Dietetics into the future: starting yesterday!
Global nutrition with an emphasis on the first 1000 days initiative

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• We are a global resource
• There are many roles to fill and ways to help

• Good nutrition in the 1,000 days between a woman’s pregnancy and her child’s second birthday sets the foundation for all the days that follow
• Source: thousanddays.org

Why the first 1000 days
• Most rapid growth across life span
• Brain development
• Higher nutritional needs relative to size
• Dependence on others
• Susceptibility to infections
The right nutrition during the 1,000 day window helps
• Build a child’s brain and fuel their growth.
• Improve a child’s school-readiness and educational achievement.
• Reduce disparities in health, education, and earning potential.
• Reduce a person’s risk of developing chronic diseases such as diabetes and heart disease later in life.
• Save more than one million lives each year.
• Boost a country’s GDP by as much as 12%.
• Break the intergenerational cycle of poverty.

Source: thousanddays.org

And what are we trying to influence?
• Stunting
• Breastfeeding
• Obesity
• Acute malnutrition
• Anaemia
• Low birth weight

Evidence is strong
• Acting before age 3 (or 2) brings long term benefits
  – Reduced chronic disease
  – Improved human capital

Martorell R Improved nutrition in the first 1000 days and adult human capital – AJHumBiol,2017;29:e22952

There are questions still...
Nutrition, Metabolism & Cardiovascular Diseases (2017) 27, 154-160
Exposure to famine in early life and the risk of obesity in adulthood in Qingdao: Evidence from the 1959–1961 Chinese famine
L. Liu 1,2, Z.C. Peng 1, Y.F. Sun 1, B. Lin 1, Z.J. Wang 1, X. Ni 1, Q. Qian 1
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• Study showed that famine exposure in early life could increase risks of obesity in adult men and women. Thereby, measures should be taken to prevent undernutrition during pregnancy, infancy, (childhood and adolescence) to reduce the prevalence of obesity. Improving early life nutrition should be given high priority to limit the increase of chronic non-communicable diseases.
• Other studies variable but all have consequences for adults
• We DON’T have to wait for more evidence

Global issue
• In advanced economies – chronic disease
• Low income – human capital, poverty

"If we want to shape the future, to truly improve the world, we have 1,000 days to do it, mother by mother, child by child. For what happens in those 1,000 days through pregnancy to the second birthday determines, to a large extent, the course of a child’s life, his or her ability to grow, learn, work, succeed, and, by extension, the long-term health, stability and prosperity of the society in which that child lives."

ROGER DUBROW, AUTHOR OF THE FIRST 1,000 DAYS: A CRUCIAL TIME FOR MOTHERS AND CHILDREN: AND THE WORLD
The burning platform

• Linear growth in the first 1000 should be a focus of interventions (Horta et al 2017) as it is associated with greater gains in IQ, educational achievements and income at age 30 in low income countries
• Relative weight gain after age 4 does not provide advantage

Malnutrition in all its forms

• How can YOU help?
• The profession in the future

While nutrition is everyone’s business, a focus on malnutrition should be part of every nutrition professional’s work.
• Location is not an issue- there is work to do no matter where you are.

Associations of Linear Growth and Relative Weight Gain in Early Life with Human Capital at 30 Years of Age

Source: http://www.globalnutritionreport.org
Ireland

Sad to say – not written by a nutrition professional
None of the reviewers or authors with obvious nutrition qualifications

1600 women in Rwanda
Empowering nurses and community healthcare workers
AND a partner

Source: https://www.phaa.net.au/documents/item/329
To address this issue, CIHR has developed the Healthy Life Trajectories Initiative (HeLTI), which follows a Developmental Origins of Health and Disease (DOHaD) approach. DOHaD is a field based on the notion that environmental factors interact with genes during conception, fetal life, infancy and early childhood, and that this programming affects the individual’s health later in life. HeLTI builds upon both the diverse research capacity and wealth of existing data sets in Canada, while using a unique set of coordinated linked international intervention cohorts to focus the powerful DOHaD approach specifically on NCDs both in Canada and in countries where the burden is greatest.

As a profession of critical importance we need

- To engage
- To provide leadership
- To remain relevant in a highly technological world
- To support others
- To be aware
- To be strong advocates among decision makers

And....

- Recognise the impact that nutrition in the first 1000 days has on some of our “core business” in adults.

We need to form networks with others

ICDA a Global Community

Notes that nutrition is not “owned” by one group

Source: http://www.gainhealth.org/
• Acting today can make a difference
• You can make a difference no matter where you work
• You can support others
• Tomorrow started yesterday