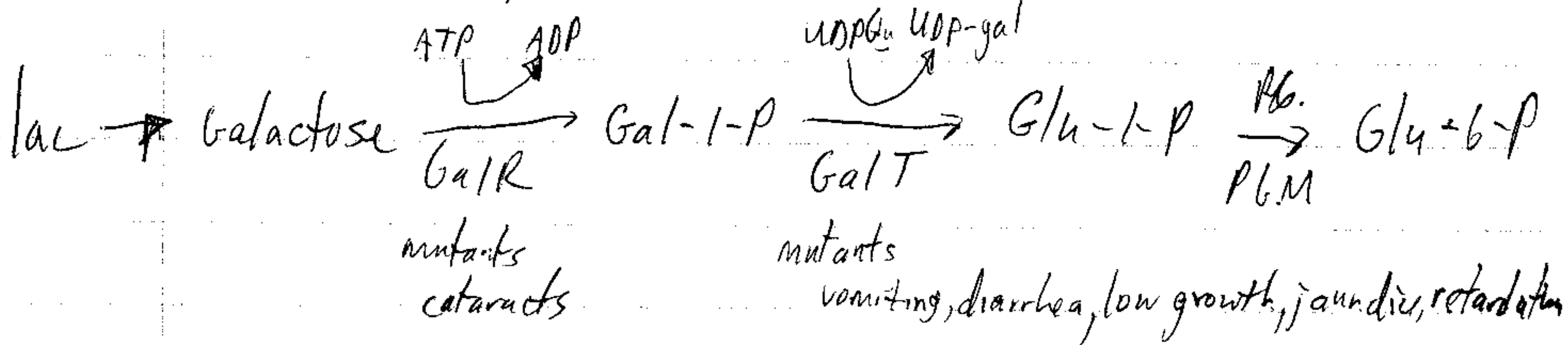


## Milk, Mutation, & Death



## Children w/ GalT mutations

- acute symptoms can be limited by removal of lactose from the diet

- however <sup>other</sup> symptoms show up after puberty

## GalT mutants

- 1/50,000

- no apparent geographic/ethnic pattern

Why do symptoms show up later?

① gal still in diet

② gal from UDPG

③

## GalT genes

- E. coli & yeast genes don't hybridize w/ genomes of other species
- However E. coli & yeast proteins do have some homology
- Used to pull out human gene
- Had much homology w/ E. coli & yst

## GalT mutants

- none appeared to be nonsense, deletions...
- guess -- maybe only missense because some needed
  - e.g. to make UDP-gal

### EVIDENCE

low galT → low UDP-gal in cell culture  
→ alterations in gal-residues in brain