# Obesity in O&G — The new Tsunami

MONIQUE STRAVENS

Weight Categories	BMI (kg/m²)
Underweight	< 18.5
Healthy Weight	18.5-24.9
Overweight	25-29.9
Obese	30-34.9
Severely Obese	35-39.9
Morbidly Obese	≥40

New Zealand rotains bronze in OECD

obesity stakes

RACHEL THOMAS AND TOM HUNT Last updated 13:39, October 12 2017



### Newshub.

12 February 2018

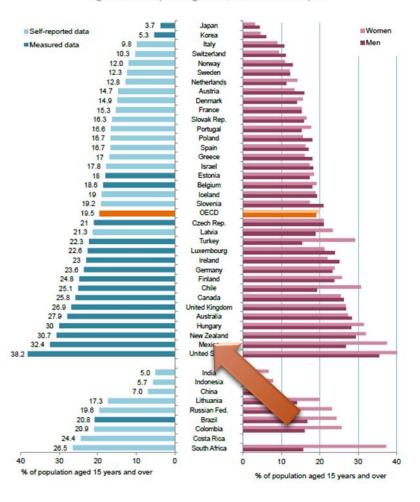












#### es obesity epidemic intry in the world

l Mexico for worldwide rates professionals are calling for of the food and beverage



rised as obese Photograph: Dominic Lipinski/PA









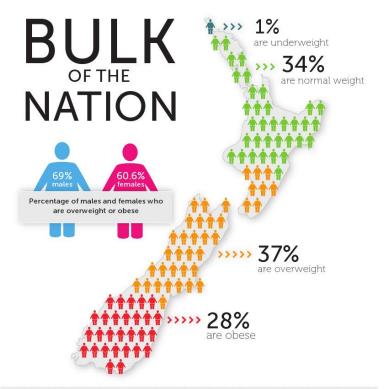


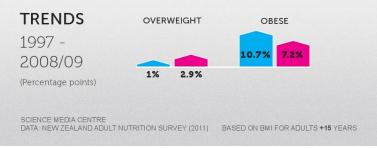
Source: OECD (2017), OECD Health Statistics 2017 (Forthcoming in June 2017). www.oecd.org/nealth/health-data.htm

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

New Zealand t... ..... ..... ..... ..... se nation

12/10/2017 Like 919





### When and how affected?

- Childhood
- Adolescent
- Reproductive years
- Pregnancy
- Beyond the reproductive years
- Menopause transition

# Obesity in childhood

- Maternal obesity and gestational weight gain associated with childhood obesity, and this effect extends into adulthood
- Increased chances of later life obesity and its complications
- 80% risk of childhood obesity if both parents obese vs 10%
- Maternal obesity independently associated with neurodevelopment delay (Girchenko et al, 2018)



### Adolescent

- High BMI scores at age 3 risk factor for early onset of puberty
- ☐ Early puberty associated with diabetes cardiovascular events later in life
- Breast cancer risk
- Psychological risks

# Reproductive years

- Longer time to conception due to ovulatory disorders
- PCOS often co-exists and obesity causes deterioration of hormonal and metabolic parameters
- Less favourable outcomes with assisted reproduction
  - respond poorly to ovulation induction
  - lower pregnancy rates with Gonadotrophins, need higher doses
- Higher miscarriage rates (spontaneous and assisted) including recurrent miscarriage

### Pregnancy

#### FETAL RISK

- congenital abnormalities
- ☐ large for gestational age
- shoulder dystocia
- IUFD

#### MATERNAL RISK

- ☐ GDM
- HTN
- obstetric intervention
- Anaesthetic complications
- PPH
- Lactation difficulties
- VTE

# And beyond

- Contraception difficulty
  COCP VTE risk, ? Less effective
  Depot Provera weight gain
  Levonorgestrel implant ? decreased effectiveness at 5 years
- Menstrual difficulties due to anovulatory cycles; irregular, heavier, longer
- Endometrial polyps
- Fibroids
- Stress urinary incontinence
- Pelvic organ prolapse

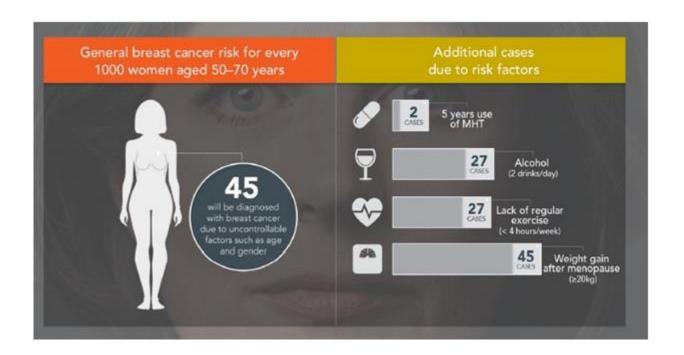
### Menopause transition

- Longer menopause transition
- ☐ Final menstrual period later
- More symptomatic
- Weight gain
- Changes in fat distribution
- □ ??HMT



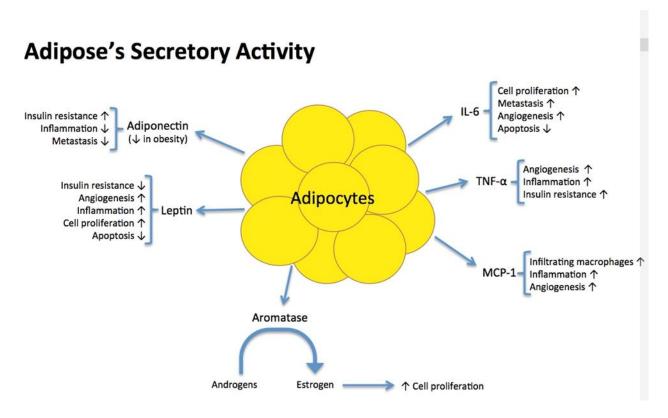
# Risk of malignancy

Increased risk of endometrial, breast (postmenopausal), ovarian & colon cancer



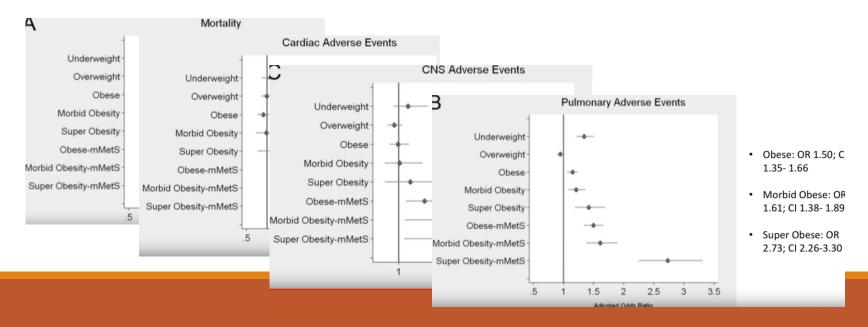
# Risk of malignancy

- Increased insulin resistance, hyperinsulinaemia, angiogenesis
- Adipokines
- oestradiol



### Treatment consideration

- High risk of perioperative complications anaesthetic & surgical.
  Consider indication for surgery, inform patients of risk, careful planning
- Outcomes similar with increased weight but significant differences with BMI approaching 40. Risks particularly high if cardiovascular comorbidities present (*Glance et al, 2010*)



### Treatment consideration

☐ Minimal access surgery best. Improved outcome achievable with laparoscopic surgery in experienced hands







# Questions?