



WHAT YOU NEED TO KNOW FOR OPTIMAL PERINATAL NUTRITION

Perinatal Society of Singapore
with the support of Integrated Platform for Research in
Advancing Metabolic Health Outcomes of
Women and Children (IPRAMHO)



Acknowledgements

This summary pamphlet was adapted from perinatal nutrition guidelines produced by the Perinatal Society of Singapore Advocacy Group for Engagement on Optimal PERinatal Nutrition (PAGE OPEN) in conjunction with IPRAMHO on 11 January 2019. The members are Dr Chua Mei Chien, Dr Ang Seng Bin, Prof Victor Samuel Rajadurai, A/Prof Tan Lay Kok, Dr Claudia Chi, Dr Tony Tan, Dr Khin Lay Wai, Dr Han Wee Meng, Dr Mary Chong Foong Fong, Dr Lee Jiun and Prof Tan Kok Hian. This multidisciplinary group is initiated by Prof Tan Kok Hian and chaired by Dr Chua Mei Chien. The initiative support from the research group of **Integrated Platform for Research in Advancing Metabolic Health Outcomes of Women and Children (IPRAMHO)**, an NMRC funded joint collaborative pot centre grant by KK Women's and Children's Hospital (KKH), SingHealth Polyclinics (SHP) & National Healthcare Group Polyclinics (NHGP) is also appreciated. The guideline does not define a standard of care, nor is it intended to dictate an exclusive course of management. It presents recognized clinical methods and techniques for consideration by practitioners for incorporation into their practice. It is acknowledged that management may vary and must always be responsive to the need of individual patients, resources, and limitations unique to the institution or type of practice.

This 'WHAT YOU NEED TO KNOW FOR OPTIMAL PERINATAL NUTRITION' information summary pamphlet is produced by the Perinatal Society of Singapore as an educational aid and reference for healthcare professionals practicing in Singapore. First version published 2st February 2019. The pamphlet is edited by Ng Mor Jack, Felicia Ang & Tan Kok Hian.



Optimal Perinatal Nutrition Recommendations

1. PRECONCEPTION PERIOD

- a. Healthy eating and keeping physically active for women of all childbearing age.
- b. Achieving optimal weight, if over or underweight.
- c. Health professionals to offer advice on the importance of a balanced diet and daily folic acid supplement in preparation for pregnancy.

2. PREGNANCY PERIOD

- a. Healthy eating according to "My Healthy Plate" guidelines.
- b. Regular physical activity during pregnancy.

Pre-pregnancy BMI	Total weight gain at term
Underweight (<18.5 kg/m ²)	12.5 – 18 kg
Normal weight (18.5-24.9 kg/m ²)	11.5 – 16 kg
Overweight (25.0-29.9 kg/m ²)	7 – 11.5 kg
Obesity (≥30.0 kg/m ²)	5 – 9 kg

3. POSTPARTUM PERIOD

- a. Healthy eating, physical activity, and breastfeeding as strategies for encouraging a return to a healthy weight.
- b. Encouraging women to maintain an optimal weight between pregnancies.
- c. Adequate dietary calcium and iron intakes.

4. BREASTFEEDING AND EARLY CHILDHOOD

NUTRITION

- a. Multifaceted approach and/or a coordinated program by healthcare professionals to increase exclusive breastfeeding rates and start early initiation of breastfeeding.

- b. Exclusive breastfeeding for all infants because of its proven benefits for both infants and mothers.

- c. Skin-to-skin contact of mother and infant and breastfeeding within the first hour after birth.

- d. Introduction of appropriate complementary food rich in nutrients and iron not later than 6 months of age; free from salt, seasonings and flavorings.

- e. The progression from puree and to age-appropriate texture and consistency for the infant's developmental stage and ensure timely introduction of finger foods before 9 months and foods eaten by the family from 12 months of age.

- f. Refraining from over-feeding and to discourage giving foods above the age-appropriate portion sizes.

- g. Optimal growth velocity according to local growth charts.

5. GESTATIONAL DIABETES (GDM)

- a. Universal screening for GDM by 75-gram 3-point Oral Glucose Tolerance Test (OGTT) at 24 to 28 week of gestation using the full three-point IADPSG criteria (0h, 1h and 2h).
- b. A multidisciplinary team approach (dietician, diabetic nurse, obstetrician, and endocrinologist) for GDM management
- c. Education of women diagnosed with GDM of the risk of future DM and GDM in future pregnancies on lifestyle advice that includes weight control, diet, and exercise.
- d. Postnatal test at 6-12 weeks for women with GDM to exclude DM or IGT with 75-gram 2-point OGTT.
- e. Women diagnosed with GDM to be screened and given dietary and lifestyle education for DM at regular intervals thereafter. Women at higher risk for progression to DM should be screened yearly, whilst those at lower risk should be screened at least 3 yearly.