

WHAT IS THE DOWNSIDE OF LOW-CARB DIET?

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LOW-CARB DIET

- Diet method that allows you to diet while eating a lot of fat and less carbohydrates



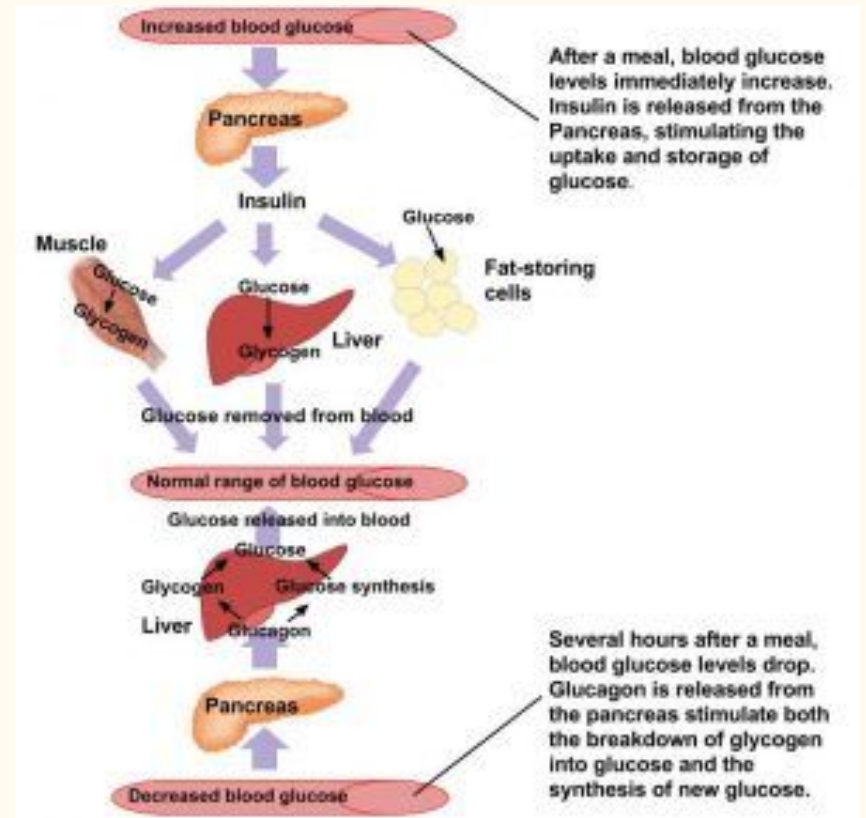
DIET



- Purpose to lose weight
- Decrease Ingested Energy (intermittent fasting)
- Increase Consumed Energy (exercise, **Low-carb diet**)

CARBOHYDRATE

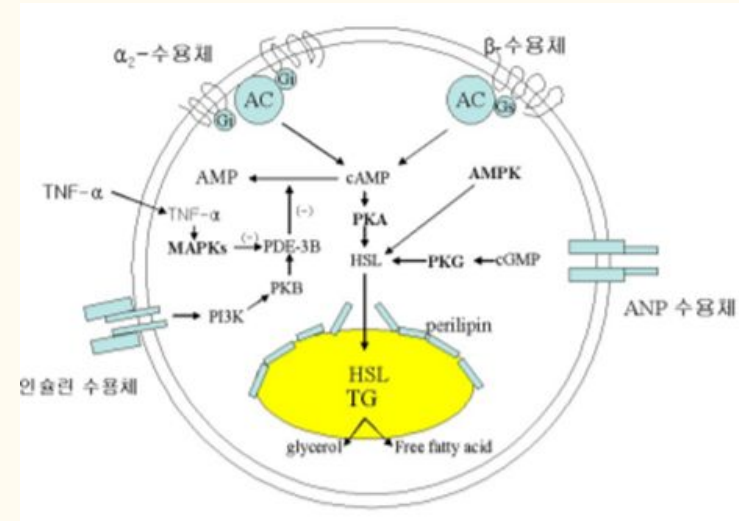
- Turned into glucose when absorbed
- Increase blood glucose
- Increase insulin



INSULIN AND FAT

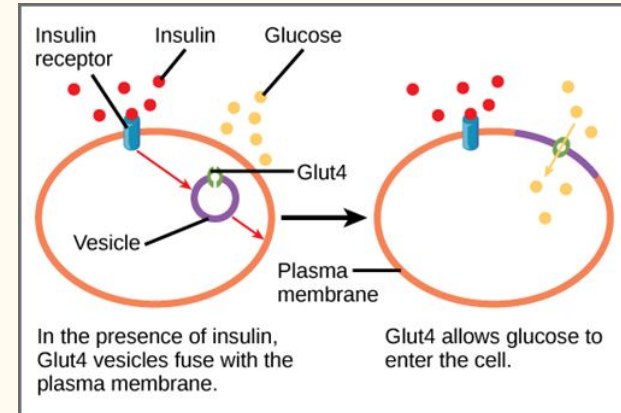
1. Decomposition of fat

- cAMP is important in fat decomposition
- Insulin promotes decomposition of cAMP



2. Increase glucose absorption

- Insulin attribute to insulin-sensitive cells
- Insulin make Glut4(glucose receptor) out to cell membrane from inside the cell
- Glucose metabolism produces enzymes essential for fat synthesis



PERSPECTIVE ON ENERGY CONSUMPTION

- Carbohydrate(coal)

Only use for energy source (heat)

- Fat(oil)

Various uses like cell membrane, hormones, body temperature (chemistry, plastic)

Our body use carbohydrate as energy source than using fat



Only energy



Cell membrane, hormone,



3d Energy Company Blog

PURPOSE OF LOW-CARB DIET

1. **Less insulin**

- Less carbohydrate → Less insulin secretion → Less insulin resistance → lose weight

2. **Lower leptin resistance**

- Leptin is appetite suppressant hormone
- Higher insulin resistance make leptin resistance
- By lowering insulin resistance, recovery of leptin perform

3. **Ketosis station**

- Using ketone as energy source
- Easy to consume body fat

RATIO OF FOOD

1. Carbohydrate

- Make lots of insulin
- Continuous ingestion make insulin resistance
- Main source of gain weight → less amount (2)



2. Protein

- Lots of intake can strain liver and kidneys
- Some amino acids make insulin
- Too many intake is not good → proper amount (3)



3. Fat

- Main source of energy instead of carbohydrate
- Important to gain energy → lots of amount (5)



NUTRITIONAL BENEFITS LOST FROM A LOW-CARB DIET

1. Whole grains (bread, cereals, grains)

- Excellent source for fiber and vitamin B
- Promote heart health
- Prevent childbearing women from having babies with neural tube defects



2. Fruits and vegetables

- Rich sources of fiber, vitamins, minerals, and phytochemicals that help protect against disease



3. Dairy products

- Good source for calcium and vitamin D
- When our body is deficient in calcium, our body takes it out from the bones and may put us into risks of osteoporosis



PROBLEMS THAT ARISE FROM DOING LOW-CARB DIET

1. Constipation

- Due to large amount of fiber (from fruits and vegetables) removed from the diet, regular bowel function is disrupted

2. Heart disease

- More fats, often saturated fats in the diet plan can increase the level of LDL (low density lipoprotein)
- This raise blood cholesterol levels and form deposits in the walls of arteries.
- May cause coronary heart disease (CHD)
- Not a direct downside of low-carb diet

3. Bone loss

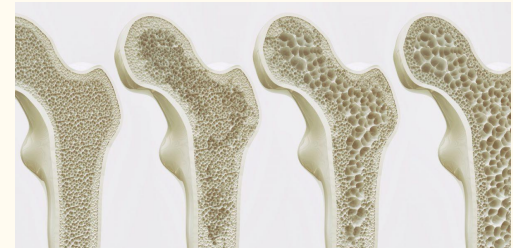
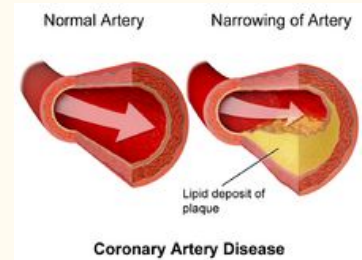
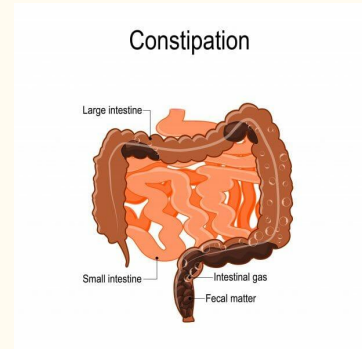
- Less calcium can cause bone diseases like osteoporosis

4. Damage to kidney function

- Kidney is responsible for eliminating the by-products of protein metabolism
- High amounts of protein put strain on kidney function

5. Negative effect on sports performance

- Carbohydrates are beneficial for muscles and brain for energy



WHO SHOULD AVOID LOW-CARB DIET?

Low-carb diet is NOT appropriate during:

- Pregnancy
 - Lactation
 - Childhood
 - Pre-teen or teen years
-
- Poor growth
 - Hinder the production of breast milk



HEALTHIER ALTERNATIVE DIET PLAN FOR LOSING WEIGHT

- Low-carb diet should be done for short period of time
- Incorporate carbohydrate into your diet to increase variety of nutrition
- Set a goal that is achievable
- Slowly reduce your meal size
- Exercise a lot
- Do not just depend on diet supplements
- Drink lots of water.
 - It suppresses your appetite
 - Increases calorie burning
 - Helps to remove waste from your body

SOURCES

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