

FIRST 1000 DAYS FROM CONCEPTION TO BIRTH



During a baby's first 1000 days of development, an incredible amount of growth occurs

The first 1000 days of life occurs from conception to a child's second birthday –this period is when the foundations for optimum health and development across a person's lifespan are established. The right nutrition and care during the 1000 day window influences not only whether the child will survive, but also his or her ability to grow and learn.

OVERVIEW

During a baby's first 1000 days of development, an incredible amount of growth occurs and studies show that it is far more effective to support brain development by preventing nutritional deficits than to rely on replacement therapy once the deficit has occurred. (1)

Nutrition during the first 1,000 days affects not only a child's growth, cognition and subsequent school attainment, but also impacts on lifelong risk of developing chronic disease (2)

Fortunately, there is evidence to suggest that maternal microbial environment during pregnancy is important in childhood immune programming, and the first microbial encounters may already start in utero. During pregnancy, there is a close immunological interaction between the mother and her baby, which provides important opportunities for the maternal microbial environment to influence the immune development of the child (3)

CAUSES AND RISK FACTORS

Extreme poverty increases children's likelihood of exposure

to multiple adversities, including family stress, child abuse and neglect, food insecurity, and exposure to violence. Early intervention has the potential to decrease inequality and interrupt intergenerational cycles of poverty, although this will only be realised if interventions are specifically targeted at the most vulnerable children (2)

In order to support mothers in caring for their babies and offering them the best care they can, the following risk factors should be dealt with (1):

- improved nutrition for adolescent girls and young women before, during and after pregnancy;
- addition of supplements such as probiotics (3,4)
- timely uptake of PMTCT services by HIV positive pregnant women and their babies;
- screening for TB and retention in care;
- exclusive breastfeeding during the first six months of the infant's life;
- provision of nutritious, safe and appropriate food to complement breastmilk as the baby grows;
- availability of safe water; improved hygiene and sanitation practices;
- regular monitoring to track growth and development
- complete immunizations and adequate complementary feeding.
- preventing diarrhoeal and respiratory illnesses through handwashing with soap,
- ensuring mental stimulation through play and affection

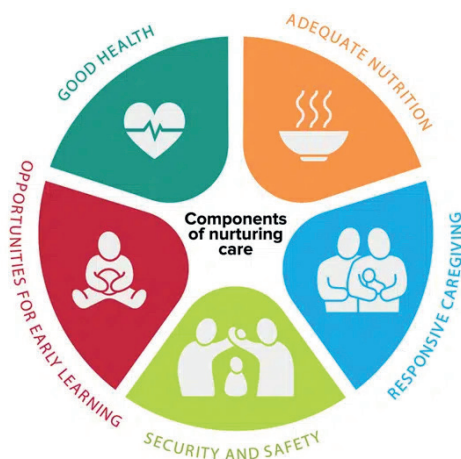
SIGNS AND SYMPTOMS

Studies done on expectant mothers with allergies, given daily probiotics at week 36 until delivery; and then their babies given the same probiotic from birth until 12 months of age, were found to have fewer allergies at 2yrs. (4) In fact, clinical data has shown that when Reuterina Daily is given to expecting mothers, and then Reuterina Drops are given to their infants, cases of eczema at 2yrs of age were significantly lowered (4).

DIAGNOSIS

The five components of nurturing care (2)
(see next page)





IMPACT ON QUALITY OF LIFE

A review of under-five (age) stunting or poverty (a composite indicator), showed that approximately 38% of young children are at risk for poor physical and cognitive development. Maternal and infant mortality rates have fallen, yet they remain high for a middle-income country such as South Africa. High levels of stunting persist with approximately one quarter of children under five years of age being short or stunted. Stunting and poor cognition correlate well at a population level, and high levels of stunting are therefore a strong predictor of poor educational attainment. In South Africa, these issues are further compounded by the HIV epidemic – not only are children with HIV infection at high risk of poor growth and development, but increasing evidence suggests that this is also the case for the almost one third of South Africa’s children who are HIV exposed but uninfected (2).

In the case of allergic diseases such as atopic dermatitis (AD), itch is the most burdensome symptom of AD, followed by skin redness and sleep loss (5). If in the first 1000 days of life, symptoms such as these can be reduced by simply adding probiotics to mom’s diet (3,4), quality of life could be significantly improved.

TREATMENT

With the right nutritional support during the first 1000 days children:

- are 10 times more likely to overcome the most life threatening child diseases
- complete 4.6 more grades at school
- go on to earn 21% more in wages as adults
- are more likely as adults to have healthier families

PREVENTION AND LIFESTYLE CHANGES

Through the combined efforts of the healthcare system, and mothers seeking out information for themselves, childhood nutritional deficits can be reduced through:

- Educating families and providing support to mothers for exclusive breastfeeding
- Scaling up infant and young child feeding programmes
- Raising awareness on the importance of growth monitoring, expanding immunization coverage and uptake
- Training communities on the importance of handwashing with soap to prevent illness, ensuring eligible households receive their child support grants and have sufficient money to buy food
- Novel use of mobile health technology (such as Mom Connect) to deliver direct communication to parents and caregivers on their mobile phones, which educates them on the needs of their babies, and supports them to get the health care they need
- Nutritional supplementation where available (4)



Significantly lowers eczema at 2yrs of age4*

*** When given to expecting mothers and then infants. Restore and maintain gut health daily. (6a,b) with the No.1 Prescribed Pediatric probiotic. (7)**

Please note: this is an education information leaflet only and should not be used for diagnosis. For more information on **First 1000 Days from Birth**, consult your healthcare professional.

References: **1.** First 1000 Days THE CRITICAL WINDOW TO ENSURE THAT CHILDREN SURVIVE AND THRIVE. May 2017. Available at <https://www.unicef.org/southafrica/media/551/file/ZAF-First-1000-days-brief-2017.pdf> Last accessed August 2021. **2.** Bramford L. The first 1,000 days: Ensuring mothers and young children thrive. South African Child Gauge 2019. http://www.ci.uct.ac.za/sites/default/files/image_tool/images/367/Child_Gauge/South_African_Child_Gauge_2019/CG2019%20-%20%283%29%20The%20first%201%2C000%20days%20-%20The%20first%201%2C000%20days.pdf **3.** Jenmalm MC. J Intern Med. 2017;282(6):484-495. **4.** Abrahamsson TR et al. J Allergy Clin Immunol. 2007;119(5):1174-1180. **5.** National Eczema Association: <https://nationaleczema.org/research/eczema-facts/>. Accessed 9 September 2022 **6.** Reuterina® Drops Approved Package Insert, August 2009. **7.** Rx Impact Data [December 2021]. **8.** Rx Impact Data [December 2021].

151 ZA Reut 092022

