

Knowing is Half the Battle: Maternal and Child Health Guidelines



Raising children is a challenge difficult to practise for. Parents may turn to the numerous sources online for advice, yet the glut of information available on the Internet can prove overwhelming or misleading. To help parents navigate the critical period of early childhood, the Integrated Platform for Research in Advancing Maternal and Child Health Outcomes, established by KK Women's and Children's Hospital (KKH) in partnership with SingHealth Polyclinics and National Healthcare Group Polyclinics, has developed a series of guidelines to support maternal and child health. In this article, we feature the three most recently published guidelines touching on the topics of feeding and eating, 24-hour activity, and perinatal mental health, respectively.

Text by A/Prof Chua Mei Chien

Nutrition during the first 1,000 days, from the time of conception to the second birthday, has profound impact on a child's long-term health. Early eating habits are related to weight gain velocity. Poor habits can lead to either obesity or faltering growth; both of which are associated with adult obesity and non-communicable diseases.

Gaps in infant and young child feeding were demonstrated in the "Growing Up in Singapore Towards healthy Outcomes" cohort study. These gaps include the inappropriate early introduction of seasonings and sugar-sweetened beverages and feeding of blended foods even at one year old.

The Singapore Guidelines for Feeding and Eating in Infants and Young Children were developed to address these gaps. This set of guidelines serves to empower parents, caregivers and healthcare professionals to be proactive in fostering healthy eating behaviours in children aged zero to two years, with emphasis on caregivers as positive role models of healthy eating. Its aim is to facilitate the transition of a young child from one who is being fed to one who is independently eating.

The guidelines introduce the concept of VAST, which encompasses four crucial domain areas: variety, autonomy, setting and timing. Each category comes with four recommendations.

1. **Variety:** Encouraging food variety

- (a) Exclusively breastfeed infants for the first six months.

- (b) Start weaning at six months with iron-rich food, preferably green vegetables. Progressively introduce different textures, flavours and variety into the child's diet without added sugars or salt.

- (c) From 12 months on, the child can partake in family meals.

- (d) In the first two years, avoid giving fruit juices and sugary or sweetened beverages.

2. **Autonomy:** Establishing eating autonomy

- (a) From birth, respond to the infant's hunger and fullness cues.

- (b) From six months, allow the infant to explore new textures and flavours. Encourage self-feeding and food play. Avoid force-feeding.

- (c) By 12 to 18 months, encourage drinking liquids from a cup instead of the milk bottle.

- (d) Between 18 and 24 months, encourage the child to eat and drink independently, using a fork, spoon and cup.

3. **Setting:** Cultivating distraction-free family mealtimes

- (a) From birth, provide an environment that promotes a nurturing feeding experience.

- (b) From six months, have the baby safely seated at a designated dining area while providing solids.

- (c) From 12 months, make mealtimes family-centred to promote social interaction.

- (d) Avoid having active screens and toys during mealtimes.

4. **Timing:** Adapting to daytime eating schedules

- (a) In the first six months, respond to the infant's evolving feeding pattern with longer intervals between feeds, especially at night.

- (b) From six months, some infants may sleep six hours through the night and do not need night feeding.

- (c) From 12 to 24 months, maintain a daily routine of three meals and two snacks.

- (d) Keep each meal duration to 30 minutes, and not longer.

For more details on the feeding guidelines, please visit the following link: <https://bit.ly/3vYiPgg>.

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Text by Dr Mohammad Ashik Bin Zainuddin

Early childhood, spanning from infancy to preschool years, plays a crucial role in shaping lifelong well-being.¹ During this developmental stage, healthy behaviours established early on can significantly impact future habits and overall health outcomes.² Recognising this, various frameworks and initiatives have been developed to promote health and well-being in early childhood, emphasising the importance of early interventions and preventive measures.^{3,4} These insights have led to the development of the Singapore Integrated 24-hour Activity Guidelines for Early Childhood (<7 Years). These guidelines provide evidence-based recommendations for healthcare professionals to promote beneficial lifestyle activities encompassing physical activity, sedentary behaviour, sleep and dietary habits.⁵

Physical activity is crucial for early childhood development, with recommendations extending from neonates to preschool children. Infants should engage in regular physical activity multiple times per day, including non-screen-based interactive play and tummy time. As children grow, the recommendations shift emphasis to accumulating 180 minutes of physical activity daily, with a focus on outdoor play and moderate to vigorous intensity activities for preschoolers. These activities not only support physical development but also promote muscle and bone strengthening, contributing to overall health and well-being.

Sedentary behaviour poses a significant health risk, and early intervention is essential to mitigate its impact. Structured routines and interactive engagement are recommended to reduce sedentary behaviour, with screen time limited for toddlers and preschoolers. Caregivers are encouraged to engage children in activities such as singing, reading and imaginative play, fostering a dynamic and stimulating environment that discourages prolonged periods of inactivity.

Quality sleep is fundamental for early childhood development, with recommendations tailored to different age groups. Infants should aim for 14 to 17 hours of sleep per day, while toddlers and preschoolers should strive for 11 to 14 hours and ten to 13 hours, respectively. Establishing consistent sleep schedules, creating a sleep-conducive environment and avoiding screens before bedtime are key strategies to promote healthy sleep habits in early childhood.

Dietary habits established during early childhood can have long-lasting effects on health outcomes. Breastfeeding is recommended for infants, with the introduction of solid foods starting at six months of age. Structured meal routines, appropriate portion sizes and a focus on healthy food choices are essential to prevent overfeeding and promote healthy eating habits. Caregivers are encouraged to avoid using food as a means of comfort or reward, and to limit screen time during meals to promote mindful eating practices.

Efforts to integrate and implement these recommendations are crucial for optimising health outcomes in early childhood. However, studies indicate that adherence to these guidelines among preschoolers is often low,^{6,7} highlighting the need for continued efforts to promote healthy behaviours during this critical developmental period. By prioritising early childhood health promotion and implementing evidence-based interventions, we can foster a foundation of health and well-being that will benefit individuals throughout their lives.

For further details on the activity guidelines, please visit the following link: <https://bit.ly/3V6y7YS>.

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Text by Dr Elizabeth Siak

The Perinatal Mental Health Guidelines on Depression and Anxiety were released in February 2023 to address the management of perinatal depression and anxiety,¹ which affect one in ten women locally.²

Women should plan well for pregnancy, particularly if they have a history of depression or anxiety. They should be counselled about how their mental health condition and its treatment might affect them or their baby if they become pregnant. For example, the reproductive safety of psychotropics should be carefully considered. The use of valproate, which is teratogenic, should be restricted to cases in which there are no alternatives.

Women with pre-existing depression or anxiety should be advised on lifestyle adjustments to optimise their mental and physical well-being. A holistic approach which considers psychological therapies and addresses social stressors is recommended.

Early screening for antenatal depression and anxiety during obstetric visits using the Patient Health Questionnaire (PHQ-2)³ or Edinburgh Postnatal Depression Scale (EPDS)⁴ is recommended. A holistic assessment which considers psychiatric comorbidity, medical and obstetric health, stressors, relationship quality, lifestyle practices, bonding with the unborn child, and risks of harm to self and others is recommended. Diagnoses should be made based on criteria from the *Diagnostic Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* or the *International Classification of Diseases 10th Revision (ICD-10)*.

Antidepressants are recommended for women with moderate to severe illness, or for those at risk of a significant relapse. We should also consider the patient's preferences, treatment history and stage of pregnancy. Women should be advised on the benefits and side effects of

treatment, and about the consequences of untreated illness. Lifestyle interventions (eg, diet, exercise, increased social support and psychological therapy) may also be beneficial.

For postnatal depression and anxiety, early screening during obstetric visits or well-child visits using the PHQ-2 or EPDS is also recommended. As with antenatal depression and anxiety, a holistic assessment which considers psychiatric comorbidity, medical and obstetric health, stressors, relationship quality, lifestyle practices, mother-infant bonding, and risk of harm to self and others is recommended. Diagnoses should likewise be made based on *DSM-5* or *ICD-10* criteria.

Patients should be counselled on the risks and benefits of treatment, including the consequences of untreated depression and anxiety and the side effects of antidepressants. Antidepressant use is not an absolute contraindication to breastfeeding. Other lifestyle interventions (eg, supportive counselling, psychological therapy or interventions to improve mother-baby bonding) may be beneficial. Social and emotional support are crucial.

Women receiving care for postnatal depression or anxiety should be monitored closely. Those with severe symptoms, or who do not respond to treatment, should be referred to perinatal psychiatric services at KKH, National University Hospital or Institute of Mental Health.

Lastly, we should keep in mind some special considerations. Women who have experienced a severe maternal event, patients with special needs, and pregnant adolescents are vulnerable groups that would benefit from additional support. Maternal mental health can also influence maternal sensitivity to infant needs. Red flags include reduced maternal attunement, reduced child responsiveness to his/

her mother, and restricted growth and development.

For more details on the perinatal mental health guidelines, please visit the following link: <https://bit.ly/44kxf6Y>. ♦

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