitamin C, folate, potassium, and fibre. Some local fruits and vegetables may have environmental sustainability benefits, as well (see box below).
- **Legumes** are highly nutritious, providing protein, fibre, folate, and minerals like iron and zinc; while widely consumed in some Latin American countries, they could be targeted for promotion in countries with relatively lower consumption – such as Paraguay and Chile. Soybeans, lentils, and lima beans are among the most nutritious options in the region.



Vitamin A-rich orange vegetables include squash, carrots, red peppers, and sweet potatoes; vitamin-A-rich fruits include things like cantaloupe melon, mango and papaya as well as local fruits; ruminants are cows, sheep, and goats.

In contrast, investment in grain value chains and roots and tubers would have comparatively less benefit for women's nutrition, as would highly processed foods. While fruits are part of a healthy diet for all population groups, they are widely consumed in most countries in the region, and their relative additional nutritional benefit for Latin American women is also lower than other food groups, like fish and seafood, vegetables and legumes. While many dairy products are highly nutritious options, they are not among the most impactful foods for women in the region and also tend to already be fairly widely consumed.

Unprocessed red meat, eggs, and poultry are dense in quality protein, as well as many vitamins and minerals, but they are already fairly commonly consumed in the region. Processed meats (like spam, sausage, and luncheon meat) are also fairly commonly consumed in the region and are generally associated with poorer health outcomes. As such, the most impactful change for Latin American women's diets with regard to meat would likely be encouraging substitution from these highly processed products to unprocessed lean meats (like goat or poultry).

'Forgotten' Crops Offer Opportunities for Nutrition-Environment Synergies

While many Latin American consumers have partly transitioned to 'Western' diets, the region still houses many nutritious indigenous or traditional foods. For example, nopales are the edible parts of prickly pear cactus and are used in many countries in the region, particularly Mexico. They are rich in fibre as well as calcium, magnesium, potassium, vitamins C and B6, and antioxidants that help reduce inflammation. And the plants are highly drought and heat tolerant and easy to grow, making them resilient parts of food systems throughout the region. Zapallito is a type of summer squash native to southern South America, especially Argentina and Uruguay.

While low in calories it is rich in fibre and potassium. It can be grown in small gardens and containers and is highly heat tolerant. Aguaje is a palm fruit native to the Amazon region and is exceptionally high in vitamin A as beta-carotene – containing more even than carrots. It is also rich in vitamins C and E. Aguaje palm trees tend to grow in wetlands, creating unique habitats for numerous local animal species, particularly during seasonal flooding. These animals (including tapirs and macaws) also rely on the fruit for food. Aguaje-containing ecosystems store large amounts of carbon in their peat soils. Sustainable husbandry of them is thus a key part of supporting the unique Amazon environment.

Continued cultivation of these indigenous foods can help to ensure their genes are preserved and that they can continue to adapt to changing conditions, helping increase resilience to climate change. It also helps to support local cultures and culinary traditions. As many of these local fruits and vegetables are grown by smallholder and/or indigenous farmers, investments in these value chains can also benefit small-scale producers and their (often low-income) households.

Which types of investment opportunities exist to support these types of foods?

Investments all along value chains can be used to improve accessibility, availability, and affordability of these foods. For example, investment in production of vegetables, particularly green leafy and vitamin A-rich vegetables, could boost availability and affordability. While cold chains have developed significantly in the region in recent years, some remote and rural areas still lack good access to dependable services and technology. Expanding these would support most of the foods mentioned here – and particularly for the rural women who most need these foods in their diets to fill nutrient gaps. In rapidly developing Latin America, convenience and desirability are key drivers of food choices for many. Investment in innovation and processing that can make nutritious, under-consumed foods more convenient or desirable (e.g., canning, freezing, and drying of vegetables and fish/seafood) could help boost consumption.

Latin America's aquaculture sector is particularly ripe for investment, with opportunities including the expansion of sustainable practices, diversification of species cultivated, and enhancement of value-added processing. Given the potential negative impact of aquaculture on local ecosystems, investments should bring a strong sustainability lens and support adoption of the most sustainable options and production practices. Post-harvest, investment in processing to freeze, can, dry, or smoke fish and seafood could help reduce losses, extend shelf life, potentially reduce prices, and support better access across seasons and in remote areas. A joint analysis by GAIN and Sagana indicates that women are currently underrepresented in the aquaculture sector, particularly at the production stage and in higher-paid roles – but also that the right investments could help improve this⁽⁹⁾. There are also opportunities to improve the employment conditions of women in processing, including by creating safer working spaces. Such investments would be a double win for women as consumers and as value chain actors—another 2X Criterion.

It is also important for investors in the region to consider what not to support. Women in Latin America experience heavy burdens of overweight and related non-communicable diseases. A number of unhealthy foods, like soft drinks, sweet breads and cakes, and salty snacks are already widely consumed, contributing to this problem. It is important for all investors who care about women's health to carefully review portfolios to avoid inadvertently supporting these types of foods.

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