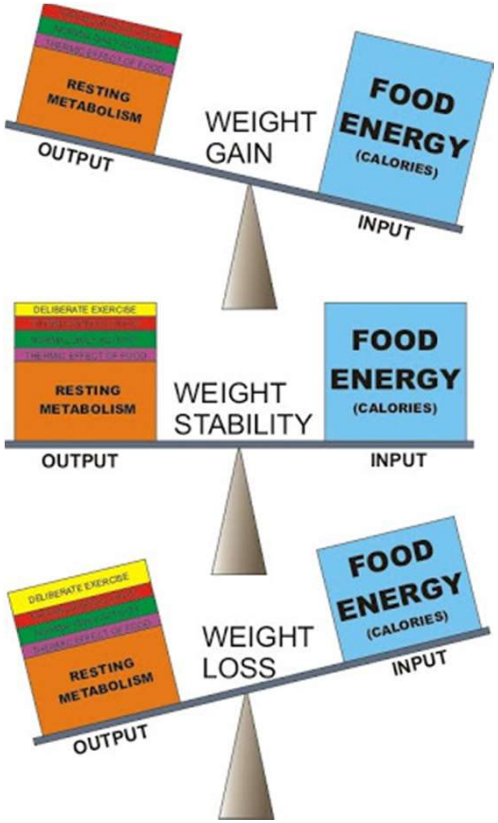
Energy balance and healthy weight, contd.



Part 2

From last class… Energy homeostasis

- Hypothalamus receives nerve and hormonal input (e.g. leptin, ghrelin, insulin, and multiple other hormones, along with nerves from the gut, adipose tissue, liver, and other tissues)
- If energy is restricted and weight loss occurring, hypothalamus directs metabolism to maintain adequate energy reserves. “Metabolic adaptation”
- “Set-point” for fat storage levels defines the level of energy reserves “considered adequate” to maintain energy homeostasis.
- The body defends decreases in adipose tissue with powerful compensatory mechanisms. Counter-regulatory or “self-preservation” processes limit conscious efforts to lose weight.

STIGMA AND BIAS

Stigma and bias in obesity

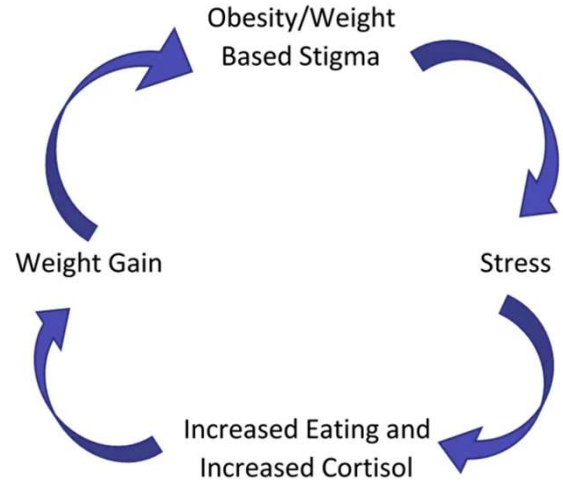
- Obesity as a chronic disease

Versus

- Lack of self-control, moral failing

Stigma and bias in obesity

- Widespread weight bias and stigma can lead individuals to believe that the negative stereotypes attributed towards them are true – and that they deserve the stigmatisation they are so frequently subject to.



GUIDELINE CPD

Obesity in adults: a clinical practice guideline

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■ Cite as: *CMAJ* 2020 August 4;192:E875-91. doi: 10.1503/cmaj.191707

This article is available in French at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.191707/-/DC1

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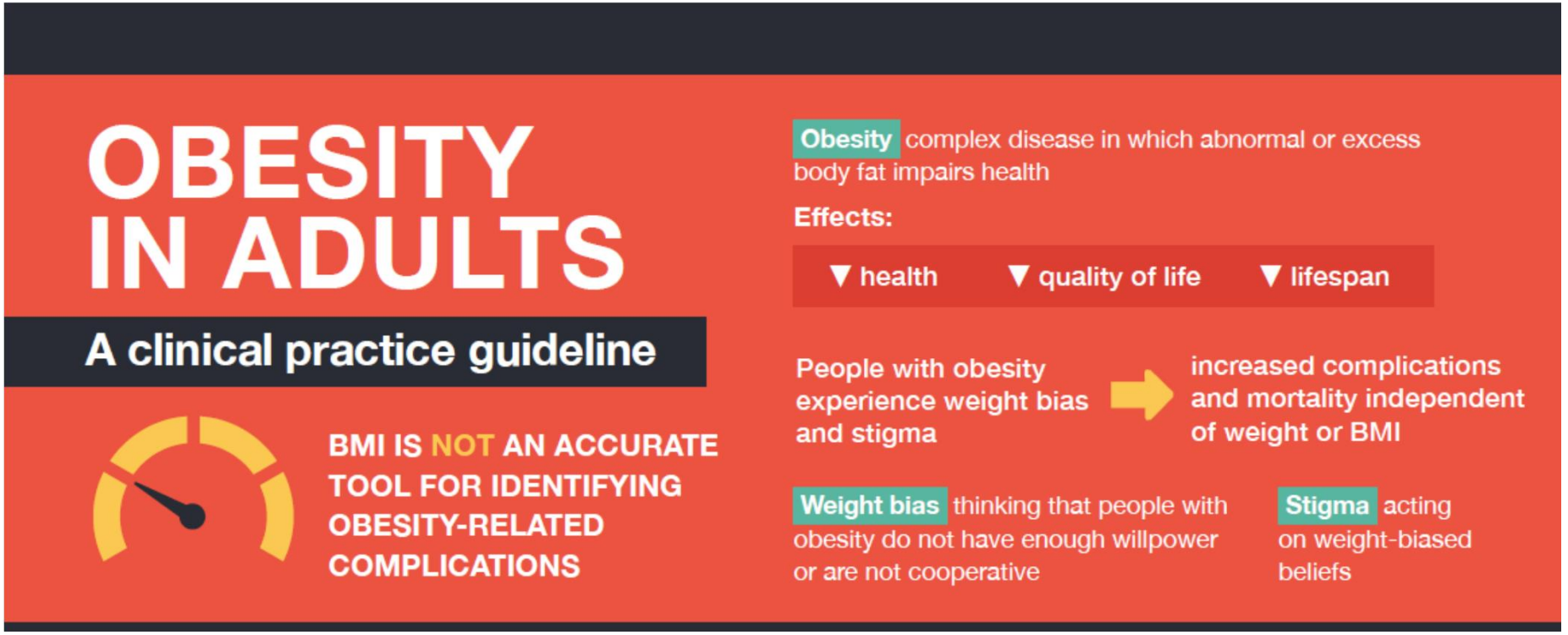
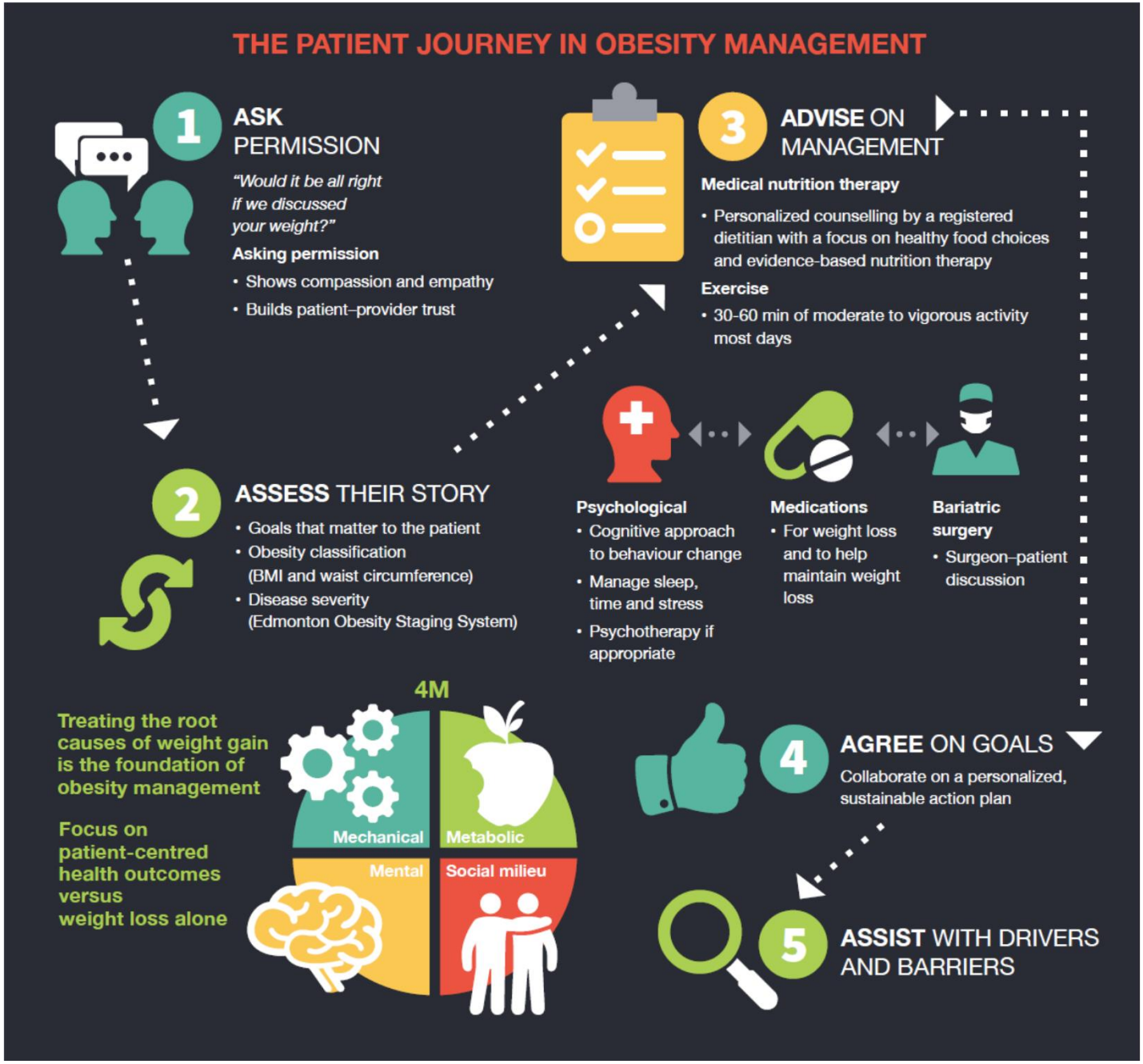
OBESITY CANADA 2020 CLINICAL PRACTICE GUIDELINES

Clinical Practice Guidelines




THE PATIENT JOURNEY IN OBESITY MANAGEMENT
1
ASK PERMISSION
"Would it be all right if we discussed your weight?"
Asking permission
• Shows compassion and empathy
• Builds patient–provider trust
2
ASSESS THEIR STORY
• Goals that matter to the patient
• Obesity classification (BMI and waist circumference)
• Disease severity (Edmonton Obesity Staging System)
3
ADVISE ON MANAGEMENT
Medical nutrition therapy
• Personalized counselling by a registered dietitian with a focus on healthy food choices and evidence-based nutrition therapy
Exercise
• 30-60 min of moderate to vigorous activity most days
Psychological
• Cognitive approach to behaviour change
• Manage sleep, time and stress
• Psychotherapy if appropriate
Medications
• For weight loss and to help maintain weight loss
Bariatric surgery
• Surgeon–patient discussion
4M
Mechanical
Metabolic
Mental
Social milieu
Treating the root causes of weight gain is the foundation of obesity management
Focus on patient-centred health outcomes versus weight loss alone
4
AGREE ON GOALS
Collaborate on a personalized, sustainable action plan
5
ASSIST WITH DRIVERS AND BARRIERS

Obesity Canada 2020 guidelines

KEY POINTS

- Obesity is a prevalent, complex, progressive and relapsing chronic disease, characterized by abnormal or excessive body fat (adiposity), that impairs health.
- People living with obesity face substantial bias and stigma, which contribute to increased morbidity and mortality independent of weight or body mass index.
- This guideline update reflects substantial advances in the epidemiology, determinants, pathophysiology, assessment, prevention and treatment of obesity, and shifts the focus of obesity management toward improving patient-centred health outcomes, rather than weight loss alone.
- Obesity care should be based on evidence-based principles of chronic disease management, must validate patients' lived experiences, move beyond simplistic approaches of "eat less, move more," and address the root drivers of obesity.
- People living with obesity should have access to evidence-informed interventions, including medical nutrition therapy, physical activity, psychological interventions, pharmacotherapy and surgery.

Guidelines contd.

Because obesity is a chronic disease, managing it in the long term involves patient–provider collaboration.[67] Health care providers should talk with their patients and agree on realistic expectations, person-centred treatments and sustainable goals for behaviour change and health outcomes.[68]

Guidelines contd.

Despite growing evidence that obesity is a serious chronic disease, it is not effectively managed within our current health system.[37,38] Canadian health professionals feel ill equipped to support people living with obesity.[39–41] Biased beliefs about obesity also affect the level and quality of health care that patients with obesity receive.[42] The dominant cultural narrative regarding obesity fuels assumptions about personal irresponsibility and lack of willpower and casts blame and shame upon people living with obesity.[41] Importantly, obesity stigma negatively influences the level and quality of care for people living with obesity.[42]

Realistic goals

- Improved health measures versus number on scale.
- Modest weight loss can improve blood glucose control in Type 2 Diabetes, high blood pressure, blood lipids and physical fitness.
- 5 to 10 % weight loss is typically considered realistic

Table 9-6: Tips for Accepting a Healthy Body Weight

Table 9–6

Tips for Accepting a Healthy Body Weight

- Value yourself and others for human attributes other than body weight. Realize that prejudging people by weight is as harmful as prejudging them by race, religion, or gender.
- Use only positive, nonjudgmental descriptions of your body; never use degrading negative descriptions.
- Accept positive comments from others.
- Avoid checking your weight or appearance frequently; focus on your whole self, including your intelligence, social grace, and professional and scholastic accomplishments.
- Accept that no magic diet exists.
- Stop dieting to lose weight. Adopt a healthy eating and exercise lifestyle permanently.
- Follow Canada's Food Guide (Chapter 2). Never restrict food intake below the minimum levels that meet nutrient needs.
- Become physically active, not because it will help you get thin but because it will enhance your health.
- Seek support from loved ones. Tell them of your plan for a healthy life in the body you have been given.
- Seek professional counselling, not from a weight-loss counsellor but from someone who can help you make gains in self-esteem without weight as a factor.
- Join with others to fight weight discrimination and fashion stereotypes. (Search the Internet for credible information on this topic or for the names of groups, see the nutrition resources in Appendix G, available online at nelson.com/student).

Moderate Weight Loss versus Rapid Weight Loss

- Gradual weight loss is preferred mainly because it helps preserve lean body mass
- Emphasize changing body composition not just what the scale says
- Aim to reduce percent body fat or to lose inches around waistline

Diet Strategies for Weight Loss

Diet Strategies for Weight Loss

- Setting realistic goals
- Keeping records
- The client plans what to eat
- Setting realistic Calorie intakes
- Balancing carbohydrate, fat, and protein
- Minding portion sizes
- Enjoy meals
- Enjoy foods
- Spacing of meals

Is higher protein better when restricting kcalories?

- Satiety
- Protect lean tissues
- Some research suggests that a little extra protein is useful when on a lower kcalorie diet
- 1.2 to 1.6 gram per kilogram body weight or 35 % of energy

Physical Activity for Weight Loss

- To prevent weight gain and promote weight loss:
  - 30 to 60 minutes of physical activity daily

- Advantages of physical activity
  - Increased metabolism
  - Improved body composition
  - Reduced appetite after exercising
  - Stress reduction

Behaviour Modification: Changing habits until new behaviour becomes automatic

Avoid problem cues. Example: Don't buy foods you can't resist and overeat.

Find ways to control cues that can't be avoided. Ex. Measure portion size and use small plate.

Strengthen cues to appropriate eating and exercise. Ex. Having healthy foods easily available in refrigerator.

Repeat desired eating and exercise behaviours

Do not emphasize negative consequences for inappropriate eating (don't punish yourself)

Emphasize positive consequences for appropriate eating and exercise behaviours (give yourself positive feedback)

Once I've Changed My Weight, How Can I Stay Changed?

- Lifelong commitment
  - Cultivate and enjoy healthy habits
- Self-efficacy is the key to success
- Physical activity remains important
- Develop social support systems

Consumer Corner: Fad Diets

- Any diet that results in kcalorie deficit will result in weight loss.
- Fad diets can give rapid results, but are difficult to sustain for long periods of time and the weight is gained back in time.

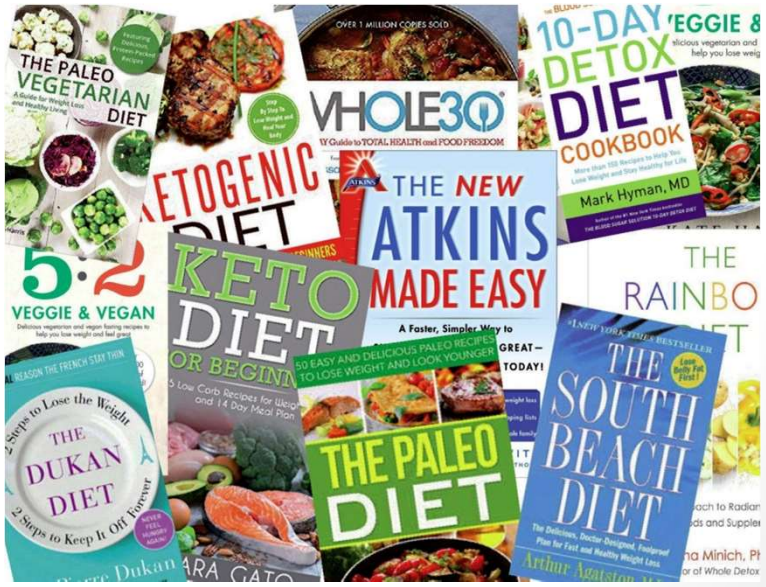


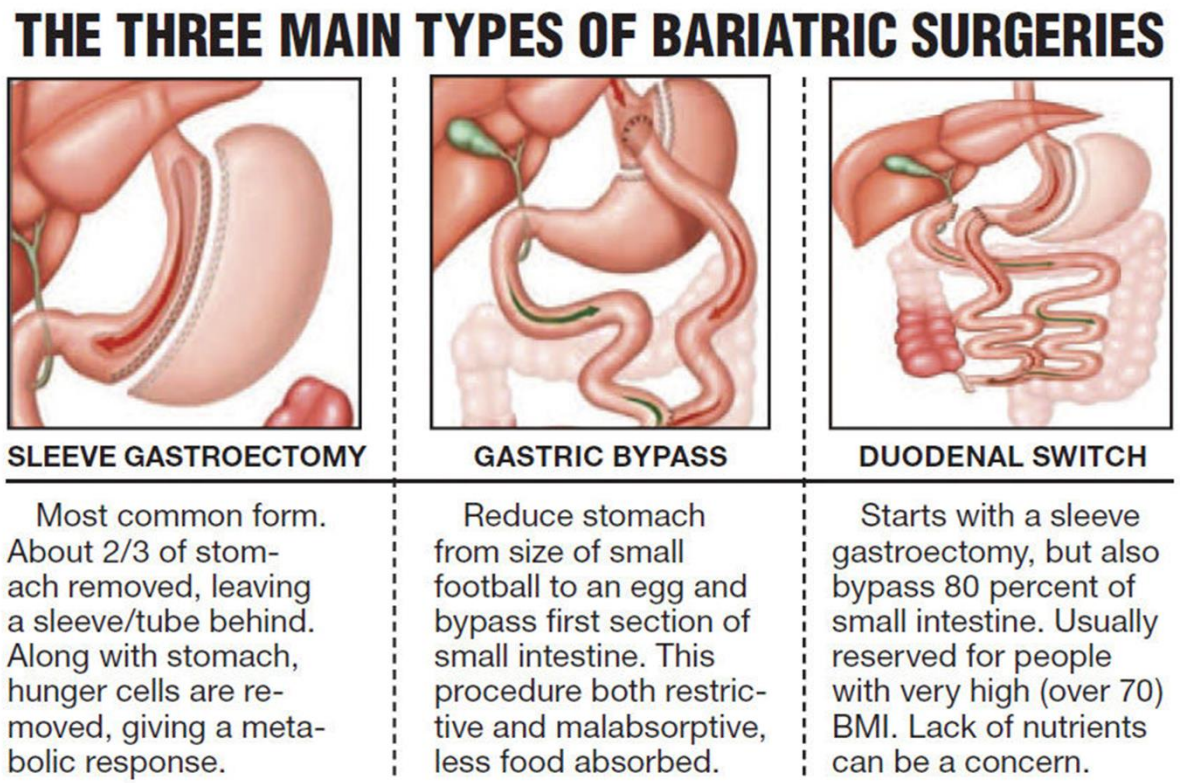
Table 9-7: Clues to Fad Diets and Weight-Loss Scams

Table 9–7

Clues to Fad Diets and Weight-Loss Scams

It may be a fad diet or weight-loss scam if it

- Bases evidence for its effectiveness on anecdotal stories and testimonials.
- Blames weight gain on a single nutrient, such as carbohydrate, or constituent, such as gluten.
- Claims to "alter your genetic code" or "reset your metabolism."
- Eliminates an entire food group, such as grains or milk and milk products.
- Fails to include all costs up front.
- Fails to mention potential risks associated with the plan.
- Fails to plan for weight maintenance following loss.
- Guarantees an unrealistic outcome in an unreasonable time period, such as losing five kilograms in three days.
- Promises quick and easy weight loss methods; for example, "Lose weight while you sleep."
- Promotes devices, drugs, products, or procedures not approved by Health Canada or scientifically evaluated for safety or effectiveness.
- Sounds too good to be true.
- Specifies a proportion of energy nutrients not in keeping with DRI recommended ranges.
- Recommends using a single food, such as grapefruit, as the key to the program's success.
- Requires you to buy special products not readily available in ordinary supermarkets.
- Has any of the characteristics of quackery (see Figure C1–1 of Controversy 1).



BARIATRIC SURGERY

Complications following surgery

- Infections
- Nausea/vomiting
- Dehydration
- Vitamin/mineral deficiencies
- Psychological problems

Bariatric surgery contd.

- Surgery reduces physical size of stomach
- Surgery alters expression of gut and adipose tissue hormones, leptin included, to promote satiety and weight loss.
- We don't see the compensatory decrease in metabolic rate observed with diet-induced weight loss.

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Ann Surg. Author manuscript; available in PMC 2015 Apr 1.
Published in final edited form as:
Ann Surg. 2014 Apr; 259(4): 642–648.
doi: 10.1097/SLA.0000000000000361

PMCID: PMC4057799
NIHMSID: NIHMS571448
PMID: 24368636

Metabolic thrift and the genetic basis of human obesity

Robert W. O'Rourke, MD

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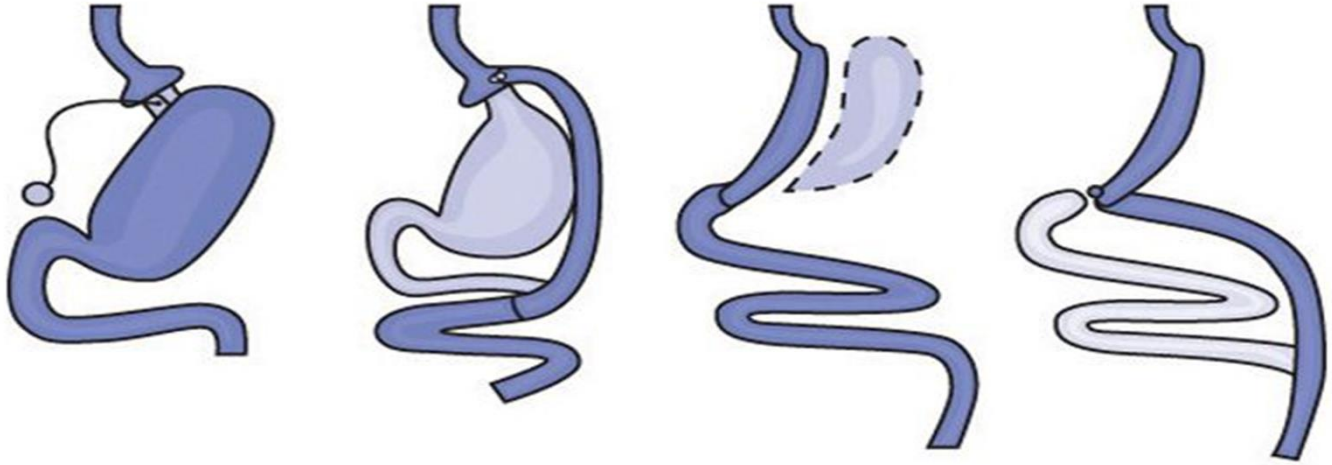
Obesity Canada guidelines

Bariatric surgery

Bariatric surgery may be considered for people with BMI $\geq$ 40 kg/m^2 or BMI $\geq$ 35 kg/m^2 with at least 1 obesity-related disease. The decision regarding the type of surgery should be made in collaboration with a multidisciplinary team, balancing the patient's expectations, medical condition, and expected benefits and risks of the surgery. A full description and supporting evidence are available online (http://obesitycanada.ca/guidelines/)

Obesity Canada guidelines for bariatric surgery

47	We suggest that the choice of bariatric procedure (sleeve gastrectomy, gastric bypass or duodenal switch) be decided according to the patient's need, in collaboration with an experienced interprofessional team.
48	We suggest that adjustable gastric banding not be offered owing to unacceptable complications and long-term failure.
49	We suggest that single anastomosis gastric bypass not be routinely offered, owing to long-term complications in comparison with Roux-en-Y gastric bypass.



Adjustable Gastric Band (AGB)

Roux-en-Y Gastric Bypass (RYGB)

Vertical Sleeve Gastrectomy (VSG)

Biliopancreatic Diversion With a Duodenal Switch (BPD-DS)

Medications

- Obesity Canada guidelines do not recommend over the counter medications products due to lack of evidence.
- Prescription medications in Canada:
  - Orlistat (xenical):: Inhibits pancreatic lipase and thereby blocks fat absorption by about 30%. Side effects: Gas, frequent bowel movements, reduced absorption of fat soluble vitamins.

Herbal Products and Other Gimmicks

- Herbal weight-loss products
  - Safety and effectiveness have not been proven
  - "Natural" does not guarantee safety

- Herbs or natural products for which there are claims relating to weight loss can be checked on the Natural Health Products Directorate website at http://www.hc-sc.gc.ca/dhp-mps/prodnatur/applications/licen-prod/lnhpd-bdpsnh-eng.php
- Other ineffective gimmicks
  - Saunas or steam baths
  - Brushes, sponges, wraps, creams, massages