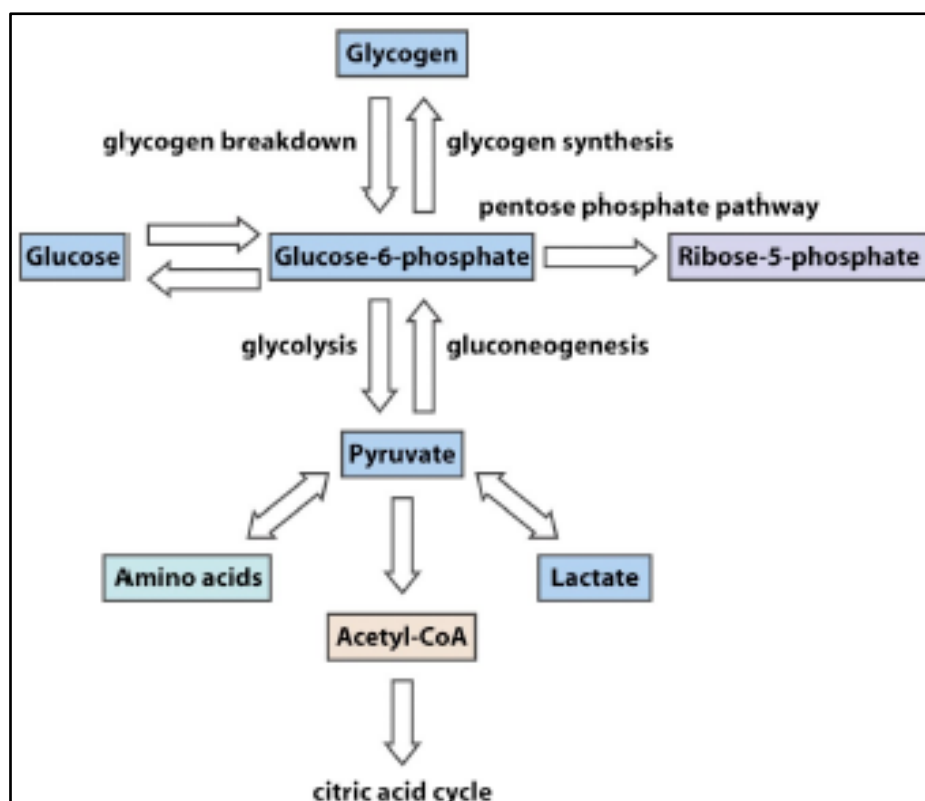


## ***Glucose Metabolism***

Glucose is stored in the body as glycogen. It is storage in the liver, when the blood glucose concentration is low glycogen is mobilized and converted to glucose by gluconeogenesis. Gluconeogenesis is very important to maintain blood glucose concentrations, for example during starvation and intense exercise.

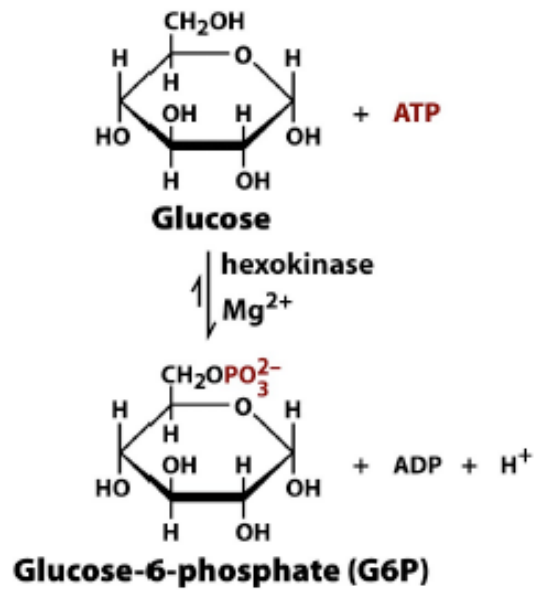
The body usually derives glucose from carbohydrates. Many foods which are rich in carbohydrates have high starch and sugar content. They generally include potatoes, pastas, breads, cereals and rice. After meals, carbohydrate metabolism takes place in the digestive tract where they are converted into glucose and absorbed in the blood. If the glucose level in the blood increases, insulin is to release from pancreas, which is a part of the endocrine system could keep the level of glucose under control.

***The overview of Glucose Metabolism can be shown below:***

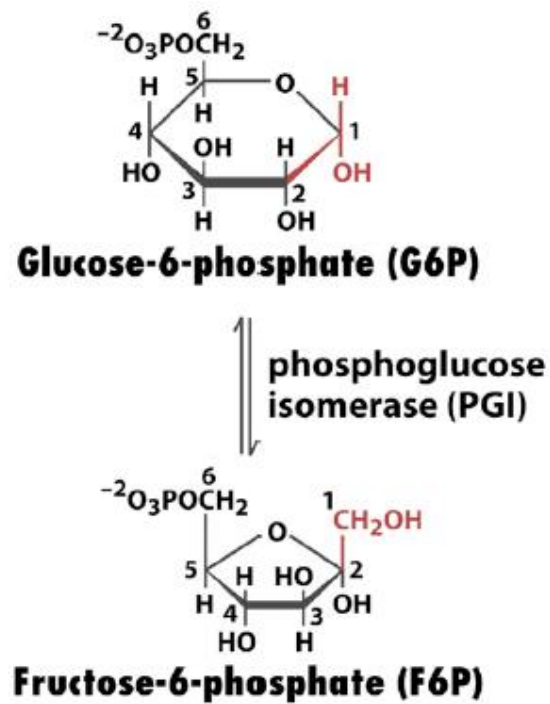


## *Glycolysis*

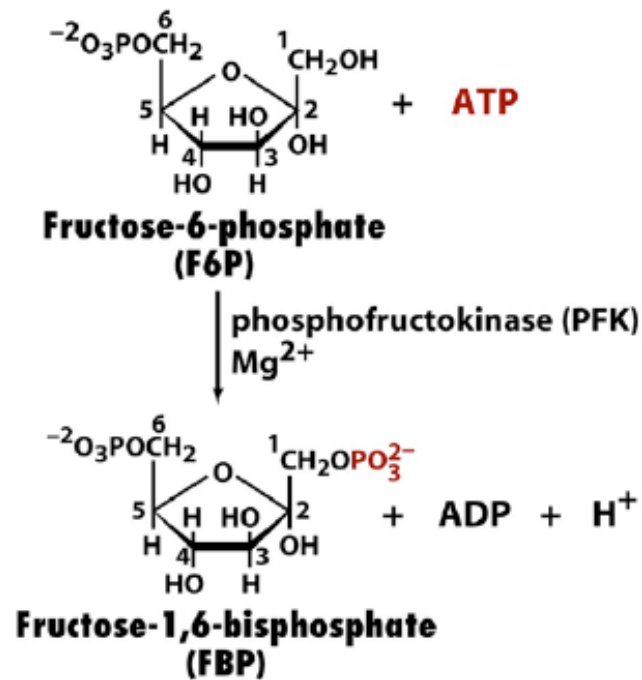
### Step 1



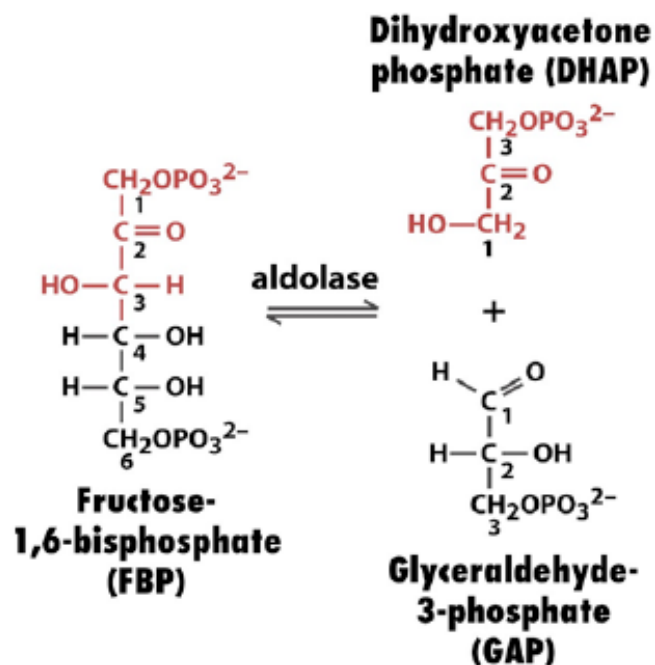
### Step 2



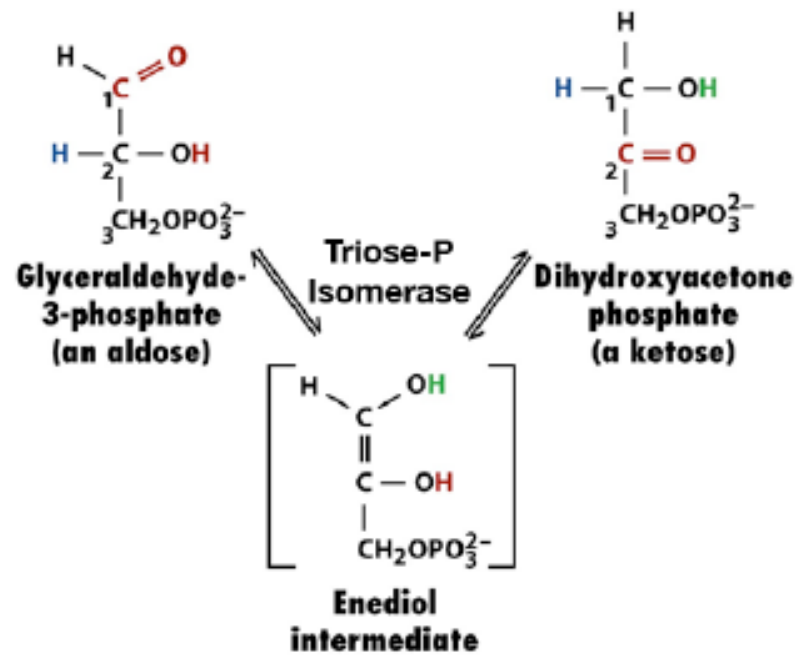
### Step 3



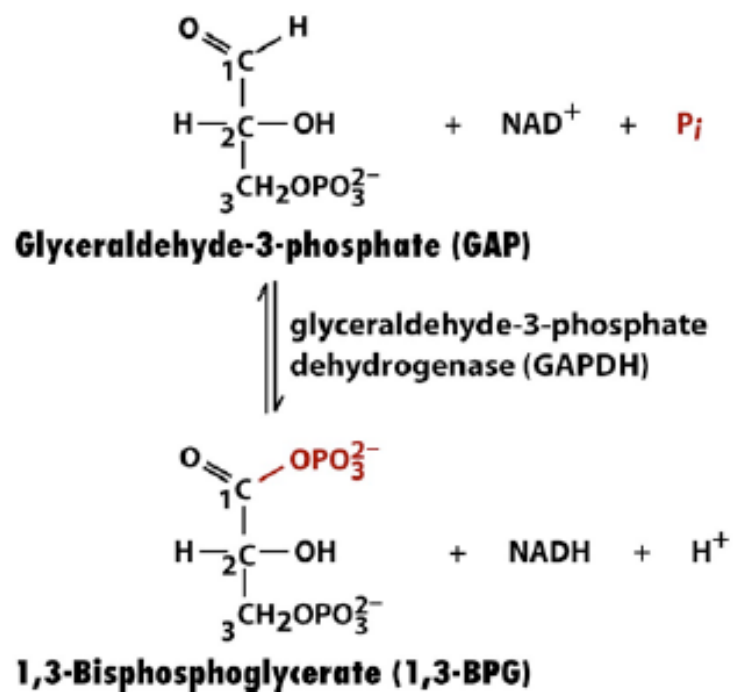
### Step 4



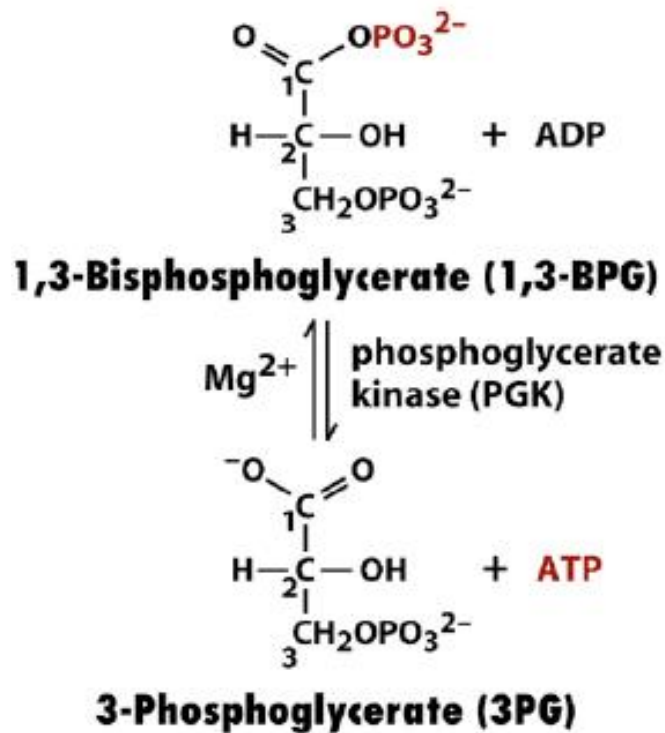
## Step 5



## Step 6

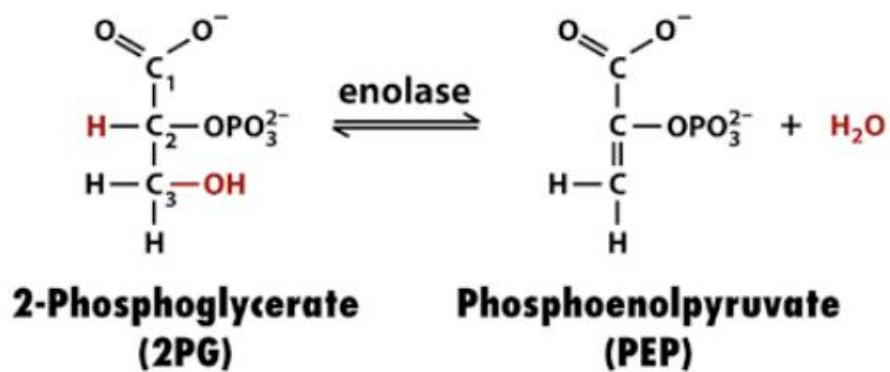


Step 7

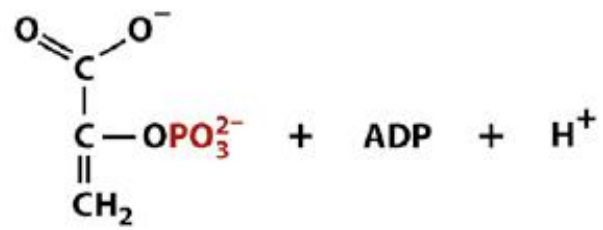


Step 8 *phosphate group on C3 moved to C2 to give 2-phosphoglycerate*

Step 9



## Step 10



**Phosphoenolpyruvate (PEP)**

pyruvate  
kinase (PK)

