

# Lancet DE Commission on Clinical Obesity

THE LANCET  
Diabetes & Endocrinology



An Academic Health Sciences Centre for London

Pioneering better health for all

## Is Obesity Ill-Conceived?

### Why a Radical Reframing is Needed to Improve Care and Policy

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# Personal Disclosures

Research/Educational Grants: Medtronic, Ethicon, Novo Nordisk

Scientific Advisory Board: GI Dynamics, Keyron, GT Metabolic Solution Inc

Speaking honoraria: Medtronic, Ethicon, Novo Nordisk

## Lancet Commission on Clinical Obesity

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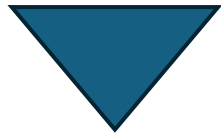
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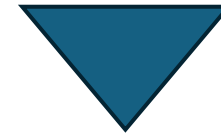
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# Current Definition of Obesity

*“A condition of excess adiposity that poses a **risk** to health”*



Physical phenotype



Health Impact

# “Risk vs Issue”

**RISK**



**ISSUE**



# Risk vs Issue in Medicine

## Health Risk/Hazard

is the likelihood that something **will harm** health.

**A possibility**

## Disease

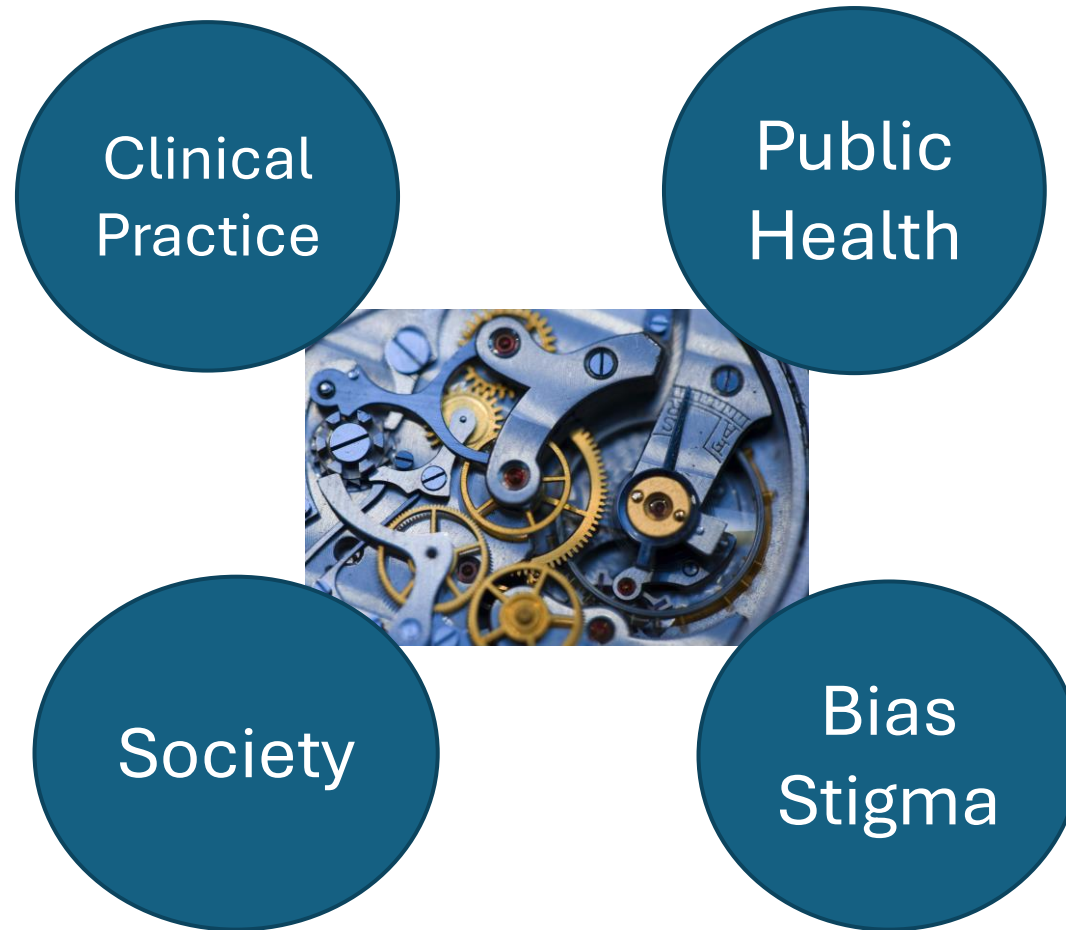
a condition of a person in which the **body is harmed** because an organ or part is **unable to work** as it usually does;  
**an illness.**

	<b>HEALTH RISK</b>	<b>DISEASE</b>
<b>Health Impact</b>	May Occur	Has Occurred
<b>Time Event</b>	Future	Past/Now
<b>Intent of Care</b>	Prophylactic/ Risk Reduction	Corrective/ “Therapeutic”
<b>Objective of Care</b>	Reduction of Risk	Cure/Clinical Improvement
<b>Time Horizon</b>	Long Term	Short Term





# REFRAMING OBESITY as a DISEASE STATE



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The “Utilitarian”  
Argument used define  
obesity as a disease  
contributes to  
controversy

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Obesity is a Disease


Obesity is NOT a Disease





# Limitations of BMI-Based Definition of Obesity



**No "Obesity"**  
*(Normal Fat Mass)*



**Obesity**  
*(Excess Fat Mass)*



**No ongoing illness**      **Ongoing illness**

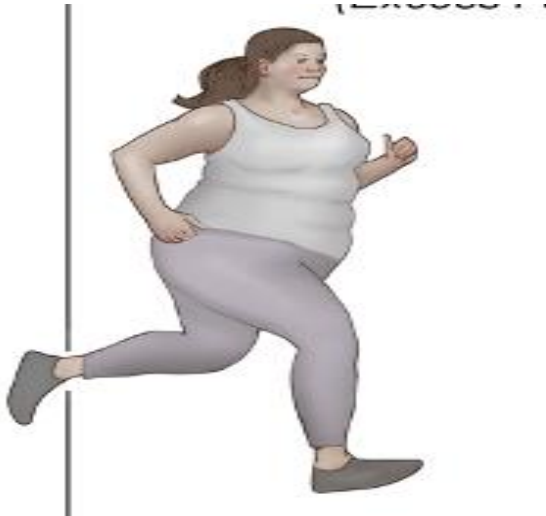
OBESITY (BMI)



# Rugby Star Iona Maher: Defying BMI Criticism With Olympic Glory

Champion faces and overcomes weight critics at 2024 Paris Olympics

[Judy Rotich](#) | Aug 3, 2024

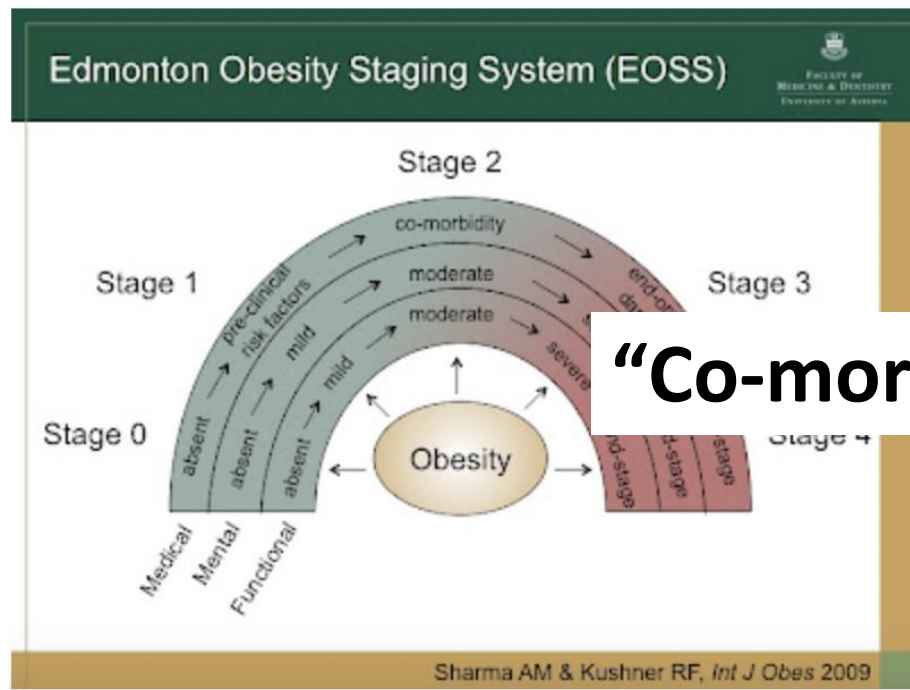


Obesity and Health



# Obesity Scoring Systems Do not Define a Specific (Single) Disease State

## Edmonton Score (EOSS)



## King's Staging Criteria (KOSC)

### Sleep apnea

	Stage 0	Stage 1	Stage 2	Stage 3
		Snoring	Sleep apnea require CPAP	Cor pulmonale
		30-35	35-50	>50
		>25% risk	Heart disease	Heart failure
Diabetes	Normal	Impaired fasting glycemia	Type 2 diabetes	Uncontrolled type 2 diabetes
Economic	Normal	Suf		financial support
Functional	Can manage 3 flights of stairs	Ma		rd
Health status	Normal	Irregular periods	PCOS/impotence	Infertility
Image		Low mood or QoL	Moderate depression or poor QoL	Severe depression
		like looking	Avoids mirrors/body image dysphoria	Severe eating disorder
Junc		rn	Esophagitis	Barrett esophagus
Kidney	Normal	Proteinuria	GFR < 60 mL/min	GFR < 30 mL/min
Liver	Normal	Raised LFT/NAFLD	NASH	Liver failure

### Heart Disease

### Diabetes

# “Obesity +” Insurance Approach

Despite typical signs of ongoing (severe) illness - due to Obesity Alone – treatment may not be covered by current insurance policies

## “JACK”



BMI 37

### Symptoms:

- Fatigue
- Dyspnea on exertion
- Recurrent bilateral knee pain with reduced mobility

### Medical Assessment:

- Reduced diastolic function
- Restrictive pulmonary defect
- Bilateral Knee pain/stiffness
- **No Diabetes**

### Occupation:

Currently unemployed  
Used to work for a moving company  
but he was no longer able to run his  
job’s duties



# A (blanket) definition of obesity as a disease risks to lump along heterogeneous conditions with different biology and health impact

## Significance of Obesity at the Individual Level

- A condition that increases risk of other diseases
- A standalone illness
- A sign of other diseases (Cushing's, hypothyroidism)
- The side effect of medications (e.g. steroids, antipsychotic drugs etc)
- A para-physiological condition with low risk of disease progression

# Obesity as a Disease – Blanket Definition



## WHO definitions

overweight BMI > 25  
obesity BMI > 30.



## WHO 2022

2.5 billion adults overweight.  
890 million with obesity.



1.4 billions will have Obesity by 2035



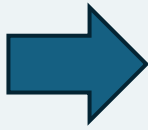
What is a Disease?

# The “Missing Piece” in the Current Framing of Obesity

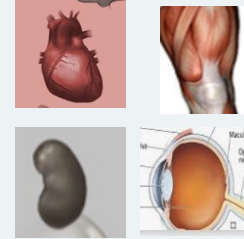
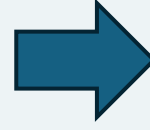
## Disease



Causes of disease



Specific disease mechanisms



Compromised organ function

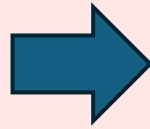


Clinical Manifestations

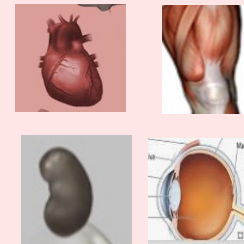
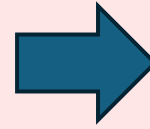
## Obesity



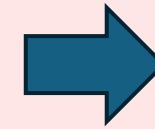
Genetic  
Environmental  
Unknown



Mechanical  
Endocrine/metabolic  
Inflammation



**“Obesity-related diseases”**  
(e.g. diabetes/cancer, etc.) are diseases in their own right,  
not clinical manifestations of a distinct disease entity



# Clinical Manifestations (Illness)

Illness is a subjective and objective experience of disease

Diseases are fundamentally characterised by the ability to cause **illness**.

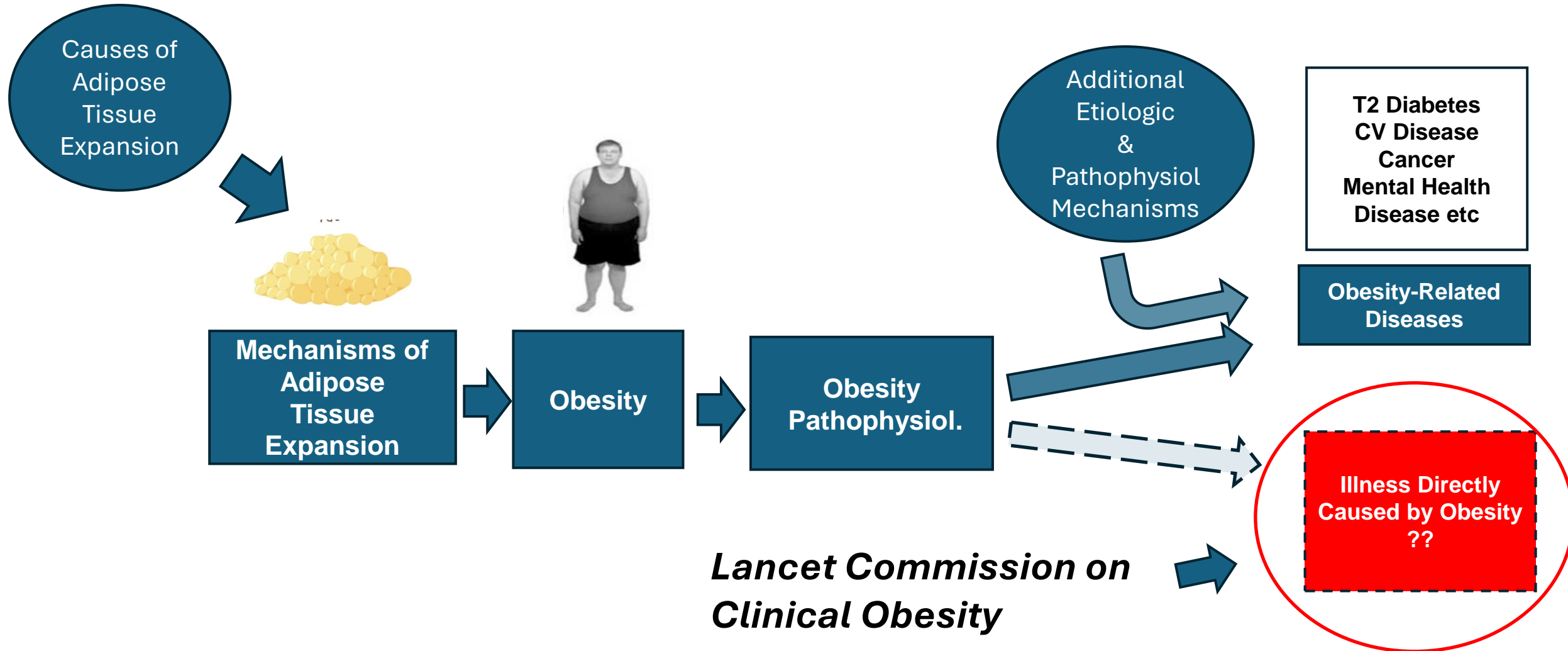


- is the **identity** of a disease
- allows clinical diagnosis
- allows differential diagnosis.



# The Commission's Approach

# Definition of Illness due to Obesity





## Diagnosis of lupus: ACR criteria<sup>1</sup>

- Antinuclear antibodies
- Malar rash
- Discoid rash
- Photosensitivity
- Oral or nasal ulcers

**Four or more criteria must be present for confirmation of diagnosis**

- Kidney disease indicated by protein or casts in the urine
- Neurological disorders such as seizures and psychosis
- Haemolytic anaemia, leukopenia, and lymphopenia.

## Clinical depression: DSM-5 criteria<sup>2</sup>

- Depressed mood most of the day, nearly every day.
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
- Significant weight loss when not dieting or weight gain, or decrease or increase in appetite nearly every day.
- A slowing down of thought and a reduction of physical movement.

**Five or more criteria must be present for confirmation of diagnosis**

- Excessive or inappropriate guilt
- Diminished ability to think or concentrate, or indecisiveness, nearly every day.
- Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

# Clinical Diagnosis vs Physical Phenotype



**Obesity (Excess Adiposity)**

**Preserved Health**

**(Variable) Risk**

**Illness  
(Clinical Obesity)**

**Issue**

## PHYSICAL PHENOTYPE

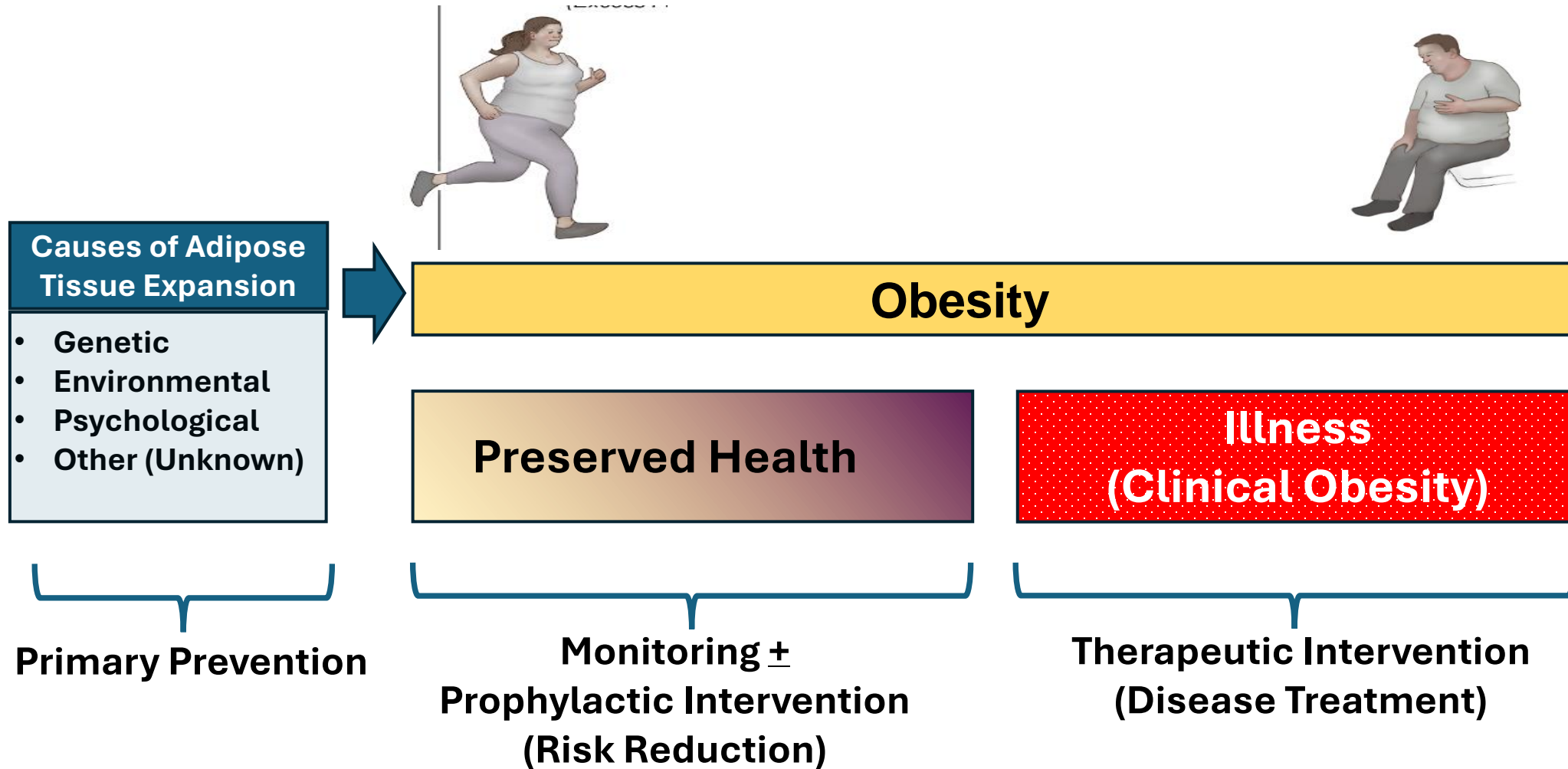
adiposity-related risk  
exists as a continuum

## CLINICAL DIAGNOSIS

Health & Illness are  
objective, binary conditions



# Scope of Care in Obesity: Primary Prevention, Risk Reduction and Disease Treatment



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**Coming soon.....**