INVESTING IN NUTRITION: THE FOUNDATION FOR DEVELOPMENT

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BACKGROUND

- Every year, malnutrition claims the lives of 3 million children < 5y
- Global economy billions of dollars is lost + productivity and health care costs.
- Losses are almost entirely preventable.
- Scientific evidence shows that improving nutrition during the critical 1,000 day window from a woman's pregnancy to her child's second birthday has the potential

  - to save lives,
  - help millions of children develop fully and thrive,
  - deliver greater economic prosperity.

NEED

- There is an urgent need for global action on nutrition.
- The world faces a grave nutrition situation
- The Sustainable Development Goals (SDG) present an unprecedented opportunity to change into ---- A better nourished world

TRANSFORMING NUTRITION THROUGH THE SDGS

- Recognizing the importance of improving nutrition, in 2015 , the 193 countries of the United Nations included a target (2.2) to end malnutrition in all its forms in the SDGs.
- The SDGs aim to 'transform our world' with a vision that can be summed up in two words:

  UNIVERSAL – for all, **IN EVERY COUNTRY** – and **INTEGRATED** – by **EVERYONE**

  connecting to achieve all the goals.

The same prerequisites apply to all the SDGs.

As put by the UN General Assembly resolution 70/1: Transforming our world: the 2030 Agenda for Sustainable Development

GLOBAL NUTRIITON TARGETS

- Global nutrition targets adopted by member states of WHO.
- The Global Nutrition Report has been tracking these global nutrition targets over the last 4 years.
- These targets comprise:
  - Maternal infant and young child nutrition (MIYCN) targets:
  - 6 global targets on MIYCN adopted at the World Health Assembly in 2012 to be attained by 2025
  - diet-related NCD targets: 3 of 9 NCD targets adopted at the WHO in 2013 to be attained by 2025

NUTRITION-RELATED 2025 TARGETS

- ADOPTED BY THE MEMBER STATES OF THE WHO

  Maternal, infant and young child nutrition (MIYCN) targets

TARGET 1 Achieve a 40% reduction in the number of children < 5 who are stunted

Women aged 15–49 years with Hb

WHO TARGETS

- 4 World Health Assembly Global Targets for Nutrition Source: WHO 2014.
  - STUNTING
  - ANEMIA
  - EXCLUSIVE BREASTFEEDING
  - WASTING

REDUCE THE NUMBER of stunted children under five by 40% REDUCE THE NUMBER of women of reproductive age with anemia b

IMPACT OF MATERNAL NUTRITION ON THE OFFSPRING

- Maternal nutritional status affects the offspring's health development significantly during early embryogenesis, pregnancy, birth and lactation, and subsequently determines health during growth and even throughout adulthood.
- In the Human lifetime scale, the importance of maternal nutrition expands into the time period before conception:

IMPACT OF MATERNAL NUTRITION ON THE OFFSPRING

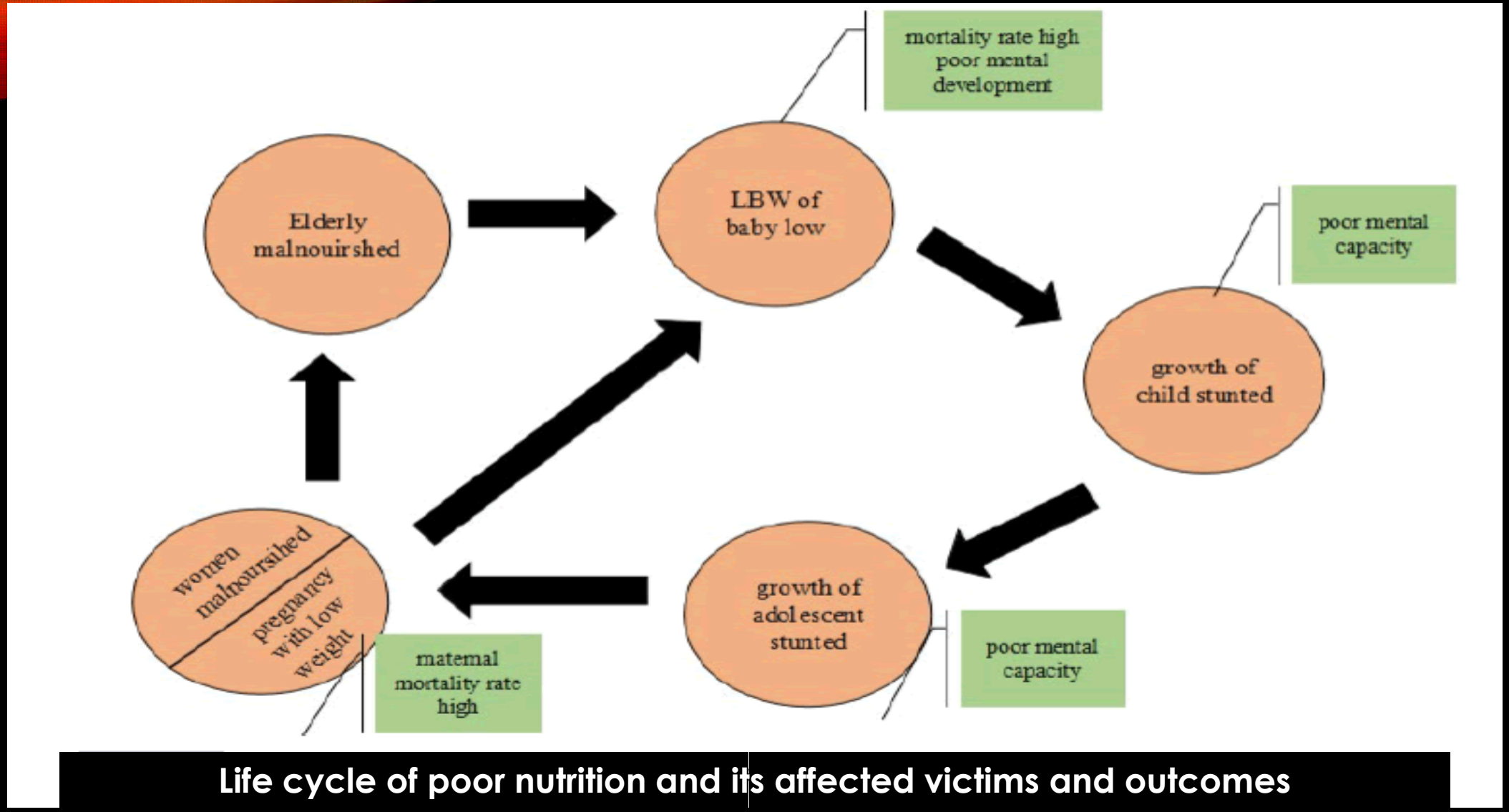
- Pre-conception nutritional status not only influences fertility, but also embryogenesis and life-long health.
- Predisposition for CHD, T2 DM and HTN can be caused by intrauterine adaptations to fetal malnutrition.
- Hence, optimizing nutrition for women during their reproductive period can be expected to have a great impact on the well being of the next generation

4 WORLD HEALTH ASSEMBLY GLOBAL TARGETS FOR NUTRITION

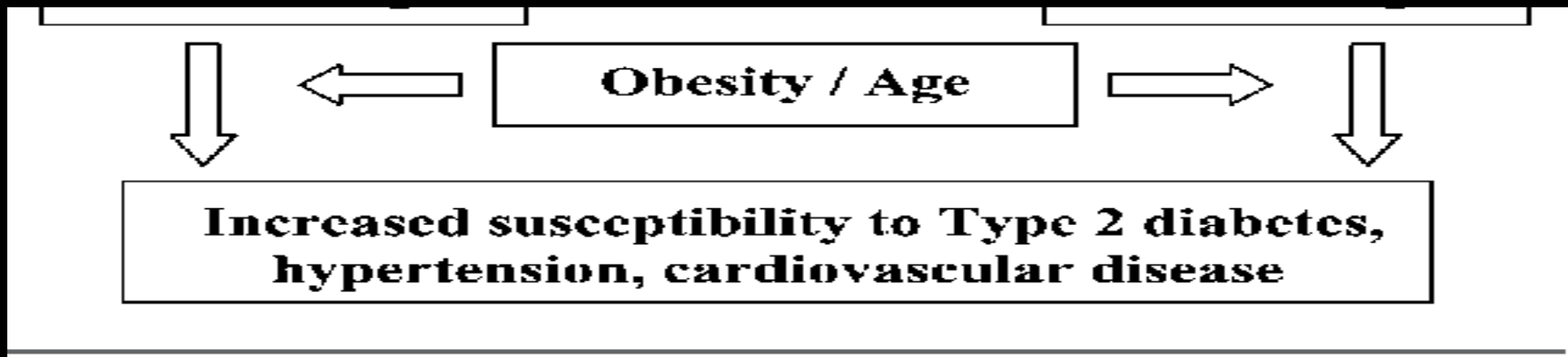
- STUNTING - reduce the number of stunted children by 40 %
- ANEMIA - REDUCE THE NUMBER of women of reproductive age with anemia by 50%
- EXCLUSIVE BREASTFEEDING – INCREASE THE RATE of exclusive breastfeeding in the first 6 months up to at least 50%
- WASTING - REDUCE AND MAINTAIN childhood wasting (acute malnutrition) to less than 5

MATERNAL NUTRITION, PREVENTION OF OBESITY AND NCD'S: RECENT EVIDENCE

- Women who are overweight when entering pregnancy or who gain excess weight during pregnancy may well be establishing an intergenerational amplification of the obesity epidemic.
- There is no doubt that a mother's nutritional status affects her child as an infant; it also affects that child's risk of obesity and related chronic disease as an adult.

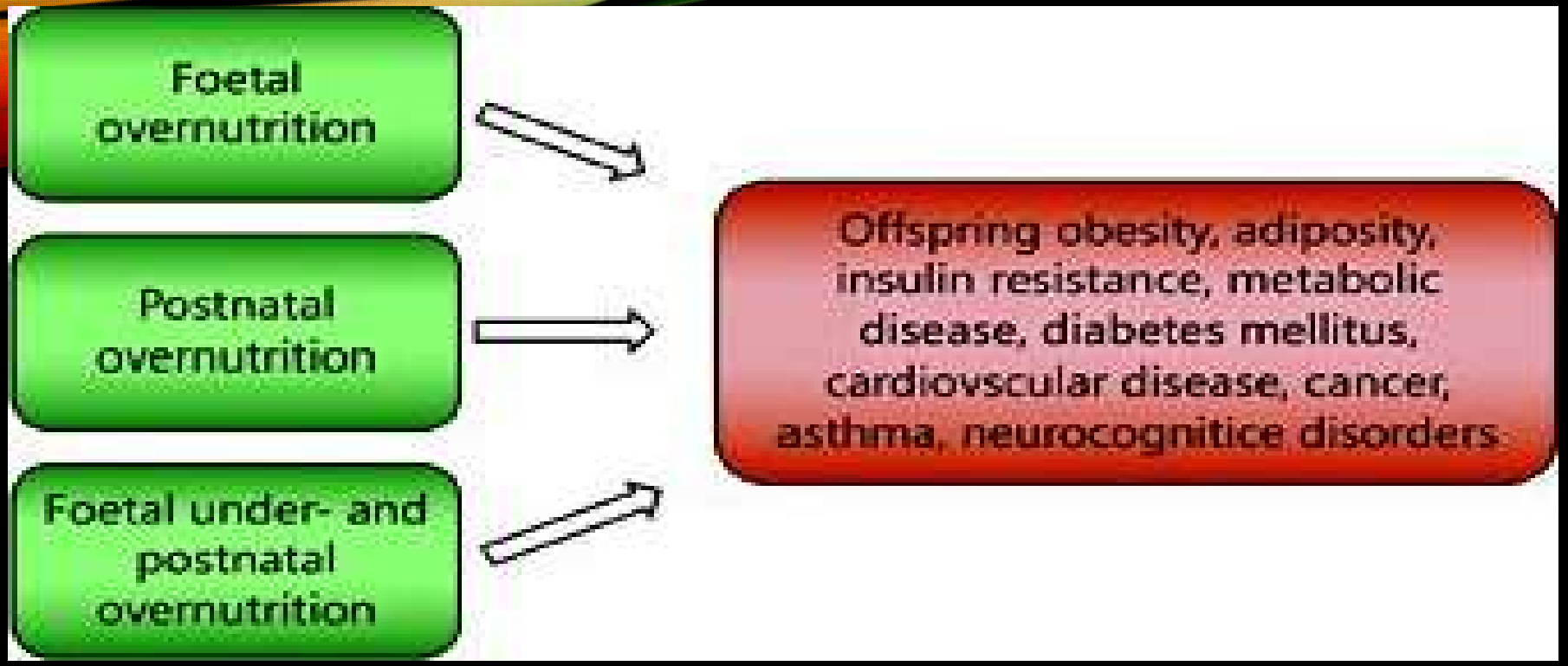


Life cycle of poor nutrition and its affected victims and outcomes

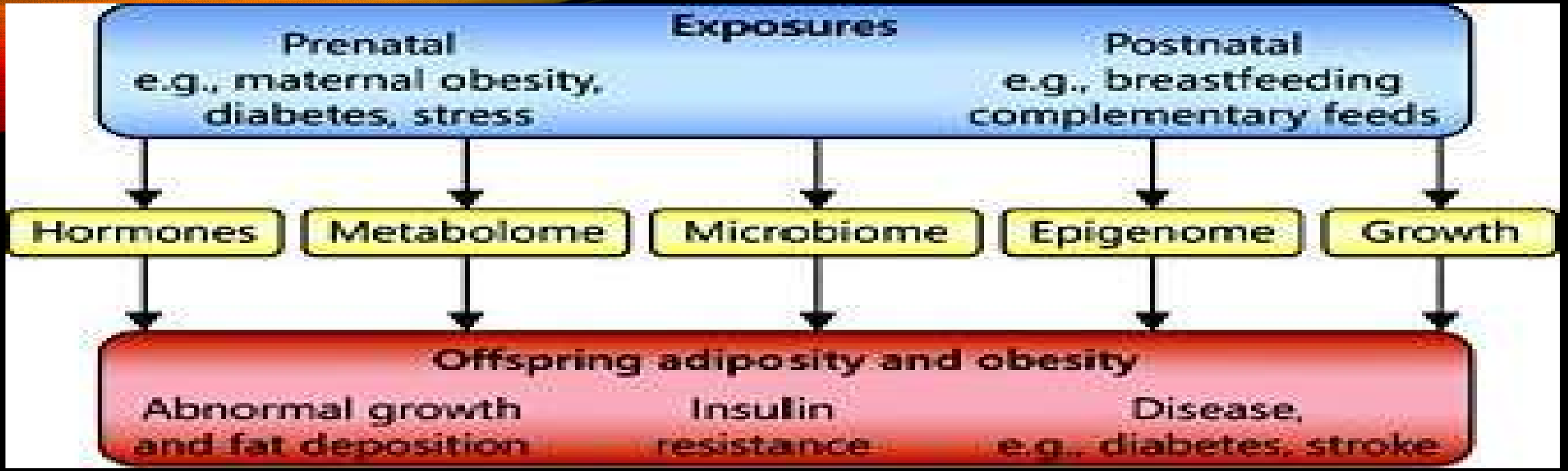

Obesity / Age
Increased susceptibility to Type 2 diabetes, hypertension, cardiovascular disease

EARLY NUTRITION PROJECT

- A multidisciplinary research collaboration funded by the European Commission with collaborating researchers from 35 institutions in 15 countries in Europe, the United States and Australia
- The project explored the early origins of obesity, adiposity and associated non-communicable diseases, underlying mechanisms and opportunities for prevention.



The work packages of the Early Nutrition Research Project are designed to jointly test 3 KEY HYPOTHESES on early life origins of adiposity and associated disorders with different and complementary methodological approaches, that is, the fuel mediated in utero hypothesis, the accelerated postnatal growth hypothesis, and the mismatch of pre- and postnatal growth trajectories hypothesis.



Nutritional and metabolic factors acting during sensitive time periods of developmental plasticity before and after childbirth modulate cytogenesis, organogenesis, metabolic and endocrine response, and epigenetic regulation of gene expression, and thereby induce metabolic programming of lifelong health and disease risk.

THE EARLY NUTRITION PROJECT HAS CONTRIBUTED TO A BETTER UNDERSTANDING OF THE IMPACT OF EARLY NUTRITIONAL PROGRAMMING ON HEALTH DURING CHILDHOOD AND LATER LIFE

HEALTHY EATING PLATE

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.

Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.

Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Eat plenty of fruits of all colors.

Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.

STAY ACTIVE!

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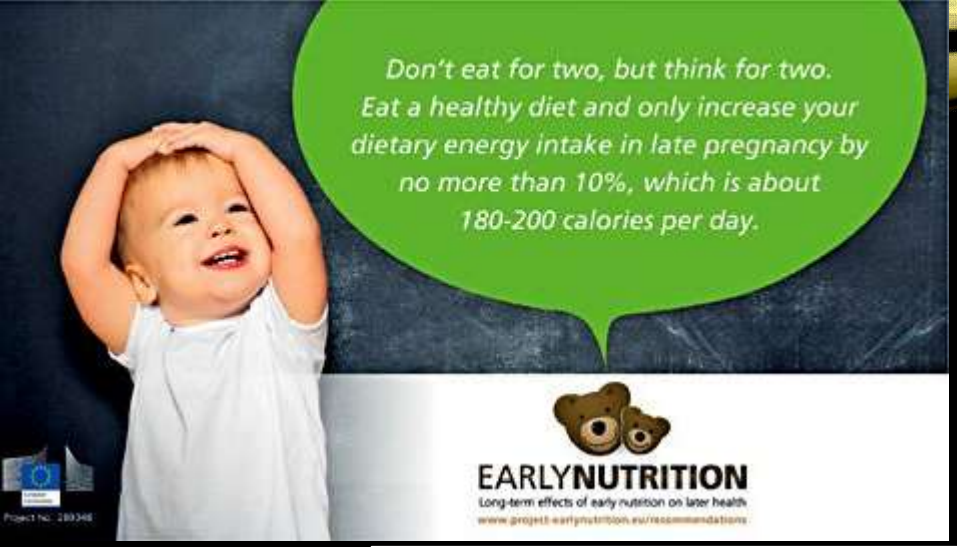

GOOD MATERNAL NUTRITION – THE BEST START IN LIFE

Thank you