Eating ourselves happy: how our food can transform our mental health

Food & Mood Centre

"The economic toll in Australia is enormous, with mental illness resulting in annual health system costs of over $14 billion, and an estimated cost of $10 billion per year to Australian businesses. Nutritional Psychiatry is a new and an entirely novel approach to addressing the increasing problem of mental and brain ill health and its potential for improving global health is clear."

- Professor Felice Jacka

A global emergency: unhealthy diet and mental illness

In Australia, only 1 in 200 children eat enough of the key plant foods to support a healthy diet, while young Australians are consuming on average seven serves of junk food a day.

Alongside this, the burden and impact of mental illness continues to take a heavy toll. In Australia – despite decades of increasing investment in access to treatments – mental health problems are not improving; three million Australians currently live with depression or anxiety, with a profound negative impact on lives, communities and economies. Mental illness now accounts for the leading cause of global disability.

"The past fifty years has seen a huge shift in how and what we eat. The unhealthy 'western' diet is fast becoming a global one, with the world now consuming more unhealthy, ultra-processed and take-away foods than ever before. Poor diet is now the leading cause of illness and early death around the world."

– Professor Felice Jacka

The causes of mental illness are complex and half of all mental disorders start before the age of 14 years. Multiple, overlapping factors such as genetics, early-life disadvantage, poverty, and lifestyle all contribute; these are hard to change and there are very few strategies currently available to prevent people from experiencing mental illness.

But, thanks to a group of pioneering researchers from Deakin University, this is changing.

Why our work matters

The Food & Mood Centre at Deakin University is now leading international efforts to uncover the links between what we eat and the transformative impact this has on our mental and brain health.

> "All of our data shows the impact of diet on the brain, immune system and gut microbiome. The fact people can take control of their mental health and help themselves by changing their diet is a very powerful message. It's a very cost-effective way of treating the whole person."
>
> **– Professor Felice Jacka**

Our pioneering research in **nutritional psychiatry** is changing the way in which scientists and clinicians think about mental and brain health. It is offering new hope for both prevention and treatment of mental health problems across the globe. Our research is set to change the lives of millions of people by unlocking the secrets to how better diet can, quite literally, make us mentally healthier.

We consist of a team that studies the food-mood relationship at various levels, from microbiology, to clinical psychiatry, through to public health interventions, policy and population-level impact.

Yet, whilst we're continuing to lead the discovery and application of how better food leads to stronger mental and brain health, we simply cannot move fast enough to keep up with the urgent and growing global mental health emergency that's taking place across our communities right now.

Our work is having an impact across the globe through demonstrating:

- That the quality of our daily diets is inextricably linked to our risk for depression and anxiety throughout our lives
- How our diets drive the health of our brains and our cognitive abilities – all the way from childhood to old age
- Improving diet is an affordable and very cost-effective way to treat depression – even in those with severe clinical depression – for people from all backgrounds
- The essential role that diet plays in the mental health of pregnant women and their infants, influencing not only children's immunity and allergic disease risk, but also their emotional health
- How what we eat affects how our brains age, informing preventive and treatment strategies for the most common and intransigent diseases associated with ageing

Now, more than ever before, our world needs the insight and applications of nutritional psychiatry that drive clinical, policy and program breakthroughs to transform the future of our mental and brain health.

We're on an incredibly exciting journey to achieve these goals. And we need your help to get there.

The transformation to come

Over the past three years, the Food & Mood Centre has achieved momentous impact. Our gains have been hard-won yet remain fragile. If we are to ensure **nutritional psychiatry** drives meaningful change in clinical and public health globally, we must significantly build the research and program base that we've already embarked upon.

This requires resourcing the Food & Mood Centre to achieve scale in what it does: planning, conducting, sharing and applying world-leading research on a national and international scale.

We believe philanthropy can supercharge the Centre's mission and, ultimately, profoundly and positively change mental and brain health for people across the globe.

We have set out an ambitious five year agenda of growth and look forward to partnering with those who are passionate about ensuring that good food can drive healthier, stronger lives.

It is only through high-quality research evidence that policy and clinical practice will change to ensure far better physical and mental health for people everywhere.

Research, innovation and program leadership

Support for a Professorial Chair in Nutritional Psychiatry – the Centre's Director – is fundamental to ensuring that leadership of the Food & Mood Centre is maintained into the future. The Director is the advocate and public face of the Centre – driving its research, applied programs, education & training, partnerships, and advocacy activities.

There also remains a massive and urgent need to increase the programs and tools that the Centre is sharing on the criticality of good nutrition to support better mental and brain health.

Additional investment of a Training and Policy Research Fellow would mean the development of nutritional psychiatry educational and training programs for healthcare professionals such as psychiatrists, dietitians and GPs – embedding changes into clinical care. We also expect this role to interface with public health and government, influencing change at a policy level.

Supporting the best life start for mothers and babies

The health of the gut in children is very much influenced by the health of the parents – particularly the mother. New research tells us that an unhealthy gut microbiome in infants may increase the risk for emotional problems, neurodevelopmental conditions such as autism, and allergic diseases across a person's life.

To our knowledge, there are currently no human trials testing the hypothesis that the diversity and composition of the infant gut microbiota is modifiable through the perinatal diet.

Investment into Post-doctoral Research Fellows and PhD scholars will drive new knowledge and programs that help women make the best dietary choices during pregnancy. In turn this will lead to better physical, neuro and mental health outcomes for newborns and infants – in turn, improving whole-of-life health outcomes for individuals.

"Our latest research highlights the essential role that diet plays in very early life through its impact on the gut microbiota of pregnant women and their infants. This is vitally important as the early life gut health of infants influences not only children's immunity and allergic disease risk, but also their brain development."

– Professor Felice Jacka

Impact in early childhood and adolescence

Half of all mental disorders first manifest in early life, before the age of 14, making the identification of modifiable risk factors in young people of extreme importance.

The Food & Mood Centre is regularly approached by schools to provide information and resources for their student programs.

Investment into Post-doctoral Research Fellows will drive new research and educational programs – working with families and into schools – that improve both physical and mental health of young people by helping them to make better food choices.

In particular, we are keen to work in more disadvantaged areas, where the schools and community often do not have the resources to access these kind of life-changing education programs. As well as benefitting young Australians, this critical work will help to ensure the health of their children – the next generation.

"Young people don't pay attention to things that may happen to them a long way into the future (e.g. a heart attack, diabetes). The foci of 'healthy food' educational programs are too diffuse and not relevant to children and adolescents' immediate concerns. However, when young people understand that their mental health and their ability to study and learn are affected almost immediately by what they eat, this has a real impact on their food interests and behaviours."

– Professor Felice Jacka

Enabling healthier ageing and protecting the brain

Dementia represents the leading cause of disability in older people, with Alzheimer's Disease accounting for up to 70% of cases. Although advancing age is recognised as the primary risk factor for Alzheimer's Disease, approximately a third of cases are attributable to modifiable risk factors. New research points to the role of the gut and oral microbiota in influencing Alzheimer's Disease.

Investment into a Post-doctoral Research Fellow will mean we can lead further investigation of the human microbiome alongside the cognitive, brain health and lifestyle of those with Alzheimer's Disease.

Ultimately, we hope this will lead to breakthrough knowledge in how to reduce dementia through improvements in our diet.

Understanding how microbes influence risk of developing Alzheimer's disease before the symptoms have begun is the first step to determining whether targeting the microbiome might be a viable approach to prevention.

Changing the lives of those living with anxiety, depressive, psychotic and eating disorders

Our research is showing how common disorders – such as anxiety and depression – can be treated, reduced and prevented through better diet. What's more, our work is now examining the role and potential of diet in severe mental illnesses such as schizophrenia and eating disorders.

Investment into clinical trials will be vital in demonstrating the efficacy and cost-effectiveness of diet and lifestyle changes in clinical care. Our research findings will translate into new policy and accessible approaches to managing mental disorders and preventing chronic disease.

Support of Post-doctoral Research Fellows and PhD Scholars across a number of key areas is set to drive additional, important breakthroughs.

Taken together, this research heralds transformational opportunities for how we integrate diet into clinical care and public health programs. We stand on the cusp of incredible change in this arena.

Join us in our work, which is set to make a difference to:

- The co-occurrence of mental health and gut ill-health (such as abdominal pain, bloating or IBS), which is likely due to shared underlying causes contributing to both. We are keen to develop, deliver and evaluate new dietary approaches for people experiencing these common, debilitating conditions
- Treating serious mental disorders – such as psychosis – by generating insights on the safety and effectiveness of a range of different diets, including the Mediterranean and ketogenic diets
- Understanding how food sensitivities and/or allergies may play a role in causing or exacerbating psychotic or schizophrenic episodes. Ultimately, we seek to research and develop dietary interventions and exclusions to treat these illnesses
- Developing more effective treatment for people with anorexia nervosa through a focus on gut health – ensuring that they not only survive but that they thrive
- Developing and testing therapies for the increasing numbers of people with depression who also present with autoimmune disorders – such as multiple sclerosis, rheumatoid arthritis and chronic fatigue syndrome.

Join us in our mission

As the Food & Mood Centre seeks to scale its breakthrough agenda and impact, philanthropic support matters more than ever.

If you share our passion for making a transformational change to mental and brain health through what and how we eat, get in touch with us. We're excited to hear from you.

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Food & Mood Centre Leadership Team

Professor Felice Jacka

Director, Food & Mood Centre

Professor Felice Jacka is Director of the Food & Mood Centre and Founding President of the International Society for Nutritional Psychiatry Research (ISNPR). She is responsible for the development of this highly innovative field of research, establishing diet and nutrition as of critical importance to mental disorders. The results of her world-first research continue to mean she is in high-demand and globally influential. Professor Jacka is listed in the top 0.1% of scientists in the world. She has published a book for the general public called 'Brain Changer' and in has recently released a children's book – 'There's a Zoo in my Poo.'

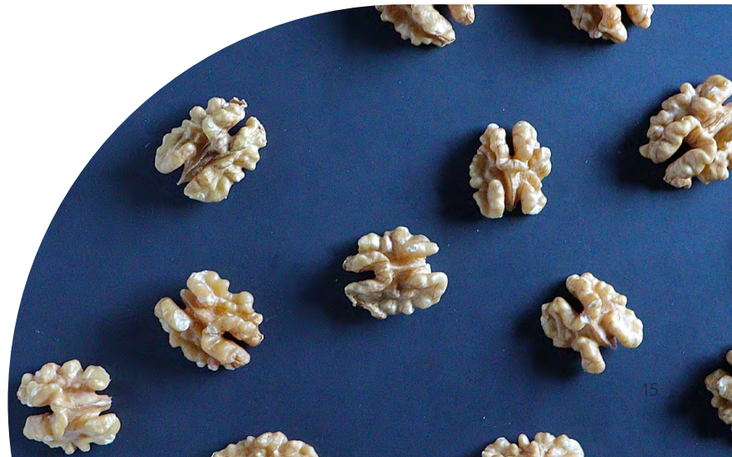
Associate Professor Adrienne O'Neil

Deputy Director, Food & Mood Centre

Associate Professor Adrienne O'Neil is the Centre's Deputy Director. Her appointment is co-funded by the Heart Foundation, and the Wilson Foundation. She is a behavioural scientist who has been researching the link between mental and cardiovascular health for over a decade, with a core of work investigating the role of lifestyle in the onset and outcomes of depression and cardiovascular disease.

"Partnerships are the underlying foundations for the Food & Mood Centre and enable our research to have the greatest impact. Thank you for your interest in supporting our critical research and we look forward to discussing this further with you."

– Professor Felice Jacka



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