# discover menzies

Issue 02: Wet Season 2008

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- *Nutrition in remote communities – a tool to get it right*

discovery for a healthy tomorrow

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*discover***menzies** is produced by the Menzies School of Health Research Communications and Development Unit.

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Menzies School of Health Research is a school of the Charles Darwin University Institute of Advanced Studies.

Through scientific excellence, education and research the team at Menzies is discovering ways to reduce the impact of disease and improve the health and well-being of people living in Australia and beyond.

At Menzies we are passionate about using our unique knowledge and solutions to discover a healthy tomorrow for all.

*imagine a healthier tomorrow...*

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*discovery for a healthy tomorrow*

In the spirit of respect, the Menzies School of Health Research acknowledges the people and elders of the Aboriginal and Torres Strait Islander Nations, who are the Traditional Owners of the land and seas of Australia.

For the purposes of this document, 'Indigenous' refers to Australia's Aboriginal and Torres Strait Islander peoples.

Aboriginal and Torres Strait Islander peoples please be advised that this publication may contain images of deceased persons.

# Welcome from the Menzies Director

> *"I will be particularly interested to hear Rev Costello's views about the health problems faced by Indigenous populations, particularly those in remote settings"*

## Welcome everyone to the second edition of Discover Menzies.

This edition will give you insight into the diversity of Menzies' research activities and includes fascinating articles from our International, Preventable Chronic Disease and Services, Systems and Society Divisions. We also include an interview with Rev Tim Costello, CEO of World Vision Australia, as a prelude to him delivering the 2008 Menzies Oration in Darwin in November.

Last year we resurrected the Menzies' Oration, a public lecture which for years was an annual fixture on the Darwin calendar. This year we are thrilled that Rev Costello has accepted our invitation to speak. I expect that we will hear about the international work of World Vision, but I am particularly interested in his views about the directions this country is taking in dealing with Indigenous disadvantage, particularly in remote settings. I encourage all Darwin locals and visitors to come along to the Oration which takes place on 25th November at the new Darwin Convention Centre.

Also in this issue of Discover Menzies is an interview with Mr David Smorgon AO, the Ambassador of Menzies' forthcoming fundraising art auction, 'Ochre – supporting Indigenous health through art'. I would like to thank Mr Smorgon and all of the committee members, sponsors and supporters of Ochre for their hard work in making this event a success. The Ochre committee have secured superb artworks from some of Australia's most prominent Indigenous artists and I am sure that Ochre really will be a night to remember. It isn't too late to support Ochre – you can make a cash donation to Ochre via the Menzies website or contact the Ochre team at Menzies if you are interested in supporting the event in any other way.

If you want to talk about any aspects of Menzies' work, I am always happy to hear from any of our friends and supporters.

Professor Jonathan Carapetis

# About Menzies

Through scientific excellence, education and research the team at Menzies is discovering ways to reduce the impact of disease and improve the health and well-being of people living in Australia and beyond.

As the nation's leader in Indigenous and tropical health research, our discoveries are being used to better prevent, treat and diagnose disease. Our researchers are also making a difference by showing how the social and physical environments in which we live and in which health care is delivered can be improved for better health outcomes.

The problems associated with poor health and disease don't stop at international borders – that is why Menzies' researchers work with governments and communities in our region and across the globe to offer their expertise and contribute our unique perspective gained from over twenty years of ground-breaking research.

At Menzies we are passionate about using our unique knowledge and solutions to discover a healthy tomorrow for all.

**Working within our seven Divisions our expertise includes:**

- Child Health – we are working to combat ear, lung and skin infections that impact upon the health and development of Indigenous children and are focusing on the links between health and education from pre-birth to leaving school.
- Healing and Resilience – our researchers are helping to prevent, diagnose and treat mental illness and substance misuse in Indigenous people.

*"Menzies' discoveries are being used to better prevent, treat and diagnose disease."*

- International Health – we are world leaders in research into major health problems in our region including rheumatic heart disease, malaria and tuberculosis.
- Preventable Chronic Disease – we are working to discover the best ways to diagnose, treat and prevent chronic diseases such as diabetes, heart and kidney disease.
- Tropical and Emerging Infectious Diseases – the Menzies team is unearthing new health threats so we can improve treatments, prevent the spread of disease and help develop vaccines.
- Services, Systems and Society – our researchers are finding out what we are doing right and what can be changed so we can improve the health care system and social and physical environments.
- Education and Training – we are training the researchers and policy makers of the future to help fight disease, injury, disability and death and improve the quality of life of disadvantaged people across our region.

## Where and how we work

With its main base on the Royal Darwin Hospital Campus in Darwin, Northern Territory, Menzies employs around 200 staff – a high proportion of whom are Indigenous. We also operate a smaller unit in Alice Springs and have a joint facility with the Indonesian Department of Health in Timika, Indonesia.

At Menzies we have world-class laboratory facilities where we conduct ground-breaking research including analysis of snake venom, soil samples for melioidosis, scabies mite drug resistance, malaria and other deadly bacteria.

We work in more than 40 Indigenous communities across Australia and our work touches the lives of many. Our researchers are discovering better ways to treat the common problems and we are teaching local people how to improve the health of their communities.

The challenges we face include poverty, poor environmental conditions, infectious diseases, lifestyle related disease and inequality of access to health services.

Menzies employs some of the nation's best researchers and we are recognised as a regional leader in education and research. We are using our unique knowledge and know-how to discover solutions and help disadvantaged people around the world.

*"At Menzies we have world-class laboratory facilities where we conduct ground-breaking research."*

# Menzies News

## Tiwi kids 'tackle health head on'

Menzies joined forces with the National Rugby League and a range of other local and interstate businesses to 'tackle health head on' on the Tiwi islands recently.

The partnerships have been developed to help to deliver healthy lifestyle messages to Tiwi kids and parents whilst taking part in activities such as rugby skills clinics, reading and story telling.

Over 200 local community members attended the event and the local kids took part in skills workshops with NRL legend Gorden Tallis, Eels forward Daniel Wagon and Cowboys Toyota Cup players Carl Webb and Obe Geia.

At the same time, Menzies researchers took the opportunity to tell the kids and their families how they can stay strong in mind and body by eating well, playing sport, reading and looking after their health.

Kids and adults taking part in the workshops were rewarded with over $10,000 worth of NRL merchandise donated by Sydney based 'Velocity Brand Management' and treated to a community BBQ supported by 'Casuarina Square Shopping Centre' and 'Simon George and Sons' fruit suppliers. Publishing house 'Scholastic' donated 100 Indigenous story books to encourage Tiwi parents to read to their kids.

*"World Vision's ongoing work with Australia's Indigenous people is through invitation into communities and is based upon consultation with community leaders and members."*

REV COSTELLO

## Menzies Oration 2008 – World Vision Chief Executive, Rev Tim Costello

Whenever there is an humanitarian crisis somewhere around the world Tim Costello is likely to be close at hand.

One of his many roles as World Vision's chief executive is to organise aid programs and wherever possible be on the ground to ensure everything is carried out as effectively, efficiently and quickly as possible.

It's a role that requires considerable diplomacy and negotiating skills in strife-torn countries, and nowhere was that more apparent than in this year's crisis in Burma. The Burmese generals had closed the country's doors to overseas aid that they could not control, a desperate situation for the hundreds of thousands left homeless or destitute by the awesome destruction of the cyclone.

Rev Costello expresses satisfaction with the way World Vision was able to carry out its humanitarian responsibilities in Burma. Despite the enormity of the aid problem in that country, however, it was just one of the many campaigns that World Vision carries out each year.

This year World Vision is also targeting child slave labour or human trafficking in a campaign called 'Don't Trade Lives'.

"Almost every country, including Australia, is implicated in this shocking trade in human lives – either as a place of recruitment, transit or the destination for trafficked people," says Rev Costello.

As World Vision points out, the victims of trafficking end up in horrendous situations. Many are trafficked into bonded labour and forced to work as virtual slaves to pay off a family debt. They may work on farms, in mines and factories, or as domestic workers in private homes.

Countless women and children are trafficked into the commercial sex industry to work as prostitutes and satisfy the growing demands of local and international sex tourists. Among the worst exploiters of child labour is the chocolate industry, which World Vision has called on to commit to ending.

Its specific target is the West African cocoa fields, which use child labour extensively to supply the beans to the big international confectioners that make chocolates for Western markets.

World Vision wants the confectionery manufacturers in Australia to publicly commit to eliminating the worst forms of child labour and forced adult labour in the cocoa supply chain.

In July this year the chocolate industry again failed to meet World Vision's deadline to tackle the labour exploitation in West Africa.

It is campaigns like Don't Trade Lives that puts World Vision and its chief executive in the spotlight when it comes to humanitarian issues. He is an experienced and sensitive humanitarian, and is often able to negotiate World Vision's way into countries and situations that many other aid organisations are unable to achieve.

Rev Costello is recognised as one of Australia's leading voices on social justice issues, having spearheaded campaigns on urban poverty, homelessness, reconciliation and substance abuse. At this year's 2020 Summit in Canberra Rev Costello chaired the Strengthening Communities, Supporting Families and Social Inclusion committee.

In addition to their enormous contribution on an international scale, World Vision Australia is also heavily involved with programs in Indigenous communities. World Vision's ongoing work with Australia's Indigenous people is through invitation into communities and is based upon consultation with community leaders and members.

Current work includes projects in Wetenngerr, also known as Epenarra, a very remote Indigenous community in the Southern Barkly Region of the Northern Territory with a population of around 270 residents; and work with the Perth Noongar Regional Council and other local Indigenous groups to address the challenges faced by urban Indigenous youth.

Rev Costello will deliver the 2008 Menzies Oration – a free public lecture – at the Darwin Convention Centre on 25 November. For more information please contact info@menzies.edu.au

## Rising health threat in remote Indigenous communities

One of the world's most prestigious medical journals has reported a new and serious threat to the health of Indigenous Australians – the emergence of antibiotic-resistant infections in NT Indigenous communities.

The report, published in the Chicago-based Clinical Infectious Diseases journal, describes a growing problem with community-associated Methicillin-resistant *Staphylococcus aureus* (MRSA) in Aboriginal communities across northern Australia which is linked to continuing poor skin health and poor quality and overcrowded housing.

Lead author, Menzies' researcher Dr Steven Tong, says that the emergence of community-associated MRSA is likely driven by domestic crowding, poor hygiene and high rates of skin infections such as scabies, tinea and skin sores and the subsequent use of antibiotics.

"Controlling this epidemic will involve novel community based strategies and improvements in health hardware," Steven Tong said. "The combination of high rates of *Staphylococcus aureus* infections, overcrowding in poor quality houses, non-working housing hardware, such as toilets and showers mean that rates of MRSA will continue to be higher in Aboriginal communities in central and northern Australia than other Australian communities."

### Recent Publication Highlights


Bailie RS, Si D, Dowden MC. Delivery of child health services in Indigenous communities: implications for the federal government's emergency intervention in the Northern Territory. *Med J Aust* 2008; **188**: 615–8.

Currie B, Canale E, Isbister G. The effectiveness of pressure-immobilisation first aid for snakebite requires further study. *Emerg Infect Dis* 2008; 267–70.

Jacups S, Whelan P, Markey P, Clelland N, Williamson J, Currie, B. Predictive indicators for Ross River virus infection in the Darwin area of tropical northern Australia, using long-term mosquito trapping data. *Tropical Medicine & International Health* 2008; **13**: 943–952.

Maple-Brown L, Cunningham J, Dunne K. Complications of diabetes in urban Indigenous Australians: the DRUID study. *Diabetes Res Clin Pract* 2008; **80**: 455–62.

Nagel T, Robinson G, Trauer T, Condon J. An approach to treating depressive and psychotic illness in Indigenous communities. *Aust J Primary Health* 2008; **14**: 17–24.

Rumbold AR, Cunningham J, Bailie RS, Hiller JE. Exploring the characteristics of the research workforce in Aboriginal and Torres Strait Islander health. *Aust N Z J Public Health* 2008; **32**: 12–8

Senior K, Chenhall R. Lukumbat marawana: A changing pattern of drug use by youth in a remote Aboriginal community. *Aust J Rural Health* 2008; **16**: 75–9.

Tong SY, McDonald MI, Holt DC, Currie BJ. Global implications of the emergence of community-associated methicillin-resistant *Staphylococcus aureus* in Indigenous populations. *Clin Infect Dis* 2008; **46**: 1871–8.

Walton SF, Beroukas D, Roberts-Thomson P, Currie BJ. New insights into disease pathogenesis in crusted (Norwegian) scabies: the skin immune response in crusted scabies. *Br J Dermatol* 2008; **158**: 1247–55.

Woodberry T, Minigo G, Piera KA. Antibodies to *Plasmodium falciparum* and *Plasmodium vivax* Merozoite Surface Protein 5 in Indonesia: Species-specific and cross-reactive responses. *J Infect Dis* 2008; **198**: 1–9.

# DRUID – Understanding chronic disease in the urban population

Over the past 25 years, a large proportion of Menzies' research into Indigenous health has taken place in remote communities where Indigenous people make up the vast majority of the population. This has enabled researchers to build a much better understanding of Indigenous health across the Territory's remote and isolated communities.

But what of the health picture of Indigenous people in urban areas, such as the Greater Darwin region – where overall populations are much bigger and Indigenous people represent a relatively small minority and can be harder to locate? The majority of Indigenous Australians actually live in towns and cities. Have they been the invisible population when it comes to identifying the risks of chronic disease?

The DRUID study is an attempt to investigate the health of urban Indigenous people who live in and around Darwin. Its specific target was to investigate the extent of diabetes and other chronic diseases in these urban communities, hence the acronym DRUID, which stands for 'Diabetes and Related conditions in Urban Indigenous people in the Darwin region'.

The study involved a range of local and national partners, and an Indigenous Steering Group was set up to ensure that the study was conducted appropriately.

The 18-month study involved free health checks for people over 15, with researchers testing participants for blood sugar levels, fats in the blood and markers of other conditions that are found in people suffering from diabetes – such as kidney damage, poor circulation and eye problems.

Body size and weight were also measured, and participants were asked questions about their health history, socioeconomic status, health-related behaviors such as smoking and diet, and a range of other factors that could have a bearing on health and on an individual's sense of well-being, including encounters with racism.

Just over 1000 people – two-thirds of them women – volunteered to take part in this ground-breaking project, with the health checks taking place in a variety of settings such as homes, schools, offices, community health centers and other facilities. The survey represented about 14 per cent of the estimated 7000 Indigenous people living in the Greater Darwin region.

Menzies researcher and co-author of the study Associate Professor Joan Cunningham admits that finding volunteers in such an urban setting was far more difficult than in remote communities.

*"Despite the challenges of finding and recruiting volunteers, the study is currently the largest and most comprehensive dataset on diabetes and related conditions in an urban Indigenous population in Australia."*

There was no “list” available of potential volunteers, and the research team had to go in search of people by a variety of means – word of mouth, family connections, shopping centre promotional campaigns and visits to schools, workplaces, medical centres, social and sporting organisations and town camps. The aim was to get as representative a cross-section of the urban Indigenous population as possible.

Despite the challenges of finding and recruiting volunteers, the study is currently the largest and most comprehensive dataset on diabetes and related conditions in an urban Indigenous population in Australia.

Over half of the participants reported having been previously tested for diabetes – 30 per cent of those under 35 years, and almost 70 per cent of those 35 and over.

Even so, the DRUID health checks still brought to light many cases of diabetes that were previously undiagnosed.

The survey figures indicate a sharp rise in diabetes with aging. More than half those aged over 55 were found to have diabetes and in those aged over 35 the figure was almost one-third. Diabetes was also more common among people with lower incomes and those not working.

Having diabetes increased the risk of other cardiovascular problems, but these risks were also present in a substantial proportion of people without diabetes, even among those less than 35 years old. Other risk factors for heart disease are problems such as being overweight, high blood pressure, problems with cholesterol or triglycerides (fats in the blood), smoking and kidney damage.

Cardiovascular risks were common even among young people without diabetes – in the 15-34 year age group, 45 per cent had at least two of the six risk factors for heart disease. Only 18 per cent of young people had none of the risk factors examined.

These figures point to a very high burden of current disease among the people in the study and a high risk of future disease, even among young people.

In a recent paper published in ‘Diabetes Research and Clinical Practice’, the DRUID team say it would be prudent to assume the situation in the DRUID study also applies to other urban populations across Australia.

The researchers concluded that both primary prevention and better management of known risk factors and existing disease are urgently required.

“Management of diabetes is a worldwide problem,” says Assoc Prof Cunningham. “It’s hard to get on top of the problem, and you often have to keep ramping up the treatment to try to stay ahead.”

“Our study suggests the control of diabetes could be a lot better, but the problems we uncovered were certainly not unique to this particular segment of the population.

"Many of the people with diabetes were not being treated by specialists, so it is important for GPs to provide good chronic disease management."

The study also confirmed the link between obesity and the risk of chronic disease, with many participants aware that they were overweight.

"Most people who were overweight or obese described themselves as overweight," said Assoc Prof Cunningham. "This means that lack of awareness is not likely to be a barrier to weight loss. We need to look at other barriers, not only at the individual level, but at the larger structural and environmental levels."

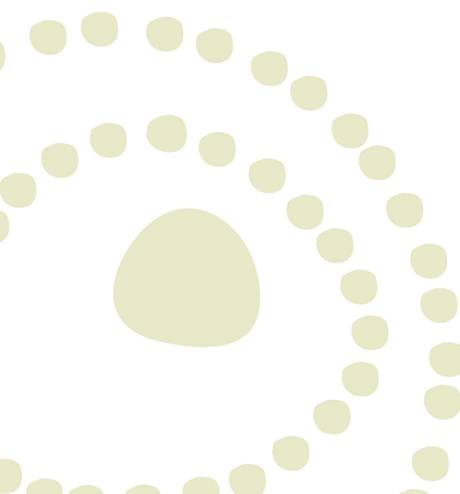
Assoc Prof Cunningham said men and people with diabetes were more likely to underestimate their weight than women and people without diabetes, so special efforts might be needed for those groups.

The frequency of smoking was high and relatively consistent across age and gender groups.

In questioning the participants on their experiences of racism, the researchers were trying to find out how this might have affected both emotional and physical health.

The researchers now have a rich database for further research, and conclude that there is a clear need for diabetes prevention programs and interventions targeting cardiovascular disease risk factors. However, they admit that this will be a challenge, given the heterogeneity of the Indigenous population in Australia.

Since the study concluded the researchers have tried to contact as many of the participants as possible to make them aware of the results and follow-up studies are now in the pipeline.



# Rheumatic Heart Disease – a local problem with an international solution

Menzies' researchers are playing a vital role in controlling the spread of a debilitating and sometimes fatal heart condition both at home and on the international front.

Rheumatic Heart Disease (RHD) is the most common heart disease among children and young adults globally. It is almost exclusively found in developing countries and other poor populations. This includes the Australian Indigenous population and countries of the Pacific region, where a significant amount of Menzies' RHD research is taking place.

Over-crowded housing – common in developing countries and Indigenous communities – is an important risk factor for RHD. Children living closely together are far more likely to become infected by the Group A streptococcus bacterium that leads to acute rheumatic fever (ARF), which is the precursor to RHD. ARF causes great pain and distress and acutely affects the joints, brain, heart and skin. Repeated attacks of ARF can result in lasting damage to the heart (RHD) which can cause life-long disability and premature death.

But this disease is entirely preventable if children and young people are diagnosed early and treated with regular doses of penicillin to prevent subsequent attacks of ARF.

Director of Menzies, Professor Jonathan Carapetis, is a leading figure in research into RHD and chairs the Geneva-based World Heart Federation's (WHF) Rheumatic Fever Council. Prof Carapetis and his team have been coordinating efforts in Fiji, Samoa and Tonga, as well as here at home in Australia, to identify and control the spread of rheumatic fever.

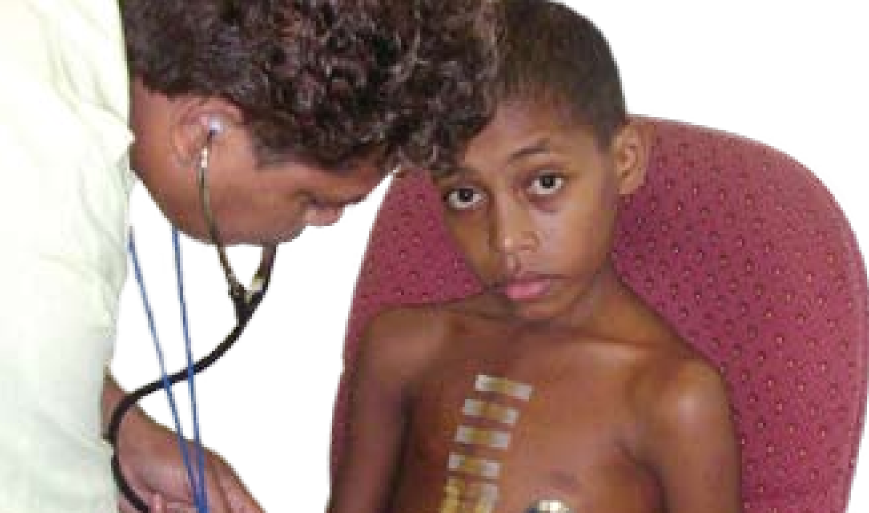
In 2005, Prof Carapetis was instrumental in the establishment of the WHF Pacific RHD Control & Prevention Program, with best-practice demonstration sites in Fiji and Samoa thanks to funding which was obtained through WHF from the Vodafone Group Foundation and the State of Geneva Solidarity Fund.

"RHD is essentially a disease of poverty," says Prof Carapetis. "It has virtually disappeared in wealthy communities because of improved living conditions. But we can't wait for economic development to eradicate this problem for us – there are things we can do right now to rid the world of this preventable but deadly disease."

Researchers Samantha Colquhoun and Sara Noonan have been working with Prof Carapetis in coordinating the projects in the Pacific region, and are now looking to expand their work to other communities in the region.

"Recent data from the Pacific suggests that the prevalence of RHD in school-aged children is about four per cent," says Ms Colquhoun.

"This is the highest prevalence in the world and translates to between 10,000 and 40,000 children affected in the Pacific."



*"About 4 000 young people in the Pacific are being screened each year, and that starts with a simple health check by listening to the heart through a stethoscope."*

Before the intervention of the World Heart Federation there were no coordinated control programs in this region, and the only solution for severe cases was to transfer patients to Australia or New Zealand for cardiac surgery, an expensive option that very few people could afford.

It is now estimated that the annual cost of the coordinated control and prevention program is equivalent to one or two heart operations a year.

Ms Colquhoun says the programs in Fiji and Samoa support an extensive screening process for signs of rheumatic fever in young people. Once detected, the children can be given monthly penicillin injections, and may have to be treated for ten years or more. "You rarely see a new case in people over 35," she adds.

To ensure the long-term success of the programs, the researchers assist local doctors and nurses, who have been attending workshops to increase their skills in the identification and treatment of the disease. The medical staff on the ground are also being provided with free online technical assistance so that the knowledge base about the diagnosis and treatment is expanding all the time.

It is all part of the best-practice model for the treatment of the disease that the team has supported Ministries of Health in Fiji and Samoa and elsewhere in the Pacific. Technical assistance is also being provided for other countries in the region, such as Tonga, Vanuatu, Kiribati and Tuvalu.

"One of the problems has simply been creating an awareness of the extent of RHD," says Ms Colquhoun. "Although treatment at hospitals in the Pacific is free, people are reluctant to go there until their case is severe. So we've got to create an awareness of this particular health problem, and let people know that it is relatively simple to treat."

Primary prevention is to give a child antibiotics for the initial Group A strep infection that usually heralds the possibility of rheumatic fever. Secondary prevention is to treat the child with penicillin for many years if rheumatic fever is diagnosed. Ms Colquhoun estimates that a child can be treated with monthly penicillin injections for about $30-$50 a year.

Tertiary prevention is the most drastic and expensive option – the cardiac surgery needed to replace the damaged heart valve with an artificial one. It's an option that cannot be offered in most Pacific Island countries, and does nothing to stem the flow of severe cases in the first place.

The initial four-year funding for the Pacific program by Vodafone will end in January, 2009 but additional funding is currently being sought for 2009-2010. "If $300,000 can be found from other sources, the State of Geneva Solidarity Fund has indicated that they will match this amount," says Prof Carapetis.

An important additional benefit of this program has been the creation of RHDnet (www.worldheart.org/rhd) – a free, web-based resource for health staff around the globe, containing information and practical materials that can be used to manage and control RHD. In addition, the World Heart Federation program is now using the Pacific program as a model for a similar program in African countries and there are plans to expand to other regions.

Prof Carapetis has also been heavily involved in the investigation and treatment of RHD in Australia and chaired the writing group for the national best-practice RHD guidelines, published in 2006. Aboriginal and Torres Strait Islander populations are up to eight times more likely than non-Indigenous Australians to be hospitalised for ARF and RHD and are nearly 20 times more likely to die from these conditions. "There is no reason why any Australian child should die from this condition," said Prof Carapetis. "The publication of guidelines and increased awareness of treatment and prevention will ensure health professionals are better equipped to diagnose and treat the disease."

"The long-term solution, however, lies in the far bigger question of how to tackle the root causes of this disease, and that comes down to improved housing, education, unemployment, and overall the eradication of poverty."

Anyone interested in finding out more about opportunities to support Menzies' Pacific or Australian based RHD programs are encouraged to contact Menzies on supportus@menzies.edu.au.

# Nutrition in remote communities – a tool to get it right

*"By developing monitoring tools under this program, Menzies is making a major contribution to overcoming the health problems associated with poor food choices."*

It's a well known fact that poor food choices can inevitably lead to poor nutrition and poor health. Throw into the mix some of the social determinants of health such as poverty and sub-standard living conditions and you have the very complex situation which is faced by many Indigenous families in remote communities.

In an effort to find out the nutrition patterns of Indigenous communities and influences on food choice, Menzies' researchers together with a team of community-based Indigenous researchers undertook an appraisal of the types of food and their nutritional value found in community food outlets.

This recently completed project was based in a remote Indigenous community in North East Arnhemland and found that in circumstances where families cannot afford to buy more expensive fresh foods, they tend to get their energy intake from cheaper foods such as white bread, white flour, milk powder and sugar.

People are known to call these the "long-life foods" because they can be stored and shared out, diverting hunger and sustaining appetites until the next pension or pay cycle.

They also provide the most calories for least cost, but too often at the expense of good nutrition. In comparison, the more nutrient rich and recommended foods such as fresh fruit, vegetables, lean meat and fish are not so affordable – in fact, this work has shown that if you are going for energy value, these foods can be from ten to one hundred times more expensive.

It is a consumption pattern in Indigenous communities that is similar to that reported for low income populations in other countries.

Based on this work, Menzies' researchers were invited by the Remote Indigenous Stores and Takeaway Project (RIST), an Australian Government Better Health Initiative, to develop a tool to monitor the sales of foods in remote community stores. This tool is now ready for use with a group of public health nutritionists across Australia.

By tracking the turnover and sales of certain foods, researchers, store managers, nutritionists and community people can see at a glance where improvements need to be made in providing a healthy food supply and creating an awareness of good nutrition. The next step is to assess the feasibility of using the tool as part of a monitoring and evaluation program in communities to improve nutrition.

By developing monitoring and evaluation tools and processes, Menzies is making a major contribution to overcoming the health problems associated with poor access to healthy food.

The findings from the monitoring of one remote community in the Northern Territory revealed the glaring disparity between recommended quantities of various food types and the actual consumption.

For example in one community, the actual consumption of fruit was 41 grams per day, whereas the recommended quantity for the community is 245 grams. Similarly, vegetable consumption was 76 grams per day, compared to the recommended intake of approximately 285 grams daily.

On the other side of the ledger, the consumption of aerated added sugar drinks and sugar was in excess.

Menzies' researchers are modeling how much it would cost to meet dietary recommendations for people living in a remote community taking people's eating habits into account and income levels.

Poor quality diet is an important risk factor for three of the four major causes of death among Indigenous people – cardiovascular disease, cancer and Type 2 diabetes.

According to Menzies' researcher Dr Julie Brimblecombe, access to nutritious food is essential to improve the health and quality of life of people in remote communities and to close the 17 year gap.

"Our research into what foods people are buying and why, suggests that affordability is a key driver in food choices in remote communities," Dr Brimblecombe said.

"People may know that fresh fruit and vegetables are better for them than refined carbohydrates (such as sweet drinks, sugar and flour), but they are simply too expensive relative to people's income, particularly when most people earn very low wages or are on welfare."

A study carried out annually by the NT department of health and families has found, for instance, that a basket of food in a remote community costs between 29 per cent to 56 per cent more than a similar basket from a Darwin supermarket. However, Dr Brimblecombe suspects that the cost disparity in many remote communities may be even higher, given that the survey is biased towards tinned foods.

"Aboriginal people living in remote communities are spending a much larger proportion of their income on food and non-alcoholic drinks when compared to the average Australian."

She said a small study of food identification suggested that young people in remote communities do understand the link between nutrition and health – they know that soft drinks have lots of sugar and can rot your teeth and that fruit is good for the body. They also understood that traditional foods – the food of their ancestors – were good for them.

"That's where affordability comes in. It's about what they can afford, not so much what people may or may not understand about food and health," said Dr Brimblecombe.

The research is providing the information on which long-term solutions to the problem of affordability can be based. According to Dr Brimblecombe, one of the long-term solutions is for communities to return to growing their own fresh food – something that is being tried in Indigenous communities across the country with varying degrees of success.

"In the past many communities developed their own plantation foods, planted their own market gardens and set up fishing, cattle and other industries," Dr Brimblecombe said.

"In those days these local industries were essential in ensuring adequate food for people."

Another long-term solution to getting fresh foods into homes is improving the quality of housing so that people have access to refrigerators, other proper storage facilities, and good food preparation areas. "At the moment many people feel it is too risky to buy fresh food because they do not have anywhere to store it properly and because there are too many people living in one home."

*"People may know that fresh fruit and vegetables are better for them than the refined carbohydrates, but they are simply too expensive at their local store, mostly due to transport costs."*

"Programs such as food subsidy or voucher systems, which allow families to purchase nutritious foods on a weekly basis need to be examined to determine their feasibility, acceptability and cost effectiveness," said Dr Brimblecombe.

"But these are stop-gap measures which do not empower communities. Long-term economically progressive solutions are needed. Communities should also be supported to manage their own nutrition improvement programs. And that requires support, training and valuing the capacity and expertise of local people."

"A better understanding of the impact of current Australian government strategies with the aim of improving access to food for Aboriginal people in the Northern Territory, is urgently needed." Getting nutrition right is an important step for better health. The monitoring and evaluation tools and processes being developed by Menzies provides a means to contribute to evaluating current strategies and informing future strategies.

# Women's health taking centre stage

*"The health of Indigenous mothers and their babies has become a controversial topic in recent years as research figures indicate the significant disadvantage they suffer."*

That the health of the adult begins in the womb is one of those truisms that health care providers know only too well.

The far-reaching implications of this statement were examined from a variety of angles in the first ever Indigenous Women's Health Conference held recently in Darwin by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists.

The co-chairs of the organising committee, were Menzies' researcher Dr Jacqui Boyle and Indigenous obstetrician and gynaecologist Dr Marilyn Clarke.

The conference saw about 300 delegates at the new Darwin Convention Centre discussing Indigenous women's health from fertility, problems in pregnancy, birthing, baby to maternal health, gynaecological cancers and other related issues.

"The aim of the conference was to bring together those working in the field of women's health so that we could exchange ideas, build networks and develop a set of recommendations that we can use in improving the health of Indigenous women," said Dr Boyle.

"There was a mixture of talks and workshops – some were medically-based, some political, such as looking at the Intervention, and some examining issues such as social determinants of health – all designed to strengthen the idea of creating strong and healthy women and families."

Dr Boyle said about 40 Indigenous health workers from across Australia and particularly from remote and isolated communities had been able to attend the conference. Many of these were able to attend due to sponsorship by the Menzies School of Health Research, the Northern Territory Government, the Commonwealth Government and Darwin based airline Airnorth.

"It is vital that we get those health workers from remote clinics exchanging ideas and discussing the issues with experts from around Australia," she said.

The health of Indigenous mothers and their babies has become a controversial topic in recent years as research figures indicate the significant disadvantage they suffer.

While some gains have been made in improving women's health, the research evidence reveals that almost 25 per cent of all Aboriginal and Torres Strait Island mothers are teenagers, compared with 4 per cent of non-Indigenous mothers. Research also indicates that Indigenous mothers are more likely to smoke during pregnancy and five times more likely to die around the time of delivery.

Babies born to Indigenous mothers are three times more likely to die before their first birthday than non-Indigenous babies, and twice as likely to be of low birth weight. The babies are also three times more likely to suffer from fetal growth restriction and almost twice as likely to be born pre-term.

Discussions included detailing the causes and extent of some of these problems and ways forward to improve outcomes. There were presentations of experiences from around the country of successful programs that are culturally appropriate in a variety of areas such as: education about pregnancy in teenagers; contraception; nutrition; antenatal and birthing care.

One of the critical issues for women's health is engaging the community in ways to provide a healthier family and community environment . A number of Indigenous women spoke about their experiences in helping to support healthy families: the conference heard at first hand from the women from Maningrida, who established their own night patrol; Marlene Liddle spoke about the role of the Strong Women, Strong Babies, Strong Culture program and Aboriginal Health workers spoke about the need to incorporate their skills in a meaningful way in order to provide better health promotion and health care.

"There is a considerable amount of research being done, but there is still a need for much more," said Dr Boyle. "There have been some improvements in women's health, and there is a growing interest on a national level for more collaboration across the spectrum of evidence-based research and health programs."

One of the workshops held discussed how the various medical colleges, midwives and health workers could collaborate to improve Indigenous health. Other suggestions have included the creation of a Virtual Centre on Aboriginal and Torres Strait Islander Health by the Prime Minister's Science, Engineering and Innovation Council. Many of these ideas were at the conference."

Menzies' staff played a major role in the conference. Delivering papers were Dr Jacqui Boyle (Healthy Living helps make babies: how to improve fertility), Dr Alice Rumbold and Maria Nickels (cancer and related research), Dr Gurmeet Singh (Report from the Aboriginal Birth Cohort ) Dr Julie Brimblecombe (nutrition programs), Dr Ngaire Brown and Assoc Prof Peter Morris (improving training in Indigenous health) and Dr Sue Sayers (intra-uterine growth restriction). Ms Bilawara Lee delivered the welcome to country.

# Scoring goals for Menzies

Melbourne based business leader and entrepreneur, David Smorgon, recently accepted the role of Ambassador for Menzies' forthcoming fundraising art auction – 'Ochre'. In this revealing interview with Liza Boston of Cracked Pepper Communications, David talks of his love of life, footy and Menzies.

As I wait in the reception of David Smorgon's South Melbourne office, reading the BRW 'Rich List', I realise that I am a long way from Darwin and the remote communities in which Menizes works. It makes me wonder, how is it that David Smorgon has recently become a powerful voice for Menzies, an organisation focused on Indigenous health research in one of Australia's most remote cities?

David greets me with a warm handshake and proudly welcomes me to his expansive executive suite, adorned with a bevy of framed articles of, amongst other things, his football success stories. You cannot help but feel you are in the presence of a man with a mission, a man that has faced many battles and won.

Grandson of Russian Jewish immigrants, David feels his path has been well walked by his ancestors who moved to Australia three generations ago in 1927 with little more than a suitcase and a grim determination to create a better lifestyle for themselves. "I am a lucky beneficiary of this", he muses as we settle into our conversation around his involvement with Menzies and Indigenous Health.

"The opportunity that the Australian community gave my family has always been appreciated and understood (by me) and has been one of the major drivers of why the wider Smorgon family has been a generous benefactor and involved in so many community activities for the last 30-40 years."

David believes that it is in his personal capacity that he gives back to the community, not out of a sense of corporate social responsibility. Also being of the Jewish faith there is a belief that we have a requirement to help others less fortunate than yourself, he muses.

"My community involvement was strongly enforced by my late wife Roslyn, who came from a similar background. She has always had these beliefs, maybe more strongly than me, and she has always been involved in community activities and inspired me."

The bottom line for David is simple, "assisting others has driven me."

"Those premises have been reinforced by my involvement in a couple of areas, like the Western Bulldogs."

"Some people say it's only football, but to me it is so much more than football."

"We are a community club and we represent the Western Region in Melbourne. We have involvement in a whole range of community groups,

*"When you see the statistics about Aboriginal health – child health in particular, I think you are confronted by it and you think to yourself, this is very serious, this is very tragic, this is very real."*

that give you an insight, a taste of what happens outside of your own domain."

"One of my reasons for being involved in AFL was that I saw how important football was to people in the area. When we win there is a smile, there is a tomorrow and when we lose, there is depression. In some ways, when we have success absolutely beyond the football, that is going to make the West a stronger and better place to live."

"This sounds bizarre but it's not. Wearing a Western Bulldogs hat can impact the lives of so many people out there."

David talks of his Community work with the Western Bulldogs like a proud emperor of an emerging super power and it is clear that his generous support of the club has created great sporting, financial, social and community success on a number of levels.

Further to this, the other thing that led David to his new role at Menzies, is that he has done a fair amount of public speaking over the years and he believes this "opens your eyes up to see what is going on in your community."

"I enjoy the fact that people can relate to stories of being open and straight. I talk about the reasons for success and what you need to create success."

"The issue that I receive most feedback from is when I talk about failure, as most people don't like to talk about failure. But I have never met a successful person that hasn't experienced failure. The ability to talk about failure is a critical thing, and it's a question to me about attitude. Do you define failure as a defeat or as a detour?"

In relation to the Indigenous Health issue, David tells an interesting story "...it is something I have never been involved with, yet back in 1958 my family owned Elsie station, which is a famous station that 'We of the never never' was filmed. As a young ten-year- old child I went and spent a couple of weeks up on our station and it stayed with me as one of my most interesting life experiences."

"Years later, playing in Darwin with the Western Bulldogs, the Territory started to grow on me, and I took the opportunity to travel around with my family after the game," which David feels has opened up a lot of understanding about the top end for him. " Experiencing the issues as a tourist and rolling up your sleeves to try and make a difference is a whole new thing altogether; tourists have a fairly superficial view."

"When I heard about Menzies, I thought it was an interesting organisation. Then when you see the statistics about Aboriginal health – child health in particular, I think you are confronted by it and you think to yourself, this is very serious, this is very tragic, this is very real."

David follows this comment up with a grim expression on his face, bordering on fierce determination and he states, "Menzies are doing incredible work and they are a professional organisation well worthy of my support."

And David says he thought to himself, "it would be a great pleasure to assist Menzies, to do what I can to give them more prominence and support, to raise more money to do more research."

"The issue of improving Indigenous health is an issue that we quite simply have to do something about. It is an issue that we could say on the one hand that 'I don't want to know about it', right, or you could say 'it's too big I can't do anything about it' – but that's a defeatist attitude and we have to do something about it."

With Menzies, "here we have an institution that understands the issues surrounding Indigenous Health, that is filled with experts and motivated professionals to do something about it and in my mind it is worthy of our support."

You can't help but think, with David at the helm, we are going to see some significant improvements in Indigenous Health at a wider community level, and I look forward to following his results.

'Ochre – Supporting Indigenous Health through Art' will take place at Mossgreen Auctions in Melbourne on 14th October. For more information about how you can support Ochre, please email supportus@menzies.edu.au or donate on line at www.menzies/ochre

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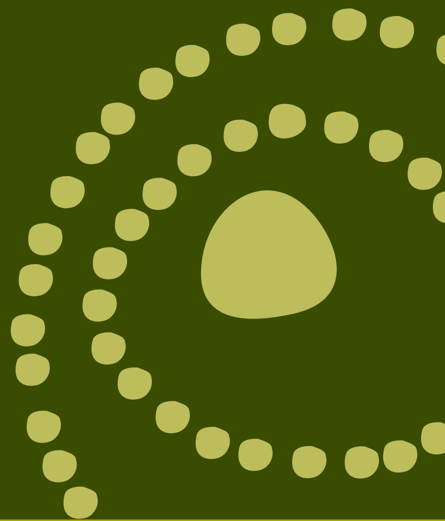

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