





# **Child Obesity**

## BACKGROUND

- Prevalence in children in Ireland estimated to be 20%, greater prevalence in girls and disadvantaged children.
- Complex, chronic, multi-factorial disease requiring a comprehensive multi-disciplinary approach to care.
- Weight based stigma and obesity discrimination must be challenged in our health care response.

# DEFINITIONS

BMI thresholds are different in children to adults as their bodies undergo physiological changes.

For children > 2 yrs sex specific growth reference percentile charts are used UK-WHO

- < 2nd centile underweight
- > 85th centile overweight
- > 95th centile obese

## **CONSEQUENCES**

Children who are greater than a healthy weight are at significant risk of many adverse health consequences e.g obstructive sleep apnoea (OSA), hypertension (HTN), cardiovascular disease (CVD), type 2 diabetes, certain cancers, osteoarthritis.

Children's quality of life may also be impacted substantially by psychosocial aspects such as exclusion, low mood and anxiety.

# **HISTORY**

- Detailed neonatal and developmental history
- Social and environmental history
- Medical history to rule out other important causes of obesity – hypothyroidism, pseudoparahypoparathyroidism, Cushing syndrome, Prader Willi, Bardet-Biedl or other syndromes
- Complications/comorbidities associated with obesity – headache, obstructive sleep apnoea, hip pain, abdominal pain, polyuria/polydipsia, polycystic ovary syndrome
- Medications likely to exacerbate
  weight gain
- · Psychosocial impact of weight
- · Patterns of eating

#### **EXAMINATION**

- Observe for features consistent with relevant syndromes
- Skin for ancanthosis nigricans, hirsuitism, acne, striae
- Abdominal palpation for hepatomegaly
- Tanner staging and pubertal assessment
- Weight, height, BMI centiles
- Blood pressure

# INVESTIGATIONS

As indicated by examination

- Urine dip for glucose and protein
- Fasting glucose, HbA1C, lipids, Cholesterol
- LFTs and TFTs
- Cortisol, calcium, phosphate and parathyroid hormone (PTH)
- Pituitary hormones
- Imaging organomegaly, bone pain, gonads
- Consider genetics if unexpected findings e.g. short stature

#### TREATMENT

- Policy
- Prevention
- Lifestyle modification
- Diet: Discuss healthy eating and portion size. Consider dietitian referral
- Exercise: Discuss increasing daily exercise
- Behaviour therapy
- Discuss co-morbidities
- Pharmacotherapy
- Bariatric Surgery

Post pubertal adolescents with severe obesity with co-morbidities

# KEY OUTCOMES

https://childhoodobesity.ie/

Improve social participation, patient centered and functional outcomes

Depending on child's age, agree weight loss targets with multidisciplinary team

# MODEL OF CARE -REFERRAL

Level 0 – health promotion and community

Level 1a - GP and primary care

Level 1b – Community specialist MDTs

Level 2 - Hospital specialist MDTs

Level 3 – Tertiary care MDT https:// w82go.ie