



From The Chair

Good old Aristotle... Moderation in all things... even in Brainwave messages!

Recently the Brainwave National committee did some strategic planning, looking closely at what Brainwave Trust is doing, our Mission, our Aims and how best to achieve them.

Two things came through very strongly from all our Committee members:

- (1) We are evidence-based and
- (2) While we want the best start in every way for every child, our key difference from other organisations is our fascination with brain development and our determination to pass on the results of research.

As part of this exercise we were asked to identify potential "threats" to the Brainwave organisation. I identified that I sometimes wonder whether we are in danger of being seen as advocating "perfect" instead of "good enough" parenting.

In the 1950s Bowlby coined that term "good enough parenting". I like to use it to distinguish between realistic, practical expectations of parents and idealistic theories of parenting that are not achievable in the real world. (After all we have to prepare children to live in the real world.)

There is no doubt that there is a "fatigue" out there with messages that are perceived as "politically correct", "zealous" or unrealistically demanding of parents.

There is no way I want to be part of anything that makes good, committed families feel inadequate or anxious. Everything Brainwave advocates is possible, realistic and inexpensive.

Moderation is a fabulous concept. Children need some stress, in order to learn. Constant stress is toxic. They need to gradually learn to think for themselves and take responsibility. But they do not need to be treated like adults. They need some stimulation. But not too much. They need sleep. But not too much. They need food. But not too much.

Just how much is full of "grey areas" and probably differs according to "family systems", temperament and a thousand other variables.

It's difficult as a Brainwave Presenter because people do want "answers".

I am forever saying be responsive "enough", "enough" stimulation balanced with "enough"

routine etc. What on earth does "enough" mean?

There are no two people who are exactly the same on any specific "enoughs". For example, my poor father will be turning in his grave a few times a week as his grandson runs on to the soccer field wearing hastily scraped (pretty muddy actually) boots. "Instill some discipline, responsibility, and respect for his team-mates" etc - I can hear Dad say. I totally agree, but my answer would be - "It's a compromise - we are busy and I pick my battles".

It may not be ideal but in the context of a loving family, it's a compromise I can live with. Basically I am happy with the amount of positive attention and guidance my children get...even if grooming is not high on our particular list of priorities!

Breastfeeding is a perfect example. Lauren Porter has written a fascinating and important article in this issue about new research on the benefits of breastfeeding for babies of depressed mothers.

I always get a little nervous about Brainwave entering the breastfeeding debate. It seems to me that there are plenty of groups out there advocating breastfeeding as though it were the "be all and end all" of everything. The Brainwave message is very different - it is a loving and caring, aware and attuned, nurturing and stimulating early life that matters. There is overwhelming evidence that breastfeeding is the optimal form of early feeding but, as Lauren says in her article, those who cannot breastfeed need not feel guilty if they are otherwise nurturing and caring.

So... what does Brainwave think? What is "good enough"? I believe that parenting is a personal journey, full of best-judgement-on-the-spur-of-the-moment decisions. There are no "rules" that can be prescribed by Brainwave or anyone else. But it is really useful to know the current science and research behind child development.

Developmental ignorance is a totally unnecessary evil.

We want to find the most up-to-date information we can. And we want to lobby for increased understanding of the importance of early experience in shaping the structure and organisation of the brain.

Respectful, positive, nurturing, repetitive, responsive, attached, attuned care maximises the chances of producing caring, curious, contributing, empathetic adults.

And we also know it doesn't need to be "perfect". Just "good enough".

That's part of the wonder.

Sue Younger



Dr Shari Barkin is coming to New Zealand in March 2008, bringing her considerable expertise in the effectiveness of office-based intervention for family violence prevention; and research solutions.

Dr. Barkin is a truly remarkable doctor. She is well-respected by her peers for her constant and flawless search for evidence-based medicine.

- She will be hosting three workshops:
- Christchurch - Thursday March 20th
 - Wellington - Wednesday March 26th
 - Auckland - Friday March 28th.

In order to give Dr Barkin the opportunity to interact with those attending, we are limiting seats to 120 per venue. A classroom style setting and ample time for discussion, means those attending will receive a valuable opportunity to gain skills and knowledge that can be integrated in their New Zealand work place.

These workshops will be relevant and of interest to everyone working with children and in the field of family violence.

For more information visit www.brainwave.org.nz or contact Sandie on sandie@brainwave.org.nz

Kim van Duiven
Executive Director

New Zealand's Birth Rate has Increased

All Paediatricians in New Zealand will currently tell you they have never been so busy. This is especially so for those like me who work in a neonatal intensive care unit. The census statistics from 2006 came out this year which confirmed what paediatricians, midwives and maternity professionals have known. The rise has occurred since 2003 and is no blip. It means that numbers of births in New Zealand are now at the highest level since 1972.

Women average 2.1 births each which has also risen over the last 5 years. The average age women give birth has plateaued at 30 years, with the age for first births at 28 years. The increased maternal age has partly contributed to the increase, since twins and triplets occur spontaneously more frequently as we get older. Our neonatal unit becomes full when the numbers of twins needing care is higher than usual.

Other important changes have occurred over the last few years. Deaths in the first year of life are at their lowest ever at 5 per 1000 live births. The biggest reduction is in deaths attributable to Sudden Infant Death Syndrome and there are many groups to pat on the back for their part in this very pleasing statistic. Education of parents on safe sleeping practices is at the centre of this reduction.

What does this mean for the new parents of babies born in 2007?

Maternity units are often very full. This has led to early discharge to postnatal facilities or home at earlier ages. Each area of New Zealand has their own way of coping with the increasing births. Many areas are also experiencing a shortage of midwives and nurses which adds to the stress parents may feel at this important stage in their babies' lives. Neonatal units are also often full. This unfortunately means some parents are sent

to another area to give birth where the care their babies need is available – again added stress for the family. Discharge planning and transfer of care to community and well child providers for the majority and support of high need babies with specialised teams occurs all over New Zealand. I am sure support agencies have also noticed the increased numbers accessing their services.

This makes the work Brainwave is involved in all the more valuable. Emphasising the importance of the first 3 years is being heard far more often. The regular high quality workshops and seminars supported by Brainwave can be recommended to any health professional or worker who supports new parents and their children.

*Dr Nicola Austin
Paediatrician
Canterbury Brainwave Committee*

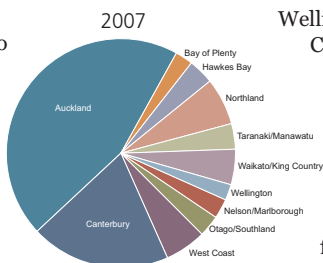
Presentation Update

What a busy and fabulous year for the Brainwave presentation programme. We now have twenty trained presenters who have achieved the amazing task of doubling the number of presentations delivered this year. The number of presentations for 2007 climbed to well over two hundred.

The graph shows the regions where we have delivered the Brainwave message. This reflects where we have active presenters rather than, necessarily, where there is need. We will increase presentation numbers in the thinner areas by training presenters in those areas as we gain funding to do so.

Brainwave is planning to train new presenters in South Auckland, Otago and the West Coast of the South Island to meet the growing demand in those areas. Training for our South Auckland presenters as well as a number of presentations has been funded by the South Auckland division of Zonta.

Funding from the ASB Community Trust has enabled us to train presenters in Auckland and Northland as well as fully subsidise presentations for target organisations and parent groups. This has made a huge difference to the number of groups that we have been able to reach with our important message and the impact of this funding



is clearly illustrated. We will work to build on these numbers in 2008.

As you will see, we continue to deliver the Brainwave message to very diverse groups – from small groups of interested parents in isolated communities to large professional conferences in the main centres.

Brainwave committee member and Paediatrician, Dr Simon Rowley has delivered the Brainwave message to many large audiences at conferences held in Auckland and Wellington, including the Conference of Understanding and Working Effectively with Child & Youth Offending, the Neonatal Nurses Conference and a conference hosted to address offending by young people.

Canterbury committee member and early childhood lecturer, Nathan Mikaere-Wallis presented to the New Zealand Association of Counsellors and we have also had the great opportunity to deliver our message at many of the Family Violence Huis around New Zealand during 2007.

Teen parent units from around the country have received presentations, including units in Wellington, Whangarei, Hawkes Bay, Christchurch, South Auckland and Central Auckland. We have really enjoyed working with these young parents. If you are aware of a teen parent group in your area that could benefit from a presentation, please contact us.

Our presentations have been given a fresh face thanks to the fabulous skills of Sue Younger. The Brainwave message has been updated to include some very useful and interesting video clips and new slides. We are sure you will enjoy what we have put together for you.

The Mothers in Prison programme has been completed for 2007 with sessions having taken place in Christchurch and Wellington and multiple sessions in Auckland this year. We even had a few of the newborn babies attending the

sessions which was great. Feedback from the participants has been excellent; the mothers all reported that they had learned vital information they would incorporate into their parenting. We hope to be able to run another series of this program next year and we are grateful to the "Sir Thomas and Lady Duncan Trust" for supporting this valuable programme.

Thanks to COGS (Community Organisation Grants Scheme) we are also currently looking for suitable people to train as presenters next year in Waikato, Kaitaia and Hawkes Bay. If you, or someone you know, has a background in child health, welfare or education; are flexible with your time, have great presentation skills and, most importantly, a passion and good understanding of the Brainwave message then please email me for an application package.

We are launching a project in Mangere in 2008 where many primary schools and early childhood education centres under the airport's flight path will receive Brainwave training for staff and presentations for parents with a focus on literacy. This project has been funded by the Auckland Airport Community Trust.

Thank you to all those organisations that hosted a presentation for their staff or community during 2007. We have enjoyed working with you in partnership to spread the Brainwave message.

While you are planning for your training needs in 2008, think about whether your staff would benefit from a Brainwave presentation. We try and accommodate all requests, however remote your area is. The more people who know the impact of the first three years, the greater chance that all our children can lead the lives they deserve.

Please contact me to discuss booking sessions or for a presenter's application pack.
jane@brainwave.org.nz or
Ph 09 4165385 or 027 4444 104

*Jane Valentine-Burt
Presentation Co-ordinator*

From Brainwave Canterbury

Life continues at a busy pace for the Brainwave team based in Otautahi/Christchurch. The Christchurch based presenters have travelled far and wide in recent months, as well as responding to the numerous local requests for presentations. Our audiences have been as varied as the landscapes we've ventured through, and it's pleasing just how many folks are now aware of the Brainwave Trust, or are returning to hear presentations for the second (or third, or fourth!) time.

Other excitement comes in the form of a small grant from the Christchurch City Council to fund "Project Outreach", to ensure that those who need to know about us and our work know just how to find us. This will allow us to take on some much needed administrative support on a contract basis – we all salivate at the prospect! We've also been successful in winning funds from the Tindall Foundation to conduct some evaluative research on Brainwave's work – watch this space for news as that unfolds.

Canterbury Committee members and presenters Nathan Mikaere-Wallis and Miriam McCaleb, specialists in early childhood education, were invited to participate in an education think tank. The Education Leader's Forum brought together professionals from all over the country, most from the tertiary or secondary sectors, as well as representation from industry. Ours were the voices reminding these people to consider that the outcomes they are interested in are largely predicted by early relationships, early experiences. We were grateful for the invitation and felt great about this bit of infant/toddler/family advocacy.

Susan Foster-Cohen's teenage brain presentation continues to be popular and she has given it most recently to the national conference of the Dyspraxia Support Group where she addressed parents of teenage children with disabilities who struggle to understand what is 'being a teenager' and what is 'having dyspraxia'. As always the early brain development is the basis for understanding development throughout the life-span, and knowledge and understanding of that development can help ease tensions between parents and their offspring.

Miriam McCaleb



Canterbury Committee

The Brainwave Trust would like to acknowledge the wonderful support we have received in the form of financial grants from the following organisations.

The ASB Community Trust, JR McKenzie Trust, the Tindall Foundation, Fletcher Trust, New Zealand Lotteries Grant Board, South Auckland Zonta, United Way, New Zealand Beef & Lamb Marketing Bureau Inc, SPARC Active Movement, Christchurch City Council, COGS, Soroptimist Groups.



Auckland Committee

Brainwave Brevities

Brain fact: Total surface area of the cerebral cortex = 2,500 cm²

"In proportion to our body mass, our brain is three times as large as that of our nearest relatives.

This huge organ is dangerous and painful to give birth to, expensive to build and, in a resting human, uses about 20 per cent of the body's energy even though it is just 2 per cent of the body's weight. There must be some reason for all this evolutionary expense."

Susan Blakemore in "Meme, Myself, I", New Scientist, March 13, 1999, Issue 2177

Effects of Methamphetamine use during pregnancy

Dr Trecia Wouldes of the University of Auckland School of Medical and Health Sciences is leading the New Zealand arm of a NZ-US study on the impact of exposure to methamphetamine during pregnancy, following babies for 3 years. Methamphetamine (or "P") is known to cross the placenta to the unborn child and complications can include increased rates of premature delivery, growth retardation and effects on the central nervous system. Early data from the joint NZ-US study has already shown that babies are 3.5 times more likely than others to be born below average weight. Dr Wouldes, as reported, says: "We are going to see some seriously affected children because of the combination of drugs and other factors such as poor nutrition and backgrounds of domestic violence, which will affect early development. They are a high risk group."

Understanding the Brain: The Birth of a Learning Science

Tom Schuller, published by the OECD in 2007.

This book provides new insights about learning. It synthesises existing and emerging findings from cognitive and brain science. It shows what the latest brain imaging techniques and other advances in the neurosciences actually reveal about how the brain develops and operates at different stages in life from birth to old age and how the brain is involved in acquiring skills such as reading and counting.

This publication is essential reading for those involved in education as parents, teachers, learners or policy makers. One of its aims is to encourage dialogue among educators and neuroscientists about what each can contribute to the understanding of how and when we learn. The book is the culmination of a two phase project, begun in 1999, by CERi, the OECD's Centre for Educational Research and Innovation.

Too Much TV = Attention Problems

Young children who watch television more than two hours a day are more likely to have attention problems as adolescents, says Erik Landhuis, a New Zealand researcher at the Dunedin School of Medicine from a study of more than 1,000 boys and girls born in 1972 and 1973. "The two-hour point is very clear in our data and consistent with what the American Academy of Pediatrics recommends," he said.

How Many New Babies?

New Zealand's birth rate jumped to almost 62,000 for the year to June 2007 from a low of 54,000 in 2002. Our aim is that every one of those new babies will receive, at no cost to them, one of our wonderful Cuddlewraps illustrated with the important Brainwave messages. This year those babies are receiving the wraps thanks to SPARC Active Movement's assistance.

Website

We continue to update our website www.brainwave.org.nz and add new material and new links. You will find a link to the Developing Child website www.developingchild.net, the website of the US based National Scientific Council on the developing child which is a multidisciplinary collaboration of leading scholars in neuroscience, early childhood development, pediatrics, and economics. They have published a series of excellent papers, in plain language, on the developing brain in early childhood. There is a delightful quote from Urie Bronfenbrenner, a distinguished US developmental psychologist who died in 2005, which so well articulates what you might hear in a Brainwave presentation "...in order to develop normally, a child requires progressively more complex joint activity with one or more adults who have an irrational emotional relationship with the child. Somebody's got to be crazy about that kid. That's number one. First, last, and always."

Anthea Springford

A General Theory of Love

Thomas Lewis, Fari Amini, Richard Lannon
Vintage

One always reads publisher's blurbs with a truckload of salt, right? In the case of this book I found that unusual creature – a book that delivers exactly what the publisher promises:

“A General Theory of Love draws on the latest scientific research to demonstrate that our nervous systems are not self-contained: from earliest childhood, our brains actually link with those of the people close to us, in a silent rhythm that alters the very structure of our brains, establishes life-long emotional patterns, and makes us, in large part, who we are. Explaining how relationships function, how parents shape their child's developing self, how psychotherapy really works, and how our society dangerously flouts essential emotional laws, this is a work of rare passion and eloquence that will forever change the way you think about human intimacy.”

This book by three eminent California psychiatrists integrates insights from a number of fields in lyrical, gripping, lucid prose.

A favourite quote:

“Of all humans who try cocaine, less than 1 percent become regular users - the other 99 walk away. As Malcolm Gladwell has argued, this staggering imbalance points to a problem not in the juices of coca leaves, but inside the brains of the tiny fraction who find its effect on their emotions irresistible. America expends billions to protect our borders against the influx of small packets of limbic anesthesia. Those sums might be better spent ensuring that our children harbor brains minimally responsive to such agents.”

There is only one thing I need to say in this review really – if you are interested in psychobiology go out and buy this book, turn off your phone, excuse yourself from your family for an afternoon and read it! A real treat!

Sue Younger

New Committee Member

Mary-Anne Boyd
MPhil (hons), MBIE,
MPP, NZROT, Dip Ed



Mary-Anne Boyd's wide background includes behavioural and medical sciences, business and innovation. Currently working in an innovation role in the health sector she has experience in a range of executive, consultant and director roles. She has worked in UK, Australia, USA, Finland, Singapore and Hong Kong as well as New Zealand. Earlier in her career, as a Bobath trained and sensory integration certified occupational therapist, recipient of the Frances Rutherford Lecture Award and Churchill Fellowship she worked with children and families in interdisciplinary primary health care programmes in pre-schools, schools, mobile and community services. She established activity and volunteer visitor programmes for children in hospitals, and has designed and lectured in tertiary programmes on early development. Her passions include family, community development, whanau ora, holistic and culturally relevant early intervention, knowledge sharing and raising expectations that education, health and social well-being services really work together

We are delighted to welcome Mary-Anne to the Brainwave committee.

Together we Achieve More

As we move closer to the end of 2007, I take time to reflect on the 26 Brainwave presentations I have done this year. As I do this, I realise the importance of working with others, as we strive to make a difference in the lives of the nation's young children.

Brainwave's slogan "Build a lifetime in the first three years" weaves in so well with the aims of the many organisations I have enjoyed presenting to this year.

Special highlights have been:

Presentations arranged by SPARC Active Movement, firstly in Bay Of Plenty then in Hawkes Bay. A primary focus for this dedicated group is to ensure that families understand the relationship between movement and healthy brain development in young children.

Teenage Parent Education unit presentations in Manawatu, Hawkes Bay and Lower Hutt were extremely rewarding. It is wonderful that our very important early brain development information can be part of the parenting

programmes being provided by the dedicated teaching teams in these units.

Having the opportunity to link a Brainwave presentation in with the SPACE programme (Supporting Parents Alongside Children's Education) at North End Playcentre in Fielding, was another very rewarding experience. SPACE is designed especially for first time parents and babies. An excellent Playcentre initiative which I hope will become available to many more families with young babies throughout New Zealand. My role was to add a neuroscience perspective to the great hands-on activities and information SPACE facilitators are working with; to promote healthy brain development and secure attachment relationships between the participating mothers and babies.

Presentations have also been carried out for groups such as Home Based Childcare, Childcare Centres, PAFT, Kindergarten, Playcentre, Plunket, REAP, Work and Income, Soroptimists and Violence Free Wairarapa. While some of these presentations have been specifically for staff and parents of a particular organisation, others have been open to the public, providing opportunities for a wide range of people to attend.

Working with so many dedicated and passionate people within these groups, fuels my own passion

for us as a country to develop a positive understanding of how important the early years are in the life of a child. I am reminded of the African proverb "It takes a village to raise a child" - no one person or group alone can do all it takes, to make the changes needed in New Zealand to ensure that every child gets the very best possible start. We must share our knowledge and resources while combining our strengths.

Many Brainwave presentations delivered in the Manawatu and other lower North Island areas have been made possible by funding received from the following Trusts:

The Square Trust

Eastern & Central Community Trust

Thomas George McCarthy Trust

John Beresford Swan Dudding Trust

The Page Trust

Many thanks for your contribution to the Brainwave Trust's work in the lower North Island.

"TOGETHER WE ACHIEVE MORE"

Pauline Allen
Presenter

Somebody, Somewhere, Knew Something and Did Nothing

As details unfolded of Nia Glassie's torture and subsequent death there was a national outpouring of emotion – disbelief, outrage, grief and shame. How could these people do those monstrous things to that beautiful child? Why didn't somebody stop them from hurting her? How could this happen to a child in our country? Why are so many of our children being abused and killed? Many of us are paralysed by an overwhelming sense of helplessness – what can we do to stop the terrible tide of abuse?

Family violence is a complex beast. How to eliminate family violence and, in particular, the abuse of children exercises the minds of a wide range of professionals in law, health, education and social work fields. There are no easy answers.

We do know that children who live in homes where partner violence occurs are more likely to be abused. About 116 children are hospitalised as a result of assault each year. Around four or five children and around 13 women are killed each year. About 7,400 of cases referred to Child Youth & Family Services are assessed as involving abuse or neglect of children. Police record around 45,000 calls a year to incidents involving family violence each year. Only about 18% of partner violence is actually reported.

We know that children who are assaulted or who observe violence at home are profoundly affected – they describe feeling scared, anxious, worried, confused, angry, insecure or sad. In the critical early years (birth to 3 years old) exposure to violence can have a severe effect on brain development, which affects the way that they think, act and feel for the rest of their lives. Children who grow up in a violent environment can develop learning difficulties, problems with controlling anger and emotions, a tendency towards criminal activities, mental health issues, and abusive relationships, addictions to drugs and alcohol and suicidal thoughts.

"Many people look to government to 'do something' about family violence, but this is not a problem that the Government can fix on its own" said Chief Commissioner Rajen Prasad at the launch of the Families Commission 'Family Violence is not ok' campaign in September. "Whether you are at home, in a pub, an office, at a university, in a wool shed, a cow shed, or at a sports match – everyone must be very clear about what sort of behaviour within families is acceptable and what is not. And we must all know how to seek help and how to help others."

So how do we seek help? How do we help others? Here are some suggestions.

1. Ring 111 and get Police assistance if you or someone else is being assaulted or is in immediate danger.
2. Be prepared to ask questions. If you are worried about a family member, a friend, a neighbour, a colleague, ask them if they're ok. Ask about that bruise. Ask if anyone has hit them. Ask if they're safe at home. Ask if the children are all right. Ask if there's anything you can do to help. You may be accused of interfering or being nosy. Or you may be a lifeline for someone trapped in the lonely isolation of a violent relationship.
3. Clearly state that violence and abuse is not ok.
4. Listen to what children say about what's happening at home. Take anything they say about violence or abuse seriously. Write down the words that they use, don't summarise your interpretation of what they're saying. Reassure them it's not their fault. Get help.
5. Recognise that there may not be an easy solution. It may be dangerous (even deadly) for a victim of family violence to act/make a stand/leave. Get help from an expert.
6. Find out about specialist family violence services in your area. Ask Preventing Violence in the Home (0508 DVHELP / 0508 384 357); the child protection agency JIGSAW (0800 228 737) or the Police Family Violence Co-ordinator for contact details of an agency near you.

7. Ring Child Youth & Family Services on 0508 FAMILY (0508 326 459) and tell the duty social worker your concerns. You can do this anonymously if you wish. CYFS are required to investigate notifications and assess children's safety. If the concern is substantiated there are a range of options available to an investigating social worker, including providing support to a family, convening a meeting of extended family and community or applying for urgent Court orders to remove a child from an unsafe situation.
8. Talk to someone you trust: a helpful friend or family member, kaumatua, doctor, Plunket nurse, health worker, teacher, women's refuge worker or family lawyer.
9. Learn more about family violence and share what you learn with parents and caregivers. The Preventing Violence in the Home website (www.preventingviolence.org.nz) has extensive and easy to read practical information, including links to pages headed 'Help for Victims', 'Help for Children', 'Help for Abusers', 'Help for a Friend' and 'Help for an Employee'. The Brainwave website (www.brainwave.org.nz) has information about how exposure to violence and neglect can have a severe effect on infant brain development. Other sites of interest include the Families Commission website (www.familiescommission.govt.nz) and the Ministry of Social Development website (www.msd.govt.nz), both of which have links to recent research reports on NZ family violence. Brainwave has worked with MSD to prepare two pamphlets (Seeing, Hearing and Feeling Violence and Family Violence Can Harm Your Child – Birth to 3 Yrs) to explain the impact of family violence on the developing brain. These are available from the MSD website.
10. Make a donation or volunteer your time and skills to an organisation that supports families or children in crisis. Most specialist family violence services struggle for sufficient resources and your financial contribution or volunteer work can make a real difference.

Evil triumphs when good people do nothing. We are all able to do something. We can ask the hard questions of people who we care about. We can directly intervene to protect a child. We can support the agencies that work with families and children. We can make the statement (again and again if need be) that violence and abuse is not ok. Every one of us can contribute to the change of culture required to ensure that all children in our country have the safe childhood that they deserve.

*Lope Ginnen
Family Court Barrister
Brainwave Committee*

Statistics from Families Commission report: Beyond Zero tolerance: Key issues and future directions for family violence work in New Zealand;
www.familiescommission.govt.nz

Preventing Violence in the Home:	0508 DVFREE/0508 384 357; www.preventingviolence.org.nz
Child Youth & Family Services:	0508 FAMILY / 0508 326 459
JIGSAW:	0800 228 737
Kidsline:	0800 543 754
Youthline:	0800 376 633
Lifeline:	0800 543 354
Whats Up:	0800 942 8787
Office of the Commissioner of Children:	(04) 471 1410
Families Commission:	www.familiescommission.govt.nz
Ministry of Social Development:	www.msd.govt.nz
Brainwave Trust:	www.brainwave.org.nz

Milk Matters: Breastfeeding, Babies and Brains

If nothing else, the revolution of neurological data has turned our attention to the details of family life. No longer do we debate nature versus nurture, but we now look to integrate their influences, to maximise the potential of the genes by creating the optimal nurturing environment. One of the details that received attention in the neuropsychological literature is the role of breastfeeding in unlocking that potential and in helping to minimise dangers on the environmental scene.

The public awareness of breastfeeding as 'best for babies' and 'nature's perfect food' is strong. You find little, if any debate, about the superiority of breastmilk. Yet anyone who has ever breastfed can bear witness to the fact that breastfeeding is much more than sustenance. It is nourishment of a more holistic kind and encompasses the realm of the psychological. Of course, all feeding interactions - whether from a bottle or breast - inhabit emotional territory. But what we are learning is that breastfeeding has the capability to protect both mothers and babies from depression and to help lift dyads into more attuned and optimal ways of relating.

The ravages of postnatal depression on mother and baby are well documented. Mothers experience low moods, sadness, difficulty bonding, trouble sleeping, eating and enjoying life. Babies in turn establish a neurological pattern that mirrors their mother's state. They are more

withdrawn, less active, more unsettled and less able to sustain positive interaction. Additionally, longitudinal research has shown that these impairments can persist into childhood, with children showing less robust cognitive and emotional states of well being than their non-depression group counterparts. The neurological patterning - the states that become traits, to echo Bruce Perry - is strong.

However, in 2004, groundbreaking research revealed a new finding and a new lens with which to view this issue. When babies of depressed mothers were divided into groups according to feeding, the breastfed babies of depressed mothers were protected - via the breastfeeding relationship - from many of the negative effects of depression that the non-breastfed group succumbed to. In other words, electroencephalographic activity was measured, breastfed infants with depressed mothers had left frontal brain activity patterns similar to those obtained from infants with non-depressed mothers. The formula-fed infants whose mothers were depressed showed deficits indicated by less left frontal brain activity. The conclusion? Breastfeeding can attenuate some of the negative psychological and physiological effects experienced by infants of depressed mothers.

The benefits don't just exist for the baby either. Two studies in 2005 and one in 2006 showed conclusive advantages for breastfeeding mothers, too. Despite some common beliefs that breastfeeding is exhausting, grueling or the more difficult choice for mothers to make, data suggests that breastfeeding boosts the psychobiological picture for women in a strongly positive way. Breastfeeding mothers have lower perceived levels of stress (despite equal numbers of stressful events), lower rates of depression, lower levels of anger and more positive feelings about life, all measured by mood state profiles as well as serum prolactin, plasma ACTH and cortisol levels.

Breastfeeding appears to confer psychoneuroimmunological benefits to mothers through regulation of the HPA axis and prolactin regulation. And breastfeeding increases the effectiveness of innate and specific immune defenses in mothers, making them less susceptible to disease and illness, thus strengthening their overall coping.

Does this mean that all depressed women should be forced to breastfeed or that depressed women who use formula should be made to feel guilty? Absolutely not. What it does mean is that we now have more knowledge about how to protect babies and safeguard mothers simultaneously. And this knowledge comes not from a special source, an expensive programme or a brand new technique, but from the simple yet profound art of breastfeeding. We can also use this information to extrapolate meaning for non-breastfeeding mothers. These findings mirror past research that indicates that mothers who are able to interact and play with their infants, despite feeling depressed, also protect their infants' brains. Hence it seems that breastfeeding forms the core of positive, nurturing interaction, something we should be supporting all new mothers to learn to do. As health professionals and parents, medical emissaries and political advocates, we can now educate our clients and ourselves about this potentially awesome aspect of the mother-baby relationship. By doing so, we can perhaps give the support and encouragement that new and vulnerable mothers need to meet their babies' needs while also building their own competency as mothers and mentally healthy adults.

Sometimes the answers lie right under our noses. And in this case, they literally do.

*Lauren Porter, MSW
Co-Director of CFA
www.centreforattachment.com
New Brainwave Presenter*

Making a Donation

Would you like to make a donation, small or large, to assist us with our work? Please check our website, www.brainwave.org.nz (under the "make a donation" button on the main menu) or call or email us **09 528 3981**, for details.

Receipts will be issued - donations are tax deductible.

How To Contact Us

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