

# Nutrition and Physical Activity



## Knowledge Bulletin

Issue 12 ◆ 16 December 2020

Welcome to the fortnightly Nutrition and Physical Activity Bulletin (which replaces the HIIRC Weight Management website). The bulletin has a New Zealand focus and provides links to new research, evaluations, guidance, resources and upcoming events on the topics of nutrition, physical activity, obesity, sport and recreation in relation to health and wellbeing.

Key international literature and guidance from similar jurisdictions is also featured.

*We want to thank all of our subscribers for their support for the new bulletin this year and look forward to providing you with material of value to your many and varied roles in relation to nutrition and physical activity in the new year.*

*We wish you and your loved ones a very safe and happy Christmas!*

*Mere Kirihimetenā āu taurā! Manuia le Kirisimasi! Kilisimasi Fiefia!*  
*क्रिसमस की बधाई krisamas kee badhaee! 圣诞节快乐 Shèngdàn jié kuàilè!*

*Feliz Navidad!*

*Peace and harmony to all!*



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If your organisation has a subscription, you may be able to use the icon under the full text links in PubMed to access the full article

## Diet and nutrition

### [Eating and Activity Guidelines for New Zealand Adults](#)

The Ministry of Health has published updated *Eating and Activity Guidelines for New Zealand Adults* to include advice for pregnant and breastfeeding women.

The updated advice for pregnant and breastfeeding women replaces the previous *Food and Nutrition Guidelines for Healthy Pregnant and Breastfeeding Women: A background paper* published in 2006 and partially revised in 2008. This advice, along with recommendations on physical activity for pregnant women, has been integrated into the adult guidelines. The Eating and Activity Statements for adults remain the same and were not reviewed. Data has been updated where possible.

The Ministry has also changed the tools used to describe what a healthy eating pattern looks like. New Zealand has updated its serving size advice to align with the evidence based Australian serve size advice and a new food model has been developed. The Eating and Activity Guidelines webpage includes more information on this.

On this webpage, under 'Resources' you will find two new info-sheets that describe the key changes from the old to the new edition of the Guidelines:

- What's Changed?
- New Serving Size Advice

Print copies of the Guidelines can be downloaded and will be available to order from the website shortly.

The related document, [Companion Statement on Vitamin D and Sun Exposure in Pregnancy and Infancy in New Zealand](#): A supplement to the Consensus Statement on Vitamin D and Sun Exposure in New Zealand has been partially updated to reflect the availability of a new subsidised medication (a daily dose of vitamin D-only) that is more suitable for infants and pregnant women than the previously available medications.

### [Seven weeks of home-cooked meals: changes to New Zealanders' grocery shopping, cooking and eating during the COVID-19 lockdown](#)

Covid Kai research looks at the behaviour of New Zealanders in relation to grocery shopping, cooking and eating over the 40-day lockdown period under Levels 4 and 3.

They found that, while the joy of shopping had decreased, loading up the trolley had increased. Although there was a rise in cooking from scratch, consumption of unhealthy foods, drinks and alcohol rose, particularly amongst the younger cohort, calling for the need for public health messages in relation to nutrition during such events.

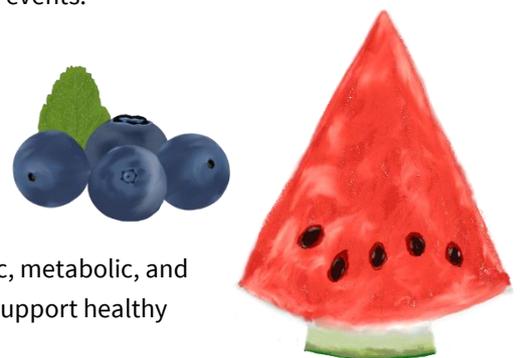
The researchers have also produced a [Covid Kai Survey infographic](#).

Click [here](#) to read the news article published in *NZ Herald*, November 18 2020.

### [The "Virtual Digital Twins" Concept in Precision Nutrition](#)

This research looks at the potential for technology to replicate individuals' genetic, metabolic, and host gut microbial factors, so as to personalise nutritional and lifestyle advice to support healthy ageing.

"... genetic information combined with longitudinal metabolomic, immune, behavioral, and gut microbial parameters, and bioclinical variables could define a digital replica of oneself, a "virtual digital twin," which could serve to guide nutrition in a personalized manner."



### [Chaos in a Bottle—A Critical Evaluation of Beverage Categorization in Nutrition Research](#)

This research analysed the literature surrounding beverage intake in relation to weight/adiposity, in order to develop a method of categorisation that would standardise consumer information, as well as provide a more consistent measure for research looking at beverage intake moving forward.

### [The impact of voluntary front-of-pack nutrition labelling on packaged food reformulation: A difference-in-differences analysis of the Australasian Health Star Rating scheme](#)

The voluntary Health Star Rating system was adopted by New Zealand and Australia in 2014, in a bid to provide the industry with a means to promote healthier food products and for consumers to make healthier choices.

Naturally, industry complied more readily if they were marketing healthful options. The obvious conclusion is, therefore, for mandatory labelling to be instated.

As reported in the [University of Melbourne news](#), a research team from the University of Melbourne, the University of Auckland, and the George Institute for Global Health analysed product nutrition labels in Sydney and Auckland supermarkets to see if the Health Star Rating system (HSR) made a difference to how the food industry formulates food.

University of Auckland Professor Cliona Ni Mhurchu said the HSR could have a much bigger impact if more unhealthy products adopted it.

*"Our study suggests that the total effect of HSR on supporting healthier population diets could be markedly increased if it was adopted by many more products,"* Professor Ni Mhurchu said.

*"In short, it suggests that making the HSR mandatory would generate substantially greater public health benefits than the current voluntary system."*

## **Physical activity, sport and recreation**

### [WHO guidelines on physical activity and sedentary behaviour](#)

The WHO Guidelines on physical activity and sedentary behaviour provide evidence-based public health recommendations for children, adolescents, adults and older adults on the amount of physical activity (frequency, intensity and duration) required to offer significant health benefits and mitigate health risks.

For the first time, recommendations are provided on the associations between sedentary behaviour and health outcomes, as well as for subpopulations, such as pregnant and postpartum women, and people living with chronic conditions or disability.

University of Sydney academics are part of a select group of international experts who provided leadership and contributed to the development and dissemination of the guidelines.

*"These new global guidelines emphasise the importance of all people being active and acknowledge that all movement counts for better health and wellbeing – be it climbing the stairs or even household cleaning,"* said [Professor Emmanuel Stamatakis](#) from Sydney University's Charles Perkins Centre and Faculty of Medicine and Health.

### [Individual and combined associations between cardiorespiratory fitness and grip strength with common mental disorders: a prospective cohort study in the UK Biobank](#)

This research analyses the physical health risks of people with anxiety and depression and provides insight into the potential for aerobic and resistance activities to modify these common mental health issues.

## [Participation in a Community-Based Sport Program is Feasible for Children with Congenital Heart Disease and May Benefit Physical Literacy Development: A Pilot Study](#)

This research evaluates the feasibility of a community-based sport programme designed to engage children with congenital heart disease.

They found that children enjoyed the programme and overcame some of their barriers to involvement, such that they experienced positive outcomes physically, in terms of movement and endurance.



## Obesity and weight management

### [Interventions for childhood obesity in Southern New Zealand](#)

Gloria Dainty's Doctoral Thesis in Women's and Children's Health, University of Otago, Dunedin, focuses on childhood obesity management in both clinical and community settings.

While the full abstract provides further detail about the aims and parameters of the study, you will need to contact the author via Otago University to access their full thesis, as it is not up on their archive server.

### [Relationship between chewing features and body mass index in young adolescents](#)

This Otago University study explores the relationships between chewing behaviour and weight status.

Overweight adolescents appear to chew and eat more slowly than their peers, suggesting that pace of eating may lend insights into weight management strategies and warrants further investigation.

Click [here](#) to read the Otago University media release.

### [From individual behaviour strategies to sustainable food systems: Countering the obesity and non communicable diseases epidemic in New Zealand](#)

This research provides a holistic perspective of understanding and tackling the optimal ways of addressing the state of incrementally increasing rates of obesity and comorbidities amongst New Zealanders.

Using the three pillars of sustainability - economic, environmental and social, they look at the epidemic in relation to the broader goal of sustainability and potential for multi-sectorial engagement and action.

## Health promotion

### [Kawea ake te wero: Enabling everyone in Aotearoa to eat well](#)

#### **Activity & Nutrition Aotearoa (ANA), October 2020**

*Everyone in Aotearoa New Zealand has a right to live, grow, learn, and work in an environment that provides access to healthy, affordable, and safe food. ANA is a national organisation with a vision that everyone in New Zealand can and does eat well and leads an active life.*

The collection of issues papers collates the latest research in one place. Together, they give an integrated picture covering selected nutrition issues in three papers.

Click [here](#) to access the full document.

### [National nutrition policy in high-income countries: is health equity on the agenda?](#)

This analysis of public health policy documents identifies the basis for many seemingly positive nutritional health policies failing to reach the total population, let alone work toward achieving health equity.

The researchers conclude: *“To positively influence health equity outcomes, national nutrition policy will need to transition toward the prioritization of actions that uphold social justice and comprehensively address the upstream determinants of health.”*

### [Perceptions of co-designing health promotion interventions with Indigenous communities in New Zealand](#)

This study looks at the potential for using a Māori co-designing framework, He Pikinga Waiora, which uses a Kaupapa Māori approach to enhance health-promoting initiatives amongst the community.

Although they found room for improvement, they found that the framework provided clarity, in terms of guiding principles that assisted in facilitating a more effective co-design than other methods.

## Non-communicable diseases

### [High prevalence of undiagnosed comorbidities among adolescents with obesity](#)

This research looks into the lack of diagnosis of metabolic syndrome in adolescents with obesity in New Zealand.

The researchers identified a range of undiagnosed conditions amongst 40% of participants enrolled in the Gut Bugs Trial, including pre-diabetes.

They recommend early intervention and preventative interventions be instated to avoid these conditions persevering into adulthood.

### [Ethnic inequities in screening for diabetes in pregnancy in New Zealand-adherence to national guidelines](#)

Published in the *New Zealand Medical Journal*, this research provides a thorough review of clinicians' level of adherence to the 2014 Ministry of Health screening guidelines for diabetes in pregnancy, with the aim of comparing results of Māori with non-Māori women's assessment.

While the barriers for using the guidelines require further investigation, it was found that, at face value, they are poorly utilised overall, with even fewer Māori women being assessed.

### [Dietary Remission of Type 2 Diabetes](#)

In this YouTube video, Professor Mike Lean from the University of Glasgow talks about the DiRECT study, which shows remarkable remission of type 2 diabetes following a dietary intervention.

The DiRECT programme sustained remissions at 24 months for more than a third of people with type 2 diabetes. Sustained remission was linked to the extent of sustained weight loss.

To read the full article detailing the research and findings of the DiRECT trial, its achievements and potential durability, go to: [Durability of a primary care-led weight-management intervention for remission of type 2 diabetes: 2-year results of the DiRECT open-label, cluster-randomised trial.](#)

### [Type 1 Diabetic Youth: Is the New Zealand Healthcare System Failing Them?](#)

This literature review looks at the gap of healthcare and support provided to young people with Type 1 Diabetes, with a particular focus on the continuity of care as they transition to adulthood.

*“Currently, there are no services specifically tailored to youth living with Type 1 Diabetes available in New Zealand. By creating a framework, that is developed collaboratively with young people and their family/whānau, youth living with Type 1 Diabetes will feel more involved, better understood and will ideally be more engaged in their care. With this implemented there is hope that it would contribute to improved overall health outcomes for youth living with Type 1 Diabetes in New Zealand.”*

## Tools and resources

### [Annual Update of Key Results 2019/20: New Zealand Health Survey](#)

The Ministry of Health's Annual Data Explorer provides a snapshot of the health of New Zealanders through the publication of key indicators on health behaviours, health status and access to health care for both adults and children.

The Annual Data Explorer shows 2019/20 results from the continuous New Zealand Health Survey, with comparisons to earlier surveys. Results are available by gender, age group, ethnic group and neighbourhood deprivation. For the first time, the New Zealand Health Survey results are also available by disability status.

### [Pan Pasifika fono – Auckland 2020](#)

Speakers' presentations are now available from the Pan Pasifika Fono (4-5 November 2020, held at the Ellerslie Event Centre in Auckland), sponsored by Pacific Heartbeat/the Heart Foundation, Te Hiringa Hauora/the Health Promotion Agency and Tala Pasifika.

The Fono had a common goal of working towards achieving equity for the health and wellbeing of Pacific people, with a particular focus on food, nutrition and tobacco control.

This was a unique opportunity to bring like-minded Pacific people together in a forum to network, be innovative, mobilise, energise, empower, inspire and learn from each other.

### [\(Reconvened\) 73rd WHO World Health Assembly Statement on item 15.2 Maternal, infant & young child nutrition Documents \(A73/4\)](#)

*Joint statement by the NCD Alliance, the World Cancer Research Fund International and the World Obesity Federation.*

2020 is the mid-point in the Decade of Action on Nutrition, marking five years until the WHO's 2025 NCD and nutrition targets, including those for breastfeeding and obesity, and 10 years remaining for the 2030 SDGs.

*"It is crucial that the pandemic catalyses action to ensure sustainable, healthy diets for all across the life-course, ahead of the Food Systems & Nutrition for Growth Summits in 2021."*

To read a simple breakdown of the intent of the code and Member States' role, click [here](#).

## News

### [Ban junk food ads on public transport and other WA Government property, health agencies say](#)

**ABC News, 13 November, 2020**

Leading health agencies, including the Telethon Kids Institute and the Cancer Council, want the Western Australian Government to immediately stop advertising junk food on government property, like bus shelters, billboards and next to train stations.

Key points:

- The health costs of junk food far outweigh ad revenue
- Their report says a quarter of WA children are overweight or obese
- Opposition from industries could be a big obstacle to any ban

The agencies have released a new report, which says it will not only improve people's health, but will help save the Government hundreds of millions of dollars over the next decade in the fight against obesity and other chronic diseases.

*"They're advertising products that make our kids sick and we really need to see a change. We've had enough."*  
Melissa Ledger, Cancer Council Director



The full report, [Unhealthy food and beverage advertising in outdoor spaces and on publicly owned assets: A scoping review of the literature](#), Prepared for Cancer Council Western Australia by researchers from the Global Obesity Centre, Institute for Health Transformation, Deakin University, was published the same day as the group took out a full page advertisement in [The Western Australian](#).

### [Britain publishes plan to ban online junk food adverts](#)

**Reuters, 11 November 2020**

Britain proposed a ban on online advertising of unhealthy foods, as part of its efforts to tackle obesity and improve public health - a mission it says has been made more urgent by the COVID-19 pandemic.

The government says obesity is one of Britain's biggest long-term public health problems, with almost two-thirds of adults in England overweight and one in three children leaving primary school overweight or obese.

Measures published by the government would, if implemented, ban online adverts for foods high in fat, sugar and salt.

### [Cancer research not on lockdown](#)

**16 November 2020**

World Cancer Research Fund International (WCRF) is delighted to announce it has awarded funding to 13 new research grants.

WCRF has awarded more than £3.5 million of funding for research on how diet, nutrition, and physical activity can prevent, or help people survive, cancer. The funding is split between 13 research projects that will be investigating a range of cancers and risk factors, including ultra-processed foods, acrylamide in diets, and food biodiversity. Many of the grants will also look at how, on a cellular and molecular level, these factors increase or decrease the risk of cancer.

### [Māori diabetes patients missing out on key medicine – Expert Reaction](#)

**Science Media Centre, 5 November 2020**

University of Waikato researchers have found Māori patients receive fewer prescriptions for a common diabetes medication than non-Māori patients, and have worse blood sugar control as a result.

Type 2 diabetes is a growing problem in New Zealand, affecting an increasing number of young people, and twice as many Māori as non-Māori.

Led by Dr Lynne Chepulis at the University of Waikato Medical Research Centre, the team collected data from 10 general practice clinics around the Waikato, focusing on patients with type 2 diabetes who were regular, ongoing users of metformin.

*“Metformin is the medication of choice for treating most patients with type 2 diabetes,” says Dr Chepulis. “But when patients don’t receive the required amount, this can lead to poor blood sugar control and increased risk of complications.”*

## Upcoming events and activities

### [Aspirations for the food regulatory system](#)

**Closes 22 Jan 2021**

In March 2020, the Australian New Zealand Ministerial Forum on Food Regulation (the Forum) endorsed an implementation plan for an ambitious reform agenda for the food regulatory system aimed at ensuring the system remains strong, robust and agile into the future. The reform agenda is being progressed through a number of interconnected projects.

This consultation is part of the first stage of the Review of the Intergovernmental Food Regulation Agreement project.

Stakeholder feedback is primarily sought on aspirations and high-level actions. Following consideration of stakeholder feedback, the aspirations and actions will be further refined and provided to Ministers for agreement. Once a final vision for the future of the food regulatory system has been agreed, stakeholders may be further consulted on the detail and implementation of individual actions.

### [Fundamentals of Obesity Treatment Virtual Course](#)

#### **Obesity Medicine Association, 26-27 February 2021**

The Fundamentals of Obesity Treatment Course is now virtual! This is a 2-day interactive virtual course offering introductory education about the evidence-based approaches for evaluating, diagnosing, and treating obesity in a clinical setting. The content is appropriate for physicians, nurse practitioners, physician assistants, clinicians-in-training, and other healthcare providers who treat patients with the disease of obesity.

On the first day, attend virtual lectures to learn about the basic concepts that define obesity as a disease, the pathophysiology of obesity, and how to evaluate patients for obesity and related diseases using ethical, non-stigmatizing communication. Then review strategies for treating obesity using four treatment pillars: nutrition, physical activity, behavior, and pharmacotherapy. On the second day, work in virtual breakout groups on patient cases to develop comprehensive treatment plans using interventions in all four treatment pillars. Gain tools to begin developing effective treatment plans for patients affected by obesity in your practice.

