Dear CHILD Cohort Study kids, parents & families:

Just keeping

you up to date with CHILD!

We want to share some pics we've received from CHILD families—keep them coming!

We're also happy to tell you about recent findings out of CHILD and the attention they have been getting.

It's been wonderful to see those of you who have come for your 12-year visits. We look forward to seeing those still to visit us.

Please remember we are happy to receive your questions, suggestions, photos and artistic creations to include in these newsletters and on our website:

child@mcmaster.ca

Thanks as always for sticking with us!

Padmaja (PJ) Subbarao

MD, M.Sc. **CHILD Cohort Study Director**



Nicholas's CHILD visits in 2014 & 2023





Juno prepares to take a spirometry test



CHILD mother Rielle demonstrates how to





Hayden & Hudson hang with the minion



CHILD 12-13 YEAR VISITS

We really want to see you!

Are you at least 11 years and 9 months old? If so, you can book your CHILD appointment.

Please:

- contact your site coordinator for visit details and to book your appointment
- bring your biological samples with you
- do your best to complete your questionnaires before your visit
- when possible, let us know 48 or even 24 hours ahead if you have to reschedule.

Vancouver site

Erika Sifuentes 604-875-2000 x 6390 erika.sifuentes@bcchr.ca

Edmonton site

Joyce Chikuma 780-407-8084 chikuma@ualberta.ca

Manitoba site

Scarlet Deluz 204-789-3677 CHILD@chrim.ca

Toronto site

Eshwari Nanjappan 416-813-7765 child.study@sickkids.ca

WE'RE TALKING ABOUT YOU & ALL THE GREAT SCIENCE YOU HAVE MADE POSSIBLE...



Above: CHILD Director Dr. Padmaja Subbarao talks at the University of Manitoba about lessons learned from CHILD.

Left: CHILD Deputy Director Dr. Meghan Azad talks about how information from CHILD about aut bacteria helps us understand how kids get asthma, at the 2023 IMPACTT Symposium in Canmore, Alberta.

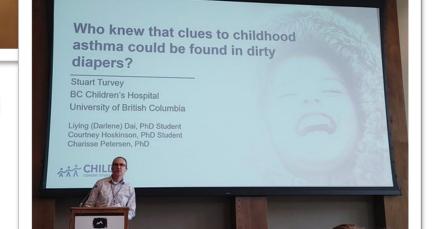
Questions?

If you – as a CHILD family parent or kid – have anything more you'd like to know about the Study, its researchers or the science involved, please send us your questions.

We're going to take your questions to CHILD researchers and include their answers in future newsletters.

Ask away.

child@mcmaster.ca Subject line: "Ask CHILD"



CHILD Co-Director Dr. Stuart Turvey talks about CHILD research at the 2023 IMPACTT Symposium in Alberta.

COVID-19 Add-on Study



RESEARCH UPDATES

CHILD's COVID-19 Add-on Study is still teaching us new things about COVID, like how it has effected people and how we can prepare for similar illnesses that may come in the future.

Recently, a report was released about how well COVID shots worked for different people in CHILD. It found that the number of shots a person got made a difference (two were better than one!), and that getting sick once with COVID made you less likely to get sick with it again.

The report was prepared by the COVID-19 Immunity Task Force (CITF), a group that shares COVID research with people in government.



There is also a brand new CHILD article in a science magazine called Epidemiology and Health. It discusses what we've learned so far from the COVID-19 Add-on Study about how the sickness went from person to person, and how the pandemic changed people's lives.



CHILD households were invited to participate in the CHILD COVID-19 Add-on Study involving; (1) brief biweekly surveys about COVID-19 symptoms and testing; (2) quarterly questionnaires assessing COVID 19 exposure and testing, vaccination status, physical and mental health, and pandemic-driven life changes; (3) in-home biological sampling kits to collect blood and stool. 1462 households (5378

participants) consented to the CHILD COVID-19 Add on study: 2803 children (mean age 9years; SD 2.7, range 0-17) and 2576 adults (mean age 43years; SD 6.5, range 18-85). We will leverage pre-pandemic CHILD data to identify risk and resilience factors for susceptibility and severity to the direct and indirect pandemic effects. Our short-term findings will inform key stakeholders and knowledge users to

shape current and future pandemic responses



from



The proof is in your poop—again

Gut bugs may help us avoid allergies

CHILD is one of the first studies to show that the germs (or bacteria) living in our bodies are very important to our health—and new discoveries keep coming.

The latest big discovery about this out of CHILD comes from the lab of CHILD Co-Director Dr. Stuart Turvey. By looking at your poop from when you were babies, he found that four common allergies are linked to a specific bunch of bacteria in babies' guts.

This means that scientists may be able to make a medicine for babies that prevents them from ever getting a whole bunch of different allergies. Hurray for your poop!

Four major allergies may have shared bacterial origin



a baby's gut can lead to the development of asthma, eczema, hay fever or food

this bacterial imbalance: breastfeeding helps correct it

Therapies that restore a bacterial balance during infancy may prevent the development of all sorts of allergic diseases in childhood.



See the Key Finding about this research (click on the image).



Watch the TV news about this research (click on the image).

WHAT ELSE HAVE WE LEARNED LATELY?



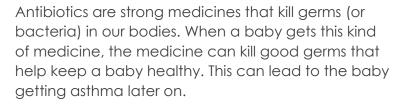
Read about the research in a newspaper (click on the image).



Hear Dr. Brauer talk about gas stoves & health (click on the image).

Breastmilk vs. antibiotics

Mom's milk fights back to prevent asthma



New CHILD research shows feeding a new baby with its mother's milk can protect that baby from asthma, even if that baby was given antibiotics.

The study found that natural sugars in breastmilk are like food for the good bacteria in a baby's gut.

Mom's milk can even help a baby get back germs that were harmed by antibiotics.

In other words, breastfed babies can better battle asthma, even after the bacteria in their bellies are battered by antibiotics.

This finding, like so many others, is brought to you by your poop samples.

Gas stoves and asthma

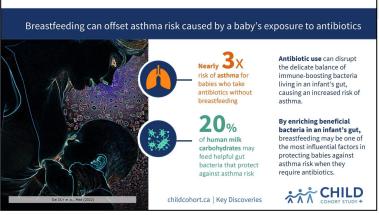
Canada joins the discussion

Lots of people in the US have been worried recently about whether cooking with gas stoves can make you sick. In 2022, scientists in the US said that using a gas stove at home might cause kids to get asthma.

Thanks to CHILD's amazing collection of information (thanks to you!), CHILD scientists were able to quickly check whether this is true for kids in Canada.

A study by CHILD researchers found that some kids in homes with gas stoves got asthma, but others didn't. They found that other things—like keeping windows open while cooking—made a difference, too. But they did not think the link between gas stoves and asthma was totally certain.

Even so, CHILD scientist Dr. Michael Brauer says you should "replace a gas stove with an electric one if you can, especially if there are people in the house with asthma or other breathing problems."



See the Key Finding about this research (click on the image).



Watch the TV news about this research (click on the image).

CHILD AT LARGE



WHO said CHILD was cool?

CHILD research used in WHO guideline

On 15 May 2023, the World Health Organization (known as the WHO) released a new guideline on using other sweeteners instead of sugar. It says people should not use non-sugar sweeteners to try to lose weight.

"The recommendation is based on the available evidence," says the WHO announcement.

A <u>CHILD finding</u> is part of the evidence they looked at. CHILD has found that when a pregnant mom eats artificial sweeteners, her child is more likely to become overweight or obese.

The WHO is the world's most important source of information on health.

World-leading breastmilk study

CHILD samples are part of a big US-funded project

A <u>project</u> studying samples of breastmilk taken from CHILD mothers when you were a baby has been given \$2.5 million. The money comes from the biggest source of funding for health research in the US: the National Institutes of Health (NIH).

The NIH only gives money for research done outside of the US when the researcher has special skills and the project uses special materials you can't get in the US (like CHILD's milk samples).

"We're leading the world when it comes to studying breastmilk," says CHILD Deputy Director Dr. Meghan Azad, who is in charge of the project.

"In this project, we will link everything we find in the breastmilk to whether kids are healthy or sick. We're going to have the world's largest and most detailed collection of information about mothers, infants and breastmilk, thanks to CHILD."



CHILD Deputy Director Dr. Meghan Azad (right) & Natalie Rodriguez (left), leaders of the breastmilk project.



CHILD featured

on new website

CHILD is a major part of a new research centre at McMaster University.

CHILD is providing the centre information about how allergies get started, which is helping scientists to find ways of preventing allergies.

CHILD is featured in a big way on the centre's website. Click on the image to visit the site.