

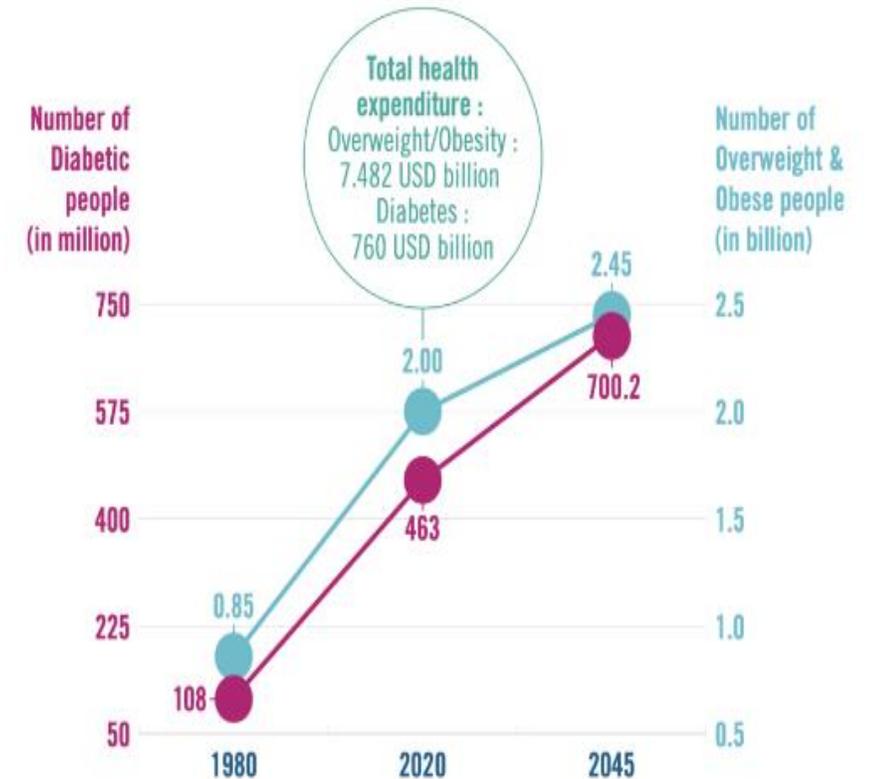
Obesity

Dr .A. Saidpour



• Prevalence

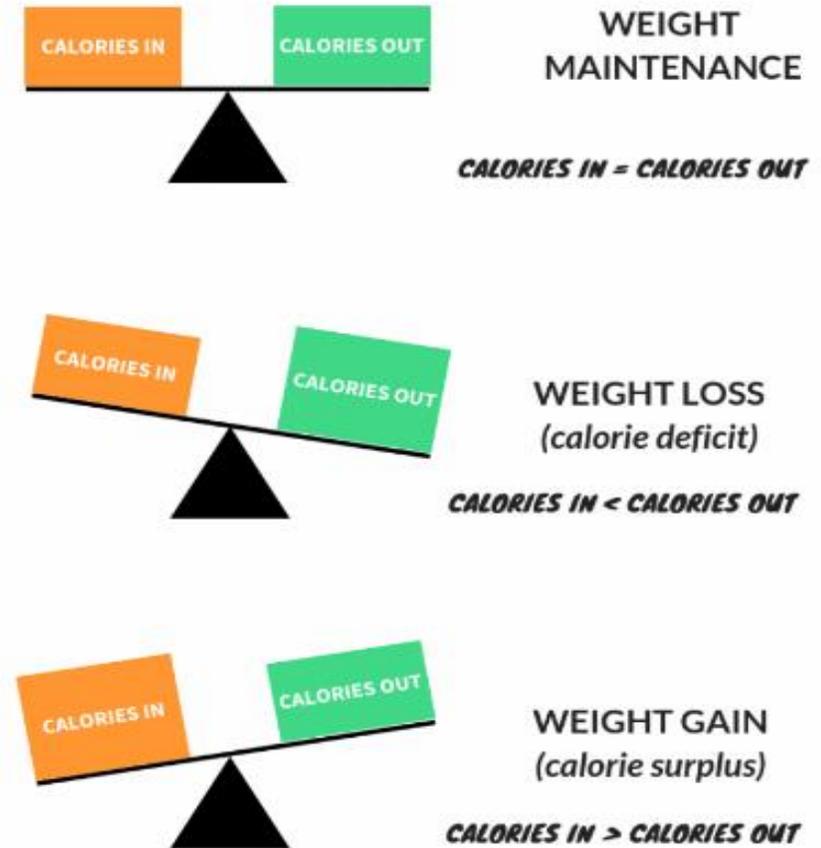
- in 2020, more than 2 billion adults (39% of the adult global population) were overweight (BMI > 25), almost **half of the world's adult population will be overweight or obese by 2030**.
- **Central obesity** has risen steadily, and **by 2030** is projected to reach 55.6% in men, **80.0% in women**, 47.6% among girls and 38.9% among boys



main causes of the obesity epidemic

- Increased energy quantity/density
- a more sedentary life-style

- So: eat less, move more



Question

- Diet composition
- what about the type of calories: Does it matter whether they come from specific nutrients? Specific foods? Specific diets? and what about when or where people consume their calories



• Response

- TEF
- The effect of diet on intestinal microbiome
- Lipogenesis and hormonal regulation of fat metabolism
- insulin and leptin resistance (high leptin without reduction in energy intake)



• **What type of diet is recommended for weight loss or weight maintenance?**

- Low-fat diet
- Low-carb diet
- High-protein diet



• **Low fat diet**

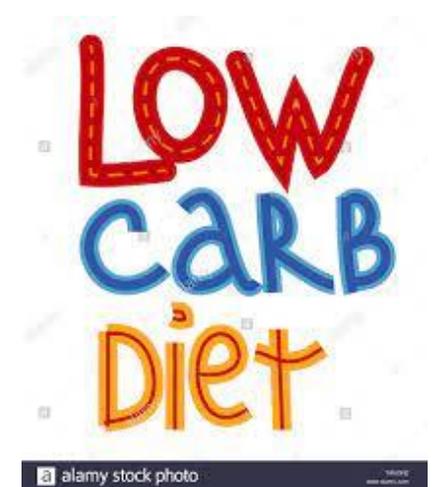
- as the key to a healthy weight
- lose weight
- are often high in carbohydrate
- type of fat
- Nurses' Health Study



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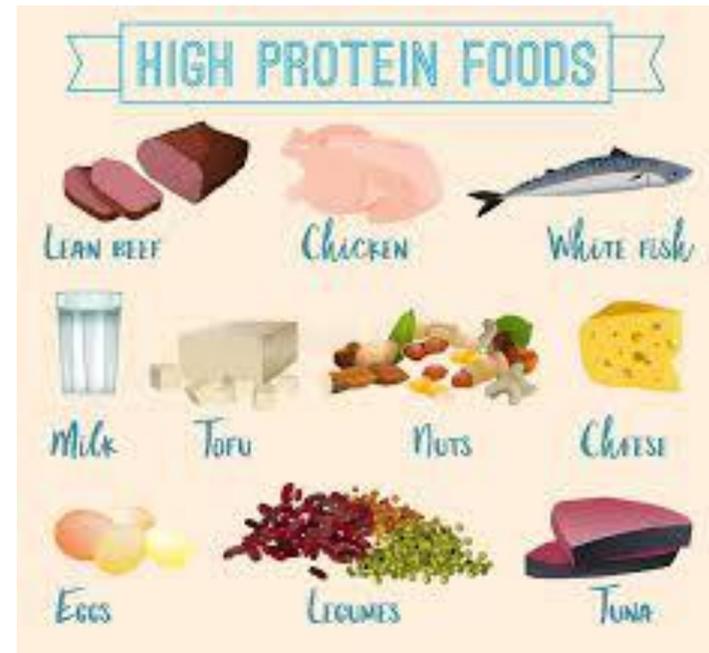
• **Low carb diets**

- limits carbohydrates and emphasizes foods high in protein and fat.
- used for weight loss/ reducing risk of type 2 DM and MS
- greater short-term weight loss
- feel full longer
- side effects: Constipation, Headache, Muscle cramps
- not recommended previously due to low adherence to the diet
- Quality is more important than quantity



• High protein diet

- weight loss (short-term trials; longer term studies)
- low in carbohydrate and high in fat
- More satiety, Greater thermic effect, Improved body composition
- improve blood lipid profiles and other metabolic markers
- Type of protein



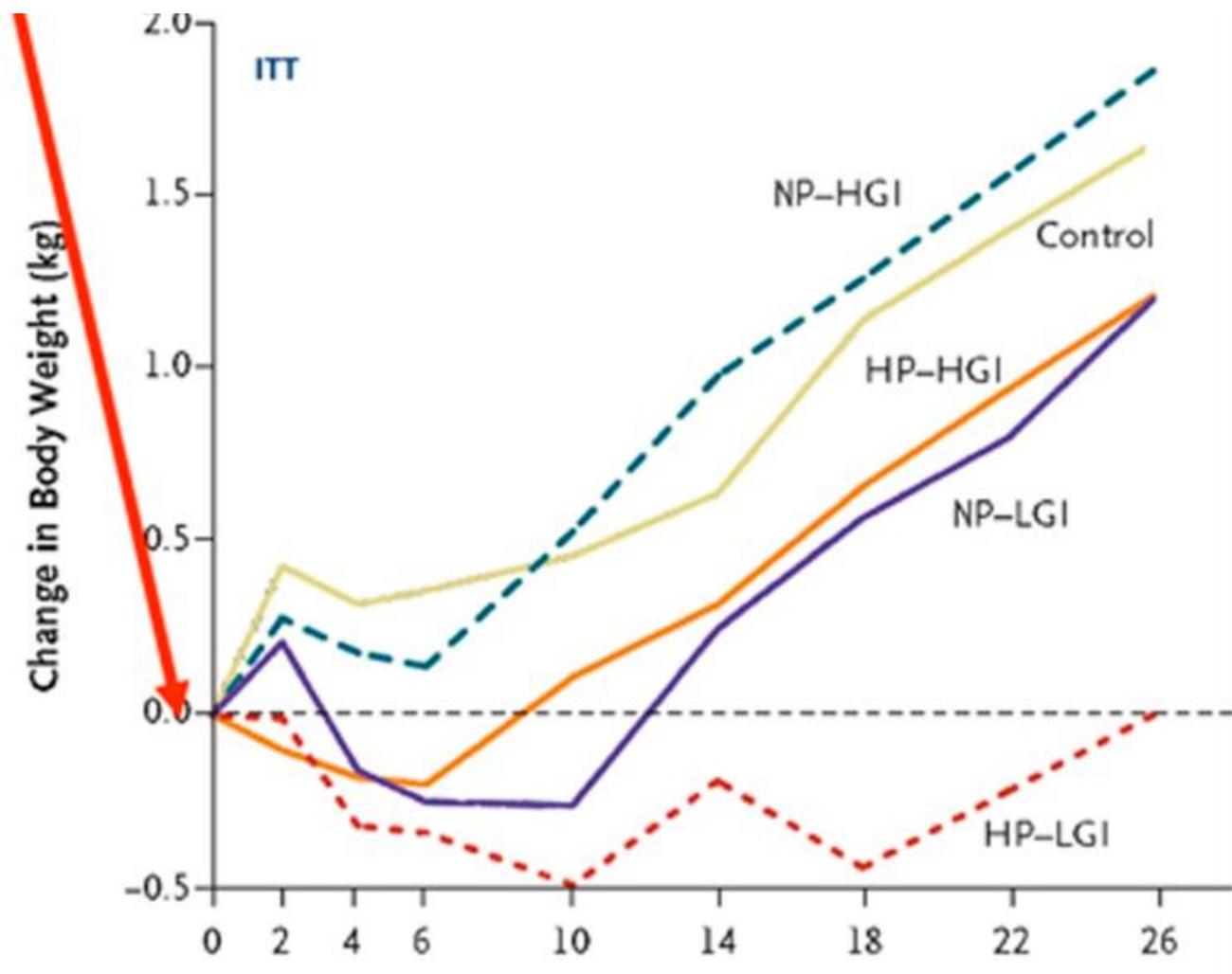
- **Optimal diet for weight loss and weight maintenance**

- **higher protein diet and low GI**

- **The mechanisms:**

- thermic effect of protein is greater than that of carbohydrate or fat
- greater satiety effect than the other macronutrients
- satiety effect of protein is partly mediated by a synergistic effect of the satiety hormones GLP-1 and PYY released from the small intestine
- preserve lean body tissue







THANK
YOU

• Reference

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