



Formative research to inform adolescent programming in Guatemala

Engagement for health, nutrition and sustainable development

Summary report – February 2018

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This is the summary report of the research, and presents key findings, recommendations and considerations for policy and programming. It accompanies a longer report of the work in Guatemala, a spreadsheet detailing the stakeholder mapping, and a synthesis report that summarises core learning across the four countries included in the research (Cambodia, Guatemala, Kenya and Uganda).

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Contents

Introduction	4
Background	4
Research objectives	5
Methodology.....	5
Defining and experiencing adolescence	6
Food and nutrition	7
Food consumption trends	7
Household food allocation.....	8
Knowledge and food classifications	8
Factors affecting adolescent nutrition	9
Farming, land ownership and climate change.....	9
Income generation	9
Economic migration.....	10
Violence and substance abuse.....	10
Sexual and reproductive health	11
Engaging adolescents	12
Recommendations	13
Strengthening the visibility of adolescents	13
Influencing adolescent nutrition.....	13
Engaging with adolescents.....	14
Platforms for engagement	15
Entry points for strategic partnerships	16
Summary of key policy and programme implications	17
References	18

Introduction

Background

Adolescence is a time of significant brain development (Blum et al., 2014) and physical growth at a pace exceeded only by the critical first 1000 days (Thurnham, 2013). As identified in Sustainable Development Goal 2, Zero Hunger, addressing the nutritional needs of adolescent girls is one of the key steps towards achieving the objective of ending malnutrition by 2030. The 2013 'Maternal and Child Nutrition Series' published by *The Lancet*, the Vision 2030 Sustainable Development Goal agenda, and the Scaling Up Nutrition (SUN) movement have each played a key role in highlighting that adolescent nutrition interventions should be tailored to girls. Interventions to improve access to education, delay marriage, and prevent early pregnancies can contribute to improving adolescent girls' nutrition so they can reach their full potential (Horton, 2013; SUN, 2016; Thurnham, 2013; Black et al., 2013; Finlay et al., 2011). There is, however, a lack of evidence to guide the development and delivery of strategic nutritional messages and interventions for this specific target group. More research is needed on the nutritional status of adolescents globally (Leenstra et al., 2005; Patton et al., 2016).

In line with the global shift of attention towards adolescents, there is increased engagement and mobilisation of multi-sectoral actors around the adolescent agenda in Guatemala. According to the country's most recent Demographic Health Survey (DHS) (data from 2014-2015), 24% of the population in Guatemala is 10-19 years old (MSPAS, INE, ICF International, 2017). The *Plan Nacional de Desarrollo K'atun Nuestra Guatemala 2032* (National Development Policy K'atun 2032) spearheaded by the Office of the President, advocates for the active participation of adolescents in the social and economic life of the country (Conadur/Segeplán, 2014). The policy highlights the importance of education, employment opportunities and sexual health services tailored to the needs of adolescents. The plan also notes the need to address malnutrition nationally by engaging mothers and children under five years.

Guatemala suffers from the 'triple burden' of malnutrition, with high rates of stunting, micronutrient deficiency and obesity in both indigenous and non-indigenous populations. The country has the fifth highest prevalence of stunting amongst children under five in the world, and the highest in Latin America. At the same time, a combination of unhealthy diet and lack of exercise (with only 50% of the population reporting to be physically active) is a key health risk for all age groups. The leading causes of death and mortality for the general population are related to nutrition, including heart attacks, stroke and cardiac insufficiency (41%), cirrhosis and malignant neoplasms (14%). Diabetes is also prevalent (PAHO, 2014).

Although nutrition data specific to adolescents is scarce, data collected on women of reproductive age (15-49 years) in the DHS illustrate the health challenges faced: 25% of all women and 37% of indigenous women in that age group are less than 145 cm in height, which is correlated with undernutrition in early life. In addition, 52% of women aged 15-49 years have a body mass index (BMI) above 25, indicating overweight/obesity, and 14% suffer from



anaemia. It was reported that 24% of all pregnant women and 32% of all infants between 6-59 months old are anaemic (ENSMI 2014-2015; MSPAS, INE, Segeplan, ICF International 2017). Micronutrient deficiencies (zinc, folate and vitamin B12) remain widespread (Ramirez-Zea et al., 2014). The Fill the Nutrient Gap study conducted in Guatemala in 2016 demonstrated that given current food consumption patterns it is highly likely that many adolescent girls across the country are consuming nutritionally inadequate diets and are deficient in key micronutrients (WFP, 2017).

Nutritional status impacts an individual's ability to learn, to work, to reproduce and to fight diseases. Therefore, interventions targeting nutrition are likely to affect not only the individual but also societal development, educational quality, workforce skills and productivity, economy and quality of life (Ohlhorst, et. al., 2013). Guatemala does not have a specific policy for adolescent nutrition, and adolescents are only rarely mentioned in national nutrition policies. In the *Estrategia Nacional para la Prevencion de la Desnutricion Cronica 2016-2020* (ENPDC) (National Strategy for the Prevention of Chronic Malnutrition 2016-2020) the elevated risk profile for overweight and obesity in adolescence is highlighted. The Ministry of Health is currently developing the National Strategy for the Prevention of Overweight and Obesity in Children and Adolescents (2017-2024). The strategy highlights the need for an integral and multisectoral approach focussed on prevention and involves a wide range of partners including SESAN, Ministry of Education (MINEDUC), Ministry of Agriculture, Livestock and Food (MAGA), INCAP and other academic partners, the United Nations and members of the civil society.

Research objectives

This research is part of a four-country study that is contributing to the global evidence base for adolescent nutrition. The other three countries included in the study are Cambodia, Kenya and Uganda. The research has four overall objectives:

1. To assess the experiences, needs and priorities of adolescents regarding their nutrition.

3. To establish the preferences of adolescents regarding how they want to be engaged in programming.

2. To understand the policy and programmatic environment and current practices for effectively engaging adolescents.

4. To establish user-centred recommendations for more adolescent-friendly, context-specific nutrition interventions.

Methodology

The mixed-methods, collaborative study was conducted between April and December 2017 in partnership with SESAN. A country landscape analysis of adolescent programming recorded 40 key stakeholders working with adolescents in the country, and categorised the focus, timeframe and location of interventions, the target group (age, ethnicity, gender), modes of engagement and key programme implementers. Formative qualitative research using participatory creative methodologies elicited perspectives, experiences and suggestions from adolescents and their communities. Data was collected in three departments: Alta Verapaz, Chimaltenango and Chiquimula. In Alta Verapaz, fieldwork was conducted in Cerro Azul (rural) and Chisec (urban); in Chimaltenango, in Xzetzizi (rural) and Chimaltenango City (urban); and in Chiquimula, in Marasxo (peri-urban). A total of 399 participants from Ladino, Q'eqchi', Kaqchikel and Chorti communities were purposively selected to be included in the study, and 158 data collection activities were undertaken, including focus group discussions, key informant interviews, technology surveys and participatory workshops with adolescents using a range of creative methodologies to document their voices (photowalks, graffiti walls, drawings). Informed consent and assent was given prior to participation, and the study was granted ethical clearance by the Social Science Faculty of Universidad del Valle de Guatemala. The full analysis of qualitative data used thematic analysis developed specifically for analysing data generated through applied research. Evidence-based recommendations were designed using the formative research findings and stakeholder mapping to improve nutrition-specific and nutrition-sensitive interventions for adolescents, and to highlight opportunities for adolescent engagement regarding nutrition in Guatemala.

Defining and experiencing adolescence

Adolescence is commonly understood as the life stage between the end of childhood and the beginning of adulthood (Kaplan, 2004). Conceptually, the UN defines adolescence as spanning the age range 10-19 years, although others argue for 10-24 years (Sawyer et al., 2018). Adolescence is a dynamic concept, both culturally and historically. The length, the progression and even the existence of adolescence as an interim life stage differs widely across cultures (Steinberg, 2014).

In Guatemala, there is not one standardised definition or age range for adolescence applied across laws and policies, and there are marked disparities between community-level definitions of adolescence and the terminology adopted at the national level. It is clear that conceptually, there is a distinct period of life that marks the transition from childhood to adulthood, although how that transition is defined, what triggers the entrance and exit between life stages, and the terminology used to describe it vary.

'For some, it [adolescence] might be earlier, some later... It does not happen to all boys and girls at the same time'.

Caregiver, Chimaltenango

Age is rarely used to indicate different life stages at the community level and the markers of adulthood can be observed in individuals considerably younger than 18 years old, the legal age of majority in Guatemala.

Both adults and adolescents across research sites in

Guatemala described biological changes and physical growth as key markers of adolescence. Such physical changes trigger social changes, including an adolescent's shift in status in the community. It is seen to be a time when both boys and girls have to *'stop playing on the street'* and become more *'responsible'*. During early adolescence, however, the paths of girls and boys diverge, with mobility for adolescent boys increasing, whilst a girl's sphere of influence becomes more restricted to her household. The maturity of boys is often measured by the work they are able to do, particularly linked to hard farm labour (see graphic below), and their contribution to household income. When girls start menstruation, they are given more household duties and become increasingly responsible for preparing food and taking care of siblings, largely home-based activities. Marriage was identified as the main marker for the transition from adolescence into adulthood for both girls and boys of all ethnic groups and across all research sites.

It is worth noting, however, that the conceptual juxtaposition of 'markers of adolescence' can impede effective and efficient programme implementation. Some adolescents excluded themselves from services aimed at 'youth' and/or 'adolescents' as they self-identified as adults (given that they were already married, had a child or *'worked on the field'*), despite being in the 10-19 age group.



'This is me, chopping corn'.

14 year old boy, Alta Verapaz

Food and nutrition

Food consumption trends

Across all field sites, participants concluded that it was challenging for the head of their household to provide sufficient and varied food. Adolescents living in farming communities were often dependent on the harvest for (high quality) food, and a good harvest could provide fresh vegetables, herbs, roots and various types of fruits. Farmers dependent on cash crop farming, however, preferred to sell their produce at market, and use the profit to purchase food for the family. Shops in rural areas were particularly frequented when harvests failed and other (affordable) food sources were not available. Food scarcity and food insecurity were common across all rural communities, particularly when harvests failed or the price of crops dropped.

Adolescent participants described having a uniform diet, often eating the same meal multiple times each week, or in some cases, every day. Adolescents across all locations confirmed eating a corn-based product multiple times a day, every day. Corn is the staple food in Guatemala, eaten by all sectors of the population as part of most meals, preferably in the form of corn tortillas. For indigenous communities, corn plays a central role and holds cultural significance. It is not only part of the everyday diet, but also an important source of livelihood for many small-scale producers. Consumption of maize or corn is ubiquitous in Guatemalan culture, such that participants did not always identify the cereal as an integral part of their daily diet until probed further.

Across all research sites, adolescents and their caregivers reported supplementing tortillas with beans and eggs, a typical Guatemalan meal. Adolescents in rural areas also reported usually eating fruits and vegetables from the land (*tierra*) for lunch, the most important meal of the day. In contrast, adolescents from urban areas could only name two or three fruits or vegetables (most often bananas, watermelons, tomatoes or onions) that they would eat multiple times per week, but not every day. Urban adolescents more frequently reported eating meat (beef, chicken and processed meat such as hotdogs) during lunch than did their rural counterparts, who rarely consumed meat. Differences in food consumption patterns between urban and rural areas and across different groups of the population were due to a combination of affordability, availability, preference and social-norms (discussed further below).

In urban areas, cheaply produced and pre-prepared foods are widely available from shops, food carts and (small) supermarkets, and are relatively affordable even for the poorest households. The consumption of processed, often imported, foods (noodles, canned foods like sardines, and tinned beans) was reported by poorer adolescents in both rural and urban areas. Adolescents in urban areas reported eating more fast food (*comida rapida*) given the limited availability of 'natural' food. The fast food for sale in *comedores* (small informal restaurants) was often more expensive than preparing food prepared at home, but still relatively affordable. Most adolescents indicated that they would drink soft drinks (*gaseosas*) at least three times per week, if not daily. Adolescents from poorer economic backgrounds did not always have the money to afford such drinks, but aspired to purchase them and would often consume soft drinks on special occasions such as weddings, graduations and birthdays.

The consumption of unhealthy, fatty and sugary food was particularly common amongst urban communities and, increasingly, the rural poor.

Guatemala has a strong food processing industry that, through effective marketing and distribution, has made snack food only 'an arm's length from desire'. Caregivers engaged across the field sites expressed their concern about the availability of so

'Fried chicken is what the rich people eat, so it must taste good'.

15 year old girl, Alta Verapaz



much 'bad' food near schools. Snacking was seen to be an issue facing older adolescents, both those in-school who were given pocket money because they were not eligible for school feeding programmes, and those who had left education. Adolescents confirmed that they spent their money on food that would not normally be eaten at home. They discussed the sense of independence they felt when purchasing such food, and some identified it as an opportunity to make decisions free from the restrictions of their caregivers or other influencers. They indicated that they purchased snacks because of the taste (*'it just tastes good'*); notions about the food (*'it gives us energy'*); and consumption associated with peer pressure and social acceptance (*'we all buy it'*). Adolescents in rural areas also reported buying snacks because they were convenient (*'you don't have to prepare it'*). Adolescents who did not eat fast food, either because they could not afford it or did not have access to it, discussed their aspirations to do so. In Guatemala, being able to eat fast food is perceived to be a sign that a family has middle- or upper-class status. For example, adolescents in the participatory workshops in rural areas *'dreamt'* of eating fried chicken in fast food restaurants. Because social significance is attributed to high and low status food, nutrition education alone is unlikely to tackle unhealthy eating practices (discussed further below).

Household food allocation

Gendered roles in terms of food preparation and allocation were reflected by all adolescent participants. Whilst household funds are usually pooled, it is the women and girls who buy foodstuffs and prepare meals. From early adolescence, girls are required to help their mother with food sourcing and preparation. In rural areas, men and boys usually receive larger portions and 'better' food *'for strength'*, including 'special' food that is not available to girls. In describing her drawing (see graphic below), an indigenous Q'eqchi' girl in Cerro Azul explained that when she and her mother had prepared tortillas, they would first serve the men, and then they would eat. Even when girls are pregnant or breastfeeding, they eat second and receive smaller portions of often less nutritious food. Adolescent girls suggested it was unfair that boys received larger portions of better food whilst the girls also had to do heavy, albeit domestic, work. To gain strength, boys were reported to supplement larger meals with additional, often unhealthy, foods (when they could afford them) including energy drinks, other soft drinks, sugary foods, coffee and alcohol.

'When I am old, I am going to find a wife, and then I will tell her that she makes me food... And if she does not know how to make food, she will have to learn'.

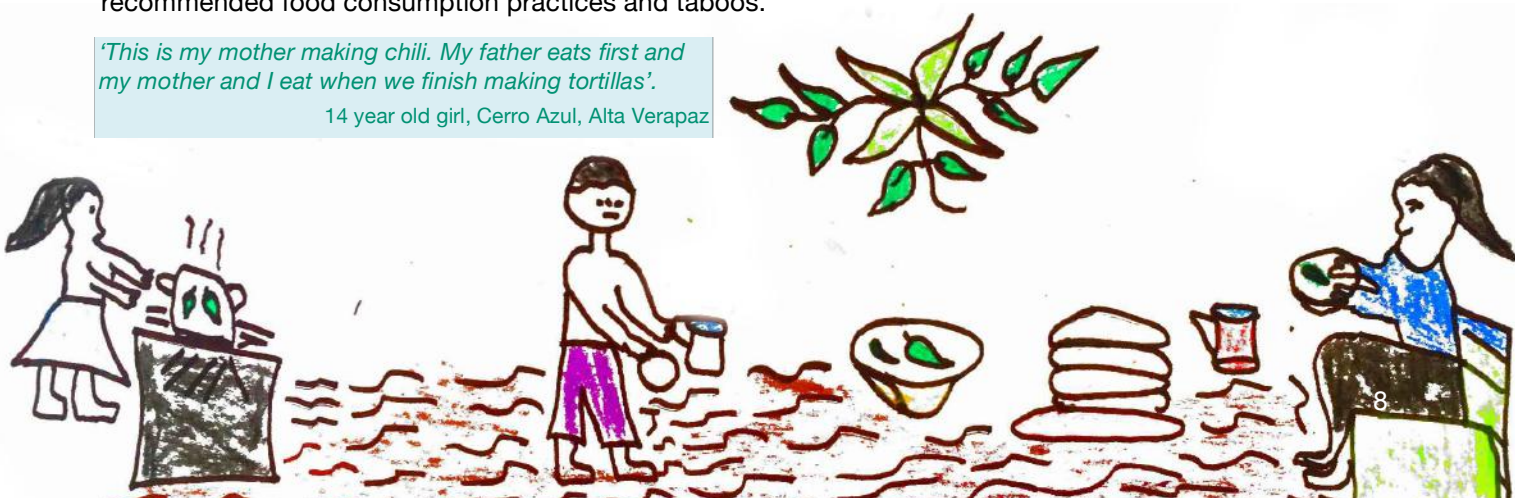
14 year old boy, Alta Verapaz

Knowledge and food classifications

Participants used various mechanisms to classify food types and the health effects of consuming different foods. Across all research sites and regardless of ethnicity, adolescent and adult participants made a distinction between 'good' and 'bad' food. Food from the 'tierra' was seen to be 'natural', and thus was good for health. Food purchased from shops and food that was not prepared by 'mothers at home' was not seen to be 'natural' and was therefore unhealthy. Often food from shops and fast food restaurants was perceived to be 'chemical' yet was still attractive to adolescents, linked as it was to social status. Various foodstuffs were classified as 'chemical food' including energy drinks, fried chicken that was not prepared at home, frozen chicken sold in shops, all canned food and, particularly relevant for adolescents, snacks sold in colourful packaging, soft drinks and candy. Indigenous participants also made a distinction between 'hot' and 'cold' food groups when describing recommended food consumption practices and taboos.

'This is my mother making chili. My father eats first and my mother and I eat when we finish making tortillas'.

14 year old girl, Cerro Azul, Alta Verapaz



Factors affecting adolescent nutrition

Guatemala has high rates of inequality and one of the most elevated rates of poverty in Latin America. Participants across the study identified poverty as a key barrier preventing adolescents from having a healthy and nutritious diet. Against this backdrop six interrelated themes were found to determine adolescents' access to adequate and healthy food.

Farming, land ownership and climate change

Across all research sites, the effects of climate-related vulnerabilities were evident, but particularly in more rural communities where livelihoods were dependent on the land and alternative income-generating activities were limited or non-existent. The majority of the adolescents involved in the study came from households engaged in small-scale subsistence farming. In both Alta Verapaz and Chimaltenango, adolescents attributed poor harvests (of corn, cardamom, coffee, broccoli and peas) to changing weather patterns related to climate change. As a result of the failed harvests, crop prices fluctuated, resulting in fewer household resources. With less opportunity to harvest fresh produce, adolescents confirmed they often resorted to purchasing cheap, unhealthy and processed foodstuffs such as canned goods and '*sopas instantaneas*' (imported noodles). Participants also identified land ownership as a key cause of economic hardship across rural and urban, indigenous and non-indigenous families. Not owning land meant having to sell one's own labour to cultivate the farmland of others, leaving communities vulnerable to shocks and stresses. Water scarcity not only affected harvests, but according to indigenous girls and women in rural areas, also increased their daily burden of cooking and maintaining the household as they had to walk longer distances to find firewood and source water to wash dirty clothes.

Income generation

Adolescents across the research sites confirmed that they often had to support their households by finding (informal) employment. During times of scarcity, participants would borrow money from neighbours or the broader community, or would seek to purchase food items on credit. Girls would most often support their caregivers by working at home doing household chores, including sourcing food, preparing meals and looking after younger siblings. Some girls assisted their mothers with paid work. Boys indicated that they started to contribute to the household's income when they were '*strong enough*' and often spoke with pride that they were able to support their family. They reported working on the land with their male relatives, or being employed in the construction or agriculture sectors. Boys started work as young as ten or eleven years old, regardless of the legal working age.

The food available to adolescent boys engaged in income-generating activities and working on the land was often not proportional to their hard physical labour. Adolescents working on palm oil plantations in Alta Verapaz, for example, were not provided with meals by their employers, and described bringing tortillas and chilli to work because they could not afford to purchase the hot lunches served by the small-scale restaurants on or near the plantation. They confirmed that they frequently bought snacks (*'it does not fill the stomach'*) or soft drinks (*'for strength'*) before they returned home at the end of the day to eat a larger meal. In contrast, the working adolescents who participated in the workshops in Chimaltenango City were often provided with lunch by their workplace, and discussed eating *fideos* and meat with adult employees. The provision of a midday meal at work was an important service as it was often the most nutritious meal that adolescents would eat in a day.

Economic migration

Across all field sites, participants from both ladino and indigenous communities confirmed that it was common for men and boys to leave their communities to seek employment opportunities elsewhere, often as a result of failed harvests. Migration was seen to influence nutrition in multiple ways. For a young male adolescent migrant, moving away from home (and his wife or other female relatives) often meant not having access to healthy home-cooked food, but resorting to purchasing food *'on the go'*. With limited resources at their disposal, boys reported that the only food they could afford was cheap and easily accessible fast food. Female relatives left at home had to manage the household budget whilst the main income generator was away. It was frequently reported that they ran out of money and had to resort to borrowing money or undertaking piecemeal work, on top of their hard housework. Although many men and boys were engaged in domestic migration to work on palm oil or banana plantations, or in the construction industry as unskilled workers, some participants reported migration to neighbouring countries including El Salvador and Honduras. Many participants dreamt of migrating to the United States in order to *'find a better life'*.

'In the United States, you gain dollars, whilst here money is not enough. There you don't earn beans, you earn meat'.

16 year old boy, Chimaltenango

Access to education

Many adolescents discussed the importance of finishing primary school and ideally going on to secondary and tertiary education *'for the future'*, and *'so we can work with clean clothes in the city'*. Caregivers also aspired to have their children complete school, and many positioned education as a protective factor for adolescents, in terms of protecting them from a *'hard life'* and as a way of improving their life trajectories. Although the value of education was well recognised, indigenous adolescents and those residing in rural areas suggested that it was common for their age group to stop attending school so they could work in the house or on the farm. Some of the younger adolescents (aged 10-14 years) engaged in the study attended school, but most older adolescent participants (aged 15-19 years) had dropped out of school after graduating from the third grade of primary school. Many participants highlighted that to attend secondary school required money for transport (as most often, schools were not located close to their homes), school fees, books and other school materials, all of which were deterrents to attendance. With limited economic resources, caregivers often had to choose which child or children to send to school and a boy's education was usually prioritised over a girl's. It was normal and well accepted that adolescent girls, particularly older girls, would leave school to help shoulder the burden of housework.

Violence and substance abuse

'On this evil path [gang affiliation], there is money to be made. There, I can eat. The only thing you have to do is take away the fear'.

Caregiver, Chimaltenango City

In urban fieldsites, participants at all levels identified violence and substance abuse as key barriers to a safe and healthy adolescence. Adolescence was seen as a vulnerable period during which youth were susceptible to alcoholism, drug abuse and both gang-related and gender-based violence. Because of their socio-economic situation and geographical location, urban adolescents reported that they were at risk of being recruited into street gangs. Participants suggested that being part of such an organisation could result in economic prosperity (and hence the availability of more food). This, at least in the short-term, was often prioritised over risks to personal health and safety. In Chimaltenango, the largest city included in the study, gang violence was common and linked to the promise of material benefits. Substance abuse was highlighted as a factor preventing the healthy development of adolescents, particularly older boys in urban centres. Alcohol or drug use was often reported by urban boys as a way to escape their daily struggles (*'to forget'*) or as a substitute for food, *'it fills us up when we don't have food'*. Violence against women and sexual violence were also prevalent. In their workshops, girls expressed fear about *'walking alone'* and those residing in urban centres confirmed that because of this, they spent the majority of their time inside their *'colonias'* (gated communities) and at home watching

'telenovelas' (soap operas) or on their mobile phones (discussed further below). By avoiding risk and outside violence, it was challenging for urban adolescents to participate in exercise and they often reported high levels of sedentariness.

Sexual and reproductive health

Adolescents, particularly indigenous girls, had very limited access to sexual and reproductive health information and services. According to the Demographic Health Survey (DHS), 52% of indigenous women of reproductive age use contraception, compared to 68% of non-indigenous women (ENSMI 2014-2015; MSPAS, INE, Segeplan, ICF International 2017). Pre-marital relations between adolescents are 'taboo' in Guatemalan society. From an early age, girls are taught by their mothers that virginity is one of their most important virtues. Social perceptions about '*saving oneself for marriage*' are dominant and linked to the strong moral influence of the church, yet Guatemala has one of the highest teenage pregnancy rates in Latin America with one in five adolescents between 15-19 years having borne a child (ENSMI 2014-2015; MSPAS, INE, Segeplan, ICF International 2017). According to the DHS, indigenous girls are younger at the time of their first pregnancy than non-indigenous girls, and 45% of all girls that fall pregnant between the ages of 15-19 years have never been to school (*ibid.*).

Stigma about the use of contraception, particularly by unmarried adolescents, is widespread and the rate of contraceptive use remains low. In the DHS, only 9.8% of adolescent girls aged 15-19 years reported using any form of protection (*ibid.*). Yet, adolescents in the study frequently highlighted their increasing sexual desire and the pressure of finding a suitable marriage partner. Adolescent pregnancy and early marriage were common across the research sites, and in indigenous communities, motherhood was regarded as a positive pathway for girls. Participants highlighted that not being allowed to have sexual relations was a primary driver for early marriage. Sexual and reproductive health education is not often taught in schools and information was found to be lacking, particularly in rural areas. Caregivers did not feel equipped or inclined to discuss sexual and reproductive health issues with their adolescents, and many confirmed that they repeated narratives about virginity and abstinence as promoted by the church. In discussing sexual and reproductive health, most adolescent girls suggested that they felt sufficiently mature to '*make decisions about our own lives*' but confirmed that even when girls and women were informed about reproductive health, they did not always have the agency to protect themselves. Participants reported that many of their male partners did not '*give them permission*' to use contraception. Adolescent boys indicated that they faced fewer restrictions than girls and, when they were older, were actively encouraged to find a sexual partner and eventually to marry. Having multiple sexual partners was reported to be a source of pride for older adolescent boys, part of their machismo culture, whilst girls were expected to only have one sexual partner, their husband.

Indigenous adolescent girls who were pregnant or had children confirmed that they did not necessarily have more or '*special*' food during pregnancy, and several reported that they still had to eat after the men in their household were replete. Their household tasks did not diminish during pregnancy, and particularly girls in rural areas reported continuing hard physical work until late in their third trimester. Participants suggested that it was usual for pregnant women to attend health facilities for antenatal care (ANC), a practice corroborated by the DHS that indicates 85% of pregnant women in rural areas and 89% in urban areas attend four or more ANC sessions (ENSMI 2014-2015; MSPAS, INE, Segeplan, ICF International 2017).



Engaging adolescents

Understanding how to effectively engage adolescents is essential for assessing how nutrition-specific and nutrition-sensitive interventions can be delivered and best related to other components of the 'adolescence equation'. Throughout the study, adolescents highlighted their priorities and needs related to engagement.

'Come to us, fit around our lifestyles'

Adolescents stressed the importance of accessibility. They preferred to be '*reached*' in places they already frequented with their peers, in the afternoon or evening after they finished their work (housework or employment) or school day.

'Use our groups, don't group us'

Given their more constrained social worlds, adolescent girls stressed the importance of creating opportunities where they could meet with peers, and they wanted '*groups to be made with just us girls*'. In line with their different experiences, however, girls highlighted that girls in- and out-of-school had different social groups, as did girls who were already married and had children, compared with those who did not. Activities, including nutrition interventions, should be tailored to such groupings.

'Make it entertaining'

All adolescents reported that they wanted to be engaged in a fun manner, '*don't just preach to us, that is boring*'. They recommended the use of music, different media and sports activities as positive hooks to engage adolescents.

'Show us real experiences'

Adolescent participants across all research sites emphasised their desire to have activities for young people facilitated by youth leaders who were close to them in age and socio-economic status, and who had shared similar experiences and challenges growing up.

'Ask us, include us'

Adolescents stressed that they did not want to '*be just told*', but to understand '*the why*'. They wanted to be engaged in a participatory manner and involved in key decision-making processes so that their voices were heard and their opinions recognised.

'Speak our language'

Adolescents stressed that they were not a uniform group and that boys and girls, older and younger adolescents and those from different communities should be engaged in the most appropriate way. Younger adolescents suggested they be approached '*playfully*', whilst older adolescents emphasised the importance of speaking their language, not only in terms of local dialects, but also to capture colloquialisms and current trends.

'Include the people around us'

Because of the important gatekeeper roles that caregivers played in their lives, adolescents emphasised that initiatives directed at their engagement should also involve their families. Girls stressed that they did not have the same decision-making power as boys and suggested that girls be supported to negotiate with their families to facilitate their participation in activities.

'With food, we need energy now...'

Adolescents reported that having energy was their priority to ensure that they could complete their daily workload. They confirmed their preference for '*fast*', '*high energy*', '*fashionable*' and '*filling*' foods. They were likely to source foods that gave them immediate energy and were related to their desired social identity. This focus on the present should be carefully considered in adolescent nutrition programming and to create opportunities to set new and healthy trends.

'Build us up for the future'

Participants emphasised the importance of engaging adolescents holistically, providing health and nutritional information alongside sexual and reproductive health services, vocational training and financial management. Adolescents suggested that this approach would address '*all the challenges we face in our lives*', by giving them interrelated life and livelihood skills.

Recommendations

Strengthening the visibility of adolescents

- Nearly one quarter of the population in Guatemala are adolescents, but they are largely invisible in policy. Adolescent malnutrition is a large-scale challenge, and as a sub-population with unique nutritional needs, adolescents are being left behind. Guatemala should consider applying an adolescent lens to existing policies and programming. Focused advocacy efforts are needed to encourage key actors to commit to interventions for this group.
- At the national-level, different sectors use various definitions of adolescence, and in so doing, the needs of adolescents risk becoming diluted or falling through policy and programming gaps. Existing nutrition policies and key strategic plans rarely mention adolescents and no budget is assigned to adolescent nutrition, which results in limited programming for this group. National efforts to limit stunting have been widespread and effective. Similar attention should be afforded to adolescents as a priority target group, and synergies created with other effective programming.
- Definitions of adolescence at the national level are not consistent with definitions used at the community level. This results in some adolescents self-identifying in ways that prevent them from seeking youth-orientated services. Interventions must be sensitive to variables including age, gender, socio-economic status, life experiences / stages, livelihoods and ethnicity. Effective engagement should target groups as defined and understood at the community level.
- ‘Adolescents’ must not be interpreted as a homogenous or standard group. Within this age group, different life-stages occur and should be accounted for. Similarly, adolescents are subjected to a range of socio-economic and contextual factors that shape their lived realities. These sub-groups are not mutually exclusive, rather an adolescent can belong to or self-identify with multiple groups concurrently and over time. Assuming a user-centred design approach, interventions should therefore be developed in an age-, gender- and context-specific/sensitive manner.

Influencing adolescent nutrition

- When taking adolescents as the central unit of analysis, it becomes clear that in Guatemala this group is uniquely affected across the ‘triple burden’ (with high rates of stunting, micronutrient deficiency and obesity co-existing in the same population). Adolescence provides a ‘second window’ to improve the nutrition and health of the population through promoting optimal development and preventing diet-related chronic diseases in adulthood.
- Programmes targeting adolescents must take account of the nutritional challenges faced in different contextual settings, and the impact this has on their overall growth, development and well-being. Complex and poor dietary habits are the underlying problem for both undernutrition and over nutrition.
- Increasing communication and information about nutrition alone will not improve the diet or health-related behaviour of adolescents. Rather, interventions should adopt a systems-based approach that addresses the nutritional needs of adolescents in the context of and in combination with other key components of their lives. Communication and information should be combined with improved access to healthy food and other services.
- Reducing poverty by increasing safe income-generation opportunities that would raise household economic status is key, but such opportunities should be designed to encourage school attendance for adolescents. For adolescents who are older or do not

- attend school, vocational training that develops business skills and provides resources such as start-up equipment, is an important avenue of constructive engagement.
- In addressing agricultural practices for adolescents and their households, an agri-nutrition lens should be adopted. Knowledge, skills and resources should be developed for effective and efficient irrigation systems and post-harvest storage, and consideration given to issues of land access. New and emerging urban-agricultural methodologies (e.g. sack-gardens) may be particularly relevant and appealing for adolescents residing in urban and peri-urban localities.
- Addressing adolescent nutrition requires a systems-based approach that considers restrictive social norms, sexual and reproductive health issues including early marriage and teenage pregnancy, and access to education. These are critical components related to improving nutritional status and wellbeing.

Engaging with adolescents

- As target beneficiaries, adolescents should be engaged as active participants in the design, implementation and monitoring of interventions. Programmes should be sensitive to the needs, preferences and priorities of adolescents. During the research, they clearly articulated suggestions that should be operationalised including ease of access, the strategic use of language, and showcasing real experiences. They emphasised the importance of privacy, trust, transparency and equity in all engagements. They wanted interventions to develop their skills for the future, but to be dynamic and entertaining, using music, dance and sport.
- Although it risks perpetuating unequal social norms, adolescents emphasised that they wanted to be engaged in gender-specific groupings and in places where they already meet. Adolescent boys meet their peers in the community after work or school, particularly to play football or other sports. Rural indigenous boys also reported meeting friends at local shops to watch television (usually football or films). Adolescent girls met each other in the community whilst undertaking household chores, such as looking for firewood or washing clothes. Many older indigenous adolescent girls reported that since leaving school, their friendship group had reduced, and they only had limited time to meet others outside their household or immediate community, emphasising again that due to their restricted movement, interventions had to engage with them in *'their space'*.
- Several key influencers in the lives of adolescents were identified including caregivers and parents, particularly mothers (for younger adolescents); husbands and mothers-in-law (for married adolescents); peers (for older adolescent boys); teachers (for those in-school); religious leaders (for older adolescent girls); and community leaders (for adolescent girls and boys of different ages). Securing their buy-in and support is vital in both generating demand and facilitating utilisation of programmes and services.



- Adolescents can be agents of change for family members and their broader communities. In addition to receiving information about nutrition and nutrition-related services for their own wellbeing, adolescents should be considered primary targets for cascading knowledge and improving the nutrition of their younger siblings and other vulnerable groups (e.g. children under five, pregnant women).
- There is need to support trusted adolescents to assume positions of leadership to represent the voice(s) of their peer group(s), to ensure appropriate user-centred design, and to provide monitoring and evaluation feedback to ensure programmes are appropriate, relevant and effective.

Platforms for engagement

- Considering the dynamic needs of adolescents, there is no 'one size fits all' delivery channel. Interventions should respond to the complex realities of an adolescent's life and rather than being an additional burden, should be mindful of the conflicting responsibilities they may have. Adolescents should be engaged through multiple avenues or platforms that are mutually supportive.
- The formative research and stakeholder mapping documented existing programmes that engaged adolescents and implemented activities related to nutrition; sexual and reproductive health; economic empowerment and livelihood support; education; social protection; and leadership related to youth participation. There was a particular bias towards girls and sexual reproductive health programming. Overall, however, programmes were not implemented at scale and coverage was therefore limited. Only a few programmes were designed with adolescents as the primary beneficiaries, but multiple programmes 'accidentally' included adolescents (such as health interventions for pregnant women, and livelihood support programmes for farmers).
- Various platforms engaged adolescents at the community level. Religious institutions played a significant role in the lives of all adolescents who participated in the study. Church is easily accessible and socially acceptable, particularly in rural areas where limited activities for adolescents are available. It is challenging, however, for religious institutions to actively tackle sexual and reproductive health and family-planning related issues, and this limits the potential impact of the church as a delivery channel. For those in formal education, particularly younger adolescents and boys, school was identified as a positive and trusted platform for engagement, although it was noted to be a selective channel given that not all adolescents (particularly older adolescents and girls) attended. Girls who had attended ANC services discussed health facilities (specifically rural health posts) as providing health- and nutrition-related advice. Other adolescents, including boys and younger girls, perceived health centres to be for curative treatment, and perceptions around contraceptives and the negative implications of pre-marital sexual relations restricted the use of health services by many.
- Technology platforms are a promising way to engage adolescents, yet the research provided further evidence that the penetration and use of technology is highly context-specific and differs according to social groups, age and gender. Girls in urban areas were more likely to use social media and watch television given their restricted mobility due to safety concerns. These girls reported using applications including Facebook and WhatsApp to chat with each other. Girls' internet usage was closely monitored by their caregivers, although a few girls had 'secret' mobile phones to communicate with friends and boyfriends. Radio was more widely accessible for all adolescents in both urban and rural areas. Where adolescents did not have personal access to the radio through their mobile phone or own radio, they reported listening to radio programmes their parents selected. This could potentially limit the programmes they have access to, particularly those that discussed more sensitive issues such as contraceptive use or other sexual and reproductive health related themes. Television was the preferred mode of entertainment in urban areas and was increasingly popular and accessible in rural areas. Younger boys also reported playing video games in internet cafes.

Entry points for strategic partnerships

- Policy and programming entry points need to be strengthened and expanded. Currently, programming is selective and localised. Further investment in both nutrition-specific and nutrition-sensitive adolescent programming is needed if the most vulnerable girls and boys are to be reached.
- Most organisations that engage adolescents in Guatemala focus on providing sexual and reproductive health services for older adolescents. These existing programmes may provide a valuable opportunity for engaging adolescents on other issues, including nutrition for themselves and their families.
- Many adolescents are included in activities that are orientated towards adults. In acknowledging this, programmes should be aware of the special needs of adolescents of different ages and encouraged to modify their services appropriately. Services aimed at women of reproductive age should purposefully try to reach all adolescents, and services aimed at pregnant women should ensure that pregnant adolescents are effectively included.
- Actors already active in the nutrition sector should be encouraged to further tailor their interventions to better reach adolescents. Their programming should recognise this specific target group and their unique needs, engage adolescents in appropriate ways and use approaches to which they are receptive. Investment in such channels should be prioritised to help mainstream adolescent nutrition programming. Existing communication strategies used by the MHSA, the Ministry of Culture and Sports and others could be strengthened to include age and gender-sensitive information targeting adolescents and adolescent nutrition issues.
- Coordination between government, partners and programme implementers should be improved to support an enabling environment for adolescent engagement. SESAN has an important role to play given their remit to coordinate, integrate and monitor food and nutrition security interventions among the public and private sectors, society and national and international agencies.
- The food industry should be positively engaged to ensure low-cost and healthy food is produced and sold, and to influence market trends towards the recognition and consumption of food that is healthy and has a high nutrient value. The Scaling Up Nutrition (SUN) business network could be strengthened to serve as an effective entry point to develop strategic partnerships with the private sector.



The following policy and programming implications have been developed directly from the research findings and the broader evidence base regarding engaging adolescents in nutrition, health and sustainable development interventions.

Summary of key policy and programme implications

	Theme	Key considerations
Food and nutrition	Food consumption trends	<ul style="list-style-type: none"> • Make diverse, healthy, natural and affordable foods available and attractive to adolescents and their families, particularly in times of scarcity. Promoting healthier foods in small shops (particularly those located close to schools and workplaces) would increase their availability to adolescents who should be encouraged to choose healthier food over other options. • Curb the promotion and availability of unhealthy foods to adolescents and their families.
	Food knowledge and classifications	<ul style="list-style-type: none"> • Existing food classification systems and traditions do not necessary prioritise or promote adolescent-specific nutritional needs but can be entry points in designing context-specific nutrition and health information communication strategies and activities. • Marketing and food advertisement campaigns can spread ‘rumours’ around the benefits of consuming certain types of food, e.g., the benefit of using energy drinks for strength. These types of promotions should be discussed in health promotion activities or restricted. • Knowledge of healthy food does not directly translate to healthy food practices, so investment should be made to ensure adolescents assume healthy diets and consumption patterns. This is linked to making healthy food not only available and accessible, but also aspirational and attractive. The promotion of healthy foods should focus on components adolescents value in terms of choice and consumption, primarily that they are energy-giving, filling, tasty and socially desirable. Healthy food choices could be promoted through engaging mass media such as <i>telenovelas</i> (soap operas), or social media.
	Household food allocation	<ul style="list-style-type: none"> • The lack of household resources in times of scarcity linked to drought, floods and failed harvests means that adolescents are at risk of missing out on healthy nutrition during the critical years of adolescence. Policies invoking the activation of social safety nets and food assistance should be strongly linked to scarcity, and should purposively consider adolescent issues and constraints. • Adolescents and their caregivers must be better informed about the most cost-effective healthy foods available to them. • Ingrained gender norms related to food allocation within the household prevent girls’ healthy nutrition. Raising awareness about the importance of an adolescent girl’s nutrition should focus on her strength and role in the (household) economy (in terms of immediate value) and on the importance of her health for the next generation (future value). • Engaging with key male and adult influencers is critical. • Raising awareness around good nutrition during pregnancy also needs to be discussed in these forums. Cheap, safe and healthy snack foods should be made available for pregnant adolescents, and consideration given to snacks in terms of their value as food and micronutrient supplements.
Factors affecting adolescent nutrition	Income-generation	<ul style="list-style-type: none"> • Poverty is widespread, particularly amongst indigenous populations, and is exacerbated by climate change induced vulnerabilities and landownership struggles. Given this, income-generating activities are often prioritised over school attendance. Adolescents and their families therefore need strong incentives for this age group to continue formal education. • Some adolescents eat lunch, regarded as the most important meal of the day, at their workplace and many eat snacks to substitute lunch if they cannot afford to purchase it. Engaging with workplaces provides a valuable opportunity that programmes aimed at increasing adolescent nutrition should carefully explore and manage. • Healthy food is often more expensive, or at least is perceived to be, so it may be may useful to explore reducing costs associated with healthy unprocessed products whilst <u>simultaneously decreasing access to non-nutritious, unhealthy foods.</u>
	Education	<ul style="list-style-type: none"> • The value of adolescent education should be promoted through community-based role models and linked to attractive incentive structures for adolescents and their wider family unit. To help facilitate school attendance, it is important to explore ways to reduce income-generation activities of both boys and girls, and the housework / household responsibilities of girls.
	Violence and substance abuse	<ul style="list-style-type: none"> • Whilst it is important to invest in longer-term solutions to security issues, in the short- to medium-term girls in unsafe urban centres must be reached where they are and not left behind due to their constrained environment. • Investment should be made in sport and recreational activities for adolescent girls and boys. Whilst this would help overcome the sedentary nature of adolescents in insecure urban centres, it would also provide them with a safe platform to meet peers, form social relationships and develop a healthy body and mind. Engaging boys through sport activities would help promote the importance of health and nutrition for strength and physique as a positive alternative to alcohol and substance abuse.
	Sexual and reproductive health	<ul style="list-style-type: none"> • Reducing adolescent pregnancy is key in ensuring the healthy development of adolescent girls and is linked with poverty reduction and education promotion efforts that have been proven to have a positive impact on adolescent nutrition and broader well-being. • Health facility services should actively try to reach adolescents and sustain engagement. Services should be carefully designed to ensure this age group perceives them to be relevant. Normalising health facility visits for preventative care is important and should aim to shift association away from sexual and reproductive health issues. In parallel, the provision of quality care for adolescents must be further strengthened.

References

- Black, R., H. Alderman, Z. Bhutta et al. (2013). 'Executive Summary of The Lancet Maternal and Child Nutrition Series', *The Lancet*. <http://www.thelancet.com/pb/assets/raw/Lancet/stories/series/nutrition-eng.pdf>
- Blum, R.W., N.M. Astone, M.R. Decker, et al. (2014). 'A conceptual framework for early adolescence: a platform for research.' *International Journal of Adolescent Medicine and Health* 26: 321-331. <https://www.degruyter.com/view/j/ijamh.2014.26.issue-3/ijamh-2013-0327/ijamh-2013-0327.xml>
- Conadur/Segeplán (2014). *Plan Nacional de Desarrollo K'atun Nuestra Guatemala 2032* (National Development Policy Ka'tun 2032). http://www.segeplan.gob.gt/downloads/Plan_Nacional_de_Development_Katun_2032.pdf
- Finlay, J. E., E. Ozaltin, D. Canning (2011). 'The association of maternal age with infant mortality, child anthropometric failure, diarrhoea and anaemia for first births: evidence from 55 low- and middle-income countries.' *BMJ Open* 1, no. 2. <http://bmjopen.bmj.com/content/1/2/e000226>
- Horton, R., S. Lo (2013). 'Nutrition a quintessential sustainable development goal.' *The Lancet*, 9890: 371-372. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)61100-9/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)61100-9/fulltext)
- Kaplan, P.S. (2004). *Adolescence*. Boston: Houghton Mifflin Company.
- Leenstra, T., L.T. Petersen, S.K. Kariuki, et al (2005). 'Prevalence and severity of malnutrition and age at menarche: cross-sectional studies in adolescent schoolgirls in Western Kenya.' *European Journal of Clinical Nutrition* 59, no. 1: 41-48. doi: 10.1038/sj.ejcn.1602031
- Ministerio de Salud Pública y Asistencia Social, Instituto Nacional de Estadística, ICF International (2017). 'Encuesta nacional de salud materno infantil 2014-2015. Informe final'. (2017), Guatemala: Ministerio de Salud Pública y Asistencia Social. <http://www.mspas.gob.gt/index.php/component/jdownloads/send/92-encuesta-nacional-de-salud-materno-infantil-2014-2015/250-vi-encuesta-nacional-de-salud-materno-infantil-2014-2015>
- Ohlhorst, S., R. Russel, D. Bier, et al (2013). 'Nutrition research to affect food and a healthy lifespan'. *Advances in Nutrition*. 4: 579-584. doi: 10.3945/jn.113.180638
- Pan American Health Organisation (2012). 'Guatemala'. *Health in the Americas*. http://www.paho.org/salud-en-las-americas-2012/index.php?option=com_docman&view=download&category_slug=hia-2012-country-chapters-22&alias=132-guatemala-132&Itemid=231&lang=en
- Patton, G.S., J.S. Sawyer, D.A. Santelli, et al (2016). 'Our future: a Lancet commission on adolescent health and wellbeing.' *Lancet* 387: 2423-2478. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)00579-1/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)00579-1/fulltext)
- Ramirez-Zea, M., M. Kroker-Lobos, R. Close-Fernandez, et al. (2014). 'The double burden of malnutrition in indigenous and nonindigenous Guatemalan populations'. *American Journal of Clinical Nutrition* 100 (6) 1644S-1651S. doi: 10.3945/acjn.114.083857
- Sawyer, S.M., P.S. Azzopardi, D. Wickremarathne et al. (2018). 'The age of adolescence'. *The Lancet Child and Adolescent Health*. doi: [http://dx.doi.org/10.1016/S2352-4642\(18\)30022-1](http://dx.doi.org/10.1016/S2352-4642(18)30022-1)
- SESAN (2016). *Estrategia nacional para la prevencion de la desnutricion cronica 2016-2020* <http://www.sesan.gob.gt/wordpress/wp-content/uploads/2017/07/Estrategia-para-la-Prevencion-de-la-Desnutricion-Cronica.pdf>
- Steinberg, L. (2014). *Age of Opportunity: lessons from the new science of adolescence*. Boston: Houghton Mifflin Harcourt.
- Scaling Up Nutrition (2016). *The Scaling Up Nutrition (SUN) movement, annual progress report*. https://docs.scalingupnutrition.org/wpcontent/uploads/2016/11/SUN_Report_20161129_web_All.pdf
- Thurnham, D. (2013). 'Nutrition of adolescent girls in low-and middle-income countries.' *Sight Life* 27: 26-37. https://issuu.com/sight_and_life/docs/sight_and_life_27_3_2013
- World Food Programme (2017). *Fill the Nutrient Gap Report Guatemala*. In publication.

