



Libyan International Medical University
FACULTY OF APPLIED MEDICAL SCIENCES
كلية العلوم الطبية التطبيقية



Obesity in Children

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Objectives



●
Introduction

●
**Effects of genes
on Obesity**

●
**Effects of obesity
in children**

●
**Common diseases
associated with
Obesity**

●
**How to avoid
obesity and
parent's role in
prevention**

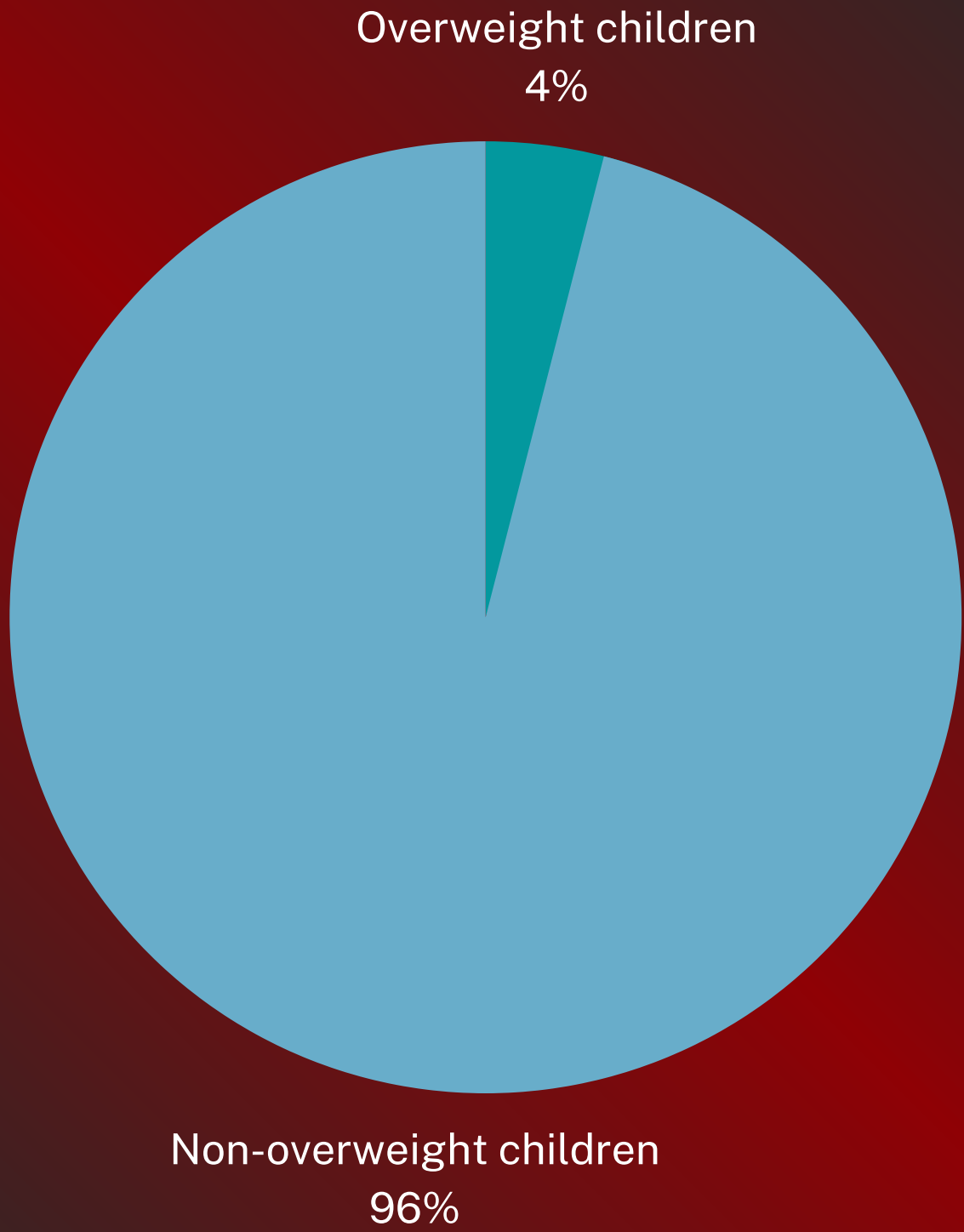
Introduction:

Overweight and Obesity

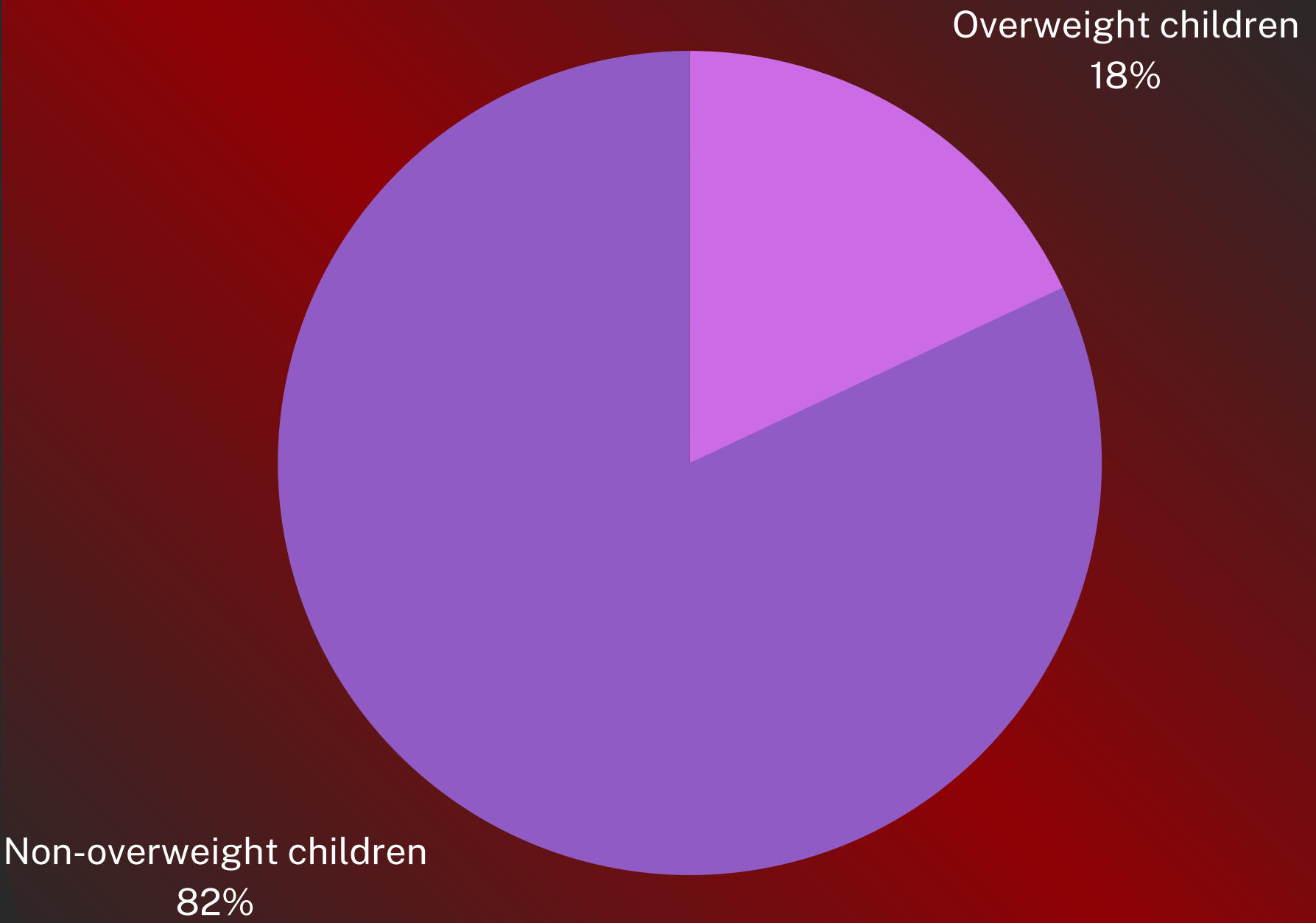
are defined as abnormal or excessive fat accumulation in the body that presents a risk to health

Obesity among children of age 5-19 has risen dramatically from just 4% in 1975 to over 18% in 2016

Percentage of Obesity among children in 1975



Percentage of Obesity among children in 2016



Causes of Obesity

- Could be due to genetic disorders (**Prader-Willi syndrome**).
- Poor diet (**eating larger portions than you need**).
- Lack of physical activity
- Acquired/Medical reasons (**cortiseroide & cushing syndrome**).



Effects of genes on Obesity □



Genes play a significant role in our physical shape and this includes our body weight.. an example of abnormality in genetics that affect weight is:

Prader-willi syndrome

- Occurs due to Interstitial deletion on the long arm of chromosome 15
- Features: Hypotonia, Obesity, Hypogonadism, Small hands & feet



Effects of Obesity in children □



The impact on Children could be affecting:

Physical health:

- Type 2 diabetes
- Hypertension
- Dyslipidaemia
- Hepatic steatosis (fatty liver)
- Cholelithiasis (gallstones)
- Sleep apnea
- Orthopedic problems
- Asthma
- Heart Diseases

Psychological health:

- Low self-esteem
- Negative body image
- Depression
- Stigma
- Negative stereotyping
- Discrimination
- Teasing and bullying
- Social marginalization

Common diseases associated with Obesity



1. Type 2 diabetes



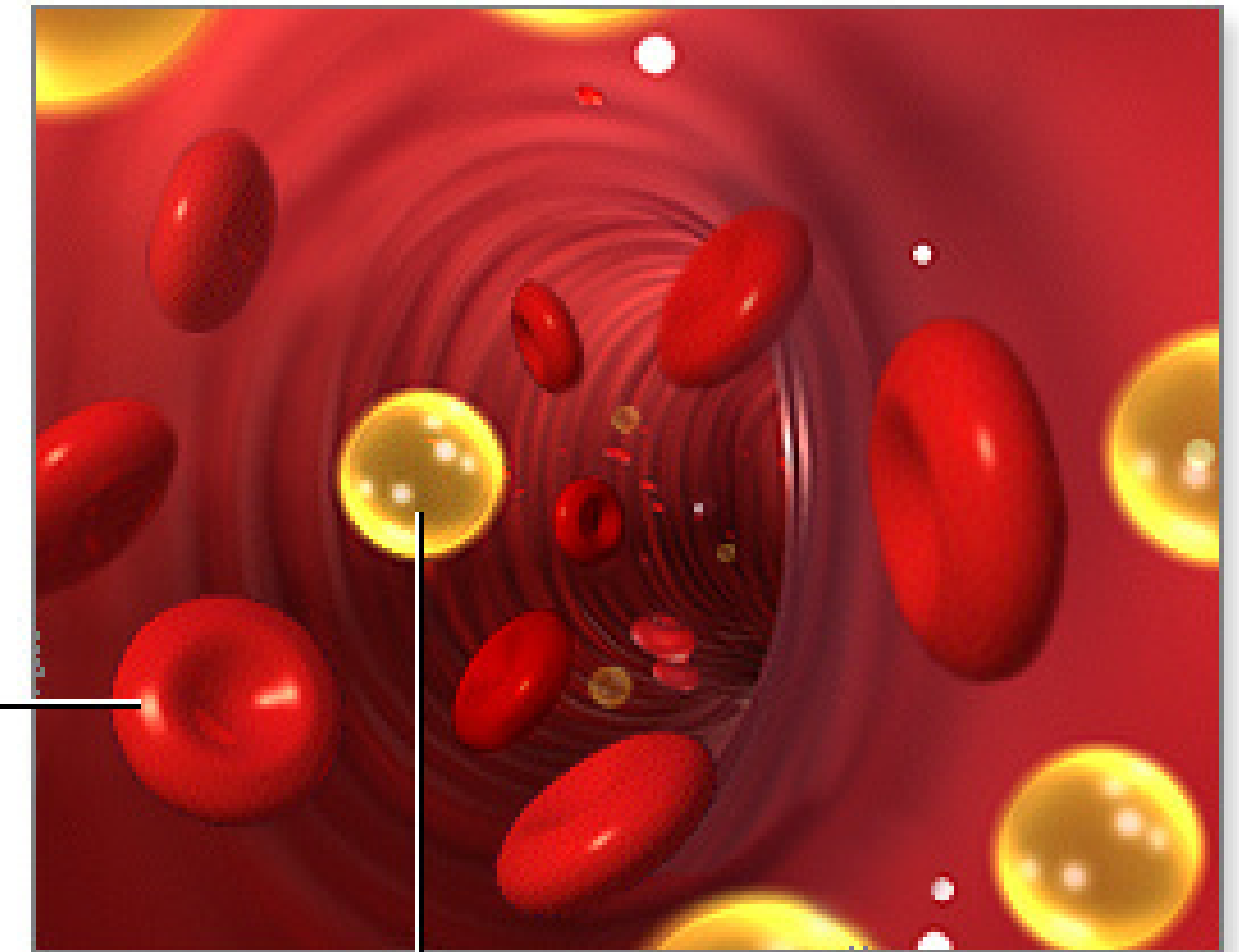
Type 2 diabetes in children is a chronic disease that affects the way your child's body processes glucose for fuel. Without treatment, this disorder causes glucose to build up in the bloodstream, which can lead to serious long-term consequences.

2. High blood pressure & cholesterol



Normal interior view of artery

Red blood
cell



Cholesterol

3. Sleep disorders (sleep apnea)



How to avoid obesity and parent's role in prevention:

- 1. Providing a healthy diet:** can help children get the nutrients they need and help them reach a healthy weight. A healthy diet is rich in fruits, vegetables, lean proteins, and low-fat or fat-free dairy.
- 2. Doing physical activities:** active children have a stronger muscles & bones. They also have lower body fat percentage and better fitness. Regular physical activity also reduces depression during childhood. Children need at least 60 minutes of exercise every day.

3 .Sleep well: Good sleep is critical to prevent type 2 diabetes, obesity, injuries, poor mental health, and problems with attention and behavior. Children with ages 6-12 years old need 9-12 hours of uninterrupted sleep a night and youth with ages 13-18 need 8-10 hours

4. Reduce screen time: Many of children spend their time sitting or laying down with a phone, iPad, computer, watching TV or playing video games (also known as screen time). Too much of screen time has health consequences like poor sleep, weight gain, low grades in school and poor mental health in youth.

Conclusion:

- Please keep an eye of your child weight regularly.
- Encourage them to practice physical activities .
- Keep a track of what your child eat and encourage them to eat homemade, low calorie, healthy food.
- The diseases caused by obesity are chronic, so prevention is a priority.

References:

<https://www.who.int/health-topics/obesity>


<https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight#:~:text=The%20prevalence%20of%20overweight%20and,19%25%20of%20boys%20were%20overweight.>

<https://www.nhs.uk/conditions/obesity/causes/>

<https://childhoodobesityfoundation.ca/what-is-childhood-obesity/complications-childhood-obesity/>

<https://www.mayoclinic.org/diseases-conditions/type-2-diabetes-in-children/symptoms-causes/syc-20355318#:~:text=Overview,occurs%20more%20commonly%20in%20adults.>

<https://www.cdc.gov/nccdphp/dnpao/features/childhood-obesity/index.html>

A close-up photograph of a blue ballpoint pen writing the words "thank you" in a cursive script on a white sheet of paper. The pen is positioned diagonally from the top right towards the bottom left. The background of the entire image is a dark red gradient with a large, semi-transparent circular shape on the left side.

thank
you

A special thanks to Dr. Zinab
Almaghrby for being my teacher