



AUCKLAND WOMEN'S HEALTH COUNCIL

NEWSLETTER

NOVEMBER 2014



WHAT'S INSIDE:

- How antibiotics are contributing to the obesity epidemic
- Sir Peter Gluckman on obesity and health
- Researcher access to women's maternity information
- Information sharing & the Children's Action Plan
- Peter Gotzsche's speaking tour of Australia

PO Box 99-614, Newmarket, Auckland. Ph (09) 520-5175
Email: awhc@womenshealthcouncil.org.nz
Website: www.womenshealthcouncil.org.nz

HOW ANTIBIOTICS ARE CONTRIBUTING TO THE OBESITY EPIDEMIC

Earlier this year a book described as “a critically important call to arms about the harmful effects of some of our most revered modern medical practices” was published. “*Missing Microbes*” is a compelling account of the discovery of antibiotics, which ushered in a golden age of medicine, and of how our subsequent overuse of these seeming wonder drugs has contributed to the loss of microbial diversity on and within our bodies which is now exacting a terrible price on our health. (1)

Author Dr Martin Blaser has spent more than 30 years studying the role of bacteria in human disease. In his book he explains how disturbing the natural balance of what he calls the human microbiome is affecting common conditions such as obesity and diabetes, long thought of as primarily nutrition and lifestyle related problems. He points the finger at two major medical practices – the overuse of antibiotics and the rising rates of caesarean sections – which are behind what he calls our modern plagues: obesity, childhood diabetes, asthma, hay fever, food allergies, oesophageal reflux and cancer, celiac disease, Crohn’s disease, ulcerative colitis, autism and eczema.

The studies undertaken by Dr Blaser and others have shown how antibiotic use during early childhood poses a huge risk to long-term health. He points out that American children receive on average 17 courses of antibiotics before they are 20 years old. At the same time, caesarean sections are depriving babies of

important contact with their mother’s microbiomes which is resulting in life-long challenges to babies’ health.

In the first seven chapters of his book, Dr Blaser introduces the reader to the fascinating world of microbes, particularly those that are found in humans. He describes how the human body is an ecosystem which is composed of an estimated 30 trillion human cells, as well as being host to more than 100 trillion bacterial and fungal cells, the friendly microbes that have co-evolved with our species. This means that 70–90% of all cells in the human body are nonhuman. Collectively these bacteria weigh about 1.5 kilos and represent about 10,000 distinct species. They reside on every inch of the skin, in the mouth, nose and ears, in the oesophagus, stomach and especially in the gut. Women also have a rich assortment of bacteria in the vagina.

The microbes that make up each person’s unique microbiome are generally acquired early in life. By the age of three, the populations of microbes in children resemble those of adults. Together, they play a critical role in immunity as well as the ability to combat disease. It is each person’s microbiome that keeps them healthy. But now parts of it are disappearing.

Without these ancient bacteria we would not survive for very long because they carry out many metabolic and protective functions. In other words, they work for us in a myriad of mysterious and amazing ways that modern science has only just begun to understand. The development of the human microbiome begins at the moment of birth, and continues to develop in the first few years of life by acquiring ever

more microbes from the people around the growing infant.

How H. pylori keeps us healthy

The ancient bacteria *Helicobacter pylori*, known as H. pylori, reside only in the stomach. Genetic studies show that humans have carried H. pylori for at least 100,000 years and probably much longer. When they were discovered in 1979 their impact on human health was unclear. Some years later it was found that they led to specific ailments and diseases such as gastritis and peptic ulcers as well as stomach cancer. But further research has discovered that H. pylori also keep us healthy.

However this ancient organism is now becoming extinct. It is now much less common in young people. Wherever scientists look H. pylori is disappearing from humans, most rapidly in developed countries but also in developing areas.

Young children are the most susceptible to H. pylori. They seem to resist it in their first year of life, but after that, in countries where sanitation and hygiene are poor, about 20-30% acquire it every year. Between the ages of five and ten most children become colonised, often with several different strains.

The decline of this bacteria over the past 100 years is due to our modern lifestyle, namely improved sanitation, clean water, and the increased use of antibiotics. The loss is multi-generational as studies show that if the mother has lost her H. pylori, chances are small that her child will acquire it.

Dr Blaser and others have discovered that just as there inflammatory cells in

the colon and in the mouth which interact with friendly bacteria, the human stomach also has inflammatory cells interacting with its local bacteria. The amount of inflammatory traffic in the stomach determines the immune responses, and it is likely that the interactions early in life, when a baby is developing, also help determine immune tone.

“The loss of H. pylori from a person’s stomach has created a new milieu. Instead of the ancient equilibrium, now the regulation of immunity, hormones, and gastric acidity is a dance without a partner ... and the effects are lifelong.”

In the last few chapters of his book Dr Blaser shows how the increase in the incidence of heartburn or GERD (gastroesophageal reflux disease), asthma, and allergies are linked to the decrease in the presence of H. pylori, and how the increased use of antibiotics is making people taller and fatter, and increasing the incidence of Type 1 diabetes.

The impact of caesarean sections

Chapter 8 of this fascinating story of the role of microbes reveals the huge impact that being born by a caesarean section has on the baby.

Throughout the animal kingdom, mothers transfer microbes to their young while giving birth. For millennia, mammalian babies have acquired founding populations of microbes by passing through their mother’s vagina. Dr Blaser explains how this important “microbial handoff” is a critical aspect of infant health in humans. “Today it is in peril,” he says.

Microbes play a hidden role in the course of every pregnancy. These

changes, involving scores of species, are not random. Experiments have revealed that many physiological and pathological features of pregnancy are controlled, at least in part, by the mother's resident microbes which evolved to help her and themselves. When food is in short supply during pregnancy, the mother's microbes will shift their net metabolism so that more calories flow from food to her body.

When a baby is born by caesarean section there is no "microbial handoff" from mother to child. The baby is not colonised by its mother's lactobacilli, and those first microbial residents which provide signals that critically interact with cells in the rapidly developing baby's body are therefore very different.

In the final chapter which is titled "Solutions," Dr Blaser states that health providers are slowly starting to wake up to the need for change, and he predicts that doctors will become more cautious about advocating for caesarean sections as the evidence continues to emerge about the life-long consequences of obesity, asthma, allergies, juvenile diabetes and even autism that can be attributed to being born by an elective caesarean section.

"Our ancient resident microbes are there for a reason; that's how we evolved. Everything that changes them has a potential cost to us. We have changed them plenty. The costs are already here, but we are only just beginning to recognize them. They will escalate," Dr Blaser warns. The rising rates of caesarean section and the overuse of antibiotics, especially in children, are two key practices at the core of modern health care. Both

need to be urgently curtailed as their unintended consequences are endangering our children.

"*Missing Microbes*" is a book that every parent, patient and health professional should read. As the world rapidly heads towards what Dr Blaser calls an antibiotic winter, this book is a much needed wake-up call.

References

1. Martin J Blaser. "*Missing Microbes.*" Published by Henry Hold & Co. 2014.

OBESITY AND HEALTH

On Saturday 1 November National Radio's Saturday morning show featured Kim Hill's interview with Peter Gluckman on obesity and health.

Peter Gluckman who is the Prime Minister's Chief Science Advisor and the co-chairperson of the World Health Organisation Commission on Ending Childhood Obesity (ECHO), referred to the importance of the prenatal environment, breastfeeding and weaning and the foods eaten during the first few years of a child's life in as having a major role in determining whether a child will become obese or not. He discusses what he calls the obesogenic environment that babies are now born into and his work in this field. (1)

Peter Gluckman has also written two books about these issues – *Mismatch* which was published in 2008, and *Fat Fate & Disease* published in 2012.

References

1. <http://www.radionz.co.nz/national/programmes/saturday/20141101>

Researcher access to women's maternity information

Women are not being informed when registering with a Lead Maternity Carer that when they sign the registration form they are in fact signing a waiver and agreeing to their maternity information being able to be accessed by researchers.

The Ministry of Health's (MOH) website states under the "Privacy Issues" heading of the National Maternity Collection page:

"When a woman registers with a lead maternity carer she signs a waiver that allows health data to be used for research under the Health Information Privacy Code 1994.

The Ministry of Health is required to ensure that the release of information meets the conditions of any legislation related to the privacy of health information, in particular the Official Information Act, the Privacy Act 1993, the Health Information Privacy Code 1994 and the Adult Adoption Information Act 1985." (1)

However, there is nothing on the Ministry's *Registration with Lead Maternity Carer* form or the Midwifery and Maternity Providers Organisation (MMPO) *Registration with Lead Maternity Carer* form that states that in signing the form the woman is signing a waiver allowing her health data to be used for research.

What the MOH form lists in dot points above the woman's signature is that she understands that the Ministry of Health will use the information in this registration form in a manner consistent with the Health Information Privacy Code 1994 to make payments to her LMC for the services

provided, and to monitor the health status of women and their babies, and to produce the annual report on Maternity. There is nothing that refers to the use of her information for research purposes.

Likewise the MMPO's registration form refers to the fact that in signing the form the woman understands that MMPO, the Ministry of Health and related health providers will be using their personal information to monitor quality of care, treatment and health statistics and accuracy of claiming in a manner consistent with relevant privacy legislation. There is no mention of researchers accessing their information.

But there is the somewhat threatening statement:

"I understand that if I do not agree to this information being forwarded by my Lead Maternity Carer, I will not be eligible for publicly funded maternity services."

This raises the question how are women supposed to know that they are actually signing what the MOH refers to as "a waiver" when there is nothing in the registration forms that mentions research or that clearly states what the woman is actually agreeing to?

This situation is unacceptable and if the LMC registration form is indeed "a waiver" that enables researchers to access a woman's maternity information then this must be spelled out very clearly in these forms.

References

1. <http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/national-maternity-collection>

INFORMATION SHARING & CHILDREN'S ACTION PLAN

It's been a while but rest assured ViKi (Vulnerable Kids Information System), Paula Bennett's answer to child abuse, is alive and well.

In 2011 Paula Bennett issued the *Green Paper on Vulnerable Children*. Despite the fact that a significant proportion of the 10,000 submissions on the *Green Paper* emphasised the need to address poverty, unemployment, housing and low levels of educational achievement as issues that also needed to be considered when dealing with child abuse, the subsequent release in October 2012 of the White Paper outlining the *Children's Action Plan* was judged by many to be a big disappointment and a missed opportunity to get a fundamental realignment of resources and effort.

What New Zealand is in the process of getting is a database called ViKi, another agency, and yet another discussion paper to make submissions on.

The 23-page discussion paper is titled "*Better Information Sharing for the Children's Action Plan: Better Results for Our Vulnerable Children*." It states that "the purpose of the *Children's Action Plan* is to reduce the incidence of child abuse and neglect for children faced with complex and interrelated problems and needs. These complex problems and needs often span a number of areas including: the social services sector, education, housing, and health. The risk of abuse and neglect is presently below the threshold for statutory care."

The plan involves sharing information between agencies, setting up ViKi, and the establishment of the Hub and Children's Teams.

The Hub is the entry point for the public into Children's Teams in that it is where the public registers matters of concern about children. It also supports the triage of identified cases into Children's Teams or to CYFS (Child, Youth and Family Services). ViKi is the IT system that allows Hub staff to record, collate and analyse a wide range of information.

Of course, there are huge privacy issues at the centre of all this. In order to ensure that all this information-sharing activity meets the requirements of the Privacy Act, an Approved Information Sharing Agreement (AISA) will be created. "The Agreement will provide certainty about privacy and information sharing for the operation of the Children's Action Plan, Children's Teams and the supporting infrastructure for the Hub and ViKi.

It is proposed that the Agreement will also operate to address legal barriers and clarify existing rules around the operation of the Children's Teams. The Agreement will ensure it is clear what information can be shared, with which agencies and for what purpose."

Submissions due in by 12 December 2014. Further information on AISA and a copy of the discussion paper are available at:

<http://www.childrensactionplan.govt.nz/info-sharing>

**INDUSTRY INFLUENCE IN
HEALTHCARE & RESEARCH:
DOES IT MATTER?**

**1pm on Monday
24 November 2014**

**Grafton Campus, University
of Auckland, Auckland**

**With guest speaker Professor
Lisa Bero, University of Sydney.
Professor Lisa Bero is a world
renowned expert on pharma-
ceutical industry interaction
and influence in medical
research.**

This half-day symposium will look at the influence of industry on research agenda's methods and healthcare. There are a variety of researchers and clinicians and media representatives discussing the impact of industry in their various fields. They include Peter Griffin, and Professors Cindy Farquhar, Chris Bullen, Shaun Hendy, Dr Sarah Hetrick and Dr Vanessa Jordan.

There is also a panel interview with Nikki MacDonald interviewing Dr Mark Jeffery, Assoc. Professor David Menkes, Dr Mark Webster, Dr Don Mackie and Dr Stewart Jessamine.

Cost: Free of charge.

Registration is essential.

Contact: u.foley@auckland.ac.nz

For further information go to:
<http://nz.cochrane.org/symposium>

**AWHC
GENERAL MEETING
20 November 2014**

Detailed minutes of this meeting are available on request. Matters discussed included:

- Financial reports
- Grant applications
- Non-consensual clinical trials
- Northern A ethics committee
- Cochrane symposium
- Cartwright Screening conference on 7 August 2015

Further information on some of the topics listed above is contained in this issue of the AWHC newsletter.



**AWHC NEWSLETTER
SUBSCRIPTION**

The newsletter of the Auckland Women's Health Council is published monthly.

COST: \$30 waged/affiliated group
\$20 unwaged/part waged
\$45 supporting subscription

**If you would prefer to have the
newsletter emailed to you, email us at
awhc@womenshealthcouncil.org.nz**

Send your cheque to the Auckland Women's health Council, PO Box 99-614, Newmarket, Auckland 1149

UP AND COMING EVENTS

DISTRICT HEALTH BOARD meetings for November/December 2014:

Waitemata DHB (Website address: www.waitematadhb.govt.nz)

The Waitemata Hospital Advisory Committee meeting starts at 11am on Wednesday 17 December 2014 and will be followed by the DHB Full Board meeting which starts at 1.30pm. Both meetings will be held in the DHB Boardroom, Level 1, 15 Shea Terrace, Takapuna.

The **combined Waitemata DHB and Auckland DHB** Community & Public Health Advisory Committee meeting starts at 2pm on Wednesday 26 November 2014.

Auckland DHB (Website address: www.adhb.govt.nz)

The Hospital Advisory Committee meeting will be held at 9.30am on Wednesday 10 December 2014 followed by the Full Board meeting at 2pm. Both meetings will be held in the A+ Trust Room in the Clinical Education Centre, Level 5, Auckland City Hospital.

Counties Manukau DHB (Website address: www.cmdhb.org.nz)

The Hospital Advisory Committee meeting will be held at 9am on Wednesday 3 December 2014 at Ko Awatea and will be followed by the Full Board meeting at 1.30pm.

The Community & Public Health Advisory Committee meeting will be held at 1.30pm on 17 December 2014 at 19 Lambie Drive, Manukau City.



ETHICS COMMITTEE meetings – dates for the four new ethics committees are at: <http://www.ethics.health.govt.nz/about-committees/meeting-dates-venues-minutes>



Peter Gotzsche leader of the Nordic Cochrane Centre and author of “*Mammography Screening: Truth, Lies and Controversy*” and “*Deadly Medicines and Organised Crime: How big pharma has corrupted healthcare*” will be in Australia from 9 - 18 February 2015 on a speaking tour. He will be visiting Adelaide, Melbourne, Sydney and Brisbane giving both public and professional lectures on psychiatry (including the use of SSRIs) and on deadly medicines and organised crime.

For further information on the times, dates and venues of Peter Gotzsche’s speaking tour, go to <http://mentalaz.wordpress.com/home/>