Intercountry Adoption

Where a Child's History Includes an Experience of Malnutrition

Relationships Australia
SOUTH AUSTRALIA

Please note: this booklet has been developed and provided as an information source and should not replace assessment and advice by medical professionals.

Post Adoption Support Services

Post Adoption Support Services (PASS) is a program of Relationships Australia SA and is funded by the Department of Education and Child Development. PASS provides information, support and services to anyone whose life involves adoption, both local and intercountry.

Services PASS provides include:

- Information on a broad range of adoption issues, including school issues
- Face to face and telephone counselling on adoption related matters
- School Support
- Support and assistance in searching for birth families, either local or inter-country
- Support and mediation with family reunions
- Links to adoption community groups
- Support groups for people affected by adoption
- Mentor program for young adoptees
- Referral to adoption-aware services.

PASS also runs seminars and workshops throughout the year, addressing a broad range of adoption-related topics such as:

- Parenting
- Child development
- Search and reunion
- Identity and family making
- Insights into adoption (plus many more).

Acknowledgements

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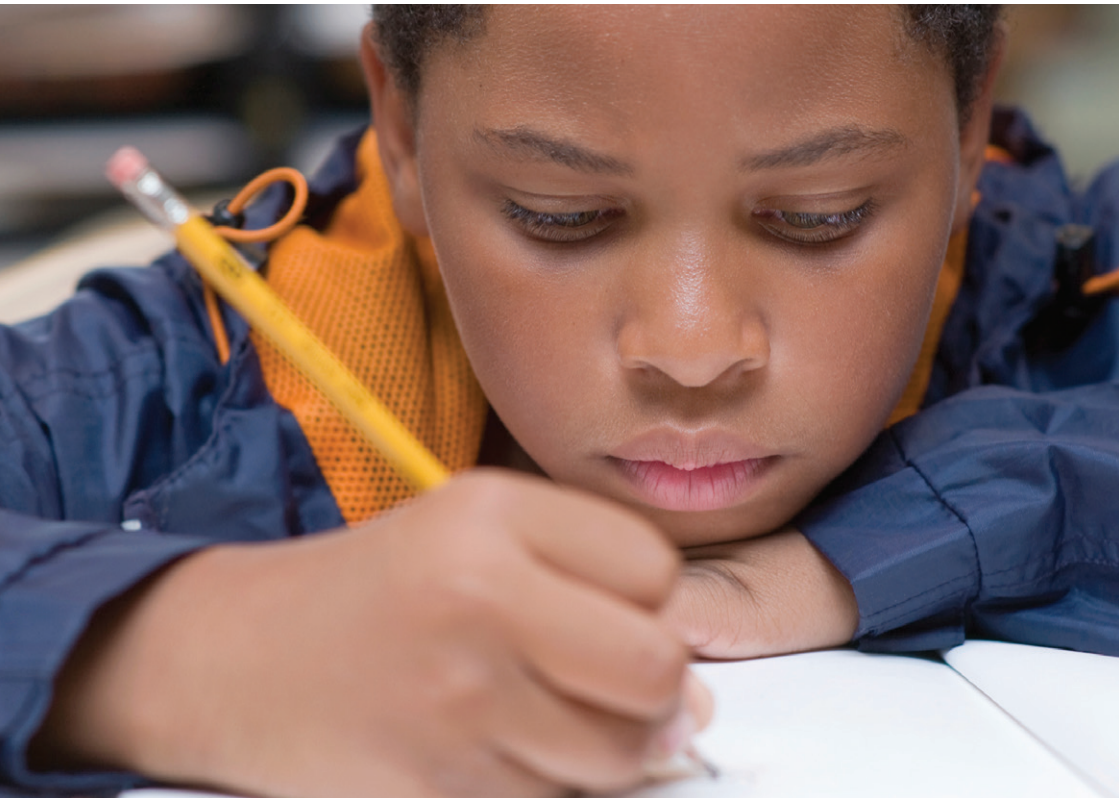
We would like to thank the '*Combined Intercountry Adoption Association of the 70's and 80's*', for their kind donation toward the printing of this booklet.



About This Booklet

This booklet has been produced by PASS at Relationships Australia SA and provides information for parents of children adopted from overseas who may have experienced malnutrition in their early growth and development prior to them coming to Australia.

It contains general information on experiences and issues that may be associated with different types of malnutrition, and the potential impacts this can have on children.

This booklet does not replace the need for medical assessment and advice specific to your child by the appropriate professional. Your family's local doctor is usually the first point of call for appropriate referral onto other specialists for your child's health and development.

If you believe your child has experienced malnutrition, PASS encourages you to discuss this with your local doctor or paediatrician for an individual assessment and advice that is relevant for your child.

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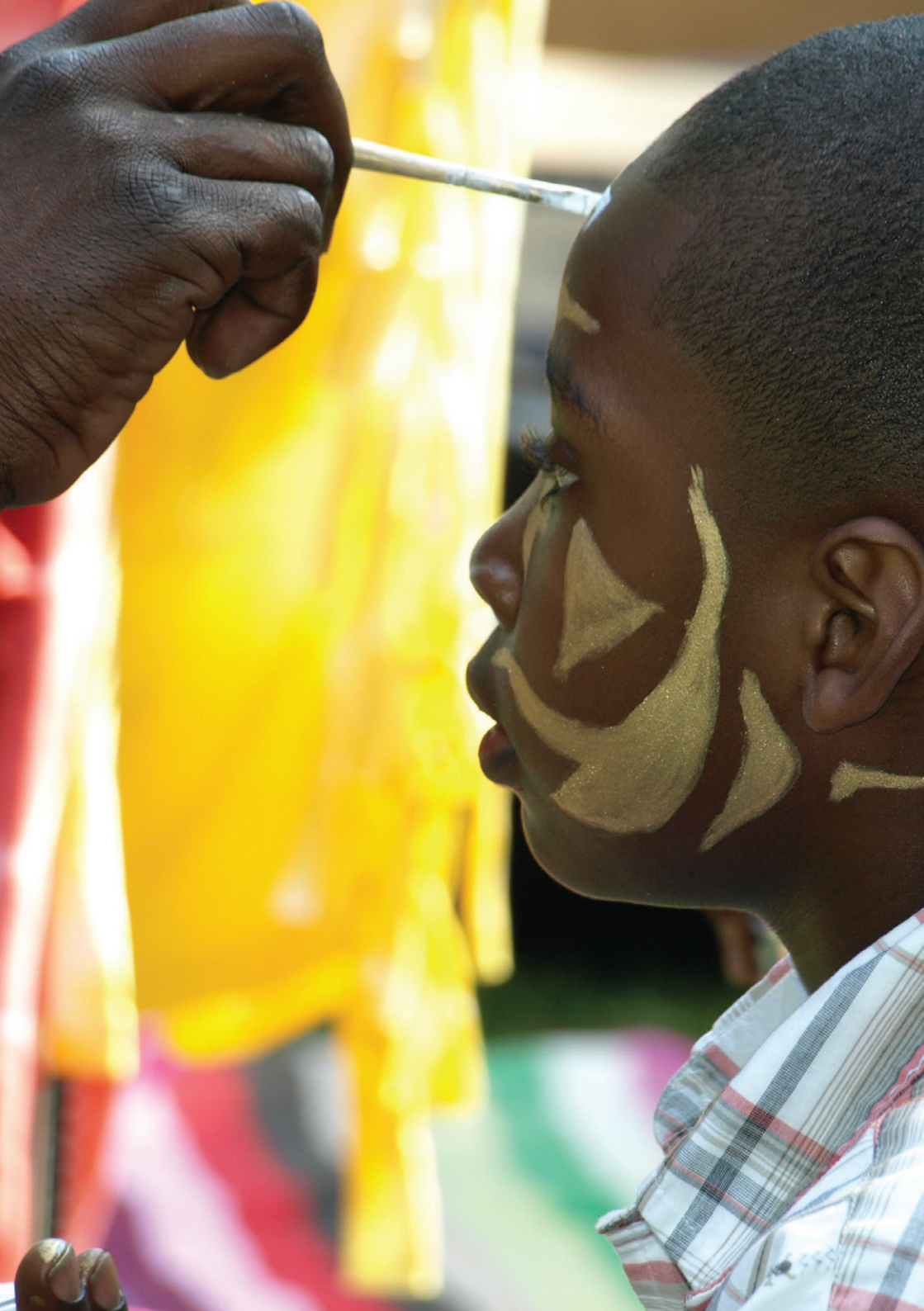


Introduction

Malnutrition and Intercountry Adoption

Children adopted from overseas come from a wide range of experiences and different country contexts. Many children adopted into Australia come from countries where they have experienced poverty, inadequate health care, little or no maternal care, and lack of regular reliable food sources.

Some children have received good nutrition and care in their families, communities or orphanages prior to adoption. However, some children will have experienced poor nutrition, with or without accompanying physical and/or emotional neglect. They may have had episodes of malnutrition long before being adopted, and some may still be very malnourished at the time of their adoption. This booklet will focus on those children.

Malnutrition may impact on a child well after the nutritional issue is resolved, and a history which included malnutrition is not always evident at the time a child is adopted.

What is malnutrition?

> *Malnutrition: Any disorder concerning nutrition. It may result from an unbalanced, insufficient, or excessive diet or to the impaired absorption, assimilation, or use of foods (Mosby's Medical and Nursing Dictionary, pg. 680, 8th Edition.2009. Elsevier)*

For the purposes of this booklet, malnutrition will be referring to a child's history of lacking enough food ***and/or*** lacking specific nutrients, prior to joining their adoptive family.

Why Might a Child Adopted from Overseas Have Been at Risk of Malnutrition?

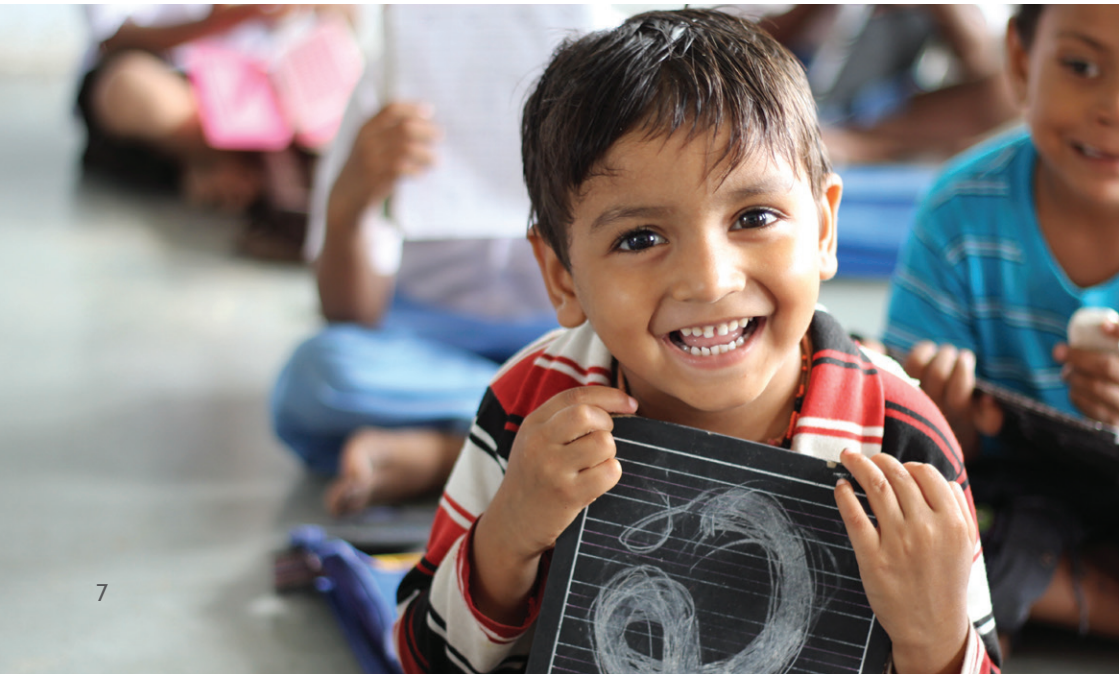
Poor nutrition may be due to a range of reasons including poverty, neglect, maternal malnutrition, lack of awareness about nutrition by previous care-givers, institutionalised care, cultural factors influencing diet and sunlight exposure for children. Recurrent infections, notably gastro-enteritis and chronic parasitic infestation may further increase the risk of malnutrition in infants and young children. In countries where there is widespread poverty and malnutrition, malnourishment may be prevalent across the population. For example, in Ethiopia an estimated 50 percent of children have stunted growth (Bulto 2005; WHO 2009), and in India around 46 percent of children are undersized for their age, as a result of malnutrition (UNICEF n.d.).

A child may have experienced malnutrition for a long period of time, or alternatively, they may have only ever experienced a single episode of malnutrition prior to adoption.

Babies and young children are particularly vulnerable to malnutrition as they are growing rapidly, especially between the age of six months and two years. Malnutrition is believed to be a contributory factor in over half the deaths of children under the age of five in developing countries.

Maternal malnutrition can impact on a child's growth up until the child is two years of age, and is therefore a significant factor for babies and very young children. Mothers may be more likely to be malnourished during pregnancy if they are very young, lack adequate nutrition, or have health issues such as intestinal parasites. Maternal malnutrition is common in developing countries. As an example, in Ethiopia a 2005 study showed approximately one third of mothers were suffering from at least one micronutrient deficiency (MoFaED&UN, 2012, p.45).

Some countries may not have widespread poverty, but individual families may have struggled with significant impoverishment and health issues, lack of education and no family or community support. This might have brought a reduced capacity to provide a baby or child with adequate nourishment, or lack of adequate food available, despite the carers giving the best physical and emotional nurturing that they are able to. Malnutrition can also sit alongside physical and/or emotional neglect. This may have been the case whether a child was being cared for by their family, a foster family or in an orphanage.



Micronutrient and Macronutrient Malnutrition

Macronutrient Malnutrition

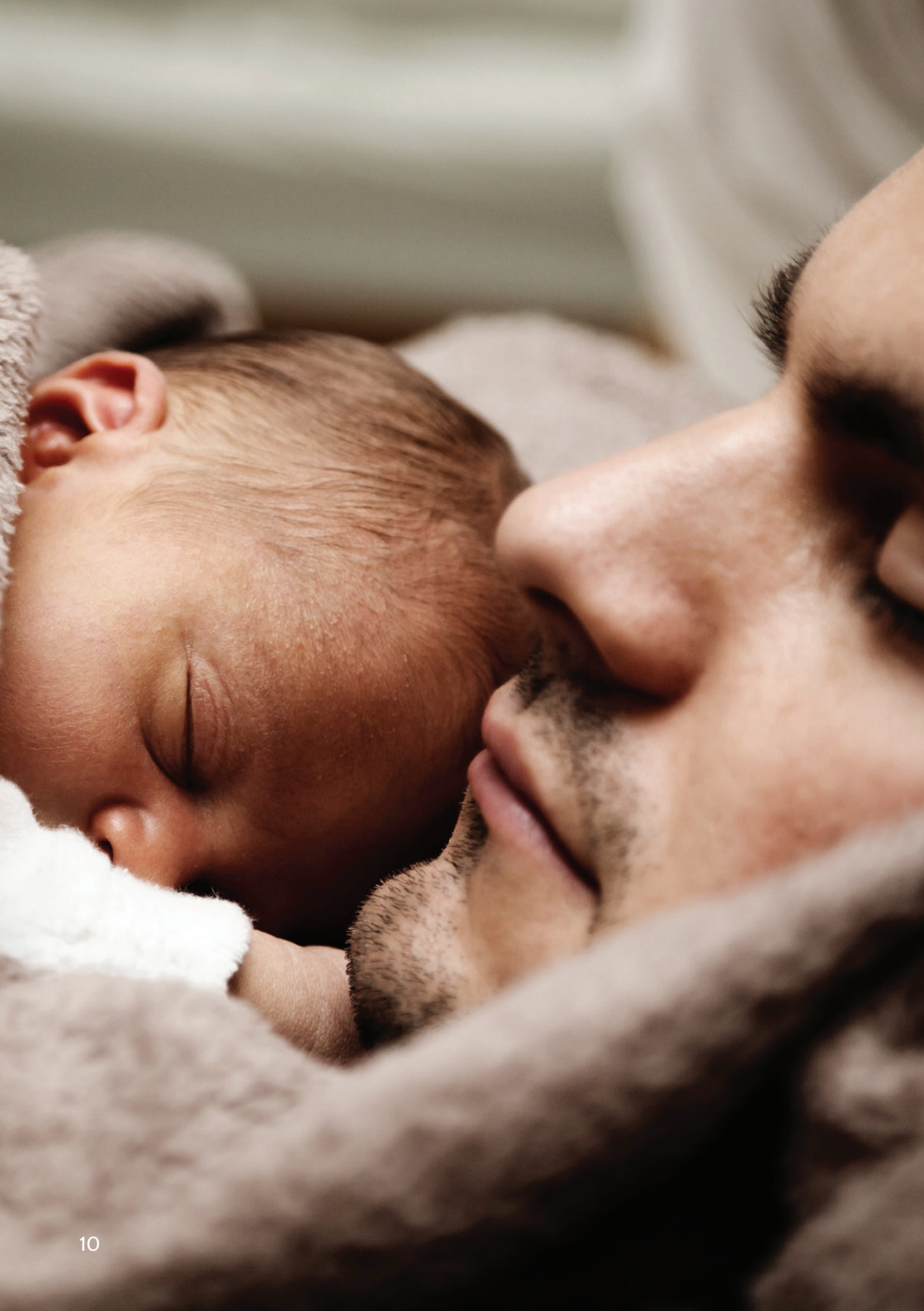
Macronutrient deficiency is where there is an inadequate intake of protein, fat and carbohydrates, leading to an inadequate total calorie (energy) intake.

There are two types of macronutrient malnutrition:

a. Marasmus – a condition where prolonged deficiency of all major nutrients leads to emaciation, poor growth, increased susceptibility to infection and often death. This type of malnutrition is seen predominately in infants less than one year of age (Dr. M. Rice).

b. Kwashiorkor results from an inadequate protein intake associated with a marginal or even normal total calorie intake. It results in fluid retention (oedema) in various tissues and body cavities. It also leads to impaired growth and increased susceptibility to infection. Kwashiorkor tends to occur in children over one year of age, often following weaning from breast feeding (Dr. M. Rice).

If malnutrition has been prolonged, mental and physical issues may be permanent despite recovery from the original malnutrition. Where the age of the child is unclear or unknown, this may lead to an assumption that the child is younger than their true age.



Micronutrient Malnutrition

Micronutrients are the vitamins and minerals which the body needs in small quantities for healthy growth and development. Examples of micronutrients include calcium, folate, iron, zinc, iodine and vitamins A, B, C and D.

The following information provides a brief overview of some micronutrient deficiencies, but this is not a complete list.

Diets that are poor quality, lack variety, or largely depend on a single staple food may lead to micronutrient malnutrition. This is quite common in developing countries.

While micronutrient malnutrition can be experienced by any age group, young children are especially vulnerable to deficiencies in one or more essential micronutrients. This is of particular concern as children's development can be impaired by micronutrient deficiencies.

It is important to note that some of the impacts of these micronutrient deficiencies which are outlined below can also be caused by other nutritional, environmental or genetic factors. Only a medical practitioner can make an accurate assessment of this. Therefore, your family doctor or paediatrician is best placed to evaluate your child for nutritional deficiencies and advise you about the health management required.

Iron Deficiency

Iron is a vital component of oxygen carrying proteins in the blood and also plays a role in promoting normal neurological and intellectual function. Iron deficiency leads to anaemia which in turn causes various health problems (Dr. M. Rice).

Iron deficiency is one of the most common forms of micronutrient malnutrition. For example:

- About 40 percent of African mothers are estimated to be anaemic, and this can contribute to children suffering from stunted growth (MoFaED&UN, 2012, p.45).

- In India, anaemia affects over 90 percent of adolescent girls, 74 per cent of children under the age of three, and 50 per cent of women (UNICEF, n.d.).
- Iron deficiency anaemia is the most common blood disorder in infancy and childhood (Dr. M. Rice).

Iron deficiency can result from reduced iron stores (prematurity, maternal iron deficiency), poor dietary intake, failure to absorb oral iron (chronic bowel disease, parasitic infestation), or reoccurring blood loss.

Vitamin D Deficiency

Vitamin D deficiency is caused by inadequate dietary intake as well as a lack of exposure to sunlight. This vitamin is important for infants and young children because it supports their rapid skeletal growth.

Children born to mothers who had limited exposure to sunlight during pregnancy may be of higher risk of vitamin D deficiency. Some cultures have beliefs and practices which limit exposure to sunlight for young babies, particularly in rural areas where traditional practices are more prevalent. Also, children living in institutions, where there is limited outdoor play time, may also be prone to vitamin D deficiency due to lack of sunlight exposure.

Vitamin D assists the body to absorb calcium, which in turn supports healthy bone development. A deficiency in Vitamin D can sometimes cause bone development issues, including a condition called rickets. Rickets can lead to bones being soft and vulnerable to bending, distortion or fracture. Children with rickets also have a heightened risk for respiratory infection.

A note on Vitamin D for children after adoption

It is important to be aware that children with darker skin may also be at higher risk of Vitamin D deficiency in Australia, especially if the child spends a lot of time indoors. This should be discussed with your doctor.

Vitamin A Deficiency

Vitamin A deficiency is another common micronutrient deficiency experienced in developing countries. This deficiency occurs when not eating enough foods that are rich in Vitamin A. Vitamin A rich foods include sweet potato, mangos, carrots and dark leafy green vegetables like spinach.

Vitamin A deficiency can impair physical and metal development, increase a child's susceptibility to infection, and cause various skin and eye problems (including a risk of blindness).

Zinc Deficiency

Zinc deficiency can develop from not eating enough foods rich in zinc, or alternatively, from excessive intake of foods which limit the absorption of zinc.

Institutionalised children are at particular risk of zinc deficiency due to diets low in zinc-rich foods.

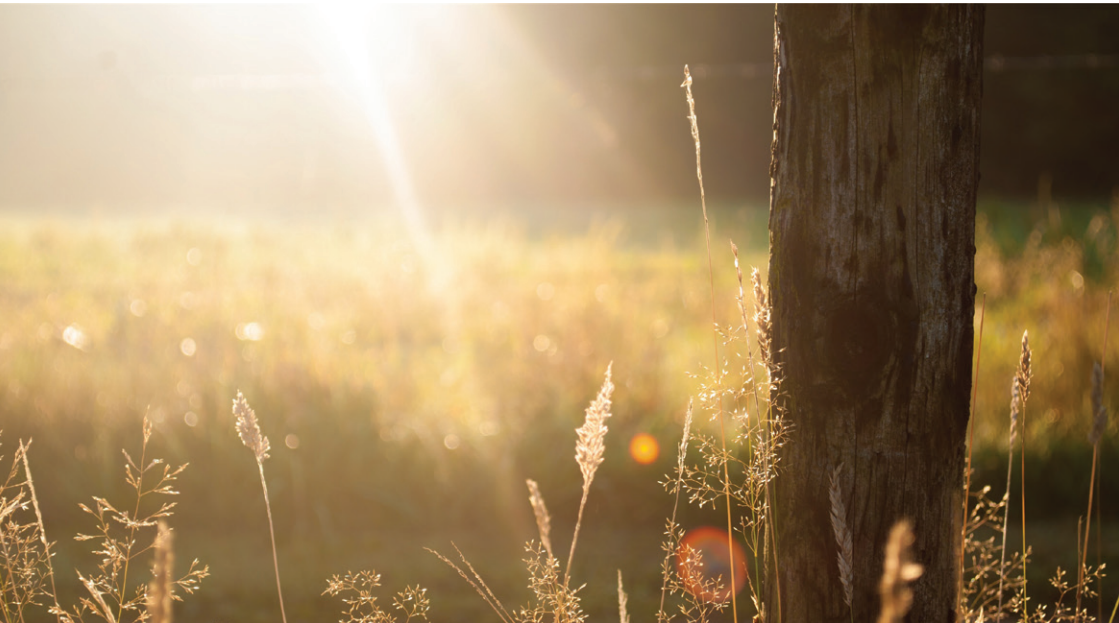
Zinc deficiency can result in impaired growth, increased susceptibility to infection, impaired wound healing, skin rashes and altered taste sensation. Zinc deficiency often co-exists with iron deficiency thus resulting in anaemia.

> ***Anaemia**: a disorder characterised by a decrease in haemoglobin in the blood to levels below normal range*

Iodine Deficiency

According to World Health Organisation, in 2007 two billion people had insufficient iodine intake, with a third of these being school age children. Iodine may be deficient in people's diets because their food source is lacking in this essential nutrient because the iodine content of crops and vegetables is dependent on the nutrient content of the soil in which they are grown. However, the most common sources of iodine-rich foods are seafood (fish and shellfish) and iodine enriched table salt. Iodine deficiency is more common in inland areas where seafood is unavailable.

Iodine is necessary for the thyroid hormones that regulate growth, development and metabolism and deficiency can cause a goiter (a swelling of the thyroid gland). Iodine deficiency impairs physical growth and intellectual development as well as other health problems. It is the most common cause of preventable mental impairment worldwide (Zimmermann 2009).



Impact of Malnutrition on Health and Development

Immune Implications

As indicated previously, micronutrient deficiency weakens a child's immune system. As a result, malnourishment creates a greater susceptibility to other diseases, such as chest infections and diarrhoea, which may be prevalent in an orphanage environment where there are many children. Such acute illnesses may further worsen the child's nutritional state.

Growth Implications

Chronic malnutrition may lead to the child being underweight and having stunted growth. Sometimes, where the actual age of a child is unknown, this can lead to the child being assumed younger than their actual age. In addition, emotional neglect and/or medical conditions can adversely affect children's growth and development.

Precocious (early) Puberty

Precocious puberty is the term for children showing signs of the onset of puberty before the age of 8 years (girls) or 9 years (boys). In girls, the first sign of puberty is breast development followed by pubic hair development, and in boys, genital and testicular enlargement followed by pubic hair development. Children with precocious puberty grow more rapidly than other children of their age, and may stop growing more quickly, leading to their adult height being affected. Research shows that children adopted from overseas are 10-20 times more at risk of developing precocious puberty, particularly those adopted after 2 years of age and those who have had a period of rapid 'catch-up' growth. Effective treatment is available and it is important that parents seek early medical assessment through their paediatrician or paediatric endocrinologist if this is an issue for their child (with thanks to Dr Jan Fairchild, Staff Specialist in Paediatric Endocrinology Women's and Children's Hospital, Adelaide, for providing this information to PASS).

Impact of Malnutrition on Gut Bacteria

Recent research in Bangladesh by physician and microbiologist Jeffrey Gordon (Subramanian et.al. 2014) indicates that early malnutrition may alter a child's gut bacteria, even when the malnutrition has been resolved. Gordon's research shows malnutrition may cause a persisting immaturity in the microbial environment of the gut. This may affect metabolism, immunity, digestion and overall development in an ongoing way.

Institutionalised Care and Malnutrition

Nutrition and Feeding Practices

Care in orphanages varies widely between different countries, and between institutions within the same country. This includes the food and feeding practices. A child who has spent time in an orphanage may have had – or may not have had - an adequate diet. Some orphanages are limited in what they are able to provide to a child due to a low carer to child ratio, and a lack of funds. There may also be significant differences in the quality of emotional, developmental and social care that a child has experienced. In addition, we must also be mindful that the child's experiences prior to entering the orphanage may also differ widely.

The following provides information about some of the challenges related to nutrition that may have been experienced by your child prior to entering an orphanage and/or during their time in an orphanage.

Babies

- Lack of nutrients in utero leading to prematurity or low birth weight
- Lack of nutrients in infancy/early childhood due to poverty
- Absence of, or limited (prior to entering the orphanage) breast feeding
- In some orphanages infants are 'bottle propped', which means babies are fed from bottles that are propped on pillows
- Bottles may have the openings broadened in order to reduce feeding times
- Being fed with cows milk instead of infant formula
- Being given over diluted infant formula, which may be done to help feed more children with limited resources
- Improperly prepared infant formula (which may also cause diarrhoea if bottles are not cleaned properly or water is contaminated)

- ‘Failure to thrive’ in a child experiencing emotional neglect or depression
- Illness affecting the babies ability to effectively absorb nutrients
- Infantile stress resulting from multiple carers can impact a baby’s eating habits, leading to an increased susceptibility to illness, which can further impact the infant’s nutritional status.

Toddlers and Young Children

- Very young children need help to access food and feed themselves. However this help may be limited if there are too few caregivers in an orphanage / institutional environment
- Toddlers are at an increased risk of malnutrition at the time of being weaned from breast milk in situations of poverty or neglect
- Lack of nutritionally balanced food being available
- Being fed with a regimented feeding schedule, as opposed to being fed when they are hungry, may lead to a child learning ‘adaptive behaviours’ such as eating as much food as quickly as possible before the food is taken away from them
- Where there is a low carer to child ratio, caregivers may be more likely to feed children in the fastest and most efficient manner rather than providing food in a nurturing and encouraging manner.

After Adoption

Often children have a rapid 'catch-up' growth after joining their adoptive family, yet they may experience some residual behavioural, physical or learning differences as a result of earlier malnutrition.

Possible Behavioural and Emotional Impacts

Children who have experienced institutionalised care and/or neglect and/or hunger and/or malnutrition may not be able to recognise when they are hungry or full, or experience a sense of panic if they become hungry. This may lead to hoarding and gorging, or stealing food from others (such as at school).

If a child has had poor feeding experiences prior to adoption (for example, babies who have been 'bottle propped', toddlers who have only been bottle fed, or children who were given only soft foods to eat), they may have difficulties in chewing and swallowing. Additionally, where the child's diet has been very limited, they may be overly sensitive to new tastes or textures. Tastes and smells may also be linked to traumatic experiences and this may cause a child to have strong reactions to certain foods.

Food and emotional nurture are closely linked in early childhood, and in particular for institutionalised children, malnutrition or hunger may go hand-in-hand with lack of emotional warmth and nurture. Where children have been 'bottle propped', experienced regimented feeding, or experienced neglect, food or the bottle may have been their only sources of comfort. Therefore, it is important to manage the related emotions or behaviours in a sensitive and understanding way.

Survival Strategies of 'hoarding', 'gorging' or 'stealing'

Children who have experienced hunger and unstable feeding routines may have developed important survival strategies that were needed to cope in the environment in which they were living. These learned behaviours may continue despite there being plentiful food and nurture after the child is adopted.

These behaviours can include 'hoarding' (for example hiding food in their room or pockets), 'stealing' (for example taking food from other children's lunchboxes at school, or 'sneaking food' from home that they believe they won't be given), and 'gorging' (continuing to eat even when they are full, sometimes to the point of vomiting).

These behaviours are a natural outcome of having experienced hunger and having a primal fear that this might occur again, and/or because the connection between nurturing and food has been complicated by the child's earlier experiences of physical and emotional neglect. These behaviours may also be caused by an overwhelming physical need where a malnourished child experiences rapid catch-up growth. When the child comes into a family environment with multiple food choices and constant availability, they can become overwhelmed and need help to assist them to adjust to their changed environment.

Leann King (2006 p.116) explains;

> *"When hunger is an unmet need, the natural correlation between hunger, food, and fullness is disrupted. I think that it is important that we try to teach recognition of hunger, and this may be very challenging in a child who wants to eat all the time as an issue of control. Their opportunities for feeling hungry will be significantly diminished in the beginning. As the need to control their food lessens, they will allow themselves to get hungry, trusting that food will be there when they need it".*

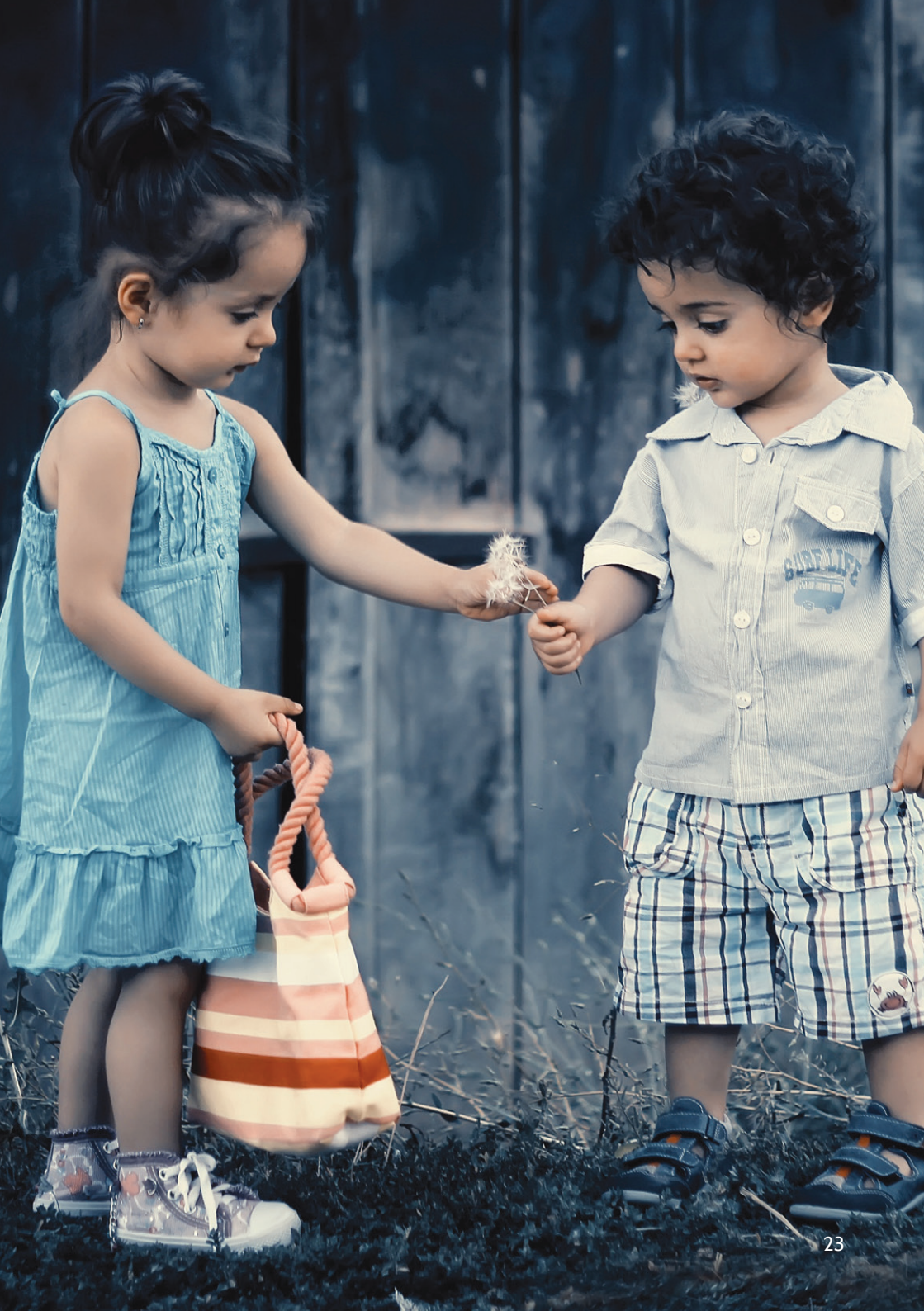
Helping the Child Who is 'hoarding', 'gorging' or 'stealing' Food

When dealing with food related challenges it is important to remember the underlying issues and that the behaviour has developed out of primal emotional and/or physical survival needs. It is important to avoid shaming the child, as these have been crucial life sustaining behaviours. Parents need to help their child in learning new eating behaviours and to build confidence and trust that food will be readily available. Children also need to learn to recognise their hunger and need for food as being separate to their need for emotional and social connection.

There are a number of helpful resources and readings in relation to hoarding, gorging or stealing. The following tips have been collated drawing from a number of sources (source details in reference list).

- Recognise the strong link between food and emotional nurture and that the child will need time and help in recognising their physical signs of being full.
- Children who have experienced neglect and/or lack of food may have a driving primal mistrust in the ongoing availability of food, and may struggle to regulate their intake. Respond by ensuring they always have more food available, and more often than they need, to help build trust that there is enough, so that they can start to self-regulate.
- Avoid shaming, disapproval, 'rules' around food, and implementing or threatening consequences for 'hoarding', 'gorging' or 'stealing' food.
- Provide them with their own food cupboard with an array of healthy foods you are happy for them to eat freely. Allow the child to have easy access and total freedom and control over this area.
- Provide the child with consistently available healthy food and nurturing experiences to help the child learn that food and nurture are now something which they can trust will be always available.

- Encourage the child to come and sit with the parent while eating to help them to replace gorging behaviours with emotional comfort.
- Some children will find sitting at a table with the family difficult, especially if they have not lived in a family environment before. Avoid forcing or shaming their inability to manage this and provide closeness while they eat in a way which is manageable for them.
- Avoid seeing hoarding or taking of food as a stealing issue which brings disapproval. Instead, remember this is a survival behaviour naturally arising from their earlier experiences.
- For the same reason, avoid negative comments or locking food away. Instead reassure the child that there is always enough food available to them. Do this through ongoing repeated verbal reassurance as well as by ensuring there is food there for them that they can access, and by giving them small amounts regularly throughout the day.
- Avoid taking the behaviour personally. Their 'hoarding', 'gorging' or 'stealing' isn't about you and your home, but about their earlier experiences where their needs were not being met.
- Feed them as if they were a younger child, for example using simple and bland foods and if possible, feeding them or sitting with them when they are eating
- Avoid control battles over food, including about what food is eaten. Children who have experienced a lack of food often need to feel in control of food as they learn to trust they will not be hungry. Post-institutionalised children may be fussy because of their limited exposure to certain foods, or because they are using fussiness as a way of gaining control around food.
- Do not use food for rewards or punishments.



Potential Impacts of Malnutrition on Learning and Behaviour

Research on the impact of malnutrition on learning and behaviour is complicated. Much of the research focuses on children living in developing countries and in situations where other compounding issues may be present. Although recent research (StC 2013) of thousands of children aged eight years in Ethiopia, India, Peru and Vietnam shows that chronic malnutrition impacts on children's reading, writing and math ability, regardless of access to educational opportunities; this may not be relevant to the situation of children who have experienced malnutrition and have then had reliable and sustained improved nutrition alongside an environment which provides sensory, emotional and education support (Scrimshaw, 1998, p.355).

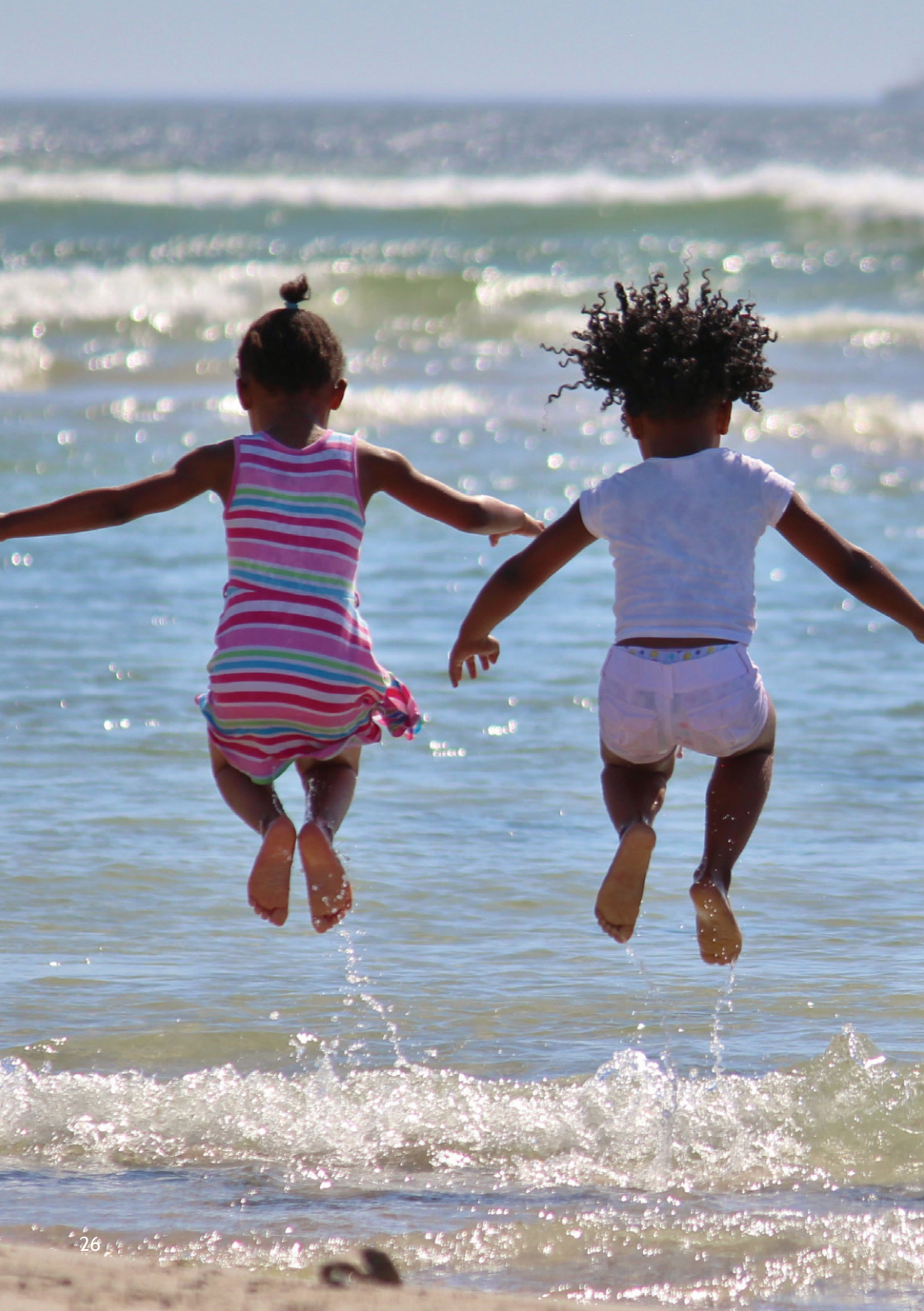
Scrimshaw, in his paper 'Malnutrition, Brain Development, Learning and Behaviour' (1998, p.355 citing a study in Jamaica by Grantham-McGregor et al) explains that some research indicates that a short, acute episode of severe kwashiorkor does not necessarily have a permanent impact, yet if this is in addition to underlying marasmus, it may be linked to severe cognitive effects. This suggests that chronic, severe under nutrition has the most significant impact on a child's cognitive capacity. However, Scrimshaw (citing research from Fernando Monckeberg in Chile) also points out that other studies indicate that marasmus in infancy had a minimal impact on a child's intellect after recovery. A third view is that there are 'vulnerable periods' and that the younger a child is, the more vulnerable they are to being affected by malnutrition – including malnutrition in utero (Smart, 1992, p.195).

Some researchers have found that although children with early malnutrition showed challenges in their learning performance and that their cognitive capacity was a factor, the strongest underlying cause for learning problems was attention deficit disorder and poor social skills (Galler, Ramsey & Solimano, 1984). Galler, Ramsey & Solimano conclude that the negative outcomes, such as diminished school performance and

early school drop out, was more a result of the child's classroom behaviour than their intellectual capacity. They cite research suggesting 60 percent of children who had experienced severe malnutrition in their first year of life, without repeat experiences of malnutrition, have 'attentional deficits' that are evident until at least age 18, compared to 15 percent in the control group, and that malnutrition in infancy is linked to increased aggressive behaviour in children aged between 9–15 years of age and poor socialisation at 5–11years of age.

Although a child may have intellectual/cognitive effects from earlier malnutrition, it may be that the susceptibility to attention deficit disorder and challenges with social skills are the primary underlying cause for learning difficulties within the classroom environment and these issues require appropriate recognition and intervention. However, it is evident that intervention which includes improving diet alongside emotional and social support is beneficial to a child's learning outcomes.

It appears that there are contrasting outcomes observed in children who have had experiences of malnutrition, and there are considerable differences between the impacts on one child to another, possibly due to genetic differences in resilience. It is therefore important that if you think your child may be affected by malnutrition (past or present), please make an appointment to see your GP or other health specialist.



Where to go for Help and Advice?

Post Adoption Support Services (PASS), Relationships Australia South Australia

49a Orsmond St, Hindmarsh 5007
Phone: (08) 8245 8100 Fax: (08) 8346 7333
Email: passinfo@rasa.org.au
Websites: www.rasa.org.au; www.socialrelations.edu.au

Adoption and Family Information Inter-country Services

Department of Education and Child Development

108 North Terrace, Adelaide SA 5000
Post: GPO Box 1152, Adelaide SA 5001
Phone: (08) 8207 0060
Fax: (08) 8297 0066
Website: www.adoptions.sa.gov.au

Women's and Children's Hospital

72 King William Road,
North Adelaide 5006
Phone (08) 81617000

Book

Jean MacLeod and Sheena Macrae (ed), 2006, 'Adoption Parenting: Creating a Toolbox, Building Connections', EMK Press, Printed in the United States of America, Published by EMK Press. You can access the chapter on 'Food' pp.113-126 at: http://www.emkpress.com/pdffiles/food.pdf

For further information or support regarding adoption related issues, please contact Post Adoption Support Services at Relationships Australia SA.

Address: 49a Orsmond St, Hindmarsh SA 5007 **Phone:** (08) 8245 8100
Fax: (08) 8346 7333 **Email:** passinfo@rasa.org.au

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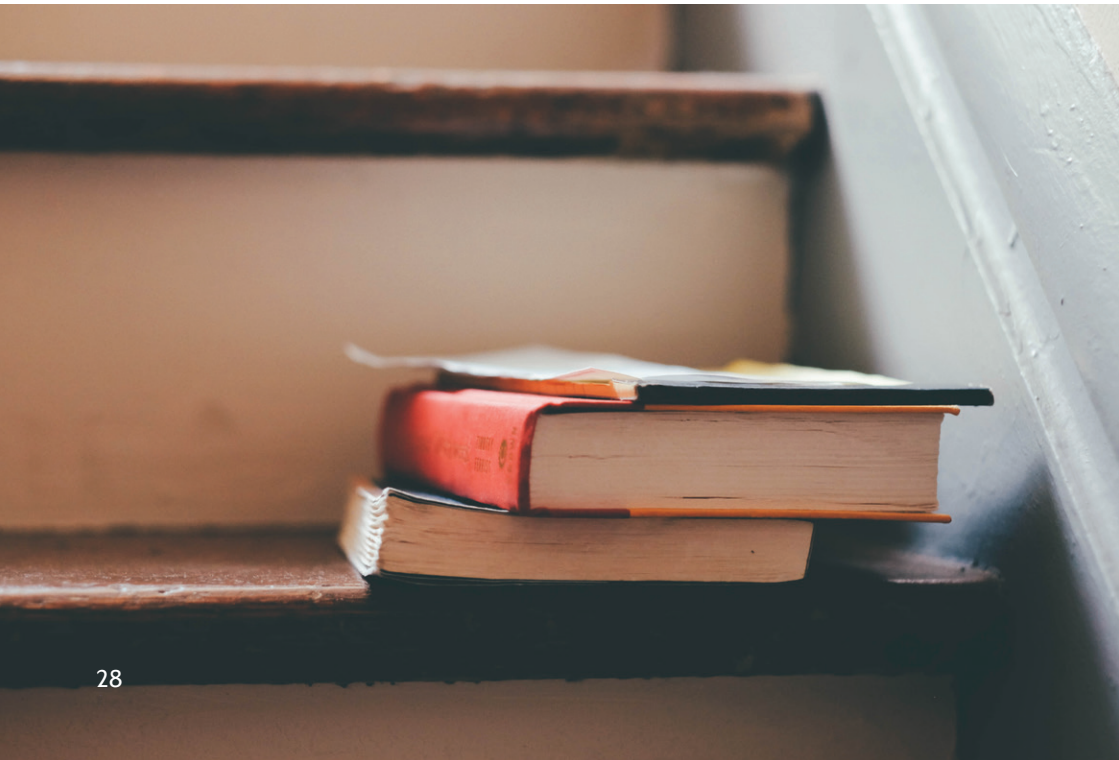

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The tips on food issues have been collated drawing on the sources:

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