



Ruta de las Pentosas fosfato

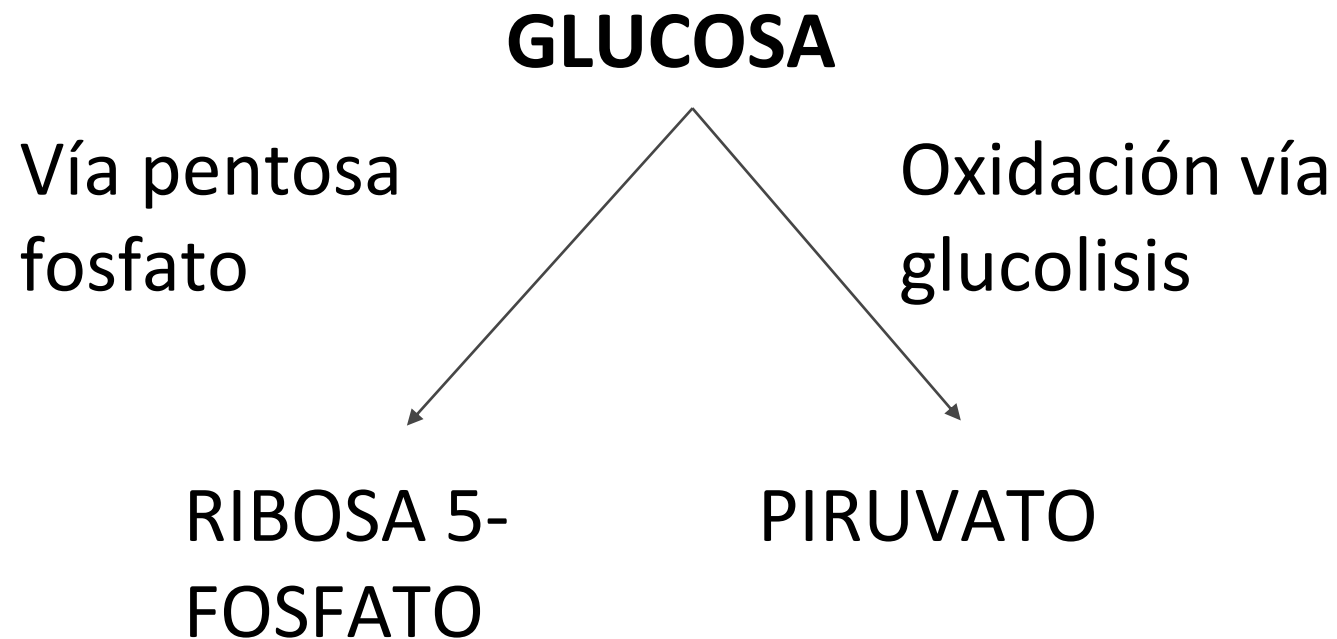
Fundamentos de bioquímica

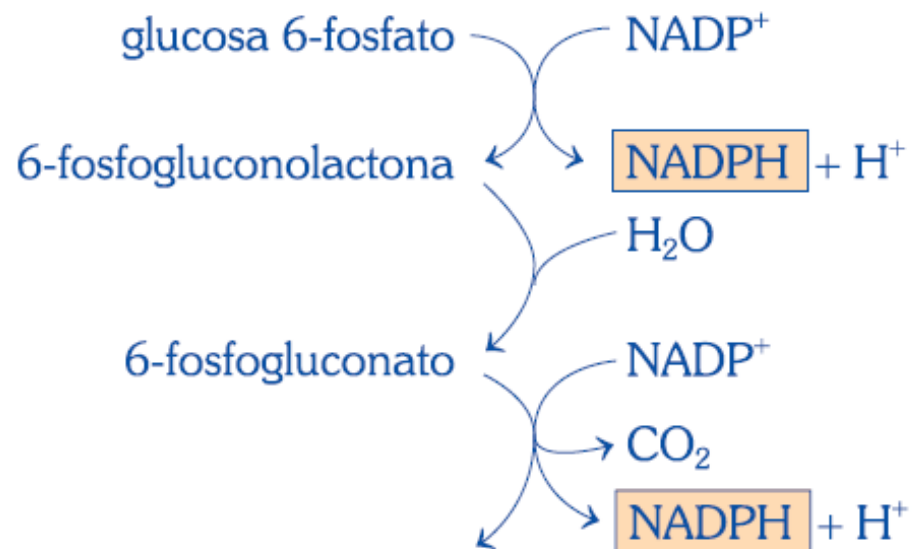
Marga Rodríguez Espejo



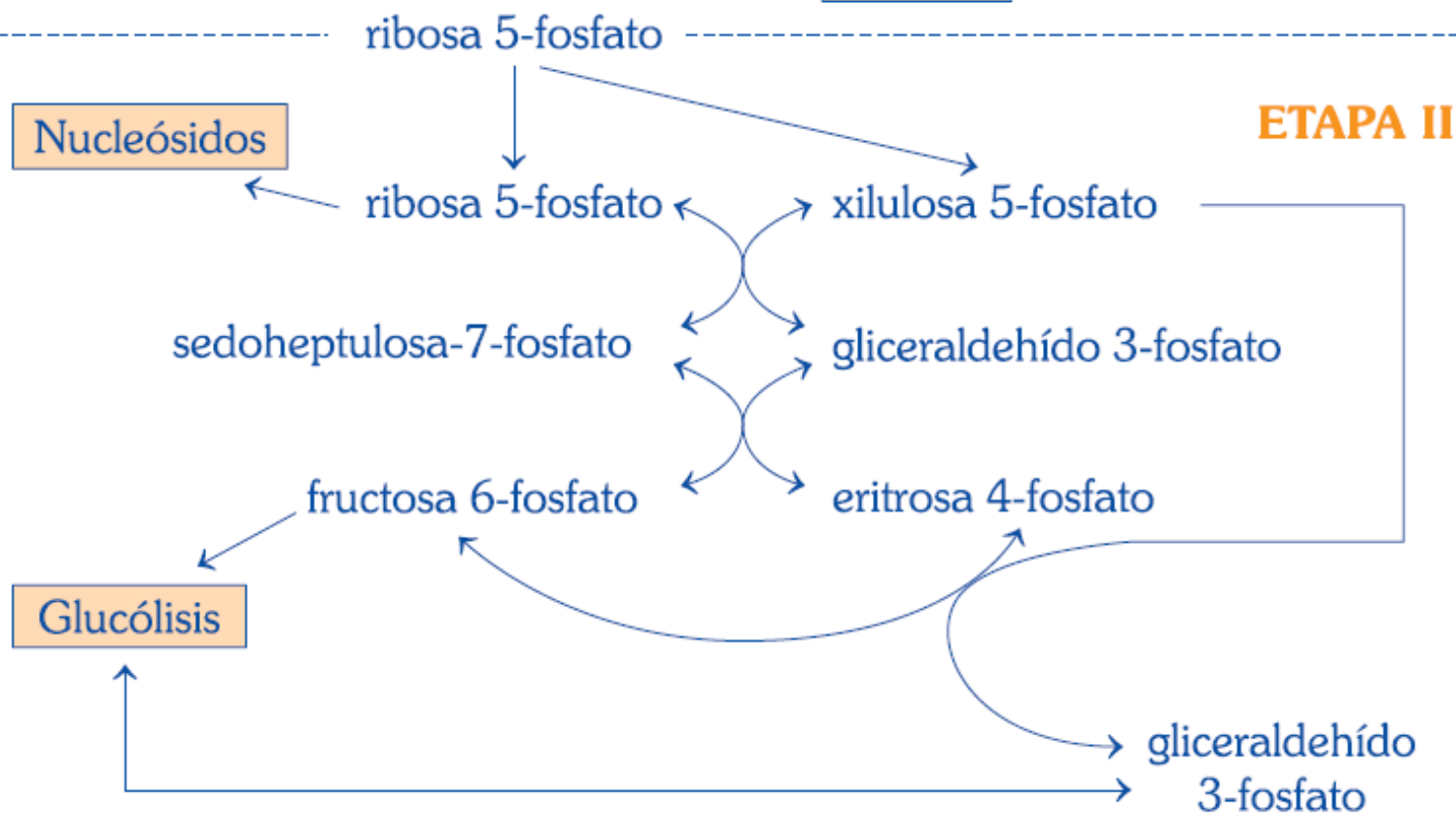
Ruta de las pentosas fosfato

- originar poder reductor en forma de NADPH
- obtener pentosas: D-ribosa.

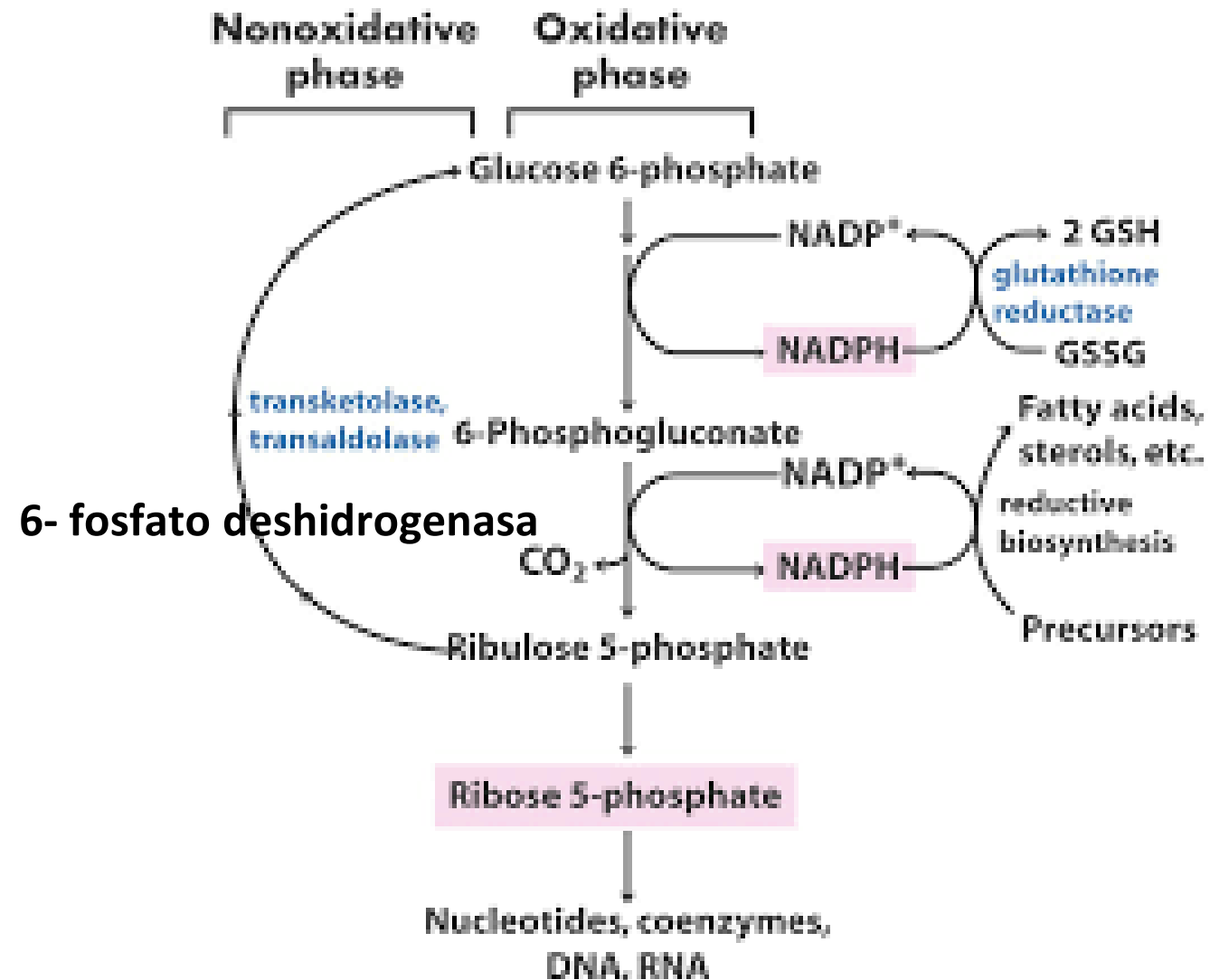




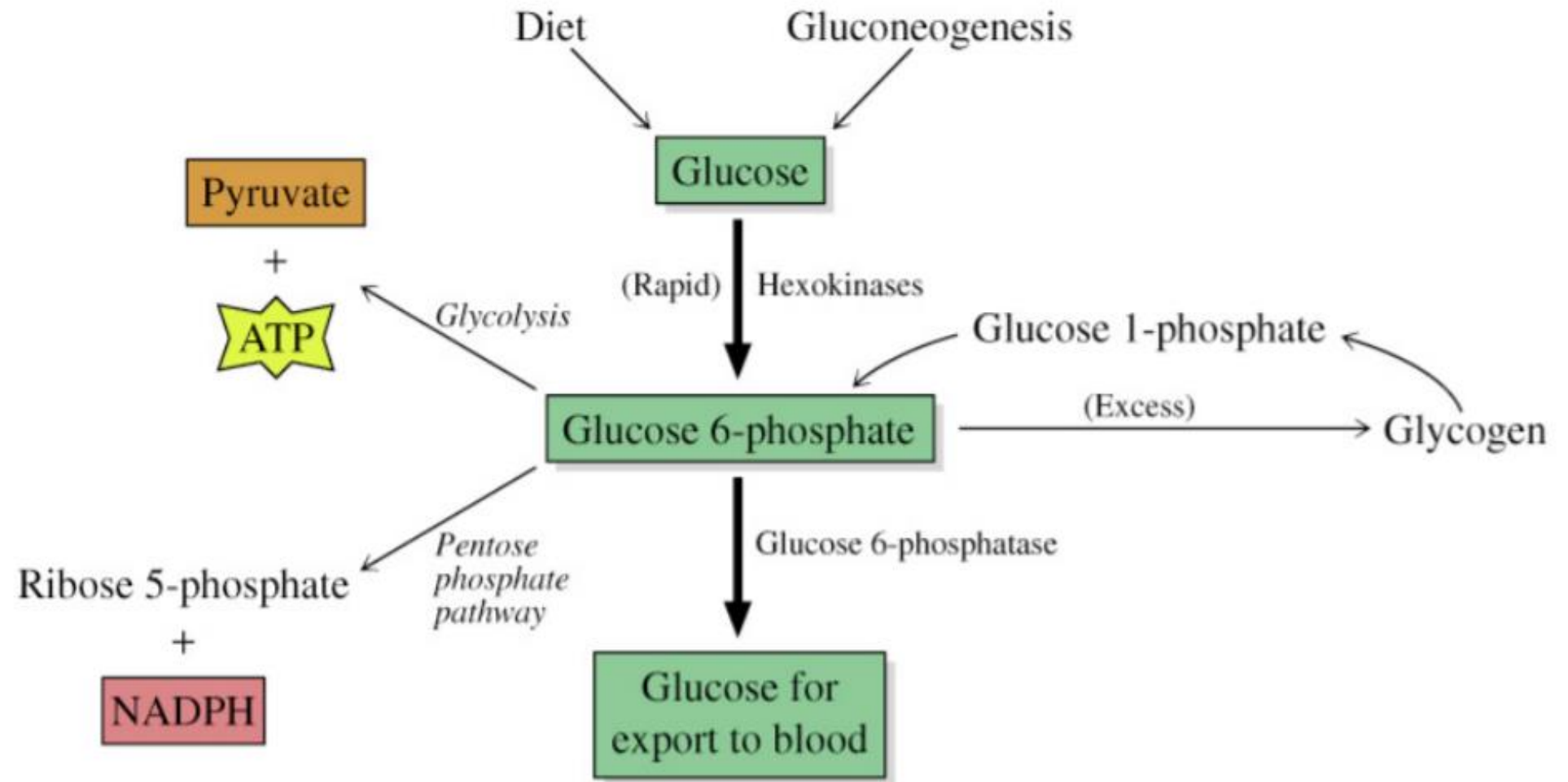
ETAPA I



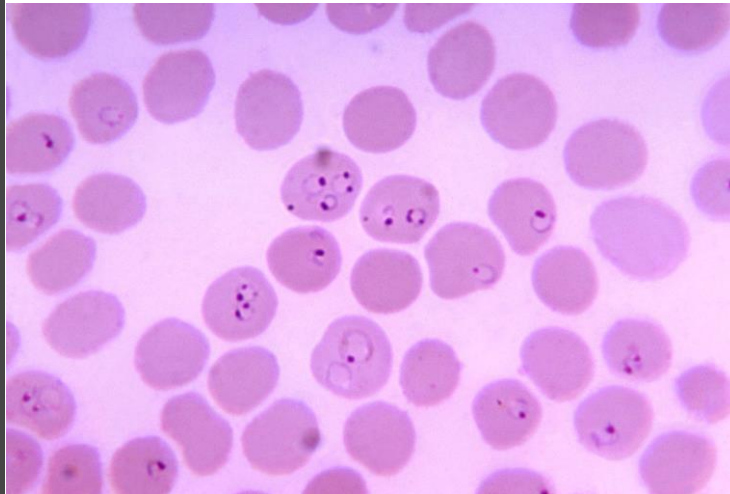
Regulación de la ruta



Resumen rutas



Deficiencias de la glucosa 6-fosfato deshidrogenasa



Mitochondrial respiration, ionizing radiation, sulfa drugs, herbicides, antimalarials, divicine

Superoxide radical $\cdot\text{O}_2^-$

Hydrogen peroxide H_2O_2

Hydroxyl free radical $\cdot\text{OH}$

Oxidative damage to lipids, proteins, DNA

glutathione peroxidase

$2\text{H}_2\text{O}$

2GSH

GS-SG

glutathione reductase

NADP^+

$\text{NADPH} + \text{H}^+$

Glucose 6-phosphate

glucose 6-phosphate dehydrogenase (G6PD)

6-Phospho-glucono- δ -lactone



Gracias