



CANADIAN HEALTHY INFANT LONGITUDINAL DEVELOPMENT STUDY

CHILD National Coordinating Centre
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A Message from the Founding Director

September 27, 2017

Dear Parents,

I want to personally thank you for the enormous contribution that you have made to increasing our understanding of the health and development of children in Canada. By participating in the CHILD Study, you have invested in the future, not only of your own child but of all children.

We have nearly completed our visits with all available children at age 5, and we are delighted to report that more than 90% of those who originally began with the study in 2008 are still involved. This is a major tribute to each of you for your commitment to CHILD, and is also a testament to the care and attention that the staff at each of the study centres have given to CHILD families.

Through the contributions of you and your family, CHILD has provided – and continues to provide – important new knowledge about the links between a child's early-life exposures and later health and development. What types of links have been discovered so far? Here are a few examples:

- A specific [mix of gut bacteria](#) in the first 100 days of life may protect children against asthma, while the presence of [furry pets](#) in the household helps to train a baby's immune system.
- Breathing in [traffic pollution](#) appears to increase a baby's risk of developing allergies.
- [Delayed introduction](#) of egg, milk and peanut may increase risk of sensitization to these foods.
- A mother's [fruit consumption](#) during pregnancy may boost her baby's cognitive development
- Use of [artificial sweeteners](#) during pregnancy may increase the child's risk of obesity.

These findings, among others, have to date resulted in over 30 publications that have been highly acclaimed by the international medical and scientific communities. In turn, these publications have generated more than 700 media stories, including CHILD features in TIME, Maclean's, The Globe and Mail, The National Post, The Nature of Things, The Wall Street Journal, The New York Times, and Vogue. You can see some of these publications on the pages following and use the links to view the award-winning CHILD videos.

What about the future? The vast majority of CHILD parents have agreed to continue with the study, which is vitally important as we prepare to follow the children through the next 10 years. We are planning our visits with the children at 8-9 years, and longer term, we plan to see them again at 11-12 years, and 14-15 years. CHILD has the potential to advance scientific understanding and knowledge



even further by following the children into adulthood as some other key international birth cohort studies have done. This would bring tremendous benefit to Canada as we follow the health and development of our own children through childhood into adolescence and even adulthood.

It has been my privilege to lead CHILD for the last 10 years, with the very strong support of all the study investigators, especially the Executive Committee, who along with the senior coordinators and staff at each clinic site, have made the study happen. As of July 1, 2017, I passed the baton to Dr. Padmaja Subbarao, a Pediatrician at The Hospital for Sick Children in Toronto. Dr. Subbarao has been the Deputy Director of CHILD since its inception and co-Director since 2015. Dr. Subbarao will continue to lead the study with expertise and passion. Dr. Stuart Turvey, lead physician for CHILD's Vancouver site, is now the study's co-Director. I am not fully retiring and will continue to be involved with CHILD, particularly in assisting with the many publications now being prepared by the investigators.

A birth cohort study like CHILD is very costly. We have been fortunate to have had continuing government funding since the study began through the Allergy, Genes and Environment (AllerGen) Network of Centres of Excellence (NCE), and the Canadian Institutes of Health Research (CIHR). To date, these two organizations have contributed over \$25 million to this study; an additional \$10 million has come from other granting agencies within Canada. We have also received a number of individual gifts, as well as donations through Foundations, which we very gratefully acknowledge.

Once again, my sincere thanks to all of you who have made CHILD happen. Scientific investigators are needed to collect and examine the data, but without the parents and the children themselves, there would be no study. Your gifts of time and commitment as a CHILD family is a gift to all Canadians. The achievements of CHILD belong to you all!

Kind regards and best wishes for many more years of CHILD.

A handwritten signature in black ink, appearing to read 'M. Sears', written in a cursive style.

Malcolm R Sears, MB, ChB, FRACP, FRCPC, FAAAAI
Professor of Medicine, McMaster University
Founding Director, Canadian Healthy Infant Longitudinal Development (CHILD) Study



SOME
CHILD discoveries so far

a woman's immune status "shifts" during pregnancy

PLOS ONE

breastfeeding protects babies from wheezing and lowers asthma risk

European Respiratory Journal
CBC News, CTV News

delayed introduction of allergenic foods increases risk of food allergies

Pediatric Allergy & Immunology
Newsweek, Globe & Mail,
National Post, Toronto Star

owning a cat or dog may protect babies from allergies and obesity

Microbiome
CTV News, Readers' Digest,
Global News, USA Today

4 gut bacteria protect children against asthma
first 100 days are critical

Science Translational Medicine
BBC, Fox News, Washington Post

air pollution increases risk of allergies by one year of age

Environmental Health Perspectives
CBC, Vancouver Sun,
Toronto Sun

fruit consumption in pregnancy boosts babies' cognitive development

EBioMedicine
CTV News, Global News

sweetener intake in pregnancy may increase babies' risk of obesity

JAMA Pediatrics
LA Times, TIME, CBS

gut bacteria at 3 months ↓
↑ sensitization to milk, egg, peanut at 12 months

Clinical & Experimental Allergy
CTV, Toronto Star

antibiotics during labour depletes babies' microbes
breastfeeding modifies effects at 12 months

BJOG: An International Journal of Obstetrics and Gynaecology
Macleans

environmental exposures assessed for over 3,200 Canadian babies

Jrnl of Exposure Science and Environmental Epidemiology

cesarean deliveries and formula feeding alter microbiome

Can. Medical Association Jrnl
TIME, New York Times,
Globe & Mail



CHILD videos

CIHR award-winning
CHILD video

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Traffic pollution puts kids at
allergy risk CHILD video

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