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Strictly Embargoed until 00:01 hours (GMT), 21st January 2009

This cluster focuses on two reviews of interventions for child obesity publishing next week in [The Cochrane Library](#), 2009, Issue 1, and highlights some of the key health care conclusions and their implications for practice.

Media wishing to receive a full copy of the reviews highlighted in this newsletter, or to arrange an interview with an author, may contact Jennifer Beal on +44 (0)1243 770633 / +44 (0) 7802 468863 or by email, wbnewseurope@wiley.com.

Reviews highlighted in this newsletter:

- [Child and Adolescent Obesity: Family-Based Programs Including Behaviour Therapy Can Work](#)
Family-based lifestyle interventions that not only modify diet and physical activity but also include behaviour therapy programs can help obese children lose weight and maintain that loss for at least six months. This Cochrane Review also found that in adolescents the effect lasts for at least 12 months. Adding weight controlling drugs orlistat or sibutramine to behaviour change programs for adolescents may provide additional benefits.
- [School-Based Physical Activity: Has Benefits Even If It Doesn't Help Lose Weight](#)
School-based health and exercise programs have positive outcomes despite having little effect on children's weight or the amount of exercise they do outside of school, say Cochrane Researchers who carried out a systematic review of studies on physical activity programs in schools.

Child and Adolescent Obesity: Family-Based Programs Including Behaviour Therapy Can Work

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These findings mark a change in opinion. A systematic review performed in 2003 could not find enough data to draw any conclusions about the effects of different

programs. This time the researchers identified 64 randomised controlled trials involving 5230 participants, enabling them to see some definite effects.

“It is now clear that family-based, lifestyle interventions that include a behavioural program aimed at changing diet and physical activity provide significant and clinically meaningful decreases in overweight and obesity in both children and adolescents compared with standard care or self help regimes,” says lead researcher Hiltje Oude Luttikhuis, who works at Beatrix Children’s Hospital and the Department of Epidemiology in Groningen, Netherlands.

The worldwide obesity epidemic in young people is continuing to gain pace. The International Obesity Taskforce now claims that, worldwide, 10% of 5-17 year olds are overweight and 2-3% are obese. Paediatric obesity rates now stand at 30% for the Americas and 20% for Europe. Socio-economically disadvantaged children in developed countries and children of higher socio-economic status in developing countries are more likely to be overweight. “This highlights the importance of effective treatment strategies for children and young people already affected by the problem of obesity,” states Oude Luttikhuis’s collaborator, Professor Louise Baur, a paediatrician at The Children’s Hospital at Westmead, and the University of Sydney.

There are many questions left unanswered. “We need to find out what types or aspects of different interventions work better for different groups of children, depending on their age, gender, socioeconomic background, faith or ethnic groups. The importance of self-esteem in influencing how successful an intervention will be, and whether there are any characteristics of individual families or patients that could help identify success, require further effort by researchers,” says Oude Luttikhuis.

Full citation: Oude Luttikhuis H, Baur L, Jansen H, Shrewsbury VA, O’Malley C, Stolk RP, Summerbell CD. Interventions for treating obesity in children. *Cochrane Database of Systematic Reviews* 2009, Issue 1. Art. No.: CD001872. DOI: 10.1002/14651858.CD001872.pub2.

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School-Based Physical Activity: Has Benefits Even If It Doesn’t Help Lose Weight

School-based health and exercise programs have positive outcomes despite having little effect on children’s weight or the amount of exercise they do outside of school, say Cochrane Researchers who carried out a systematic review of studies on physical activity programs in schools.

The research shows that school-based programs increased the time children spent exercising and reduced the time spent watching television. Programs also reduced blood cholesterol levels and improved fitness – as measured by lung capacity. However, programs made little impact on weight, blood pressure or leisure time activities.

Physical inactivity is a key factor behind 1.9 million deaths every year and almost a quarter of all cases of coronary heart disease. People who are overweight as children are more likely to develop heart disease as adults. Exercise helps to maintain a healthy weight, yet studies show most children do not do enough exercise to give any

health benefit. The World Health Organisation has identified schools as important settings for promotion of physical activity among children.

The researchers reviewed data from 26 studies of physical activity promotion programs in schools in Australia, South America, Europe and North America. Most studies tried to encourage children to exercise by explaining the health benefits and changing the school curriculum to include more physical activity for children during school hours. Programs included teacher training, educational materials and providing access to fitness equipment.

“Given that there are at least some beneficial effects, we would recommend that schools continue their health promotion programs. These activities should also be supported by public health unit staff, and parents and teachers as positive role models,” says lead researcher, Maureen Dobbins, who works at the School of Nursing at McMaster University in Ontario, Canada.

Dobbins believes that schools should make spaces in their timetables to create environments that encourage pupils to engage in physical activity each day as well as having an ethos that encourages increased duration of moderate to vigorous activity each week. “Schools have great opportunities to help pupils learn how to promote health and minimise the risk of acquiring a chronic disease. Providing a healthy structure to their day should enable them to develop healthier lifestyles that may track in adulthood,” she says.

She also suggests an explanation for why some programs often don't improve physical health measures such as weight and blood pressure. “Physical activity classes may be too closely associated with school work, so for some students this makes them feel like they are being made to do more work. Perhaps the key is to promote physical activity by getting children and adolescents to ‘play’ in ways that promote better fitness levels, while at the same time represent fun and adventurous activities,” says Dobbins.

Full citation: Dobbins M, De Corby K, Robeson P, Husson H, Tirilis D. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6-18. *Cochrane Database of Systematic Reviews* 2009, Issue 1. Art. No.: CD007651. DOI: 10.1002/14651858.CD007651.

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Notes for editors

1. The Cochrane Library contains high quality health care information, including Systematic Reviews from The Cochrane Collaboration. These Reviews bring together research on the effects of health care and are considered the gold standard for determining the relative effectiveness of different interventions. The Cochrane Collaboration (<http://www.cochrane.org>) is a UK registered international charity and the world's leading producer of systematic Reviews. It has been demonstrated that Cochrane Systematic Reviews are of comparable or better quality and are updated more often than the Reviews published in print journals.

- The Cochrane Library can be accessed at <http://www.thecochranelibrary.com>. Guest users may access abstracts for all Reviews in the database, and members of the media may request full access to the contents of the Library. For further information, see contact details below.

A number of countries have national provisions by which some or all of their residents are able to access The Cochrane Library for free. These include:

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The US State of Wyoming	http://wyld.state.wy.us/dbloginform.html

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There are also several programmes, such as the Health InterNetwork Access to Research Initiative (HINARI) and the International Network for the Availability of Scientific Publications (INASP) that provide access in developing countries. To find out whether your country is included in any of these programmes/provisions, or to learn how to get access if you don't already have it, please visit: <http://www.thecochranelibrary.com>.

- The Cochrane Database of Systematic Reviews received its first Impact Factor ever in 2007 and has an IF of 4.654, giving it a ranking of 14 out of 100 in the ISI category Medicine, General & Internal.
- As of January 2009 The Cochrane Library is proud to introduce its first ever Editor-in-Chief, Dr David Tovey. Dr. Tovey was previously Editorial Director of the BMJ Evidence Centre and editor of Clinical Evidence. He graduated from Bristol University in 1983. After completing vocational GP training, he was senior partner in a large, inner city practice in South London, and a postgraduate CPD tutor until 2003, when he joined the BMJ Group. He is a Fellow of the Royal College of General Practitioners.
- As of Issue 4 2008, the Cochrane Database of Systematic Reviews includes Systematic Reviews of Diagnostic Test Accuracy. Diagnostic test accuracy reviews are full-text systematic reviews of studies that assess the accuracy of a diagnostic test or tests for a given target condition in a specific patient/participant group and setting.
- The Cochrane Library Issue 1, 2009 Podcasts: a collection of podcasts on a selection of Cochrane Reviews by the authors will be available from <http://www.cochrane.org/podcasts> from Wednesday 21st January 2009.
For Issue 4, 2008, the podcasts are:
 - **Post-operative radiotherapy for ductal carcinoma in situ of the breast**
 - **Early discharge hospital at home**
 - **Interventions for treating obesity in children**
 - **Virtual reality training for surgical trainees in laparoscopic surgery**
 - **Robot assistant for laparoscopic cholecystectomy**
 - **Street lighting for preventing road traffic injuries**

- **School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6-18**
- **Publication bias in clinical trials due to statistical significance or direction of trial results**
- **Acupuncture for tension-type headache & Acupuncture for migraine prophylaxis**
- **Orthotic devices after stroke and other non-progressive brain lesions**
- **Interventions for preventing weight gain after smoking cessation**

Podcasts of the top 20 most accessed reviews of 2007 will also be available from www.cochrane.org/podcasts from 21st January

If you would like to see a full list of Reviews published in the new issue of The Cochrane Library, or would like to request full access to the contents of The Cochrane Library, please contact:

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^a Jadad AR, Cook DJ, Jones A, Klassen TP, Tugwell P, Moher M, et al. Methodology and reports of systematic Reviews and meta-analyses: a comparison of Cochrane Reviews with articles published in paper-based journal.