Infant and Young Child Feeding Policy

Health

Department:
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Infant and Young Child Feeding Policy

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Preface

It is with great pleasure that I present this Policy for the protection, promotion and support of safe infant and young child feeding.

This policy is in furtherance of Article 28(2) of the Constitution, which states, *"A child's best interests are of paramount importance in every matter concerning the child"*.

It also fulfils Government's obligations under Article 24 of the Convention on the Rights of the Child. This includes the important role breastfeeding plays in the achievement of the child's right to the highest attainable standard of Health. It further ensures that parents and children are informed and supported in knowledge of child health and nutrition including the advantages of breastfeeding.

The policy recognises that mothers, who decide to use commercial infant formula, should be respected in their decision and should receive all the support they require. It also provides expert information on what, when and how complementary foods should be given.

Inappropriate feeding practices of infants and young children remain one of the greatest threats to child health and survival globally. The World Health Organisation's Global Strategy for Infant and Young Child Feeding called for a revitalisation of commitment to appropriate infant and young child feeding.

I am confident that this policy, when implemented, will contribute to improvement of the nutritional status, growth and development of infants and young children.

My thanks and appreciation go to all the role-players for their technical contributions during the development of this policy for infant and young child health for South Africa.

Dr M E Tshabalala-Msimang
Minister of Health

Acknowledgements

The benefits of investments in programmes to improve infant and young child feeding go beyond reduction in mortality and undernutrition. Improving nutrition and growth during infancy and early childhood has a range of long-term benefits, including reduction in morbidity and health-care related needs and expenses; improved cognitive and psycho-social development and active learning capacity; improved economic and physical productivity as well as reproductive health in later life.

Health care personnel should be able to provide skills to families and support them to initiate and sustain appropriate feeding practices, and to prevent and overcome difficulties which may occur during prenatal, intra-partum, postnatal and follow-up care.

This policy will strengthen the capacity of health care personnel, health services and communities to ensure that the nutritional needs of infants and young children are met. It draws on the understanding and experience of past and continuing achievements in infant and young child feeding in South Africa and on various global initiatives.

I wish to extend a word of gratitude to all who have contributed to producing this document. All health workers who participated, directly or indirectly, in this process are hereby acknowledged.

I would also like to thank UNICEF for their technical support with the development of this policy document.

Mr T Mseleku
Director-General: Health

Abbreviations and Acronyms

ARV	Antiretroviral
BFHI	Baby Friendly Hospital Initiative
CCMTS	Comprehensive HIV and Aids Care, Management, Treatment and Support Plan for Children
DOTS	Directly Observed Treatment Short-course
ECD	Early Childhood Development
EPI	Expanded Programme on Immunisation
HIV	Human Immunodeficiency virus
IMCI	Integrated Management of Childhood Illnesses
INP	Integrated Nutrition Programme
MTCT	Mother-to-child transmission of HIV
NFCS	National Food Consumption Survey
PMTCT	Prevention of mother-to-child transmission of HIV
SADHS	South Africa Demographic and Health Survey
SAVACG	South African Vitamin A Consultative Group
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
WHA	World Health Assembly
WHO	World Health Organisation

Policy Development Process

To optimise infant feeding, and thus child survival, growth and development, the World Health Assembly (WHA) adopted the Global Strategy for Infant and Young Child Feeding, at the 55th WHA in May 2002. The strategy provides a basis for public health initiatives to protect, promote and support appropriate infant and young child nutrition.

The sub-optimal infant feeding practices, concerns about child survival versus avoidance of HIV infection, mixed messages conveyed by health care personnel and the Global strategy prompted the Department of Health to develop a national infant and young child feeding policy.

The draft Policy was circulated widely to relevant National Directorates, Provincial Nutrition Units, Universities, key stakeholders and UN organisations for comments and inputs. The Draft Policy was reviewed based on the comments and a national workshop was held to discuss the revised policy. The policy was amended according to the recommendations emanating from the workshop and consultations.

The final Infant and Young Child Feeding Policy is thus the result of extensive deliberation on various actions that can contribute to the improvement of the nutritional status of infants and young children through optimal, safe feeding.

Executive Summary

Adequate nutrition during infancy and childhood is critical to child health and development. Globally under nutrition is a leading cause of childhood mortality. Inappropriate feeding practices such as; sub-optimal or no breastfeeding and inadequate complementary feeding, remain the greatest threat to child health.

The Policy document has been developed in the context of national policies, strategies and programmes and numerous global initiatives in infant and young child feeding, namely:

- International Code of Marketing of Breastmilk Substitutes.
- Innocenti Declaration.
- Convention on the Rights of the Child.
- Baby-Friendly Hospital Initiative.
- Global Strategy for Infant and Young Child feeding.
- Infant Feeding Technical Consultation on HIV and Infant Feeding (WHO, UNICEF and UNAIDS).

The **vision of the policy** is optimal nutrition, growth, development and health of infants and young children.

The **aim of the policy** is to improve the nutritional status, growth, development and health of infants and young children by protecting, promoting and supporting optimal safe infant feeding practices.

The recommendations outlined in this policy are based on most recent available scientific knowledge. It also identifies actions that should be taken to improve optimum infant and young child feeding practices, and to strengthen the capacity of health services and communities to ensure that the nutritional needs of infants and young children in South Africa are met.

The policy covers the following:

- A description of the policy development process.
- The rationale and context of the policy.
- The vision, aim, principles and main objectives.
- Actions that should be taken during antenatal, intra-partum, postnatal and follow-up care.
- Feeding during difficult circumstances.
- Safe use of commercial Infant Formula.
- Interventions at different levels.
- Responsibilities of health care personnel.

Key recommendations:

- ® Levels of exclusive breastfeeding in South Africa remain unacceptably low. The promotion, protection and support of breastfeeding should continue to be the primary focus.
- ® Every health establishment providing maternity services should implement the Baby Friendly Hospital Initiative.
- ® Exclusive breastfeeding should be practised during the first six months of life and continued breastfeeding up to two years of age or beyond.
- ® Health care personnel should not recommend formula feeding as an alternative to breastfeeding, unless there are legitimate medical reasons to do so namely: in rare cases of metabolic disorders of the infant, such as galactosaemia, and when a mother makes an informed decision not to breastfeed.
- ® Health care personnel should provide evidence based information on HIV and Infant feeding to pregnant women and to support them in their decision with regards to infant feeding choice and continued infant and mother follow-up.
- ® Infants who are not breastfed should use a suitable commercial infant formula during the first year of life. Mothers should be educated in how to prepare, store and use formula feeds safely.
- ® Specialised commercial formula, such as soya-based or low birth weight formula, should be used only under medical supervision.
- ® Introduction of any fluid (mix feeding) should be discouraged, unless medically indicated such as in hypoglycaemia.
- ® Early introduction of complementary foods (solids) should be discouraged.
- ® Health care personnel should provide counselling and support to mothers during antenatal, intra-partum, postnatal and follow-up care if infant feeding practices are to be optimised.
- ® Special attention should be given to feeding of infants and young children in exceptionally difficult circumstances.
- ® The International Code of Marketing of Breastmilk Substitutes and its subsequent resolutions which will be superseded by the South African Regulations Relating to Foodstuffs for Infants, Young Children and Children once these are promulgated.
- ® National, Provinces and Districts should implement, monitor and evaluate the implementation of this Policy.

SECTION A: BACKGROUND

1 Introduction

Adequate nutrition during infancy and childhood is critical to child health and development. Globally under nutrition is a leading cause of childhood mortality. The 2005 Innocenti Declaration on Infant and Young Child Feeding recognises that inappropriate feeding practices; sub-optimal or no breastfeeding and inadequate complementary feeding, remain the greatest threat to child health and survival.

Early under nutrition and micronutrient deficiencies have been associated with impairment of intellectual performance, work capacity, and overall health and nutritional status during adolescence and adulthood. In addition to under-nutrition the rising incidences of overweight and obesity in children are also a serious concern.

In several countries the dilemma over infant feeding in the context of HIV, especially in developing countries where breastfeeding is the cultural norm, has posed a new threat to optimal infant nutrition, child health, survival and development.

Studies have shown that inadequate support for infant and young child feeding is the main contributing factor to inappropriate feeding practices globally. There is a need for health care personnel to receive up to date evidence based knowledge and skills on appropriate infant and young child feeding practices to provide quality counselling and adequate support to mothers and caregivers [1].

1.1 Rationale

1.1.1 Context of the Policy

This Policy document was developed in the context of national policies, strategies and programmes and numerous Global initiatives. These initiatives included:

- The adoption of the International Code of Marketing of Breastmilk Substitutes as an annexure to the World Health Assembly (WHA) Resolution 34.22 in 1981[2].
- The adoption of the Innocenti Declaration in August 1990. This declaration called for governments to take concrete action by 1995 to protect, promote and support breastfeeding [2]. This Declaration was reaffirmed and broadened by the 2005 Innocenti Declaration.
- The Convention on the Rights of the Child that was adopted in 1989 by the General Assembly of the United Nations. This convention obligates ratifying states to take measures to *"ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of the advantages of breastfeeding"* [3].

- The Baby Friendly Hospital Initiative (BFHI) launched globally in 1991 in recognition of the special role of maternity services in early support and protection of breastfeeding [4].
- The Global Strategy for Infant and Young Child Feeding, unanimously adopted by all World Health Organisation (WHO) member states at the 55th WHA in May 2002 [5].
- A joint policy statement on HIV and Infant feeding was issued by WHO, UNICEF and the Joint United Nations Programme on HIV / AIDS (UNAIDS) in 1997, leading to the development of guidelines on HIV and infant feeding for decision-makers, programme managers and supervisors. This was supported by the **Infant Feeding Framework for Priority Action,** published in 2003 by WHO, UNICEF and other United Nations agencies. It recommends key actions related to infant and young child feeding, that cover the special circumstances associated with HIV and AIDS [6].
- In 2006 the WHO's HIV and Infant Feeding Technical Consultation group released a consensus statement to refine the policy statements on HIV and infant feeding [7].

In September 2000, 189 countries adopted the *Millennium Declaration* that was translated into the Millennium Development Goals to be achieved by 2015. Eight goals were set of which Goal 4 is aimed at the reduction of child mortality. This includes the reduction of the under-five mortality rate and the infant mortality rate by two-thirds between 1990 and 2015. Goal 1, which is the eradication of extreme poverty and hunger, has as an indicator of prevalence indicating the proportion of children under five years of age who are underweight [8].

Since 2000, South Africa has engaged in various processes to discuss infant feeding in the context of HIV. These consultations intensified from 2001 with the advent of the national PMTCT programme. The PMTCT programme provides free commercial formula for 6 months for HIV infected mothers opting to replacement feed their infants.

Various programme interventions to clarify the debate on infant feeding in the context of HIV were initiated including the drafting of the Regulations Relating to Foodstuffs for Infants, Young Children and Children under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) in 2001.

It is also now more widely known that powdered infant formula is not always a commercially sterile product and therefore carries a risk of infection. World Health Resolution 58.2 of 2005 recognised that intrinsic contamination of powdered infant formula with *E.sakazakii* and *Salmonella* has been a cause of infection and illness. Member States are urged to ensure that health care personnel, community health workers and families, parents and other caregivers are provided with enough information and training on the preparation, use and handling of powdered infant formula in order to minimize health hazards; and are informed that

powdered infant formula may contain pathogenic micro-organisms and must be prepared and used appropriately [9].

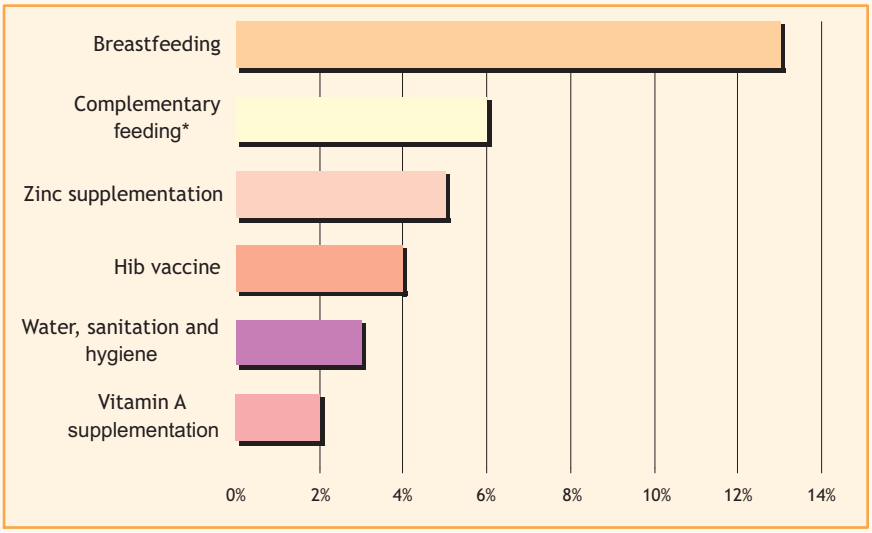
1.1.2 Breastfeeding and child survival

Appropriate feeding practices are essential for the optimal nutritional status, growth, development and survival of infants and young children. This include exclusive breastfeeding for the first six months of life, followed by sustained breastfeeding for two years and beyond with the introduction of nutritionally adequate and safe complementary foods at six months. There is considerable evidence that exclusive breastfeeding confers many benefits over mixed feeding.

More than half of the deaths amongst children under the age of 5 years are associated with malnutrition or lack of optimal breastfeeding . Exclusive breastfeeding compared with mixed breastfeeding has been shown to be associated with a reduced incidence of diarrhoea, respiratory infections and allergy [10, 11]. Breastfeeding is a key child survival strategy in resource-poor countries .

A review of child survival interventions that are feasible for delivery at high coverage in low-income settings in 42 countries showed that the promotion, support and protection of breastfeeding is effective in preventing death from diarrhoea, pneumonia and neonatal sepsis. Breastfeeding prevents 13% of all under -5 deaths in countries with a high under-5 mortality rate. Breastfeeding far outweighs the number of deaths that can be prevented from any other single preventive intervention. Refer to Figure 1 [12].

Figure 1: Estimated percentage of preventable death for different preventive interventions [12]



** Complementary feeding with continued breastfeeding*

There is also strong evidence that exclusive breastfeeding for the first 6 months may reduce the risk of obesity, chronic diseases including cardiovascular disease and cancer and improved educational levels and cognition later in life [13,14].

1.1.3 HIV and child survival

With the recognition that breast milk can transmit the human immunodeficiency virus (HIV) and substantive data indicating that in the absence of interventions, breastfeeding for up to 2 years may be responsible for one-third to one-half of HIV infections in infants and young children in African countries, there has been concern about protecting infants from contracting HIV through breastfeeding.

However, there is now a significant body of data that confirm that exclusive breastfeeding has a lower risk of mother-to-child transmission of HIV than does mixed feeding [7, 11, 16, 17, 18].

Recent evidence from a large cohort study conducted in KwaZulu-Natal to assess the HIV transmission risks and survival with exclusive breastfeeding and other type of infant feeding, demonstrated that infants, who at 14 weeks of age received formula milk and breast milk, were nearly twice as likely to be infected as exclusively breastfed infants. Early introduction of solid foods to infants who were breastfed was nearly 11 times more likely to acquire HIV infection than were those who received breast milk only [18].

This study found a cumulative postnatal HIV transmission risk of 4.04% after five months of exclusive breastfeeding. It was also noted that the mortality in the first 3 months of life was roughly doubled in the group receiving replacement feeding compared with the exclusive breastfed group (15% vs. 6%). These mothers that chose to exclusively formula feed were more likely to have CD4-cell counts below 200 cells per mcgL (higher risk group for transmission of virus through breastfeeding). It is possible that if the mother had clinical symptoms they were not able to care for their infant correctly [18].

The possible mechanisms why exclusive breastfeeding has a lower risk of transmission than mixed feeding: [11, 16, 18].

- ® Exclusive breastfeeding normally protects the integrity of the intestinal mucosa, which in turn hinders passage of HIV.
- ® Exclusive breastfeeding is associated with fewer breast health problems than is mixed feeding. These include sub-clinical mastitis and breast abscesses, which in turn are associated with increased breast milk viral load.
- ® Ingestion of contaminated water, fluids, and food may lead to gut mucosal damage and disruption of immune barriers. Bacteria and other contaminants may be introduced into the gut, and result in inflammatory responses and subsequent damage to the mucosa. HIV-1 is less likely to penetrate intact and healthy gastrointestinal mucosa than damaged mucosa.

There is no postnatal mother-to-child transmission of HIV beyond perinatal acquisition if mothers do not breastfeed. However, many women who choose replacement feeding also breastfed for various reasons [18, 19]. According to a sub-study of the National PMTCT Cohort study at least 30% of HIV-infected women who chose to formula feed and who were provided with formula milk, did not exclusively formula feed and often mixed feed with breast milk [20].

Early cessation of breastfeeding (before 6 months) was associated with an increased risk of infant morbidity (especially diarrhoea) and mortality in HIV-exposed children in completed (Malawi) and ongoing studies (Kenya, Uganda and Zambia). According to preliminary data presented from Botswana and Zambia breastfeeding of HIV-infected infants beyond 6 months was associated with improved survival compared to stopping breastfeeding [7].

Based on substantial evidence it is recommended that national programmes should provide all HIV-exposed infants and their mothers with a full package of child survival interventions and not only avoidance of HIV transmission [7, 12].

1.1.4 Counselling and support

Counselling and support are needed if infant feeding practices are to be optimised. Data shows that exclusive breastfeeding is optimised, when breastfeeding women receive consistent and accurate messages concerning appropriate infant feeding from health care personnel, family members at home, peer supporters and community members during antenatal, intra-partum, postnatal and follow-up care [11,18,21,22, 23].

1.1.5 Situational Analysis

In South Africa, infant feeding practices are sub-optimal, with rates of breastfeeding, especially exclusive breastfeeding, remaining low. Data from the 2003 South African Demographic and Health Survey (SADHS), and other studies show that although breastfeeding is a common practice in South Africa, and initiated early post delivery, mixed feeding rather than exclusive breastfeeding is the norm [24, 25, 26, 27].

The SADHS in 2003 found that only 11,9% of children aged 0 to 3 months were exclusively breastfed, and 20,1% of children age 0 to 3 months were not breastfed at all. The infant feeding rates of the 2003 SADHS [24] are compared to the rates of the 1998 SADHS [25] in **Table 1** below.

Table 1: Infant feeding rates as reported in the 1998 and 2003 SADHS

	1998 SADHS	2003 SADHS
Exclusive breastfeeding		
0 - 3 months	10,4%	11,9%
4 - 6 months	1,0%	1,5%
Not breastfed 0 - 3 months	16,6%	20,1%

A study conducted in rural KwaZulu-Natal in 2002 found that, despite the implementation of the Baby-Friendly Hospital Initiative (BFHI) in the district, 46% of infants received non-breast milk fluids or feeds within 48 hours of birth; 10% of infants were exclusively breastfed for 6 weeks and 6% for 16 weeks [26] .

Infant formula was the most common supplement introduced. The most frequent reason for the early introduction of formula was perceived milk insufficiency. Feeding choices were mainly self-determined (43% of women), but health staff (22%) and grandmothers (16%) were cited as other sources of advice [26]. A study conducted to assess breastfeeding knowledge amongst health workers in an area of high HIV prevalence revealed that health workers knowledge was outdated and not in line with the latest WHO recommendations [1].

A cohort study conducted in 2003 and 2004 in three sites (Paarl, Rietvlei and Umlazi) implementing prevention of mother-to-child transmission of HIV (PMTCT) programmes found that even after counselling on infant feeding options, infant feeding practices were sub-optimal [27]. The study further reported that HIV infected mothers often provided formula that were bacterially contaminated and/diluted to their infants [28].

A study conducted in KwaZulu-Natal to determine the risk of HIV transmission by infant feeding modality found that less than 30% of mothers were exclusive breastfeeding at 3 months. This study highlighted the importance of interventions to improve rates of exclusive breastfeeding in the general population [11].

Recent data from a large cohort study conducted in KwaZulu-Natal to assess the HIV transmission risks and survival with exclusive breastfeeding and other type of infant feeding, obtained 40% exclusive breastfeeding at 6 months. This study demonstrated that if HIV-positive women who chose to breastfeed receive adequate and sustained quality support it is possible for them to practice exclusive breastfeeding, including rapid cessation at 6 months [18].

Data from the National Food Consumption Survey (NFCS) [29] and the South African Vitamin A Consultative Groups (SAVACG) showed that malnutrition, including stunting, underweight for age, wasting, over nutrition (obesity) and vitamin A deficiency, is a public health problem in South Africa. The prevalence of these disorders, as obtained from these surveys, is listed in **Table 2** below:

Table 2: Current nutritional status of children in South Africa

Indicator	Age Group	Prevalence (%)	Comment
Stunting	12 - 108 months (1 - 9 years)	21,1%	Younger children (1 - 3 years of age), are more severely affected as well as those living on commercial farms (30,6%) and in rural areas. The level of maternal education was an important determinant for these nutritional disorders.
Underweight	12 - 108 months (1 - 9 years)	10,35%	
Wasted	12 - 108 months (1 - 9 years)	3,7%	
Overweight in formal urban areas	12 - 108 months (1 - 9 years)	7,7%	Prevalence was higher amongst children of well-educated mothers.

Food insecurity was experienced on average by 2 out of 3 households, 5 out of 10 individuals and 4 out of 10 children nationally. For children as a whole, the dietary intake of the following nutrients was less than 67% of the recommended dietary allowances: energy, calcium, iron, zinc, selenium, vitamin A, vitamin D, vitamin C, vitamin E, riboflavin, niacin and vitamin B6 [29].

SECTION B: POLICY FRAMEWORK

The policy identifies best evidence-based practice actions that should be taken by national, provincial and district managers, health establishments and all health care personnel caring for parents and children during pregnancy, childbirth and in the first five years of life to protect, promote and support optimal safe feeding of infants and young children.

The policy also identifies actions that should be taken to strengthen the capacity of health services and communities to ensure that the nutritional needs of infants and young children are met.

The policy statements are organised according to different stages of care for mothers and children, namely antenatal, intra-partum, postnatal and follow-up care. It also include policy statements on feeding during difficult circumstances, use of commercial formula, key child survival strategies and responsibilities of health care personnel implementing maternal, women and children's health, nutrition or HIV and AIDS programmes at national, district and facility level.

The policy should be read in conjunction with the **South African Implementation Guidelines on Infant and Young Child Feeding for Health Care Providers**. These guidelines provide details about how this policy should be implemented at national, provincial, district and facility levels.

1 Vision of the Policy

Optimal nutritional status, growth, development and health of infants and young children.

2 Aim

The aim of this policy is to improve the nutritional status, growth, development and health of infants and young children by protecting, promoting and supporting optimal safe infant feeding practices.

3 Objectives

The aim will be achieved through the following objectives: [4,5,9,13]

- ® To increase rates of exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond.
- ® To provide evidence based information on HIV and infant feeding to pregnant women and to support them in their decision with regards to infant feeding choice and continued infant and mother follow-up.

- ® To reduce mixed feeding before six months and promote timely, adequate, safe and appropriate complementary feeding with continued breastfeeding.
- ® To provide guidance on feeding infants and young children in exceptionally difficult circumstances.
- ® To create awareness of child survival strategies that significantly contribute to the reduction of malnutrition-related childhood morbidity and mortality hence contribute to achievement of millennium goal 1 and 4.
- ® To give effect to the principles and aim of the International Code of Marketing of Breastmilk Substitutes and to subsequent relevant Health Assembly Resolutions.
- ® To ensure that every health establishment providing maternity services implement the Baby Friendly Hospital Initiative.
- ® To encourage commitment of all stakeholders to optimal feeding practices for infants and young children.
- ® To standardize messages about infant and young child nutrition to health care personnel, organisations involved in health and communities.
- ® To create a supportive environment conducive to optimal infant and young child feeding.

4 Guiding Principles

- ® Infant and young child feeding interventions should be conducted within a human rights paradigm wherein the following principles are enshrined:
  - (i) The child's best interest is of paramount importance.
  - (ii) Children should enjoy the highest attainable standard of health.
  - (iii). Children's survival, growth and development should be protected.
- ® Infant and young child feeding interventions should be implemented within a life-cycle approach.
- ® National, provincial and district-based interventions for infant and young child feeding should adopt a public health approach; hence interventions that promote the highest level of nutrition and well-being for the general population should be promoted except in cases where the general rule is contraindicated.
- ® Interventions that aim to improve infant and young child feeding should be comprehensive, integrated and equitably distributed.
- ® Infants and young children should be appropriately fed during the first 5 years of life, with specific attention to the first 2 years of life, to prevent under nutrition and over nutrition, including obesity;
- ® Sick children, attended to in hospitals or clinics should receive appropriate, timely interventions.

- ® Special, individualised attention should be given to children in exceptionally difficult circumstances, especially those infected and affected by TB, HIV and AIDS.
- ® Health care personnel should adhere to the International Code of Marketing of Breast milk Substitutes and subsequent relevant World Health Assembly (WHA) Resolutions (Code), and the Regulations;
- ® Provision of free commercial formula to HIV-positive women should not lead to a spill-over[a] effect to the general population;
- ® BFHI should be implemented, supported and strengthened [4,5,9,13].

Spill-over refers to the feeding behaviour of mothers who either know that they are HIV-negative or are unaware of their HIV status, and then choose to reduce breast feeding, mix feed, or do not breastfeed at all due to unfound fears or misinformation about HIV, the ready availability of breast-milk substitutes or perceptions that commercial formula is better than breast milk.

5 Target Audience

The policy is aimed at Health Care Providers including managers and supervisors implementing maternal, women and child health, nutrition and HIV and AIDS programmes at all levels.

6 Policy Statements on Infant and Young Child Feeding

6.1 Antenatal Care

6.1.1 All pregnant women

- ® All pregnant women should be educated on exclusive breastfeeding for six months and continued breastfeeding until two years and beyond, with appropriate complementary feeding [5].
- ® All pregnant women should be provided with evidence-based objective and unbiased infant feeding information in order to ensure they make an informed decision (i.e. independent from commercial influence).
- ® Scientific evidence demonstrates that breastfeeding is in the best interests of the vast majority of infants, health care personnel should not recommend formula feeding as an alternative to breastfeeding, unless there are legitimate medical reasons to do so [5]. Replacement feeding is only necessary:
  - in rare cases of metabolic disorders of the infant, such as galactosaemia, maple syrup urine disease and phenylketonuria,
  - in some cases of maternal illness e.g. life-threatening illness, and when a mother makes an informed decision not to breastfeed.

- ® All pregnant women should be encouraged to go for voluntary counselling and testing.
- ® All pregnant women should be encouraged, educated on and supported to achieve adequate nutritional status. At risk pregnant and lactating women, for example adolescents, women with low weights and HIV-positive women, should receive special attention [5].
- ® All pregnant women should be encouraged to bring partners or a family member for antenatal education.
- ® Once a HIV positive woman has been counselled and decided on her infant feeding option, she should be educated during antenatal care and postnatal care so that she can safely feed her infant.

6.1.2 HIV-positive women

- ® HIV-positive women should receive individual and unbiased counselling on infant feeding options to enable them to make informed choices on the infant feeding option that is most suited for their circumstances.
- ® **Exclusive breastfeeding** is recommended for HIV-infected women for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time.
- ® **When replacement feeding** is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected women is recommended.

Acceptable:

The mother perceives no barrier to choosing and executing the option for cultural or social reasons, or for fear of stigma and discrimination.

Feasible:

The mother (or family) has adequate time, knowledge, skills and other resources to prepare and feed the infant, and the support to cope with family, community and social pressures.

Affordable:

The mother and family, with available community and/or health system support, can pay for the purchase/production, preparation and use of the feeding option, including all ingredients, fuel and clean water and equipment, without compromising the health and nutrition spending of the family.

Sustainable:

Availability of a continuous and uninterrupted supply and dependable system of distribution for all ingredients and commodities needed to safely implement the feeding option, for as long as the infant needs it.

Safe:

Replacement foods are correctly and hygienically prepared and stored in nutritionally adequate quantities, and fed with clean hands using clean utensils, preferably with cups.

- ® Counselling should commence during the antenatal visits as part of the voluntary counselling and testing strategy, and not be left to the time of birth.
- ® Counselling should include detailed discussions on the risks and benefits of infant feeding options.
- ® All pregnant women and mothers with infants and young children should be supported in their infant feeding choice during pregnancy, delivery and continued follow-up after delivery.

6.2 Intra-partum and postnatal care

6.2.1 Mothers who are HIV-negative or of an unknown status and HIV positive women who choose to breastfeed [30,31,32]

- ® All women who decide to breastfeed should be supported:
  - to hold their infants in skin-to-skin contact as soon as possible after delivery (but not later than 30 minutes).
  - to initiate breastfeeding; within an hour after birth, unless medically contraindicated.
  - Mothers should be taught through demonstrations and observation to ensure correct positioning and attachment of their babies for breastfeeding [32].
  - to breastfeed exclusively for the first six months of life [30].
- ® Mothers should be shown how to maintain lactation during periods of separation from their babies, including how to express breast milk by hand and how to feed their infant with a cup [32].
- ® Health care personnel should discourage the use of dummies or artificial teats [31].
- ® No pre-lacteal feeds or any other supplemental or replacement feeds should be given to the infant unless medically indicated [31].
- ® Health care personnel should educate mothers about the dangers of mixed feeding.
- ® Mothers should be informed of available infant feeding support groups in the community.
- ® Mothers should be encouraged to attend the well baby clinics regularly for immunisation and monitoring the infant's growth and development.
- ® HIV-negative mothers who are breastfeeding should be counselled about postnatal transmission of HIV.

6.2.2 HIV-positive woman who choose not to breastfeed

- ® Women should be supported to hold their infants in skin-to-skin contact as soon as possible after delivery.

- ® All mothers who choose replacement feeding should be taught through demonstrations, how to prepare and use formula feeds safely. This should be done individually only to those mothers who need it [33,34].
- ® Cup feeding should be encouraged and bottle feeding discouraged.
- ® Non-breastfed infants should be fed with a commercial infant formula until the infants are 12 months old. According to the World Health Assembly Resolution (WHA39.28) in 1986 follow-up formula is not necessary.
- ® Pasteurised full cream milk may be introduced to the non-breastfed infant's diet at 12 months of age. However, in the absence of commercial infant formula and in families where allergies are not common, full cream milk could be given at 9 months but ideally introduction of full cream milk should be delayed until the infant is 12 months old.

According to the World Health Organisation (WHO) undiluted pasteurised full cream milk can be fed to infants after six months of age, provided that iron supplements or iron-fortified foods are consumed and the amount of fluid in the overall diet is adequate [35,36].

- ® When free commercial formula is provided, **it should continue for at least six months.**
- ® Provision of free commercial formula to HIV-positive women should not lead to a spill over effect to the general population;
- ® Health care personnel should encourage mothers to avoid early introduction (before 6 months) of complementary feeding.
- ® Health care personnel should encourage mothers to attend the well baby clinic monthly for monitoring the infant's growth and development.
- ® At discharge refer mothers to available infant feeding support groups in the community.

6.3 Follow-up Support for all mothers within postnatal services for infants and young children [37,38,39]

- ® All mothers should be supported on their infant feeding choices.
- ® With every visit and before infants reach six months, all parents should receive information and advice on appropriate complementary foods and when and how to introduce these to their infant's diet.
- ® After six months, all parents should be advised to introduce and gradually increase the frequency, consistence and variety of family foods, adapting them to the infant's requirements and abilities, while avoiding sugary drinks and drinks with low nutrient value.
- ® Growth monitoring should be performed at every child visit to the health establishment. In the first two years of life, infants and young children should

be weighed monthly and after the second year of life, children should be weighed every three months until they reach five years.
Parents should be given follow-up dates until their children are five-years old.

® Only the growth chart approved by the National Department of Health should be used. These growth charts should be distributed free of cost.

® Children should receive vitamin A supplementation according to the national protocol. Parents should be encouraged to attend regular child visits and be given follow-up dates until their children are five-years old.

® Parents should be educated on appropriate child care practices including giving love and care.

® Active feeding should be encouraged [37,38].

6.3.1 Follow-up Support of breastfeeding mothers who are HIV-negative or of an unknown status

® Every effort should be made to support mothers to exclusively breastfeed up to six months and to continue breastfeeding up to two years and beyond in combination with appropriate, nutrient dense and easily ingested complementary foods [18].

6.3.2 Follow-up Support of HIV positive women who choose Exclusive breastfeeding [5,7,32,40]

® Nutritional support should be offered to HIV infected women choosing to breast feed [41, 42].

® **At six weeks**, following the PCR test all HIV positive mothers should again be counselled.

- If the **infant is HIV positive** the mother should be advised to continue exclusive breastfeeding.
- If the **infant is HIV negative** the mother should be counselled on feeding options and she should be informed of all the risks. The **mother's circumstances** and **health status** should be assessed. Early cessation of breastfeeding should only occur when replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS).

® Every effort should be made to support mothers to exclusively breastfeed up to six months. Sufficient scientific evidence exists to show that exclusive breastfeeding reduces the transmission risk compared with mixed breastfeeding by about half [7, 43].

® The decision to stop breastfeeding or continue breastfeeding even after complementary feeds are introduced should be governed by the mother's socio-economic circumstances and her health status [7].

- ® **At six months**, all breastfeeding should stop **when replacement feeding is AFASS**, and the mother has adequate access to health services [7].
- ® **At six months, if replacement feeding is still not AFASS** continuation of breastfeeding with additional complementary foods is recommended [7].
- ® All breastfeeding should stop once a nutritionally adequate and safe diet without breast milk can be provided [7].
- ® Mother's breast health and any other infant feeding aspects should be discussed with every contact.
- ® Breastfeeding mothers of infants and young children who are **known to be HIV-infected should be encouraged to continue to breastfeed (even after 6 months)** until two years and beyond in combination with appropriate complementary foods [7]. There is a clear benefit for the already infected infant and there is no evidence of a risk of second or re-infection from the mother.
- ® Mothers should be supported to provide a suitable replacement feed **at any time** should exclusive breastfeeding not be feasible.
- ® Every effort should be made to support mothers **to make a safe transition to appropriate replacement feeding**, including information on commercial formula, feeding frequency and quantities required [33,40].
- ® It is safe for a mother on HAART to breastfeed as long as she fulfils the AFASS criteria [7].

6.3.3 Follow-up Support of HIV positive women who choose replacement feeding

- ® Every effort should be made to support mothers to exclusively replacement feed until 6 months.
- ® Health care personnel should observe and assess if mothers or caregivers prepare and use formula safely.
- ® The amount of formula required by the infant should be reviewed with each visit.
- ® Cup feeding should be encouraged and bottle feeding discouraged.
- ® Health care personnel should continue encouraging mothers to avoid early introduction (before 6 months) of complementary feeding.
- ® Health care personnel should identify problems and should take appropriate timeous actions.

6.4 Children in exceptionally difficult circumstances

6.4.1 Low birth weight infants [39,43,44,45]

- ® Exclusive breastfeeding or exclusive breast milk feeding for the first 6 months of life and sustained breastfeeding for two years and beyond should be promoted, supported and protected, unless there is a medical indication not to breastfeed.

- ® The early initiation of breastfeeding should be promoted and supported.
- ® The use of infant formula should be discouraged unless the infant has a medical condition that requires formula or the mother is HIV-positive and, after counselling, has chosen not to breastfeed.
- ® If infant formula is used a special low birth weight formula should be given until the infant weighs at least 2 kg and medical practitioner's instructions followed. A soy protein based formula should not be given.
- ® Mothers should be taught individually through demonstrations, how to prepare and use formula safely.
- ® Cup feeding should be encouraged and bottle feeding discouraged.
- ® Kangaroo Mother Care (KMC) for low birth weight infants should be promoted and supported.
- ® A Breast milk fortifier should only be used based on a medical practitioner's assessment of individual infants and when breastfeeding alone has failed to produce desired results. Hind breast milk has a greater energy and fat content than fore milk and increasing the proportion of hind milk fed to low birth weight infant has been shown to be beneficial in promoting weight gain.

6.4.2 Hospitalised Infants, Children and Mothers

- ® Health establishments should enable mothers to remain with their hospitalised infants and young children to ensure continued breastfeeding and adequate complementary feeding.
- ® Health establishments should be encouraged to have lodger facilities for mothers with low birth weight babies and for lactating mothers.
- ® Health establishments should assist in-patient lactating mothers to continue breastfeeding unless medically contraindicated.
- ® Health establishments should provide an adequate age-appropriate diet for hospitalised children and to continue promoting exclusive breastfeeding for six months when a mother is available.

6.4.3 Severely malnourished children

- ® Initial assessment should begin with admission to hospital and should last until the child's condition is stable and his or her appetite has returned.
- ® Protocols for management of severe malnutrition at facility level should be adhered to.
- ® Trained, skilled health care personnel should manage the severely malnourished children in hospital or in the community, as well as support and teach the parents/caregiver on proper nutrition for that child.
- ® Therapeutic feeds (as per WHO definition) should be provided in hospital or in the community until nutritional recovery is complete.
- ® Health establishments should ensure effective therapeutic feeding of sick and

malnourished children.

- ® Appropriate community-based referral systems or rehabilitation facilities should be identified to prevent relapse.

6.4.4 Obesity

- ® Health care personnel should educate communities on the influence of early feeding practices on childhood obesity.
- ® Health care personnel should educate mothers and families to ensure that children that are growing well use sugary and fatty foods sparingly.
- ® Healthy eating habits and daily physical activity in children should be promoted.

6.4.5 Orphans, children in foster care, children separated from their mothers for a long term and children whose mothers are incapable of caring for them due to ill health or mental disabilities

- ® Should receive adequate and appropriate replacement feeding for as long as they need it.
- ® Nutrient dense complementary foods should be introduced in the infant's diet when they are 6 months old.
- ® Young children should receive nutrient dense family foods.
- ® Active feeding should be promoted with all these children.

6.4.6 Children suffering the consequences of emergencies, including natural or human-induced disasters, floods and droughts

- ® Donated commercial formula should comply with all the relevant Codex Alimentarius standards and the Code.
- ® Whenever possible mothers should never be separated from their children.
- ® In the event of an emergency, relieve efforts, including the distribution of free formula feeds should not undermine exclusive and sustained breastfeeding practices.
- ® Lactating mothers and young children should be provided with appropriate foods.

6.4.7 Infants with inborn errors of metabolism

- ® Any child suspected of having an inborn error of metabolism should be referred to a paediatrician for confirmation of diagnosis and further management.
- ® Depending on the inborn error of metabolism an infant may need to be fed exclusively with a specialised product (such as in the case of galactosaemia) or the infant may be breastfed with partial replacement with a specialised product (as in the case of phenylketonuria). Infants born to HIV positive mothers should be fed with replacement feeds exclusively if AFASS is fulfilled.

7 Use of Commercial Formula

- ® If a mother is not able to breastfeed for medical reasons or makes an informed choice not to breastfeed, suitable cows' milk based commercial formula should be recommended.
- ® Caregivers should be provided with information that can reduce the risk of contamination with pathogens, including *Enterobacter sakazakii* [9].
- ® Health establishments should ensure stringent protocols and guidelines for the prescription, reconstitution, handling, delivery, disposal and storage of all commercial formula are formulated, implemented and monitored. Health care personnel should be trained in these policies and guidelines.
- ® Health care personnel should take steps to ensure that the provision of free commercial formula to HIV-positive women does not lead to a spill over effect to the general population; This includes the storage of all formula out of sight of mothers and a strict stock control system to ensure that only those mothers who are HIV-positive and have made an informed choice not to breastfeed, artificially feed their infants.
- ® Health care personnel should be able to demonstrate the preparation of formula safely and correctly to those mothers who need to use it.
- ® In situations where commercial formula is being provided free of charge through health facilities, managers, supervisors and health care personnel need to ensure that each clinic always has stock of commercial formula. In the absence of an acidified commercial formula, a suitable standard commercial formula should be provided and not a soy protein based commercial formula.

7.1 Code of Marketing of Breastmilk Substitutes [33,34]

All health care personnel caring for mothers, infants and young children should fully adhere with all the provision of the International Code of Marketing of Breastmilk Substitutes and its subsequent resolutions which will be superseded by the South African Regulations relating to Foodstuffs for Infants, Young Children and Children once these are promulgated.

- ® All health care personnel should make themselves familiar with the provisions of the Code and these Regulations once they are promulgated and comply with them at all times.

7.2 Commercial formula for special dietary or medical purposes

There are conditions where infants need specialised commercial formula. Before any decision is made to use a commercial formula, a health care provider should be consulted for advice.

7.2.1 Breast milk fortifier for low birth weight infants

This should only be used, under the guidance of a health care provider, if there is an established individual need.

7.2.2 Infant formula for low birth weight infants [39,44,45,46]

When low birth weight infants require infant formula, special infant formula for low birth weight infants should be used rather than standard infant formula until the infant weighs at least 2kg .

7.2.3 Soy protein based commercial formula

- ® Soy protein based commercial formula should not be used routinely as mineral absorption is less predictable due to the presence of phytates. Soya also contains high levels of phytoestrogens, the long-term effects of which are unknown [47, 48].
- ® Soy protein based commercial formula should only be used under supervision of a medical practitioner and/or dietitian for specific medical indications.

7.2.4 Anti-reflux commercial formula

Anti-reflux commercial formula should only be used after confirmation of a diagnosis.

7.2.5 Semi-elemental commercial formula

Semi-elemental commercial formula should only be used for infants with mal-absorption and certain metabolic disorders after confirmation of a diagnosis.

8 Interventions at Different Levels

8.1 Key Child Survival Programmes and Strategies

Key child survival programmes and strategies suitable for each establishment should be implemented. These strategies and programmes include:

- ® Baby Friendly Hospital Initiative;
- ® International Code of Marketing of Breast-milk Substitutes;
- ® Growth Monitoring and Promotion;
- ® Management of children with Severe Malnutrition;
- ® Vitamin A Supplementation;
- ® Kangaroo Mother Care;
- ® Integrated Management of Childhood Illnesses;
- ® Prevention of mother-to-child transmission of HIV; and
- ® Expanded Programme on Immunisation.

Infant and young child feeding programmes and initiatives should be integrated into existing programmes.

8.2 Capacity Building and Training

- All provincial-and district offices and health establishments should develop integrated infant and young child health training strategies to build capacity of staff at all levels.
- Health establishments should provide opportunities for education, training and skills development for relevant staff in child survival strategies and programmes and also appropriate training to implement this policy.
- Health establishments should ensure that all staff and agency staff be orientated to the policy as soon as their employment begins.
- Health care personnel working in the field of infant and young child health and nutrition programmes should receive further training to strengthen their communication and counselling skills.
- Health care personnel should be made aware of the effects of certain medications on exclusive breastfeeding and whenever possible in alternative drugs should be prescribed.
- Financial support, equipment, transport, refreshments for training should not result in conflict of interest. Benefactors who are approached for support should not have commercial interests in any artificial infant feeding product.
- Health care personnel should be sufficiently skilled in counselling on HIV and infant feeding to avoid biases toward any one method of infant feeding.
- Training should include skills on how to support mothers on breastfeeding, complementary feeding, how to safely prepare commercial formula and how to provide regular follow-up.

8.3 Advocacy

For successful implementation of this policy, advocacy should be targeted to various stakeholders who are involved in the care of infants and young children.

8.4 Monitoring and Evaluation

- National and Provinces should monitor and evaluate the implementation of this policy.
- To ensure the effective implementation of the policy monitoring should be an integral part, with clear indicators for monitoring.
- Effective programmes should be put in place which includes assessment of needs, action plans and monitoring of this policy.
- Use of commercial formula should be monitored to prevent spill-over of replacement feeding to the general population.

® National, provinces and districts should ensure the implementation and monitoring of the Code.

9 Responsibilities of Health Care Personnel and Health Establishments in the Implementation of the Policy

® Health care personnel should promote safe infant and young child feeding practices during antenatal, intra-partum, postnatal and follow-up care.

® Health care personnel should promote, protect and support exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond.

® Health care personnel should promote, timely, adequate, safe and appropriate complementary feeding with continued breastfeeding.

® PMTCT programme recommendations for HIV-positive women should not undermine optimal infant feeding practices in the general population.

® Health care personnel should provide accurate and complete information about infant and young child feeding practices, taking into account prevailing social, cultural and environmental circumstances **(without commercial influence).**

® All health care personnel should make themselves familiar with the provisions of the Code and the Regulations once they are promulgated and comply with them at all times.

® Health care personnel should provide guidance on feeding infants and young children in exceptionally difficult circumstances.

® Health care personnel should set aside time to support HIV-positive mothers with infant feeding. This includes supporting breastfeeding and formula feeding mothers.

® Systems to follow-up mothers after discharge should be established.

® Health care personnel should educate communities on the influence of early feeding practices on childhood obesity.

® Healthy eating habits and daily physical activity in children should be promoted.

® Health care providers should ensure that drugs are carefully selected and prescribed in lactating mothers.

® Health care personnel should inform mothers of the effect of medicinal drugs in breast milk.

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Annexure A: Definitions

Anthropometric measurements
When height, length, weight, arm circumference, skin fold thickness or other body measurements are made on any human being they are called anthropometric measurements. Such measurements are often expressed in ratios of one to another e.g. weight-for-height. These measurements, when compared to national or international norms for healthy groups of people for that particular age and sex, are referred to as assessment of nutritional status.

Breastmilk substitute
Any food or drink marketed or otherwise representing a partial or total replacement of breast milk, whether or not suitable for that purpose.

Children in especially or exceptionally difficult circumstances
This refers to the following groups:

- Children born to HIV-infected mothers.
- Low birth-weight or premature infants.
- Infants and young children who are malnourished.
- Infants and young children suffering the consequences of complex emergencies, including natural or human-induced disasters such as floods, drought, earthquakes, war, civil unrest and severe political and economic living conditions.
- Infants and young children who are orphaned and or abandoned.
- Infants and young children with mothers who have physical or mental disabilities.
- Infants and young children living in prison (usually with their mother).
- Infants and young children whose parents are drug-users.
- Infants and young children with inborn errors of metabolism.

Commercial formula
Commercial formula refers to a commercial product that meets the applicable Codex standard for infant formula, follow-up formula and infant or follow-up formula for special dietary or medical purposes.

Complementary foods
Complementary foods means any foodstuff, whether in solid or semi-solid form, given to an infant after the age of 6 months as part of the transitional process during which an infant learns to eat food appropriate for his or her developmental stage while continuing to breastfed or fed with commercial formula.

Cup feeding
The act of feeding an infant or child using a cup, regardless of what the cup contains. The cup used should be without a spout.

Exclusive breastfeeding or exclusive breast milk feeding
An infant receives only breast milk and no other liquids or solids, not even water, with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines. When expressed milk is given, the preferred term is breast milk feeding.

Growth faltering
Child's failure to gain adequate weight between 3 serial weighings, at least one month apart.

Growth monitoring and promotion
The regular measurement, recording and interpretation of a child's growth in order to counsel, act and follow-up results with the purpose of promoting child health, human development and quality of life.

Health care personnel
This includes all health care providers and health workers.

Health care provider
Any person providing health services in terms of any law, including in terms of the:

- Allied Health Professions Act, 1982 (Act No.63 of 1982).
- Health Professions Act, 1974 (Act No. 56 of 1974).
- Nursing Act, 1978 (Act No. 53 of 1974).
- Pharmacy Act, 1974 (Act No. 53 of 1974) and
- Dental Technicians Act, 1978 (Act No. 19 of 1979).

Health establishment
The whole or part of a public or private institution, facility, building or place, whether for profit or not, that is operated or designed to provide inpatient or outpatient treatment, diagnostic or therapeutic interventions, nursing, rehabilitative, palliative, convalescent, preventative or health services.

Health worker
Any person who is involved in the provision of health services to a user, but does not include a health care provider. This includes lay counsellors.

HIV-negative
Refers to people who have taken an HIV test with a negative result and who know their result.

HIV-positive
Refers to people who have taken an HIV test whose results have been confirmed positive and who know their result.

HIV status unknown
Refers to people who have not taken an HIV test or who do not know the result of their test.

Infant
A person from birth to 12 months of age.

Integrated Nutrition Programme
A programme primarily implemented through the Department of Health aimed at specific target groups, which combines some direct with indirect nutrition interventions to prevent malnutrition.

Low birth weight
Birth weight of less than 2 500 grams.

Malnutrition
Malnutrition is an impairment of health resulting from a deficiency, excess or imbalance of nutrients. It includes over-nutrition, which is excess of one or more nutrients, usually of energy, and under-nutrition, which refers to a deficiency of energy and / or one or more essential nutrients.

Micronutrients
Micronutrients are natural substances found in small amounts in food (vitamins and minerals) as compared with macronutrients (e.g. protein, fats and carbohydrates), which are found in larger amounts.

Micronutrient malnutrition
A term used to refer to diseases caused by a deficiency of vitamins or minerals.

Mixed feeding
Feeding breast milk as well as other milks (including commercial formula or home -prepared milk), foods or liquids.

Mother-to-child transmission
Transmission of HIV from an HIV-positive woman, during pregnancy, delivery or breastfeeding, to her infant. The term is used because the immediate source of the infection is the mother, and does not imply blame on the mother.

Nutrients
A chemical substance obtained from food and needed by the body for growth, maintenance, or repair of tissues. There are six known groups of nutrients: carbohydrates, protein, fat, vitamins, minerals – including electrolytes and trace elements - and water.

Nutritional status
The nutritional status of a person as determined by anthropometric measures (height, weight, circumference etc.), biochemical measures of nutrients, or their by-products in blood and urine, a physical (clinical) examination and a dietary assessment and analysis.

Nutritional supplements
Food- and / or nutrient supplements given in addition to food available at home.

Obesity
An excess of body fat frequently resulting in significant impairment of health, usually associated with a high body mass index (BMI).

Regulations
Means the draft Regulations Relating to Foodstuffs for Infants, Young Children and Children that will be promulgated under the Foodstuffs Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972). Once it is promulgated it will be enforceable.

Replacement feeding
Feeding infants who are receiving no breast milk, with a diet that provides adequate nutrients until the age at which they can be fully fed family foods. During the first 6 months of life, replacement feeding should be with a suitable commercial formula. After 6 months complementary foods should be introduced.

Responsive or Active feeding
Responsive feeding applies psycho-social care and includes the following:

- ® Feeding infants directly and assisting older children when they feed themselves, being sensitive to their hunger and satiety cues;
- ® Feeding slowly and patiently, and encouraging children to eat, but not forcing them;
- ® If children refuse many foods, experiment with different food combinations, tastes, textures and methods of encouragement;
- ® Minimising distractions during meals if the child loses interest easily; and
- ® Talking to children during feeding, with eye to eye contact. Feeding times are periods of learning and loving.

Severe malnutrition
A child has severe malnutrition if he or she has any of the following signs:

- ® very low weight; or
- ® visible severe wasting; or
- ® oedema of both feet (oedematous malnutrition).

Severe malnutrition includes kwashiorkor and marasmic- kwashiorkor in older classifications. However, to avoid confusion with the clinical syndrome of kwashiorkor, which includes other features, the term "oedematous malnutrition" is preferred. If weight-for-age or weight-for-height charts are available then severe malnutrition refers to weight-for-age or weight-for-height -3 standard deviations below the reference population.

Spill-over
This term designates the feeding behaviour of mothers who either know that they are HIV-negative or are unaware of their HIV status, and then choose to reduce breastfeeding, or mix feed, because of unfounded fears or misinformation about HIV, the ready availability of breast-milk substitutes, or perceptions that commercial formula is better than breast milk.

Stunting
Indicates past chronic under-nutrition. Height-for-age z-scores below -2 standard deviations of the reference population.

The Code
The International Code of Marketing of Breast Milk Substitutes was adopted as an annex to the 1981 WHA Resolution 34.22 and includes subsequent relevant WHA Resolutions.

Under-nutrition
Too little food or nutrition in the diet resulting in immediate and / or long term adverse consequences on health status and / or physical and mental development.

Underweight
A child is underweight when his/her weight falls below 80% expected weight-for-age.

Wasting
An acute, short-duration episode of malnutrition where weight for height z-scores are below -2 standard deviations of the reference population.

Young child
A person from the age of 12 months up to the age 5 years (60 months).

Notes

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