PRIORITIZING NUTRITION AND FEEDING IN ALTERNATIVE CARE

SPOON

AN INTRODUCTION AND RECOMMENDATIONS FOR PROGRAMS

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SPOON

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SPOON, August 2020.
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DEAR READER,

This paper illustrates the undeniable link between childhood malnutrition, disability, and loss of family care. It draws from over a decade of experience and evidence SPOON has collected working with vulnerable children around the globe. Our data illustrate alarming rates of malnutrition among children in alternative care and children at high risk of family separation. The data also demonstrate the power of simple nutrition interventions to restore even the most vulnerable children to health, thereby strengthening their chance for remaining in or returning to family care.

It is SPOON's aim to inspire alternative care professionals, particularly those designing and implementing programs, to prioritize collaboration and action towards addressing malnutrition in their work. This paper introduces the main nutritional challenges faced by children in alternative care, and describes key areas of action for programs.

The immediate and life-long impacts of poor childhood nutrition are well established and are gaining increasing attention from the global community. Yet, malnutrition has rarely been studied or prioritized for the millions of children worldwide living outside of family care. SPOON's research demonstrates that children living outside of family care suffer from malnutrition at rates far greater than their peers. This is particularly true for children with disabilities, who are over-represented in this population, particularly in institutional settings. Gone unaddressed, malnutrition will compromise brain development, immunity, and resilience, thereby exacerbating pre-existing disability or creating disability that would otherwise not exist. This not only has consequences for the health of children—it may also rob children of their chance to remain in or return to family care.

SPOON works with alternative care professionals and caregivers to develop growth monitoring systems, provide healthy diets, and implement safe, effective feeding practices. These simple measures have resulted in swift and dramatic improvements in growth, nutritional status, and feeding skills for children in residential care and in family care. The methods outlined here are most effective when integrated into a holistic disability or care reform initiative.

While malnutrition is only one of many issues that must be addressed in family strengthening and deinstitutionalization efforts, it is foundational. Families who are ill-equipped to care for their child with disabilities are more likely to relinquish them, and children in residential care who are malnourished and unhealthy are less likely to return home or be placed with a family. Our hope is that the alternative care and nutrition sectors can bridge to meet the needs of these groups of children through policies and programs.

Timing has never been more crucial. The COVID-19 pandemic poses a real threat to child nutrition and to children's families. As food insecurity and family separation increase, it will become even more urgent to protect children's rights to good nutrition and a safe family environment. We know that nutrition also helps to promote resilience in children, and can buffer some of the worst effects of stress and trauma.

SPOON is committed to supporting our colleagues in this effort through data-sharing, knowledge transfer, and technical assistance. Together, we will work towards the vision of a world where every child is valued and nourished.

In gratitude and partnership,

Cindy Kaplan
Co-founder & Board Chair
SPOON

INTRODUCTION

Early nutrition is fundamental for all children to grow, develop, and thrive. Proper nutrition powers children's growth and brain development,[1] and leads to life-long benefits in good health, better social outcomes, and success in school and work.[2] In early childhood, and particularly in the first 1,000 days, nutrition and stimulation work together to form the architecture of children's growing brains.[3] Poor nutrition in early childhood can cause irreversible delays, and approximately 45% of all child deaths are related to undernutrition.[4] Research estimates that each dollar invested in reducing stunting generates a return of up to USD $18,[5] and nutrition for all is instrumental to delivering at least 12 of the 17 Sustainable Development Goals.[6]

Children in alternative care, many of whom have disabilities, have some of the highest rates of malnutrition. *Alternative care* refers to a formal or informal care arrangement for children living without parental care.[7] Alternative care can include family-based care such as kinship or foster care, as well as residential and institutional care.[8] The alternative care system is responsible for identifying, preparing, and supporting children and families throughout the transition period back into family care, including biological and adoptive families. Many alternative care programs also include efforts to prevent family separation, such as positive parenting programs and efforts to reunite children with their families. If nutrition is not addressed, children in alternative care face risks from both malnutrition and the long-term stress of family separation.

Currently, an estimated 5-6 million children live in institutional care.[9] Children with disabilities represent a significant portion of the children in alternative care overall, and are at particularly high risk of being placed into childcare institutions. Growing up in an institution is consistently associated with poor outcomes in children's physical growth and brain development. Children who move from an institution to family-based care often catch up with some growth and developmental milestones, though delays typically persist.[10] Both the United Nations Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities affirm children's rights to health, including nutrition, and to family life. The 2020 Lancet Commission on Institutionalization and Deinstitutionalization of Children calls the sector to action to provide every child with family care. SPOON's work, and this paper, focus on improving nutrition for children during key developmental windows in all settings, and as a critical factor in accelerating progress towards ending institutionalization and providing family care for every child.

SPOON is a global nonprofit focused on equipping caregivers with the skills, tools, and information they need to respond to the nutrition and feeding needs of children in alternative care, children at risk of family separation, and children with disabilities. Our work addresses both *what* and *how* children are fed. This paper draws upon lessons from our work in 17 countries since our founding in 2008. It summarizes the main nutrition considerations for children in alternative care, and offers recommendations on integrating nutrition and feeding practices into alternative care programs. This paper also explores ways that nutrition can support the global movement to ensure every child has family-based care, while meeting the immediate needs of the millions of children currently in all types of alternative care.

LINKS BETWEEN NUTRITION, DISABILITY, AND ALTERNATIVE CARE

Multiple, inter-related factors lead to high rates of malnutrition for children in alternative care. Many children who enter into alternative care have risk factors for poor nutrition at birth, such as low birth weight, inadequate prenatal care or diet, and not being breastfed.[11] Children affected by poverty and food insecurity, and children with special healthcare needs, are at higher risk of being placed into alternative care,[12] particularly when families cannot access support services in their communities.[13] Children who have lost family care are also more likely to have developmental disabilities or delays, be exposed to adverse childhood experiences, or have other health conditions.[14] While these factors contribute to high rates of malnutrition, care practices while children are in alternative care also frequently lead to malnutrition or fail to address existing nutrition challenges.[15]

Globally, children with disabilities are three times as likely to be malnourished as children without disabilities, and twice as likely to die from malnutrition during childhood.[1617] Up to 85 percent of children with developmental disabilities experience feeding difficulties, such as difficulty chewing or swallowing. These difficulties, if not addressed, can lead to respiratory illnesses and undernutrition.[18] Children with disabilities in alternative care are at particularly high risk of malnutrition and its long-term consequences,[19] and lack of community-based services for children with disabilities may contribute to high rates of institutionalization for this population.[20]

SPOON has found consistently high rates of malnutrition in children in residential care and children with disabilities who are at high risk of family separation. A 2010 assessment compared children in childcare institutions in Kazakhstan to a control group from the same communities. Children in institutions were substantially below growth standards, and were more likely to be wasted (22.1%), underweight (31.5%), stunted (36.7%), and anemic (37.1%) compared to children in kindergartens (2.2% wasted, 4.4% underweight, 14.4% stunted, 18.1% anemic). Children in institutions also had a high risk of developmental delays, with 52% showing mild to severe delays.[21]

Count Me In is a web application developed by SPOON that tracks children's growth, anemia status, and feeding over time, and generates customized care plans for each child. It is used by trained healthcare and child protection workers to monitor and improve nutrition for children in institutional care, children at risk of family separation, and children with disabilities. A baseline nutrition screening of 377 children from five countries[22] in *Count Me In* showed that 71% of children in these risk groups had one or more indicator of malnutrition, including stunting, wasting, underweight, and anemia. Preliminary data collected by *Count Me In* users (as of April 2020, see **Table 1**) show high rates of malnutrition among children in these risk groups.

INDICATOR OF MALNUTRITION*	ALL CHILDREN	CHILDREN WITHOUT DISABILITIES	CHILDREN WITH DISABILITIES
Stunting	**58.4%** (of 329 children)	**45.2%** (of 124 children)	**73.4%** (of 169 children)
Wasting	**14.2%** (of 239 children)	**10%** (of 110 children)	**21.5%** (of 93 children)
Underweight	**48.7%** (of 343 children)	**31.2%** (of 125 children)	**66.5%** (of 182 children)
Anemia	**47.5%** (of 343 children)	**57%** (of 144 children)	**41.6%** (of 190 children)

Table 1 *Baseline prevalence of malnutrition among children with and without disabilities enrolled in Count Me In*

*Stunting, wasting, underweight, and anemia are defined per WHO cut-off points (wasting as weight-for-height/length < -2 z-score; underweight as weight-for-age < -2 z-score; stunting as height/length-for-age < -2 z-score;[23] anemia as hemoglobin <11.0 g/dl for children younger than 5 years and <11.5 g/dl for children 5 years and older.[24]

NEW RISKS FROM COVID-19

The current COVID-19 pandemic places more children at risk of losing family care and brings in new threats to children's nutrition. Providing good nutrition, including diverse, nutrient-dense foods, can help keep children's immune systems strong during the pandemic. Children in residential settings face high risks of COVID-19, due to crowded conditions, higher rates of health conditions, and challenges to practicing social distancing and hygiene measures. While nutrition alone cannot prevent the spread of COVID-19, undernourished children have reduced immunity and face increased susceptibility to infections.[25]

COVID-19 is also disrupting food systems and is predicted to increase food insecurity, particularly for the most vulnerable people. The economic and social impacts of COVID-19 threaten to separate families and children. These impacts may lead to caregivers becoming sick, increased stress in the home, the need to move to find work, or other economic factors that make families feel unable to meet their children's needs. As the pandemic threatens to place more children at risk, COVID-19 responses must include steps to help families stay together and keep children well-nourished.[26]

INTEGRATING NUTRITION AND FEEDING INTO ALTERNATIVE CARE PROGRAMS

Nutrition and feeding can strengthen outcomes for children in all types of alternative care, including preventing family separation, meeting the needs of children in residential care, and supporting transitions to family-based care. SPOON's experience has shown that **six key areas** can improve nutrition and feeding: equipping caregivers; assessing and monitoring nutrition; providing healthy diets; promoting good feeding practices; supporting responsive caregiving and positive mealtimes; and developing inclusive systems. This section explains the role of each of these steps in meeting the nutrition and feeding needs of children in alternative care, and provides action items for practitioners to integrate these steps into programs or policies. Specific actions will vary across contexts, and should be adapted depending on the type of care provided, the health needs of children and families, and the expertise of their caregivers.

Equip caregivers

Caregivers have the power to transform nutrition and feeding. Caregivers in an alternative care context can include adoptive or foster parents, other relatives, staff in child care facilities, and parents in family strengthening or reintegration programs. Practical information and contextualized solutions can support caregivers to ensure that children are fed safely, are fed in a nurturing environment, and receive an appropriate diet. We recommend supporting caregivers to implement best practices progressively following a 'small doable actions' approach, starting with the most urgent and feasible practices, and adding in new actions over time.[27] The following sections will expand on the types of actions caregivers can implement to improve nutrition and feeding for children in alternative care.

SPOON works with caregivers around the world to adopt feeding and nutrition practices adapted to their contexts. Preliminary data from *Count Me In* on 224 children with disabilities collected by healthcare workers in residential or community-based rehabilitation centers who have been trained in nutrition and feeding show trends towards improved nutrition, with a 43.6 percent reduction in anemia and 24.7 percent reduction in wasting.[28] Caregivers who use *Count Me In* received training on critical nutrition practices, and use *Count Me In* for assessment, monitoring, decision support, and data collection.

In residential settings, staff can use supportive feeding and nutrition techniques to give children a foundation for a healthy transition to family life. As children transition from residential care to family care, families typically need information, skills, and support to respond to children's needs and overcome nutrition challenges. When families understand children's health history and nutritional needs as they transition to family care, they can prevent or respond to malnutrition. Specific support needs are likely to vary, and should respond to each family's individual needs.

PROGRAM RECOMMENDATIONS

- Equip caregivers with knowledge, techniques, and support
- Target solutions to caregivers' needs and avoid a 'one size fits all' approach
- Gather support from family members and community members
- Include nutrition and feeding in existing support services[29]

Improving nutrition is not the responsibility of families alone, and particularly not only the role of mothers. Existing supports, such as visits from parasocial or community health workers, can be expanded to include efforts to support families to improve nutrition and feeding, information about essential nutrition actions, and practical steps to make changes. Engaging a wider network, including neighbors, extended families, community leaders and others can encourage families, promote the importance of nutrition, and combat stigma.

Assess and monitor nutritional status

Without regular assessment, signs of malnutrition can be easy to overlook, and may not be detected until children have developed moderate or severe malnutrition and missed significant developmental milestones. Alternative care programs should ensure that all children, even those with no outward signs of malnutrition, receive comprehensive nutritional assessments appropriate for their age and their nutritional risk.[30] Comprehensive nutritional assessments should include growth monitoring and screening for micronutrient deficiencies.

PROGRAM RECOMMENDATIONS

- Establish a growth monitoring system and ensure access to appropriate, quality growth equipment
- Refer children to nutrition services or train staff to weigh and measure children accurately and compare to WHO Child Growth Standards[38] or Growth Reference[39]
- Track children's growth on the recommended well-child visit schedule or according to their risk
- Adapt measurement techniques for children with disabilities[40]
- Link with health services and nutrition rehabilitation units and develop action plans to respond to growth concerns
- Asses nutrition status in pre- and post-transition assessments and include steps to respond to any issues in care plans as children transition to family care[41]

Physical growth monitoring includes taking anthropometric measurements (weight, height or length, head circumference, mid-upper arm circumference) following standardized measurement protocols on a standard schedule, comparing the child's growth to the to the WHO Child Growth Standards (for children 0-5 years old)[31] and WHO Growth Reference (for children and adolescents 5-19 years old), [32]responding to any concerning growth trends, and following individualized care plans to ensure each child is growing well.[33] The goal of growth monitoring is to allow healthcare workers and caregivers to diagnose and address malnutrition early and determine if children are responding to the nutrition and feeding interventions they receive.[34] When appropriate health services are accessible, alternative care professionals can work to ensure children are accessing these services on a consistent basis. When services are not accessible, child care professionals (such as social workers, early child development service providers, etc.) can perform growth monitoring, for example in a residential institution or as part of a parent support program for children returning to families from residential care.

While some disabilities may alter growth patterns, poor growth among children with disabilities can also be caused by malnutrition.[35] When healthcare workers and caregivers are measuring and interpreting growth, they should consider the child's disability with the aim to bring all children to their full growth potential. Healthcare workers should also communicate growth results and implications to caregivers clearly and work with them to identify feasible ways to improve children's growth.

While growth monitoring is essential to assessing a child's nutrition, it will not reveal every nutrition issue. *Hidden hunger* refers to a lack of essential micronutrients (i.e., vitamins and minerals), and can lead to poor growth and health, delayed development, low productivity, and disabilities.[36] Children at high risk of malnutrition should be screened for common micronutrient deficiencies. For example, iron deficiency anemia is the most widespread nutritional deficiency in the world. Severe anemia causes weakness, shortness of breath, and fatigue or lack of interaction. Even moderate iron deficiency can delay children's brain development and growth, and increase their risks for infections.[37] Assessing micronutrient levels, responding to any issues found, and monitoring progress over time can prevent or overcome micronutrient deficiencies.

Provide healthy diets

Children in alternative care, like all children, need a diverse, nutrient-dense diet to develop and thrive. In early childhood, when children are growing quickly, an insufficient or low-quality diet can lead to stunting, underweight, or wasting and can limit brain development.[42] Children with disabilities and children with special health care needs often have different or increased dietary needs.[43]

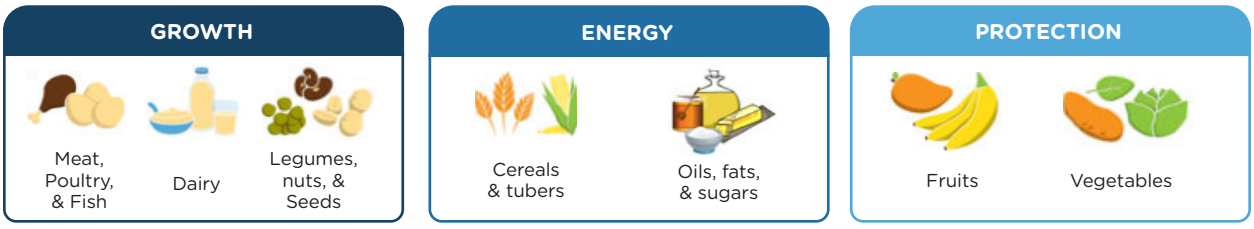
PROGRAM RECOMMENDATIONS

- Facilitate access to a diverse, healthy diet as part of family strengthening and transition programs (for example, through home gardening, seed distribution, or education on use of locally available foods)
- Link with food security programs to help ensure children in alternative care receive sufficient diets[49]
- Adjust diets to children's individual needs
- Set minimum standards for dietary diversity in residential care settings
- Support caregivers to include foods for growth, energy, and protection in every meal, and nutrient-dense foods between meals[50]

Caregivers in families and in residential settings should be supported to provide children nutrient-dense foods in all food groups. A diverse diet includes foods that support growth, energy, and protection (see **Graphic B**). Growth foods are high in protein and support healthy growth, including brain development. Energy foods provide children with energy to grow, play, and learn. Protection foods provide needed vitamins and minerals, many of which bolster children's immune systems and protect them from infections.[44] Currently, only 1 in 5 children from the most vulnerable households receives a diet that meets the minimum level of diversity.[45]

Healthy diets do not necessarily require new or expensive foods. Alternative care programs can support caregivers to use foods that are available within in their communities or to develop sustainable food sources in areas of food insecurity. For example, a home garden can be a sustainable source of vegetables, which provide necessary nutrition. Trainings can also encourage families to incorporate foods that may be available in their communities but are not typically eaten by the family or served to children. The availability and affordability of foods can vary within countries, so recommendations should be tailored to each setting.

Breastfeeding is associated with significant health and developmental benefits for children and can promote bonding.[46] Family strengthening programs aiming to prevent separation should offer direct support to mothers to breastfeed and contribute to building a positive enabling environment around breastfeeding. Mothers of children with feeding difficulties may need additional help to breastfeed,[47] such as guidance on appropriate positioning techniques or support expressing milk for alternative feeding methods. If this is not possible, including in cases where infants are separated from their mothers, infants should receive a diet and feeding practices that mirror breastmilk and breastfeeding as closely as possible.[48] This can include using high-quality infant formula and holding infants closely while feeding.



Graphic B *Examples of growth, energy, and protection foods*

Promote safe feeding practices

Children's nutrition is not only influenced by their diet, but also how they are fed. In alternative care, children may be exposed to unsafe feeding practices, and this is particularly true for children with disabilities or other special healthcare needs. Approximately 80% of children with developmental disabilities have feeding difficulties, such as trouble chewing or swallowing.[51] Improper feeding can lead to aspiration and pneumonia, prevent children from accessing a nutritious diet, and make feeding lengthy and challenging for caregivers and children.[52] For example, many children with neuromotor disorders or motor impairments are fed lying down. This practice increases the risk for coughing, choking, and aspiration, which can lead to respiratory illness and pneumonia.[53]

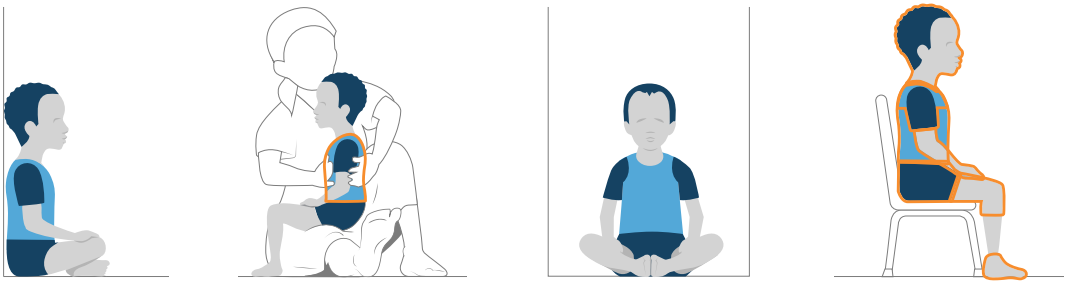
Caregivers may also feed children very quickly, force feed, or offer bites that are too large for a child's mouth. This can cause choking or aspiration, which is when food or liquid goes into the airway. It can also lead to oral aversion, causing children to refuse certain foods or food textures.[54] Caregivers may also not allow children to feed themselves, which prevents children from developing the feeding skills they will need in a family setting.[55] In residential settings, these practices can be driven by high caregiver to child ratios, limited feeding time, or basing feeding techniques on efficiency rather than children's cues.[56]

Training caregivers on simple techniques such as correct body positioning, matching food texture to skill level, and feeding at an appropriate pace can improve outcomes.[57] These practices can help children stay healthy, overcome malnutrition, and develop independent feeding skills.[58] They may also help children in residential settings build a foundation to successfully transition to family care. For example, SPOON trains caregivers to feed children when they are seated as upright as is possible for the child, including using household objects like pillows and blankets for support when adapted seating solutions are not available. SPOON also responds to more complex feeding needs, and trains caregivers in highly specialized techniques such as jaw support and tube feeding protocols.

Similar programs for families can also improve nutrition and feeding outcomes. For example, a program in Bangladesh provided feeding training to 37 pairs of caregivers of children with cerebral palsy. Caregivers received home visits with training and support focused on improving the ease and efficiency of feeding and improving dietary intake. Program data from 22 pairs showed significant reductions in caregivers' stress levels, as well as improvements in children's respiratory health, fluid intake, and cooperation during mealtimes.[59]

PROGRAM RECOMMENDATIONS

- Train caregivers in safe and developmentally appropriate feeding practices for children with feeding difficulties
- Ensure safe positioning, particularly for children with feeding difficulties
- Support children to develop independent feeding skills[60]
- Promote safe food hygiene practices, like handwashing with soap and cleaning dishes thoroughly[61]



Examples of safe positioning guidance from Count me in

Support responsive caregiving and positive mealtimes

Responsive caregiving, defined as interactions in which a caregiver responds to a child's behaviors, complements best nutrition and feeding practices to promote growth and development.[62] Children in alternative care often lose out on the responsive caregiving they need for healthy development. In residential settings, high caregiver to child ratios and limited interaction can make it infeasible for caregivers to provide the 'serve and return'[63] attention children need for optimal development.[64] Families experiencing high levels of stress, such as families at risk of separation and families reintegrating children, can also find it difficult to provide responsive care. When they succeed, responsive caregiving can support children's development, promote bonding, and eventually ease care burdens.[65]

PROGRAM RECOMMENDATIONS

- Promote responsive caregiving for all caregivers
- Develop a supportive enabling environment around responsive feeding practices[71]
- Focus on mealtimes as an opportunity for nutrition and bonding
- Support caregivers to interact with children by singing and talking during mealtimes[72]
- Coach caregivers on common feeding challenges experienced by children in alternative care[73]

Mealtimes can be a critical bonding experience for children and families and an opportunity to promote responsive caregiving. Caregivers can sing or talk with children during feedings, feed children face to face, and use other simple practices to promote positive interactions.[66] For caregivers of children with feeding difficulties, mealtimes may be very stressful.[67] As caregivers implement improved practices, mealtime can become an enjoyable opportunity for parents to connect with their child, understand their child's communication, and build empathy. Responsive mealtimes can also make it easier for parents to notice feeding issues, practice new techniques, and see their children become more independent.[68]

Children in alternative care are more likely to have issues like food aversions, picky eating, and food hoarding, which may be associated with trauma and can increase stress during mealtimes. Caregivers can help children establish a positive lifelong relationship with food and mealtimes.[69] For example, SPOON trains foster parents in the United States to establish positive mealtime routines for the children in their care, many of whom have experienced food insecurity. These trainings focus on practices that foster parents can implement at home, like offering a variety of foods at scheduled mealtimes, while empowering the children to choose which and how much of the offered foods to eat.

To implement responsive caregiving, families and caregivers will need support from services, policies, and their communities.[70] Alternative care programs can help caregivers access support services, develop positive feeding practices, and contribute to a holistic approach that works with families, caregivers, and communities to keep children healthy, well-nourished, and safe.

Develop inclusive systems

Nourishing children in alternative care also requires change at system and policy levels. Ensuring family care for every child will not only fulfill children's rights but also improve their nutrition outcomes. Alternative care advocates and practitioners must continue this progress, while incorporating nutrition into plans to reform care systems. Meeting the nutrition and feeding needs of children in alternative care requires collaboration between the health and social service workforces to ensure that when children are separated from their families, this does not mean their need for good nutrition goes unmet.

PROGRAM RECOMMENDATIONS

- Advocate for nutrition policies that address the needs of children with disabilities and children in alternative care
- Strengthen collaboration between the nutrition and alternative care sectors
- Accelerate progress to provide family care for every child
- Generate, share, and use data on nutrition status and best practices[75]

Changing systems will also require data to guide decision making. There remain significant gaps in research, data, and best practices in this field,[74] making it difficult for policy makers and health system leaders to target resources where they are needed and limiting the visibility of the needs of children without family care as a development priority. Alternative care practitioners can work to fill this gap through their own work and by advocating for children in alternative care to be included in community-based surveys.

Finally, the nutritional and developmental needs of children in alternative care must be reflected in policy priorities and supported by strong accountability structures. Collaboration mechanisms can ensure mutual accountability and communication across policy makers in health and social welfare. Civil society and advocacy groups, including professional associations, must hold decision makers accountable for delivering on children's rights to health, nutrition, and family.

CLOSING

Malnutrition and lack of family care present a double burden for vulnerable children. Inability to meet children's nutritional needs contributes to more children being placed into alternative care, and children who lose family care are more likely to be malnourished. Improving the nutrition status of children in alternative care and in family strengthening services will not only support children's development, but make the transition to family care more successful. This will require collaboration between the nutrition and alternative care sectors, dedicated support for front line professionals, and behavior change among caregivers. We know that children need the love and protection of families and access to essential nutrition to set them up for the best start in life. Governments, organizations, and individuals each have a role to play to make sure all children's rights to good nutrition are fulfilled.

ENDNOTES

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