

Submission No. 131

(Inq into Obesity) *KE 9 Sept 08*

**Submission from: Australasian Child & Adolescent Obesity Research  
Network (ACAORN)**

***Submission prepared on behalf of ACAORN by the ACAORN Co-Directors:***

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**Specific issue being addressed:**

**Support for research into causes, treatment and prevention of obesity**

## **Support for research into causes, treatment and prevention of obesity**

### **Executive summary**

The severity of the obesity epidemic highlights the need for effective solutions, at both a treatment and prevention level. However, there are many knowledge gaps about what works and what doesn't in preventing and managing obesity. This has contributed to the slowness in responding to the obesity epidemic.

This submission focuses upon the need to support and grow the Australian research capacity to develop, implement and evaluate solutions for the obesity epidemic, especially as it affects children and young people.

In tackling the obesity epidemic, research approaches into the specific causes, consequences, treatment and prevention of obesity should be supported. Areas of research identified by the Australasian Child & Adolescent Obesity Research Network (ACAORN) as under-invested include addressing the complex up-stream drivers of the obesity epidemic, the implementation of solution based interventions aimed at treating or preventing obesity, and the translation of study findings into established and sustainable practice and policy. The ACAORN membership therefore wishes to highlight the areas for research investment outlined below.

### **Recommendations:**

1. Fund inter-sectoral research that focuses on reducing obesity from interventions that are delivered within and beyond the health system, with particular attention to the built environment, public transport, food availability, manufacturing, marketing and costs, work practices, education, and occupational health and media policies.
2. Establish an ongoing and regular system of national monitoring of nutrition, physical activity and overweight and obesity status in children, adolescents and adults
3. Fund obesity-related health systems research and research that translates clinical trials into funded programs.
4. Establish a support and funding process to capture "opportunistic research" on policies or programs that are being implemented and which may influence obesity and related lifestyle behaviours.
5. Fund a national network of networks of obesity researchers in order to promote collaborative solution-focussed research
6. Facilitate expert reviews of Australian research grant applications in the area of obesity through the use of international reviewers who do not have official "conflicts of interest" with the Australian obesity research community

## **Background**

### ***About the Australasian Child & Adolescent Obesity Research Network (ACAORN)***

The Australasian Child and Adolescent Obesity Research Network (ACAORN) is an international group of researchers that was established in November 2002 with funding from NSW Health. ACAORN fosters research collaboration among Australian and New Zealand child and adolescent obesity research groups, to identify key research questions and to address them with high quality collaborative research.

Current members of ACAORN represent most of the major paediatric obesity research groups in Australia and New Zealand. Initial support of the ACAORN group by NSW Health has enabled members from around Australia and also New Zealand to meet face-to-face, discuss research problems and work towards solutions, and to form the collaborative research groups that are more successful in attracting funding.

ACAORN has five active Special Interest Groups (management of paediatric obesity, prevention of obesity, longitudinal studies of paediatric obesity, dietary intake measurement, and physical activity measurement). Members have obtained funding for undertaking collaborative research studies, have published papers together and have co-supervised research students. More information about ACAORN can be found at its web-site (<http://www.acaorn.med.usyd.edu.au/>).

### ***The need for investment in research to help tackle the obesity epidemic***

The severity of the obesity epidemic highlights the need for effective solutions, at both a treatment and prevention level. However, there are many knowledge gaps about what works and what doesn't in preventing and managing obesity. This has contributed to the slowness in responding to the obesity epidemic.

While ACAORN members are interested in a broad range of issues relevant to child and adolescent obesity, this submission focuses upon the need to support and grow the Australian research capacity to develop, implement and evaluate solutions for the obesity epidemic, especially as it affects children and young people.

### ***General comments***

The members of ACAORN applaud both the National Health & Medical Research Council's current major focus on obesity for the 2007-2009 triennium, and the recent announcement by the Minister for Health to make Obesity a National Health Priority.

In tackling the obesity epidemic, research approaches into the specific causes, consequences, treatment and prevention of obesity should be supported. Areas of research identified by ACAORN as under-invested include addressing the complex up-stream drivers of the obesity epidemic, the implementation of solution based interventions aimed at treating or preventing obesity, and the translation of study findings into established and sustainable practice and policy. The ACAORN membership therefore wishes to highlight the areas for research investment outlined below.

### ***Priority areas for research investment***

#### ***1. Support inter-sectoral research into interventions to reduce obesity***

Most of the drivers of the obesity epidemic lie outside the traditional interest of the Health system and of Health-related research. Relatively little research has been undertaken into developing and evaluating interventions that will have an impact on obesity through modifications to such areas as the built environment, public transport, food manufacturing, availability, marketing and costs, work practices and occupational health policies.

Recommendation: Fund inter-sectoral research that focuses on reducing obesity from interventions that are delivered within and beyond the health system, with particular attention to the built environment, public transport, food availability, manufacturing, marketing and costs, work practices, education, and occupational health and media policies.

Comment: This approach is likely to need joint partnership investments from agencies such as the National Health & Medical Research Council, the Australian Research Council, State and Federal government departments and private industry. Some agencies that do not traditionally fund research into obesity-related issues (such as the Australian Research Council and many of the non-Health departments at both State and Federal level, as well as industry) may need to prioritise research into these areas. Note that the 2020 Summit made a recommendation that “junk food taxes” could be used to fund research and action in prevention of chronic disease.

## ***2. Establish an ongoing system of monitoring the population’s eating and physical activity behaviours and weight status***

Unlike the vast majority of developed and even developing countries, Australia does not have a regular system of monitoring the population’s levels of under- and overweight, dietary intake and food-related behaviours and apparent consumption of food, and levels of physical activity and sedentary behaviour. Such information is vital in order to track the obesity epidemic and to evaluate the effectiveness of population-level interventions. The lack of such information has been a major contributor to Australia’s slow response in first recognising, and then acting to halt, the obesity epidemic and highlights Australia poor international standing in this area.

Recommendation: Establish an ongoing and regular system of national monitoring of nutrition, physical activity and overweight and obesity status in children, adolescents and adults.

Comment: This will require leadership of such agencies as the Australian Bureau of Statistics, the Australian Institute of Health and Welfare and key NGOs such as the National Heart Foundation, The Cancer Council, Nutrition Australia and the Dietitians’ Association of Australia.

## ***3. Invest in obesity-related health systems research and clinical trial translational research***

As detailed in other submissions, there is only a very patchy system of treatment services across Australia for people affected by obesity. Unlike the situation for many other chronic diseases, there is no coordinated model of care across the different levels of the health care system and for different age-groups and different

levels of severity of obesity. Further information is required about such issues as: a) how best to train health professionals in managing or preventing obesity, b) what types of programs are effective for which setting, c) how best to link these services across the different parts of the health system, and d) what is the cost-effectiveness of different treatment programs and different models of service delivery? Such health systems research, particularly as it relates to obesity, is poorly funded at present. Investment in researching these issues is likely to lead to a more efficient system of health care delivery for people affected by obesity.

Even when there is evidence about the effectiveness of an intervention, it can be very difficult to subsequently implement that intervention more widely. For example, several ACAORN members have undertaken collaborative research, funded by NHMRC, to develop and evaluate community-based programs suitable for treating children with mild to moderate levels of obesity. While results from some of these randomised controlled trials are very promising (1, 2), it has been difficult for the researchers to then obtain the funding support to translate these programs into real-life settings. The funding responsibility for such implementation/evaluation studies falls between traditional research funders (eg NHMRC) and program funders (eg Health departments). This situation contributes to delays in uptake of evidence-based interventions.

Recommendation: Fund obesity-related health systems research and research that translates clinical trials into funded programs.

Comment: This approach is likely to need joint partnership investments involving the National Health & Medical Research Council, both State and Federal Health departments and private industry.

**4. *Establish and fund a system to capture “opportunistic research” on policies that are being implemented and which are likely to have an impact on obesity and related lifestyle behaviours***

Departments in all three levels of government and some major private industries and NGOs occasionally introduce policies or programs that are likely to have an impact of obesity and obesity-related behaviours. Often there is a political necessity to act quickly that overrides the ideal to embed research and evaluation in any policy and program implementation. As a result, such policies and programs may be commenced relatively quickly and are usually not evaluated; hence, there are lost opportunities to understand what may or may not work in tackling the obesity epidemic.

Recommendation: Establish a support and funding process to capture “opportunistic research” on policies or programs that are being implemented and which may influence obesity and related lifestyle behaviours.

Comment: Potential lead agencies for such a process include the National Health & Medical Research Council and the Australian Research Council. An international example of a rapid access funding mechanism to support intervention evaluations is the Canadian Institute of Nutrition, Metabolism and Diabetes.

5. ***Support a national network or networks of obesity researchers to promote collaborative solution-focussed research***

The relatively rapid emergence of the obesity epidemic, and the urgent need to find effective solutions to it, highlights the importance of facilitating collaborative research across traditional research groupings and research centres. Such an approach in other areas of biomedical research (eg cancer research, human genome discoveries) has been used to accelerate the acquisition of new knowledge and the translation of research into clinical practice. What if such an approach were also used for obesity? What if researchers could share the most effective tools for measuring physical activity, dietary intake or body fatness (eg through a publicly accessible database of measurement tools)? Or facilitate multi-centre trials across the fledgling obesity treatment groups in Australia and New Zealand? Or combine existing studies into a large data-set to answer research questions about childhood obesity that can't be answered using smaller studies alone?

Recommendation: Fund a national network or networks of obesity researchers in order to promote collaborative research in priority areas.

Comment: ACAORN has begun this process (having received initial support from NSW Health) and already has buy-in from most of the active paediatric obesity research groups in Australia and New Zealand. ACAORN is at the start of its new phase of growth.

6. ***Facilitate expert reviews of Australian research grant applications in the area of obesity through the use of international reviewers***

An effective research grant process requires the input of high quality peer reviewers. While the obesity epidemic is well recognised, there is still only a relatively small number of experienced Australian researchers in this area, particularly in areas related to child and adolescent obesity. However, many of these researchers have research collaborations and other forms of official "conflicts of interest" that preclude them providing expert reviews on each others' grants. As a result, it can be very difficult for funding agencies to obtain high quality reviews on research grant applications; indeed, reviews may end up being provided by researchers with little or no relevant experience in this area.

Recommendation: Facilitate expert reviews of Australian research grant applications in the area of obesity through the use of international reviewers

Comment: Agencies such as the National Health & Medical Research Council, State and Federal governments and key NGOs, may need to actively seek experienced researchers in other countries such as New Zealand, the USA, Canada, the UK and parts of Europe and Asia.

## **References**

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2. CE Collins, AD Okely, PJ Morgan, RA Jones, JM Warren, DP Cliff *et al.* Efficacy of HIKCUPS (Hunter Illawarra Kids Challenge Using Parent Support) in reducing BMI z-score at 1 year: Results of a multi-site randomized trial for overweight 5-9 year olds. Proc Obesity Society Annual Scientific Meeting, New Orleans, October 2007.