

**A SELECTION OF TEN CURRENT READINGS ON TOPICS RELATED TO  
OBESITY: PREVENTION & MANAGEMENT –  
some available as free full-text and some requiring payment  
Selection of readings made by A/Prof Goh Lee Gan**

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**READING 1 – How effective is current public health approach**

**Chan RS, Woo J. Prevention of overweight and obesity: how effective is the current public health approach. Int J Environ Res Public Health. 2010 Mar;7(3):765-83. Epub 2010 Feb 26. Review. PubMed PMID: 20617002; PubMed Central PMCID: PMC2872299.**

URL: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2872299/pdf/ijerph-07-00765.pdf> (free full text)

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ABSTRACT

Obesity is a public health problem that has become epidemic worldwide. Substantial literature has emerged to show that overweight and obesity are major causes of co-morbidities, including type II diabetes, cardiovascular diseases, various cancers and other health problems, which can lead to further morbidity and mortality. The related health care costs are also substantial. Therefore, a public health approach to develop population-based strategies for the prevention of excess weight gain is of great importance. However, public health intervention programs have had limited success in tackling the rising prevalence of obesity. This paper reviews the definition of overweight and obesity and the variations with age and ethnicity; health consequences and factors contributing to the development of obesity; and critically reviews the effectiveness of current public health strategies for risk factor reduction and obesity prevention. PMCID: PMC2872299 PMID: 20617002 [PubMed - indexed for MEDLINE]

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**READING 2 – Single or multiple health behaviour interventions?**

**Sweet SN, Fortier MS. Improving physical activity and dietary behaviours with single or multiple health behaviour interventions? A synthesis of meta-analyses and reviews. Int J Environ Res Public Health. 2010 Apr;7(4):1720-43. Epub 2010 Apr 16. Review. PubMed PMID: 20617056; PubMed Central PMCID: PMC2872344.**

URL: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2872344/pdf/ijerph-07-01720.pdf> (free full text)

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ABSTRACT

Since multiple health behaviour interventions have gained popularity, it is important to investigate their effectiveness compared to single health behaviour interventions. This synthesis aims to determine whether single intervention (physical activity or dietary) or multiple interventions (physical activity and dietary) are more effective at increasing these behaviours by synthesizing reviews and meta-analyses. A sub-purpose also explored their impact on weight. Overall, reviews/meta-analyses showed that single health behaviour interventions were more effective at increasing the targeted behaviours, while multiple health behaviour interventions resulted in greater weight loss. This review may assist policies aiming at improving physical activity and nutrition and reversing the obesity epidemic. PMCID: PMC2872344 PMID: 20617056 [PubMed - indexed for MEDLINE]

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**READING 3 – Motivational interview**

**Armstrong MJ, Mottershead TA, Ronksley PE, Sigal RJ, Campbell TS, Hemmelgarn BR. Motivational interviewing to improve weight loss in overweight and/or obese patients: a systematic review and meta-analysis of randomized controlled trials. *Obes Rev.* 2011 Sep;12(9):709-23. doi: 10.1111/j.1467-789X.2011.00892.x. Epub 2011 Jun 21. Review. PubMed PMID: 21692966.**

URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-789X.2011.00892.x/pdf> (payment required)

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ABSTRACT

Motivational interviewing, a directive, patient-centred counselling approach focused on exploring and resolving ambivalence, has emerged as an effective therapeutic approach within the addictions field. However, the effectiveness of motivational interviewing in weight-loss interventions is unclear. Electronic databases were systematically searched for randomized controlled trials evaluating behaviour change interventions using motivational interviewing in overweight or obese adults. Standardized mean difference (SMD) for change in body mass index (BMI) or body weight (kg), mass, reported as either body mass index (BMI; kg was the primary outcome, with weighted mean difference (WMD) for change in body weight and BMI as secondary outcomes. The search strategy yielded 3540 citations and of the 101 potentially relevant studies, 12 met the inclusion criteria and 11 were included for meta-analysis. Motivational interviewing was associated with a greater reduction in body mass compared to controls (SMD = -0.51 [95% CI -1.04, 0.01]). There was a significant reduction in body weight (kg) for those in the intervention group compared with those in the control group (WMD = -1.47 kg [95% CI -2.05, -0.88]). For the BMI outcome, the WMD was -0.25 kg m<sup>-2</sup> (95% CI -0.50, 0.01). Motivational interviewing appears to enhance weight loss in overweight and obese patients. © 2011 The Authors. obesity reviews © 2011 International Association for the Study of Obesity. PMID: 21692966 [PubMed - indexed for MEDLINE]

**READING 4 – Facts and fallacies in weight management**

**Egger G, Egger S. Weight management - Facts and fallacies. *Aust Fam Physician.* 2009 Nov;38(11):921-3. Review. PubMed PMID: 19893844.**

URL: <http://www.racgp.org.au/afp/200911/200911egger.pdf> (free full text)

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ABSTRACT

There is a great deal of misunderstanding about the facts around weight loss among health professionals, and the general public. Possible reasons for this include lack of adequate education of doctors in this area, misreporting of health research in the popular media, and a need for further research in some areas. Training doctors in 'lifestyle medicine' may be helpful. Standards of evidence in media reports could be significantly improved. PMID: 19893844 [PubMed - indexed for MEDLINE]

**READING 5 – Office-based strategies for management of obesity**

**Rao G. Office-based strategies for the management of obesity. Am Fam Physician. 2010 Jun 15;81(12):1449-56 ; quiz 1429. Review. PubMed PMID: 20540483.**

URL: <http://www.aafp.org/afp/2010/0615/p1449.pdf> (free full text)

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Comment in: Am Fam Physician. 2010 Jun 15;81(12):1406-8.

**ABSTRACT**

Roughly two thirds of U.S. adults are overweight or obese. Obesity increases the risk of hypertension, type 2 diabetes mellitus, hyperlipidemia, heart disease, pulmonary disease, hepatobiliary disease, cancer, and a number of psychosocial complications. Physicians often feel unprepared to handle this important problem. Practical office-based strategies include: (1) making recommendations for assisted self-management, including guidance on popular diets, (2) advising patients about commercial weight-loss programs, (3) advising patients about and prescribing medications, (4) recommending bariatric surgery, and (5) supplementing these strategies with counseling about lifestyle changes using a systematic approach. Family physicians should provide basic information about the effectiveness and safety of popular diets and commercial weight-loss programs, and refer patients to appropriate information sources. Sibutramine and orlistat, the only medications currently approved for the long-term treatment of obesity, should only be prescribed in combination with lifestyle changes. Bariatric surgery is an option for adults with a body mass index of 40 kg per m<sup>2</sup> or higher, or for those with a body mass index of 35 kg per m<sup>2</sup> or higher who have obesity-related comorbidities such as type 2 diabetes. The five A's behavioral counseling paradigm (ask, advise, assess, assist, and arrange) can be used as the basis for a systematic, practical approach to the management of obesity that incorporates evidence for managing common obesity-related behaviors. PMID: 20540483 [PubMed - indexed for MEDLINE]

**READING 6 – Bariatric surgery for adult obesity**

**Schroeder R, Garrison JM Jr, Johnson MS. Treatment of adult obesity with bariatric surgery. Am Fam Physician. 2011 Oct 1;84(7):805-14. Review. PubMed PMID: 22010619.**

URL: <http://www.aafp.org/afp/2011/1001/p805.pdf> (payment required)

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Summary for patients in: Am Fam Physician. 2011 Oct 1;84(7):815.

**ABSTRACT**

Bariatric surgery procedures, including laparoscopic adjustable gastric banding, laparoscopic sleeve gastrectomy, and Roux-en-Y gastric bypass, result in an average weight loss of 50 percent of excess body weight. Remission of diabetes mellitus occurs in approximately 80 percent of patients after Roux-en-Y gastric bypass. Other obesity-related comorbidities are greatly reduced, and health-related quality of life improves. The Obesity Surgery Mortality Risk Score can help identify patients with increased mortality risk from bariatric surgery. Complications and adverse effects are lowest with laparoscopic surgery, and vary by procedure and presurgical risk. The Roux-en-Y procedure carries an increased risk of malabsorption sequelae, which can be minimized with standard nutritional supplementation. Outcomes are also influenced by the experience of the surgeon and surgical facility. Overall, these procedures have a mortality risk of less than 0.5 percent. Although there have been no long-term randomized controlled trials, existing studies show that bariatric surgery has a beneficial effect on mortality. The family physician is well positioned to care for obese patients by discussing surgery as an option for long-term weight loss. Counseling about the procedure options, risks and benefits of surgery, and the potential reduction in comorbid conditions is important. Patient selection, presurgical risk reduction, and postsurgical medical management, with nutrition and exercise support, are valuable roles for the family physician. PMID: 22010619 [PubMed - indexed for MEDLINE]

**READING 7 – Childhood overweight and obesity**

**Sargent GM, Pilotto LS, Baur LA. Components of primary care interventions to treat childhood overweight and obesity: a systematic review of effect. *Obes Rev.* 2011 May;12(5):e219-35. doi: 10.1111/j.1467-789X.2010.00777.x. Review. PubMed PMID: 20630025.**

URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-789X.2010.00777.x/pdf> (payment required)

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**ABSTRACT**

The primary care setting presents an opportunity for intervention of overweight and obese children but is in need of a feasible model-of-care with demonstrated effectiveness. The aims were to (i) identify controlled interventions that treated childhood overweight or obesity in either a primary care setting or with the involvement of a primary healthcare professional and (ii) examine components of those interventions associated with effective outcomes in order to inform future intervention trials in primary care settings. Major health and medicine databases were searched: MEDLINE, CINAHL, EMBASE, Cochrane Reviews, CENTRAL, DARE, PsychINFO and ERIC. Articles were excluded if they described primary prevention interventions, involved surgical or pharmacological treatment, were published before 1990 or not published in English. Twenty-two papers describing 17 studies were included. Twelve studies reported at least one significant intervention effect. Comparison of these 12 interventions provides evidence for: training for health professionals before intervention delivery; behaviour change options (including healthy diet, activity and sedentary behaviour); effecting behaviour change via a combination of counselling, education, written resources, support and motivation; and tailoring intensity according to whether behavioural, anthropometric or metabolic changes are the priority. These components are practicable to future intervention studies in primary care. © 2010 The Authors. *obesity reviews* © 2010 International Association for the Study of Obesity. PMID: 20630025 [PubMed - indexed for MEDLINE]

**READING 8 – Obesity in pregnancy**

**Tsoi E, Shaikh H, Robinson S, Teoh TG. Obesity in pregnancy: a major healthcare issue. *Postgrad Med J.* 2010 Oct;86(1020):617-23. Review. PubMed PMID: 20971713.**

URL: <http://pmj.bmj.com/content/86/1020/617.full.pdf> (payment required)

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**ABSTRACT**

The prevalence of maternal obesity is rising, up to 20% in some antenatal clinics, in line with the prevalence of obesity in the general population. Maternal obesity poses significant risks for all aspects of pregnancy. There are risks to the mother with increased maternal mortality, pre-eclampsia, diabetes and thromboembolic disorders. There is increased perinatal mortality, macrosomia and congenital malformation. The obstetric management, with increased operative delivery rate, and increased difficulty of anaesthesia, carry risk for the obese mother. Long term complications associated with maternal obesity include increased likelihood of maternal weight retention and exacerbation of obesity. This review aims to discuss these risks with a view to suggesting management to ensure the best outcome for both the mother and the offspring. PMID: 20971713 [PubMed - indexed for MEDLINE]

### READING 9 – What is the best way to motivate patients to exercise?

**Martin SN, Crownover BK, Kovach FE. Clinical inquiries. What's the best way to motivate patients to exercise? J Fam Pract. 2010 Jan;59(1):43-4. Review. PubMed PMID: 20074502.**

URL: <http://www.jfponline.com/Pages.asp?AID=8268> (payment required)

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#### ABSTRACT

There is no single best strategy for motivating patients to exercise, given the lack of data from rigorous comparison studies. There are, however, several interventions for adults that are effective. They include: writing a patient-specific behavioral health “green” prescription, encouraging patients to join forces with accountability partners or support groups, and recommending the use of pedometers. In children and adolescents, multicomponent strategies that include school-based interventions combined with either family or community involvement increase physical activity. PMID: 20074502 [PubMed - indexed for MEDLINE]

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### READING 10 – Preventing chronic diseases by promoting healthy diet and lifestyle: public policy implications for China

**Hu FB, Liu Y, Willett WC. Preventing chronic diseases by promoting healthy diet and lifestyle: public policy implications for China. Obes Rev. 2011 Jul;12(7):552-9. doi: 10.1111/j.1467-789X.2011.00863.x. Epub 2011 Mar 2. Review. PubMed PMID: 21366840.**

URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-789X.2011.00863.x/pdf> (payment required)

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#### ABSTRACT

Fuelled by rapid urbanization and changes in dietary and lifestyle choices, chronic diseases have emerged as a critical public health issue in China. The Healthy China 2020 programme recently announced by the Chinese government has set an overarching goal of promoting public health and making health care accessible and affordable for all Chinese citizens by year 2020. One of important components of the programme is to reduce chronic diseases by promoting healthy eating and active lifestyles. Chronic diseases not only affect health and quality of life, but also have economical and social consequences. With a limited infrastructure for chronic disease care, China is ill-equipped to deal with the escalating chronic disease epidemic, which threatens to reverse the gains of economic development in recent decades. Population-based intervention studies conducted in China and elsewhere have demonstrated the efficacy and effectiveness of several preventive strategies to reduce risk of chronic diseases in high-risk individuals and the general population. However, translating these findings into practice requires changes in health systems and public policies. To achieve the goals set by the Healthy China 2020 programme, prevention of chronic diseases should be elevated to a national public policy priority. © 2011 The Authors. obesity reviews © 2011 International Association for the Study of Obesity. PMID: 21366840 [PubMed - indexed for MEDLINE]