Obesity from mother to child

The risk of obesity in childhood, and later in life, may be influenced by pre- and postnatal factors.

Maternal and Early Infancy factors that may impact long-term health

The impact of maternal health on the development of the fetal system

- The impact of early environmental factors in the infant’s development

MATERNAL HEALTH

- Even when breastfed, children of overweight mothers have accelerated growth

INFANT’S ENVIRONMENT

- Duration of breastfeeding is not long enough

MATERNAL HEALTH

- Poor nutrition and stress can lead to transgenerational programming, resulting in obesity

INFANT’S ENVIRONMENT

- Traditional formulas have higher level of protein compared with breast milk

Prenatal

Postnatal

Potential risk reduction

- General improvement to the mother’s mental and physical health before and during pregnancy
- Control of weight gain during pregnancy
- Control of weight prior to becoming pregnant for overweight mothers
- Avoid excessive infant weight gain during first months of life

Long-term benefits

- Improvement in maternal health, including weight control and nutrition, might provide an intergenerational solution for the obesity and diabetes epidemic
- Long-duration breastfeeding, or use of low-protein infant formula when breastfeeding isn’t possible, alongside appropriate complementary feeding, will help to ensure healthy growth and might reduce the risk of obesity-related non-communicable diseases

References:

1. Yajnik CS. Ann Nutr Metab 2014;64(Suppl 1):8–17