What can I do if my patient asks me about help with weight loss?

A solution focused approach to weight management

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Disclosures - none

- The emphasis is on dispelling clinical inertia with management tips and advice on when to refer

- Supporting excellence in practice

Greenlane
Medical Specialists

AUCKLAND
DISTRICT HEALTH BOARD
Te Toka Tumai

Caring for people with diabetes and weight

Helping people with obesity – it's different

- Important:
  - Words matter
  - Our attitude matters (approach and values)
  - We know - people have tried it several times before
  - They are afraid having their hopes slashed again

A. Deeply rewarding as a clinician (if you are honest, realistic, supportive and can make a difference)

B. The evidence supports – when we know **how to** approach - we can make **that difference**

Key Principles

Obesity is a Chronic Condition

- Obesity is a chronic and often progressive condition not unlike diabetes or hypertension.
- Successful obesity management requires realistic and sustainable treatment strategies.
- Short-term "quick-fix" solutions focusing on maximizing weight loss are generally unsustainable and therefore associated with high rates of weight regain.

canadian obesity network

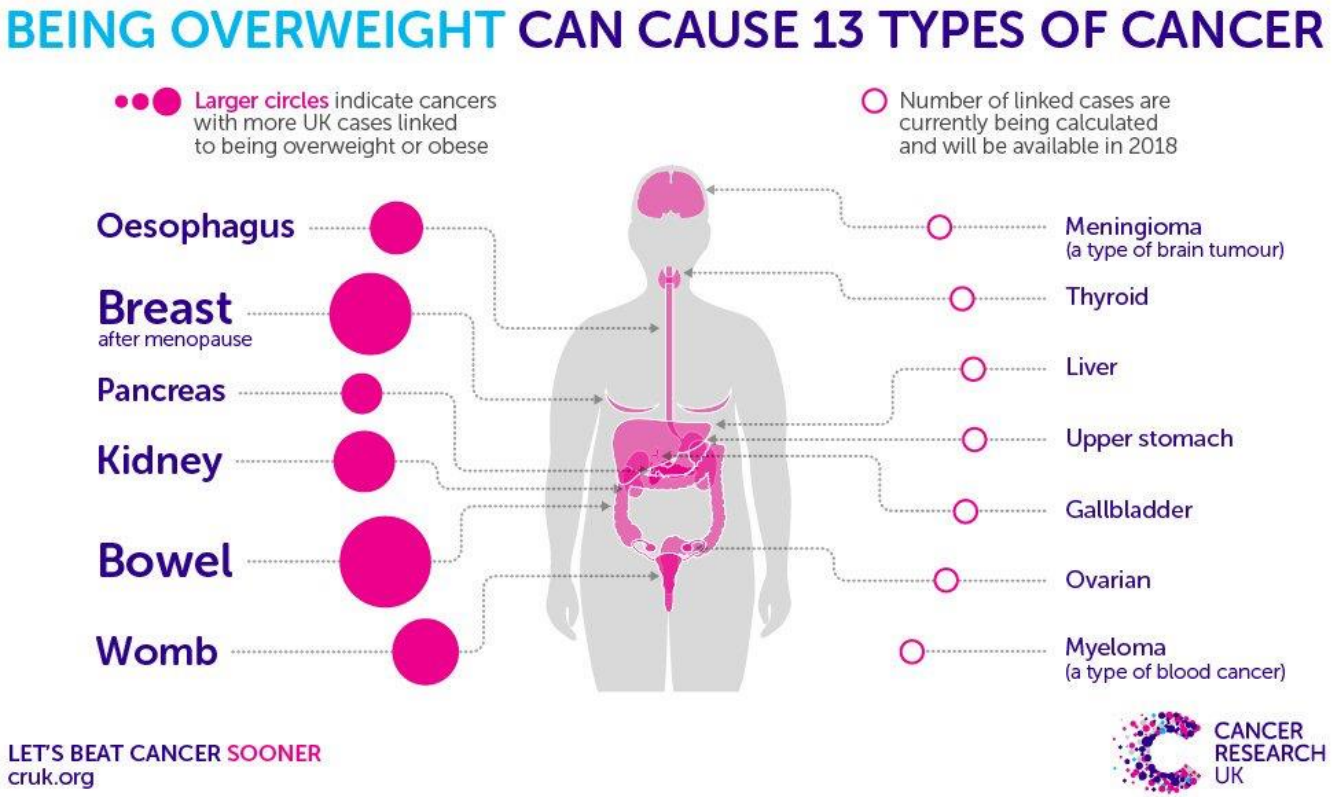
Key Principles

Obesity Management is About Improving Health and Well-being, and not Simply Reducing Numbers on the Scale

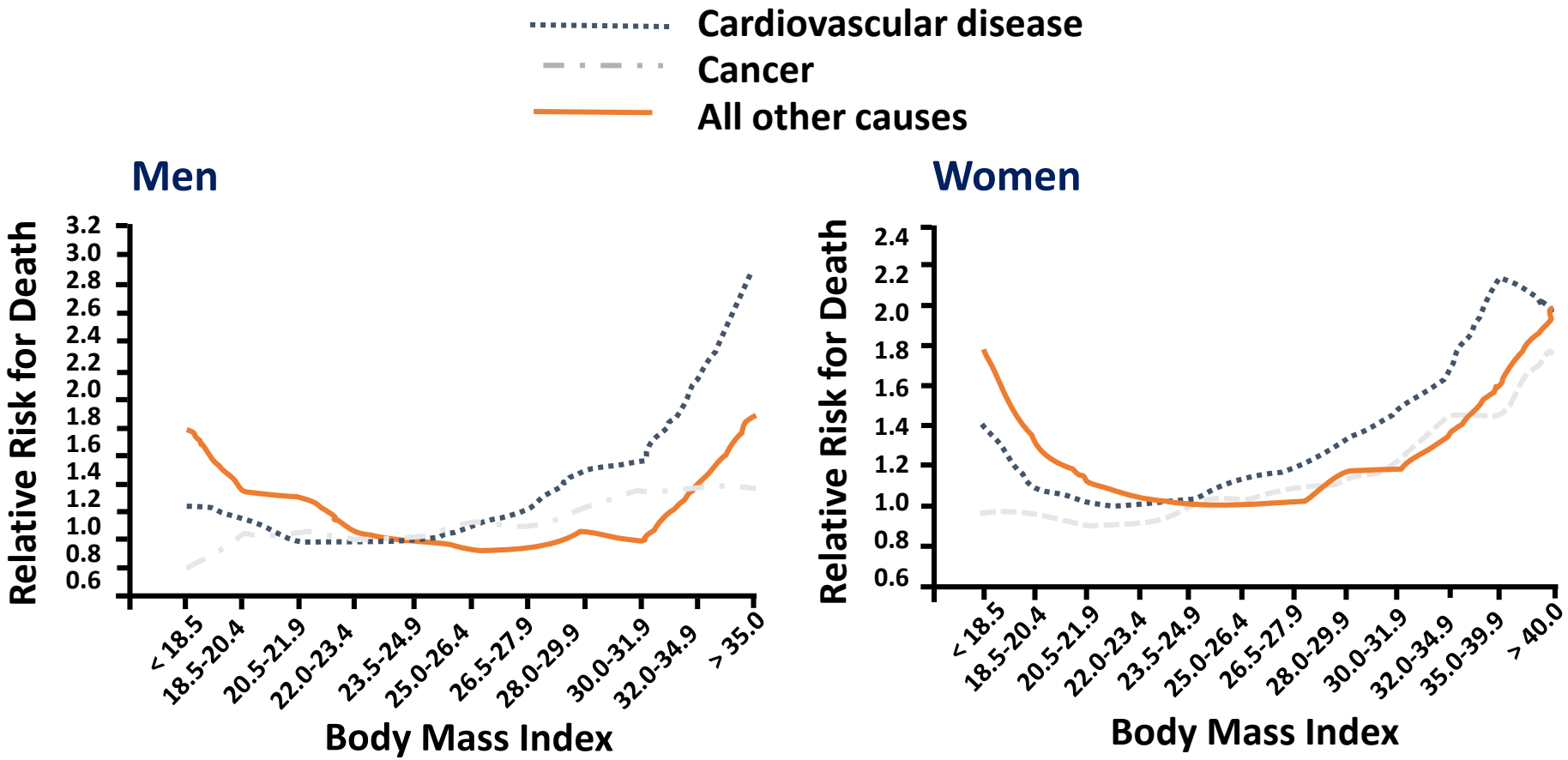
- The success of obesity management should be measured in improvements in health and well-being rather than in the amount of weight lost.
- For many patients, even modest reductions in body weight can lead to significant improvements in health and well-being.

Co-morbidities and complications

- Increased morbidity and mortality (premature death), several (>100) significant associated co-morbidities (including several cancers)
- Significant impact on quality of life and wellbeing



Relative Risk for Death From Cardiovascular Disease, Cancer, and All Other Causes



The reference category consisted of participants with BMIs of 23.5-24.9 kg/m^2.

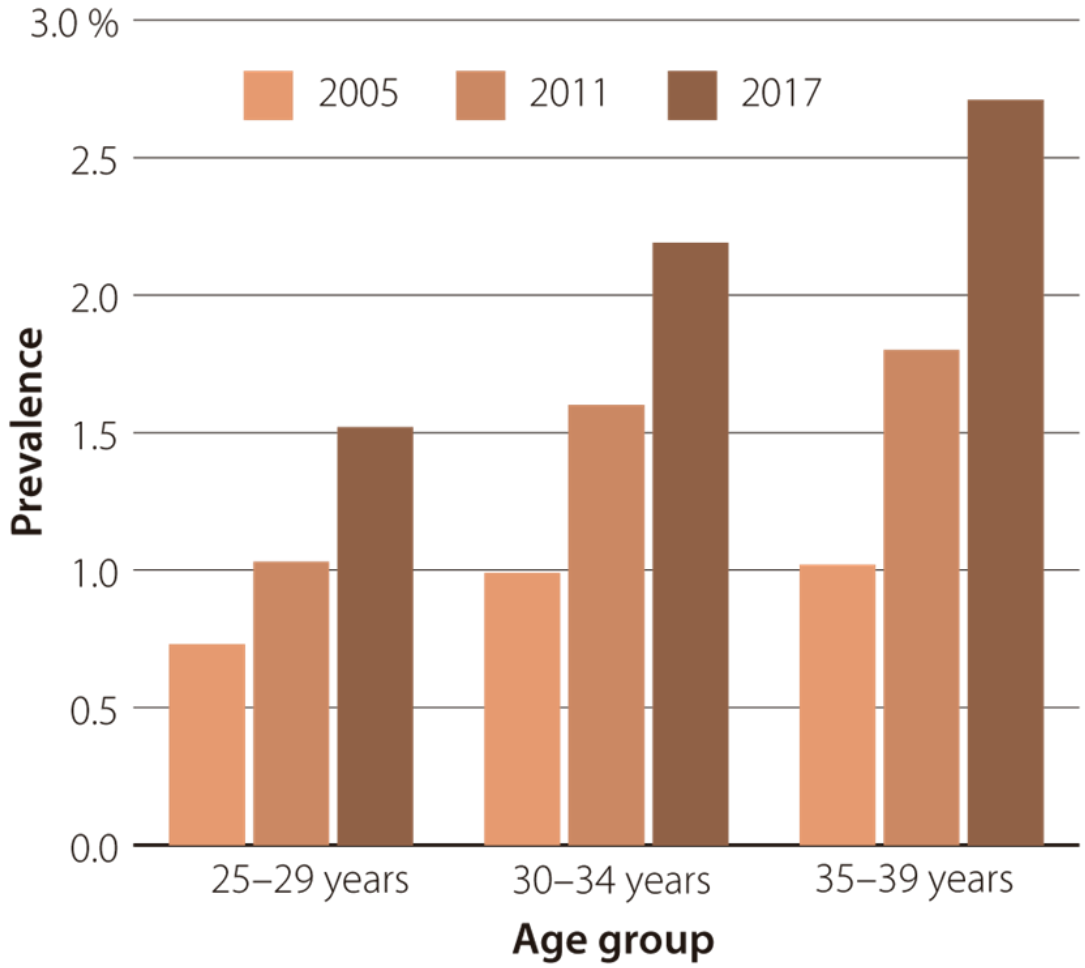
Calle EE, et al. *N Engl J Med.* 1999;341:1097-1105.

Figure 1: Obesity among adults, 2015 or nearest year

Changes in the prevalence of diabetes from 2005-2017 in adults aged 25-39 years in New Zealand

- The incidence of type 2 diabetes in younger adults and adolescents in New Zealand is increasing; people of Māori, Pacific and South-Asian ethnicities are particularly at risk

- People with early onset type 2 diabetes have increased morbidity and mortality compared to those with a later onset *or to those of similar age with type 1 diabetes*



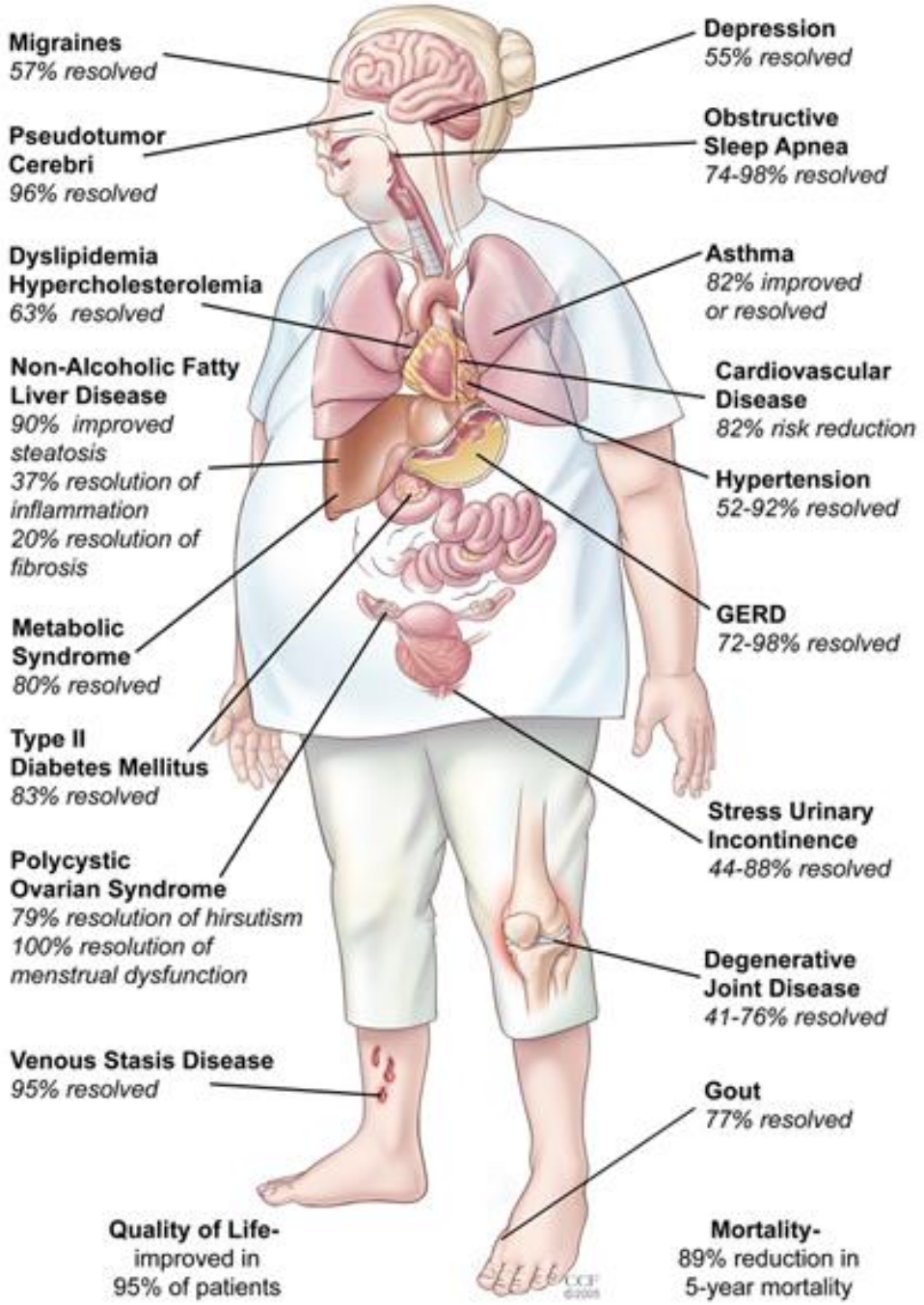
Obesity as a disease (clinicians approach)

- Inheritability
  - Genetics (40-70% inherited)
  - Epigenetics
- Pathophysiology:
  - Dysregulation of gut-brain axis that controls food intake
  - Obesity – mechanical and metabolic effects
- Chronic and relapsing
  - *Why? - mechanisms behind* the 'vicious cycle' & set-weight concept
  - Need for long-term management and prevention of weight cycling

- Environmental factors
  - Obesogenic environments

Obesity complications

- Mechanical
- Metabolic
- Cancer
- Psychological & QOL
- Functional
- Mortality



EOSS: EDMONTON OBESITY STAGING SYSTEM - *Staging Tool*

STAGE 0

- **NO** sign of obesity-related risk factors
- **NO** physical symptoms
- **NO** psychological symptoms
- **NO** functional limitations

Case Example:
Physically active female with a BMI of 32 kg/m², no risk factors, no physical symptoms, no self-esteem issues, and no functional limitations.

Class I, Stage 0 Obesity

EOSS Score

WHO Obesity Classfication

STAGE 1

- Patient has obesity-related **SUBCLINICAL** risk factors
  (borderline hypertension, impaired fasting glucose, elevated liver enzymes, etc.)
  - *OR* -
- **MILD** physical symptoms - patient currently not requiring medical treatment for comorbidities
  (dyspnea on moderate exertion, occasional aches/pains, fatigue, etc.) - *OR* -
- **MILD** obesity-related psychological symptoms and/or mild impairment of well-being
  (quality of life not impacted)

Case Example:
38 year old female with a BMI of 59.2 kg/m², borderline hypertension, mild lower back pain, and knee pain. Patient does not require any medical intervention.

Class III, Stage 1 Obesity

WHO CLASSIFICATION OF WEIGHT STATUS (**BMI kg/m²**)

Obese Class I ..... 30 - 34.9
Obese Class II ..... 35 - 39.9
Obese Class III ..... ≥40

Stage 0 / Stage 1 Obesity

Patient ***does not meet clinical criteria for admission*** at this time.
Please refer to primary care for further preventative treatment options.

STAGE 2

- Patient has **ESTABLISHED** obesity-related comorbidities requiring medical intervention
  (HTN, Type 2 Diabetes, sleep apnea, PCOS, osteoarthritis, reflux disease) - *OR* -
- **MODERATE** obesity-related psychological symptoms
  (depression, eating disorders, anxiety disorder) - *OR* -
- **MODERATE** functional limitations in daily activities
  (quality of life is beginning to be impacted)

Case Example:
32 year old male with a BMI of 36 kg/m² who has primary hypertension and obstructive sleep apnea.

Class II, Stage 2 Obesity

STAGE 3

- Patient has **significant** obesity-related end-organ damage (myocardial infarction, heart failure, diabetic complications, incapacitating osteoarthritis) - *OR* -
- **SIGNIFICANT** obesity-related psychological symptoms
  (major depression, suicide ideation) - *OR* -
- **SIGNIFICANT** functional limitations
  (eg: unable to work or complete routine activities, reduced mobility)
- **SIGNIFICANT** impairment of well-being
  (quality of life is significantly impacted)

Case Example:
49 year old female with a BMI of 67 kg/m² diagnosed with sleep apnea, CV disease, GERD, and suffered from stroke. Patient's mobility is significantly limited due to osteoarthritis and gout.

Class III, Stage 3 Obesity

STAGE 4

- **SEVERE** (potential end stage) from obesity-related comorbidities - *OR* -
- **SEVERELY** disabling psychological symptoms - *OR* -
- **SEVERE** functional limitations

Case Example:
45 year old female with a BMI of 54 kg/m² who is in a wheel chair because of disabling arthritis, severe hyperpnea, and anxiety disorder.

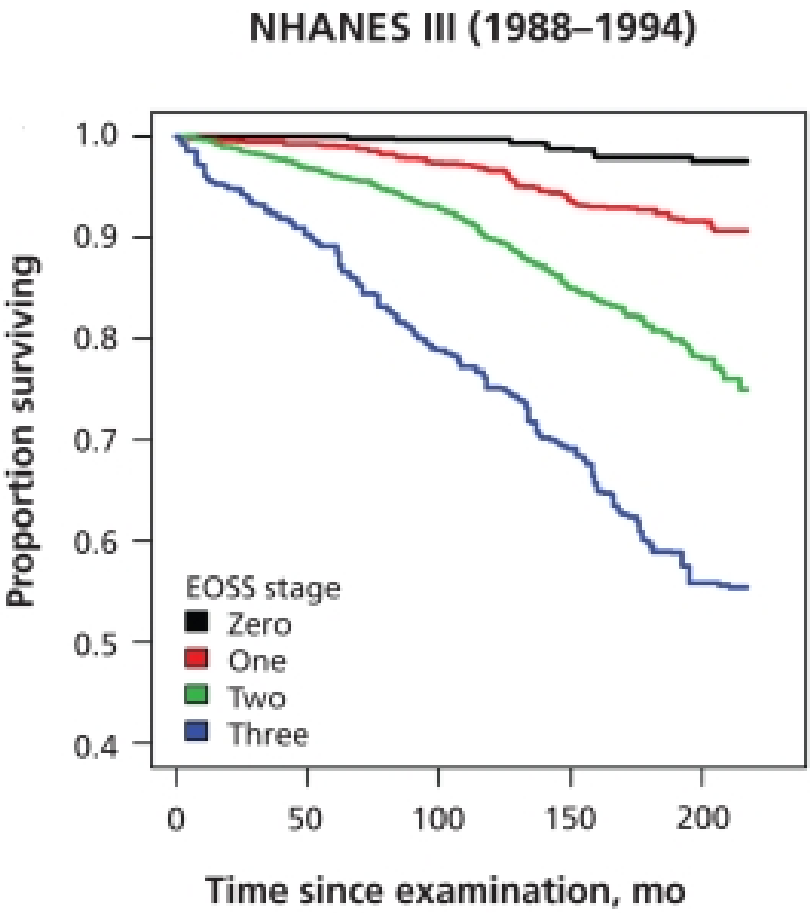
Class III, Stage 4 Obesity

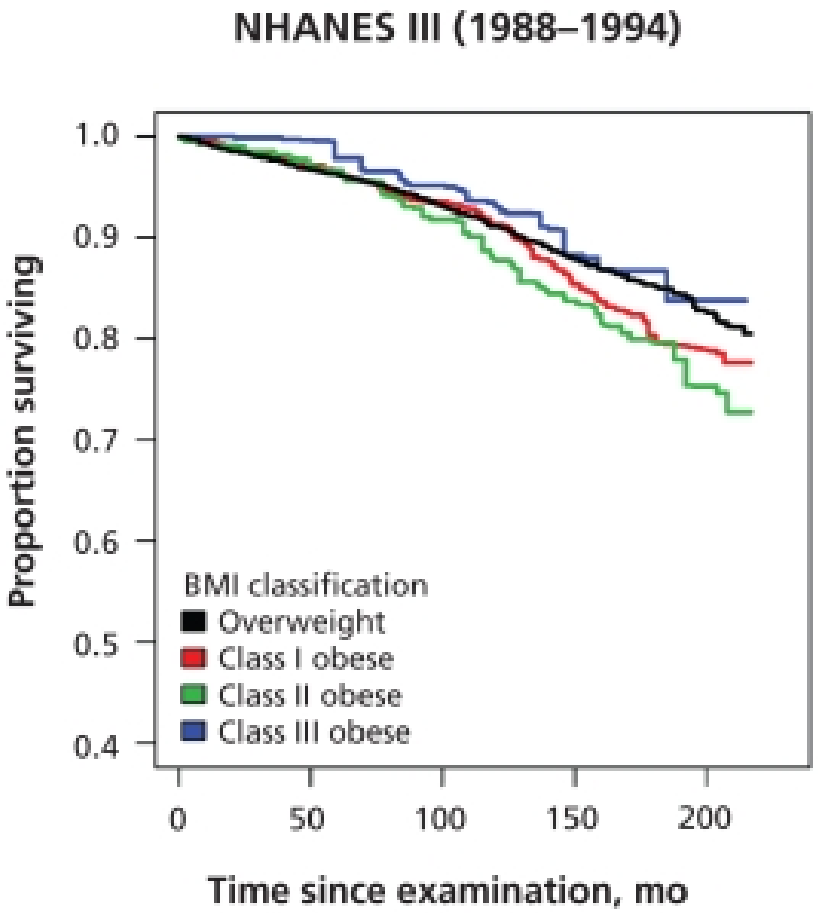
Alberta Health Services

UNIVERSITY OF ALBERTA

Sharma AM & Kushner RF, *Int J Obes* 2009

Edmonton Staging System Can Predict Mortality Better than BMI

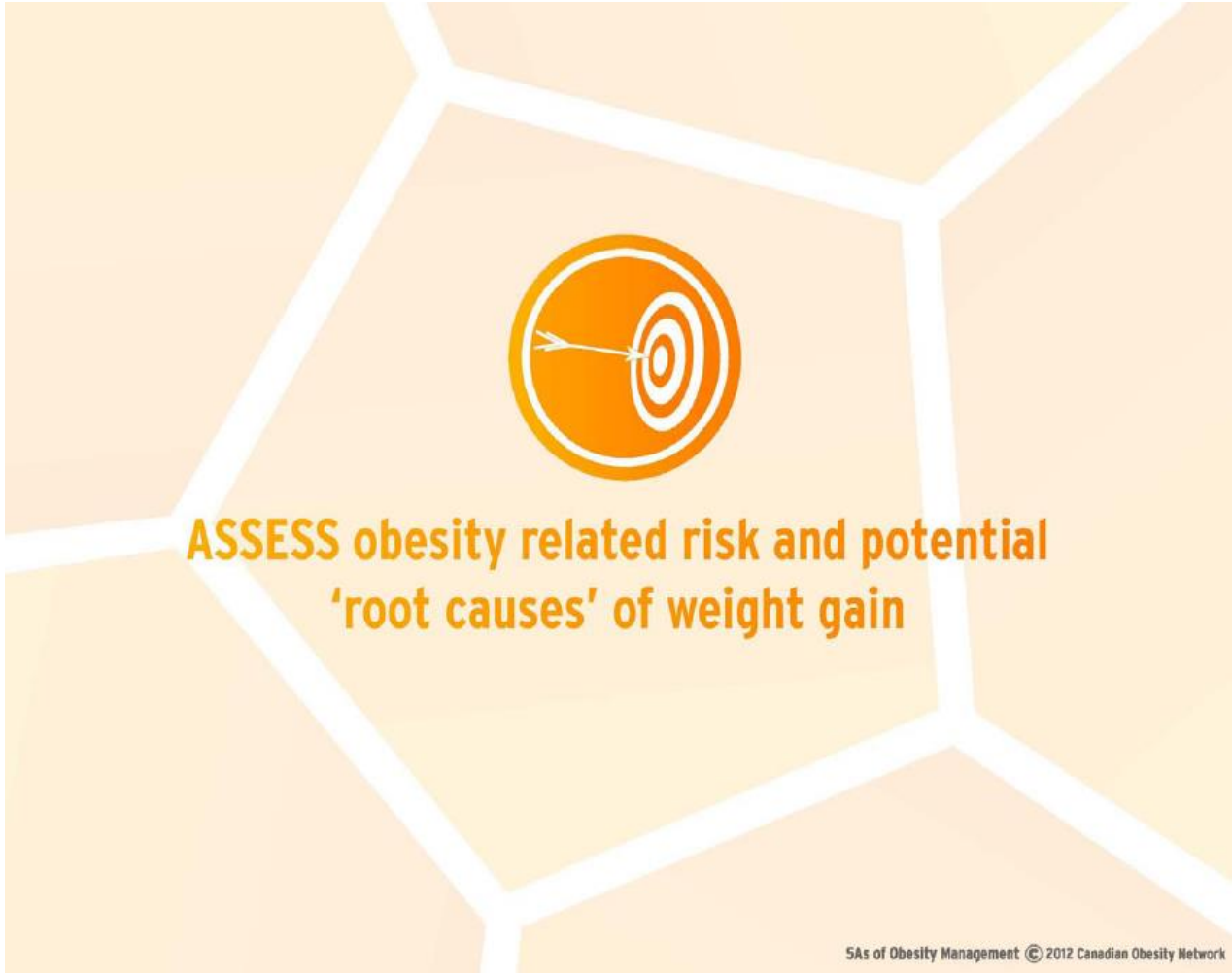




Padwal R et al. CMAJ. 2011

Bariatric assessment

- Structured
- Pre-clinic ‘patient assessment tools’
- Comprehensive clinic assessment
- Investigations
- Agreed management plan



- *The obesity consultation*
- *Use of patient self-assessment tools*
- *Assessment process (1)*

1st visit

- *Obesity timeline* (age of onset, changes in childhood and adolescence, triggers for weight gain and weight loss attempts, what worked and what didn't (show my timeline – insert picture)

Pearl, 32

- BMI 38 kg/m2, weight 128Kg, height 183cm, **EOSS 2**, Class 2
- Onset of weight gain around menarche (age 10), managed to lose with exercise (netball)
- Family history for obesity - several siblings and mother
- Complications: **DM 2 with early onset**, menorrhagia, otherwise well
- Examination: acanthosis+++, equal distribution of weight
- Lab's – normal, except **HbA1c 104mmol/mol**, ACR 12.5mg/mmol
- Eating: 'what everyone else has', can eat large amounts without feeling full, no night-time eating, mild degree of emotional eating and cravings for sweets
- Exercise: has personal trainer and engaged
- Behavioral: no depression / anxiety

- *Keen to make changes, aims to get pregnant*

Image: Pacifica.org.nz, Published 07/05/2017

Pearl, 32

A. Duromine 30 mg for 3 month, than stop
B. Use low carbohydrate or low energy diet
C. Increase exercise regime
D. Use available diabetes medications (Metformin, Vildagliptin, Dapagliflozin)
E. Refer for bariatric surgery
F. Duromine 15mg for 6-12 months
G. Orlistat 120mg tds

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Pearl, 32

- Key aspects:
  - Degree of genetic predisposition
  - Cultural component
  - Can lose weight
  - Main problem DM2 and not weight
  - (DM2 < 3years – responsive to 5-10% weight loss)
- Other complications from weight - menstrual problems and microalbuminuria (FSGS?)
- Eating:
  - no significant emotional or abnormal eating component
  - Possible rapid gastric transit (no constant cravings)
- Exercise: able and engaged
- Behavioral: motivated, no depression

Pearl, 32

What did we and she do?

- Started on Metformin and Vildagliptin
  - (ideal medication would be a GLP1 agonist – slows gastric transit and helps with weight loss)
- Diet plan in the Gym (LCH) – encouraged to continue
- What happened?
  - Big smile
  - Hba1c 53mmol/mol
  - Weight down by 6kg
- Why did it work?