

# Olce of the Participant NICHD, September 2025

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Role of Semaglutide in Restoring Ovulation in Youth and Adults with Polycystic Ovary Syndrome (RESTORE) NIH NICHD R01HD108340, NCT05819853



## **Polycystic Ovary Syndrome**

Menstrual cycle irregularities
Elevated testosterone or signs of elevated testosterone
Polycystic ovaries (only adults)

Hirsutism
Acne
Balding
Acanthosis
Hidradenitis
CARP

Infertility
Miscarriage
Pre-eclampsia
Gestational diabetes
Small/Large infants
Endometrial cancer

Obesity
Type 2 Diabetes
MASLD
Hypertension
Hyperlipidemia
Sleep apnea

Anxiety
Depression
Sexual Dysfunction
Disordered Eating
Low Quality of Life



## **PCOS** and Weight



Losing >5 % of body weight

Testosterone

Insulin

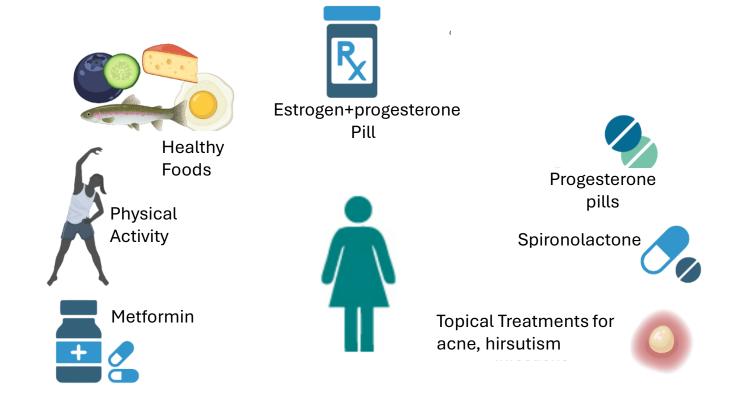
Infertility
Pregnancy Complications
Excess hair growth on face and body
Acne
Depression/Anxiety

Sexual Dysfunction

Excess Weight
Type 2 Diabetes
Excess Liver Fat
High blood pressure
Sleep Apnea
High Cholesterol



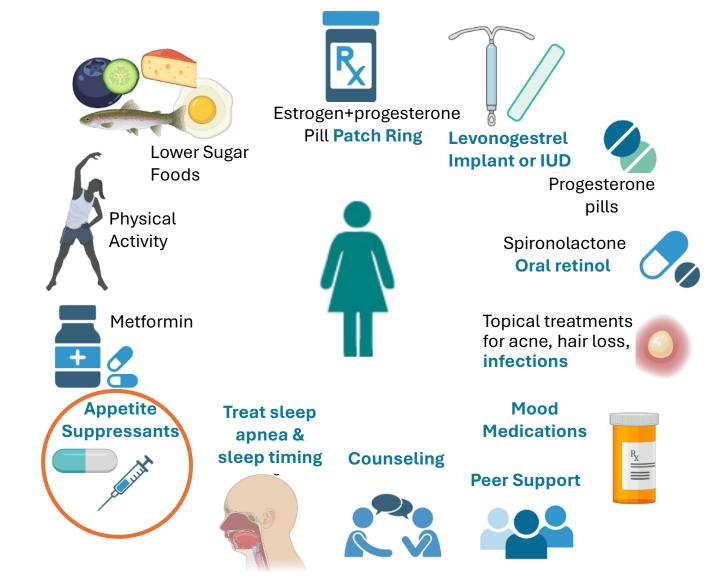
### **Initial Treatment Options**



# Little change in > 30 years

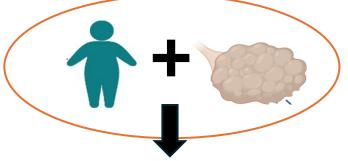


### **Practical Treatment Options for PCOS**





#### PCOS and Weight Loss Medications



Losing 5 % of body weight

Weight Loss Medication (GLP1-RA)

**±Metformin** 



Testosterone





Excess hair growth on face and body
Acne
Depression/Anxiety



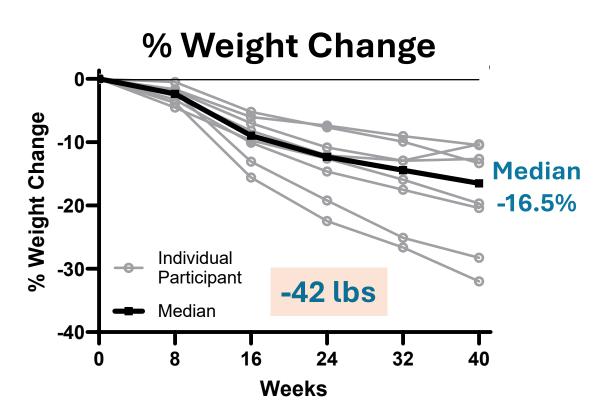
#### **Excess Weight**

Type 2 Diabetes High blood pressure High Cholesterol

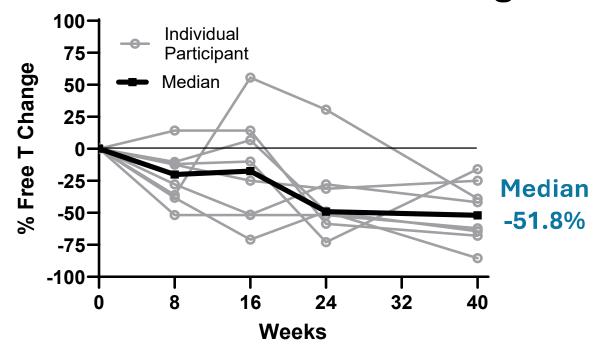


#### PCOS+Semaglutide Trial Early Findings

10 months of weekly injections of semaglutide First 8 participants to lose > 10 % weight



#### **% Free Testosterone Change**



6 – more menses

1 - same menses 1 - less menses





#### **GLP1RA +/- Metformin to Improve Reproduction**

