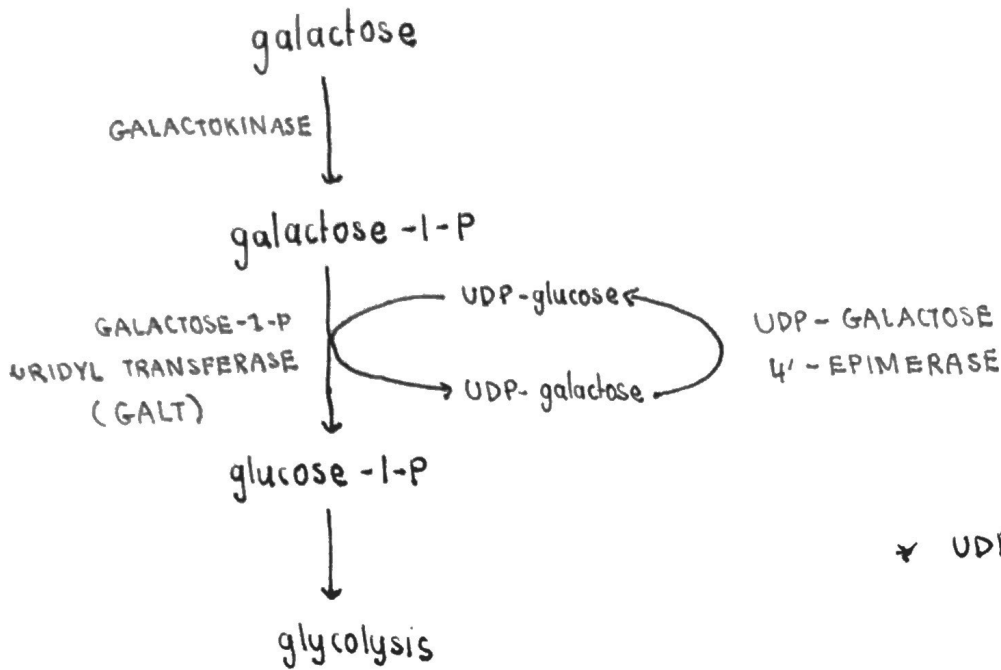


# Energy production (2.5)

## Galactose metabolism

lactose = galactose + glucose

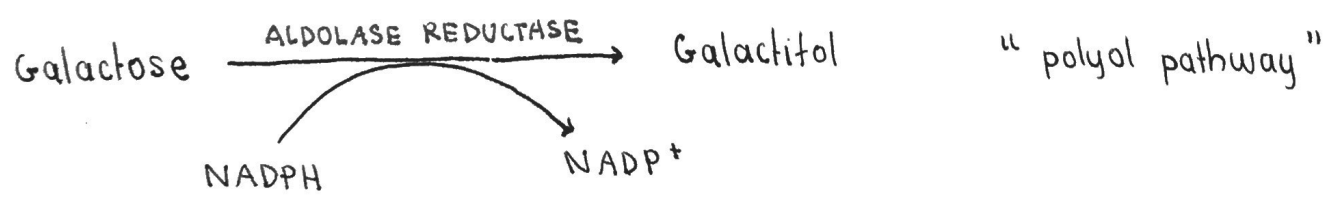


\* UDP-glucose acts catalytically

## Galactosemia

- milk rich diet (infancy)
- unable to utilise galactose
- galactokinase deficiency = RARE → galactose accumulates
- TRANSFERASE deficiency = COMMON → galactose and galactose-1-P accumulate

PROBLEM → galactose enters other pathways



- ↓ NADPH = ↑ disulphide bridge formation (in eye)
- depletion of lens = damage = cataracts

TREATMENT → remove lactose from diet