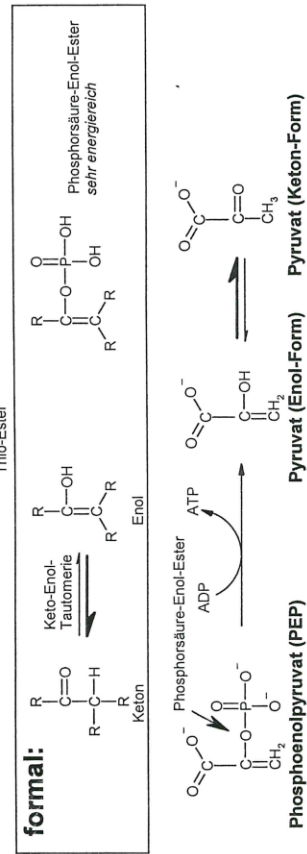
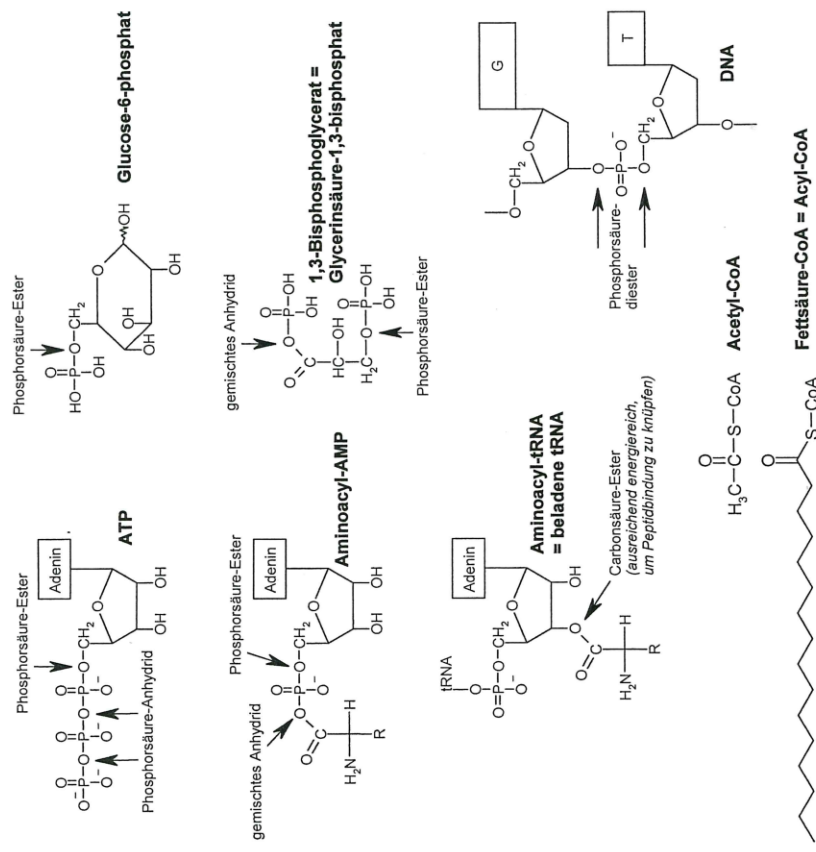
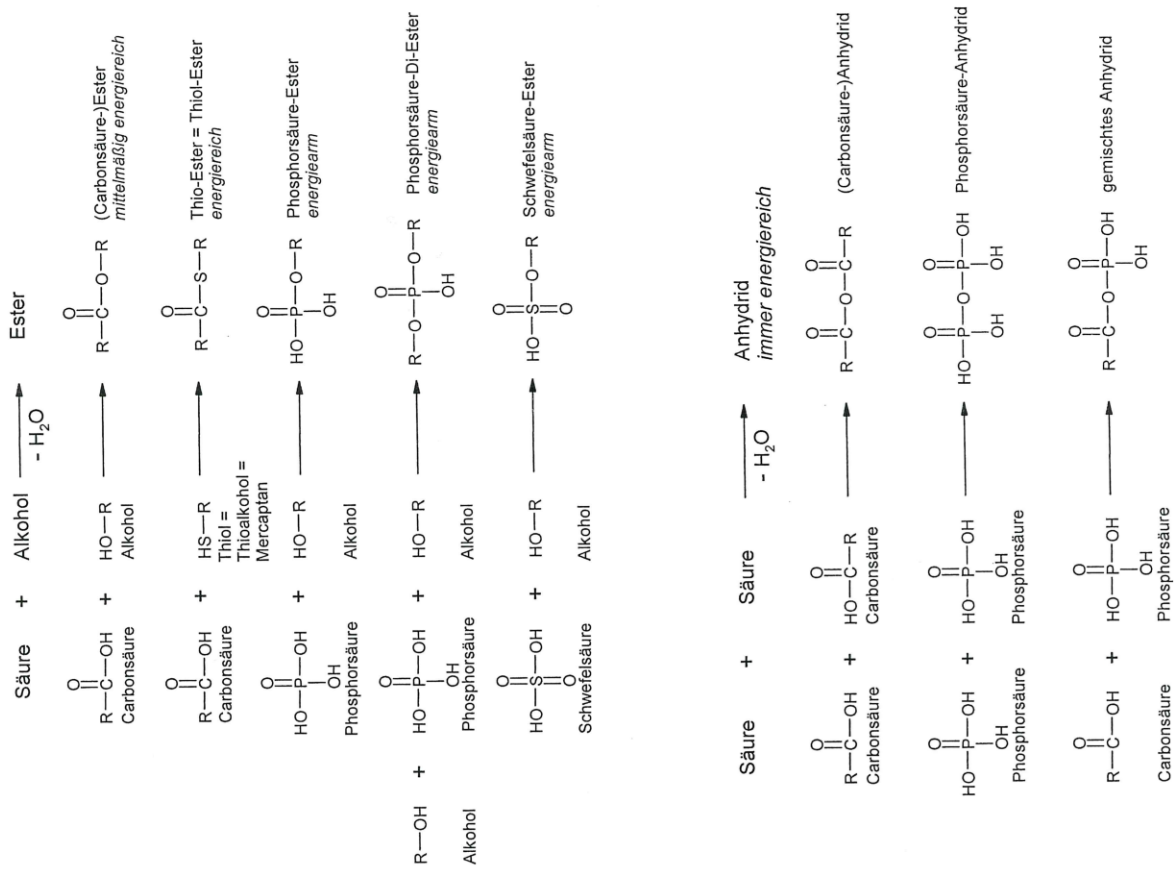
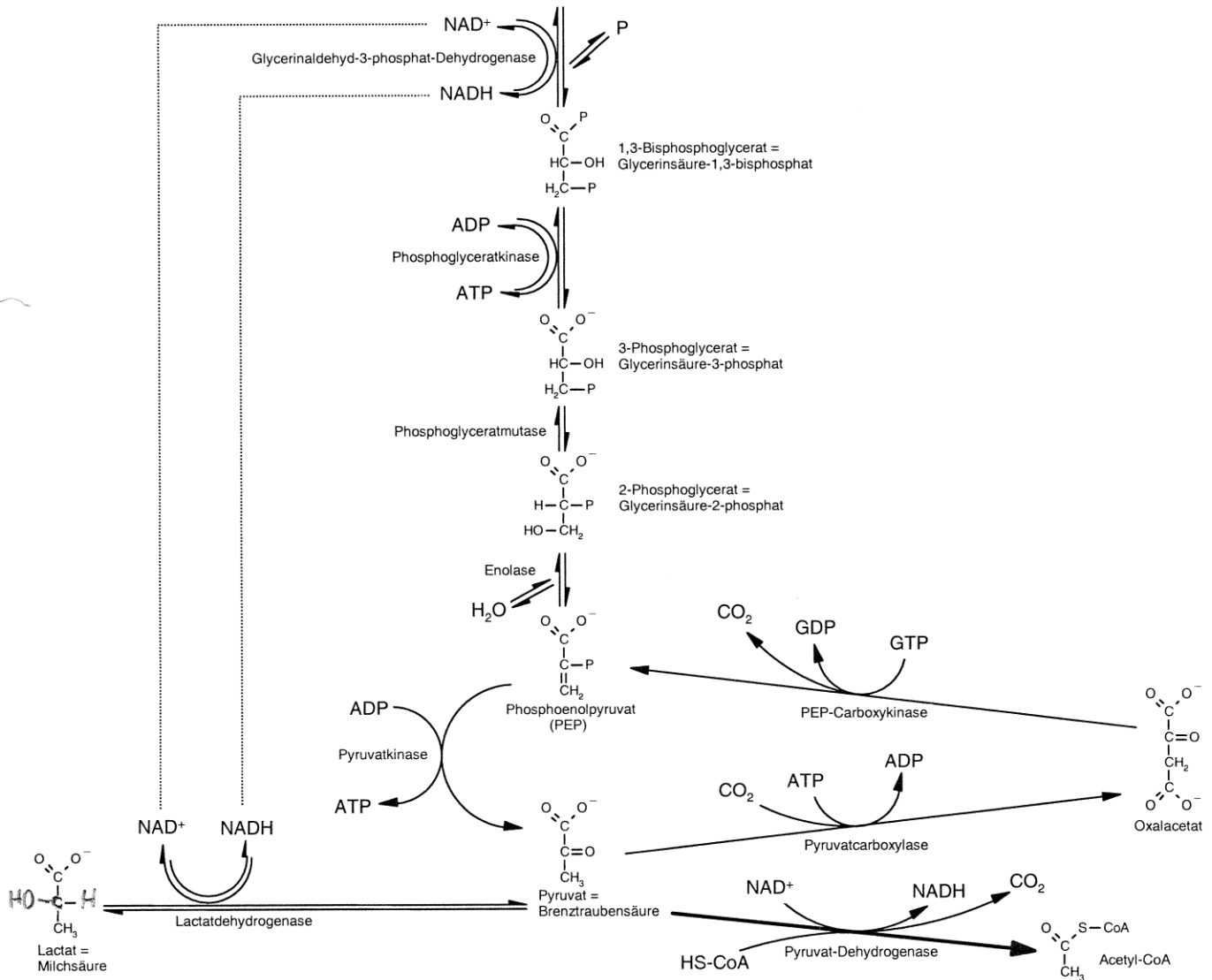
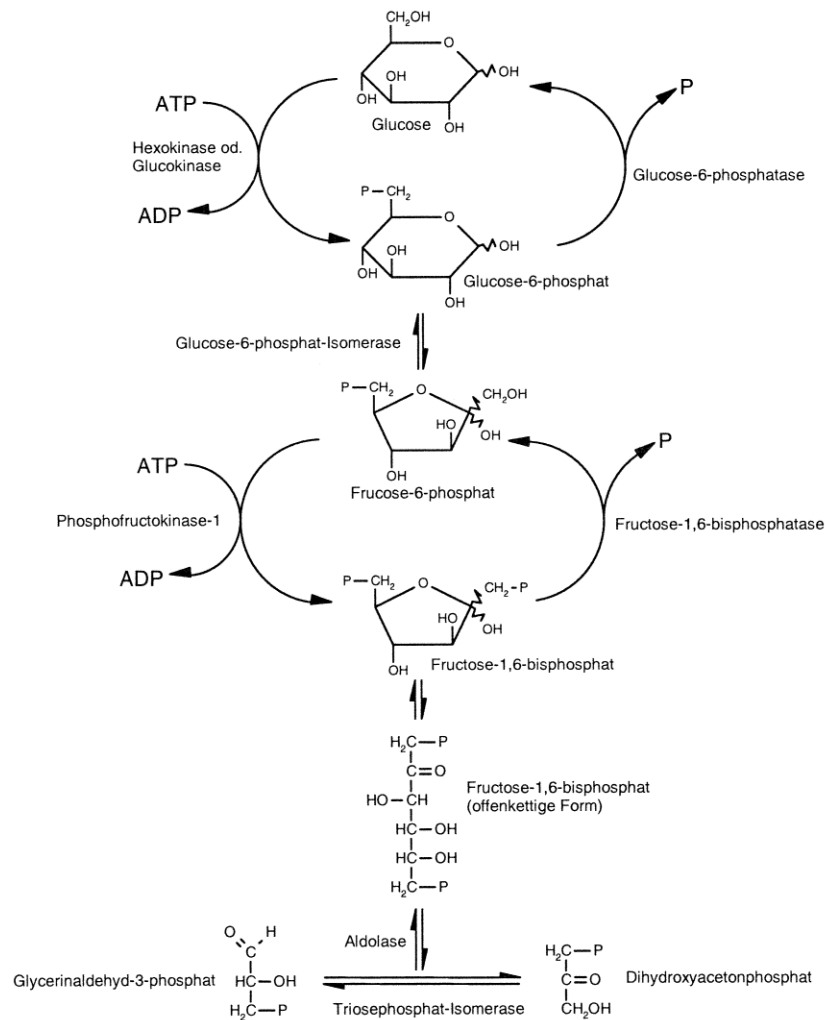
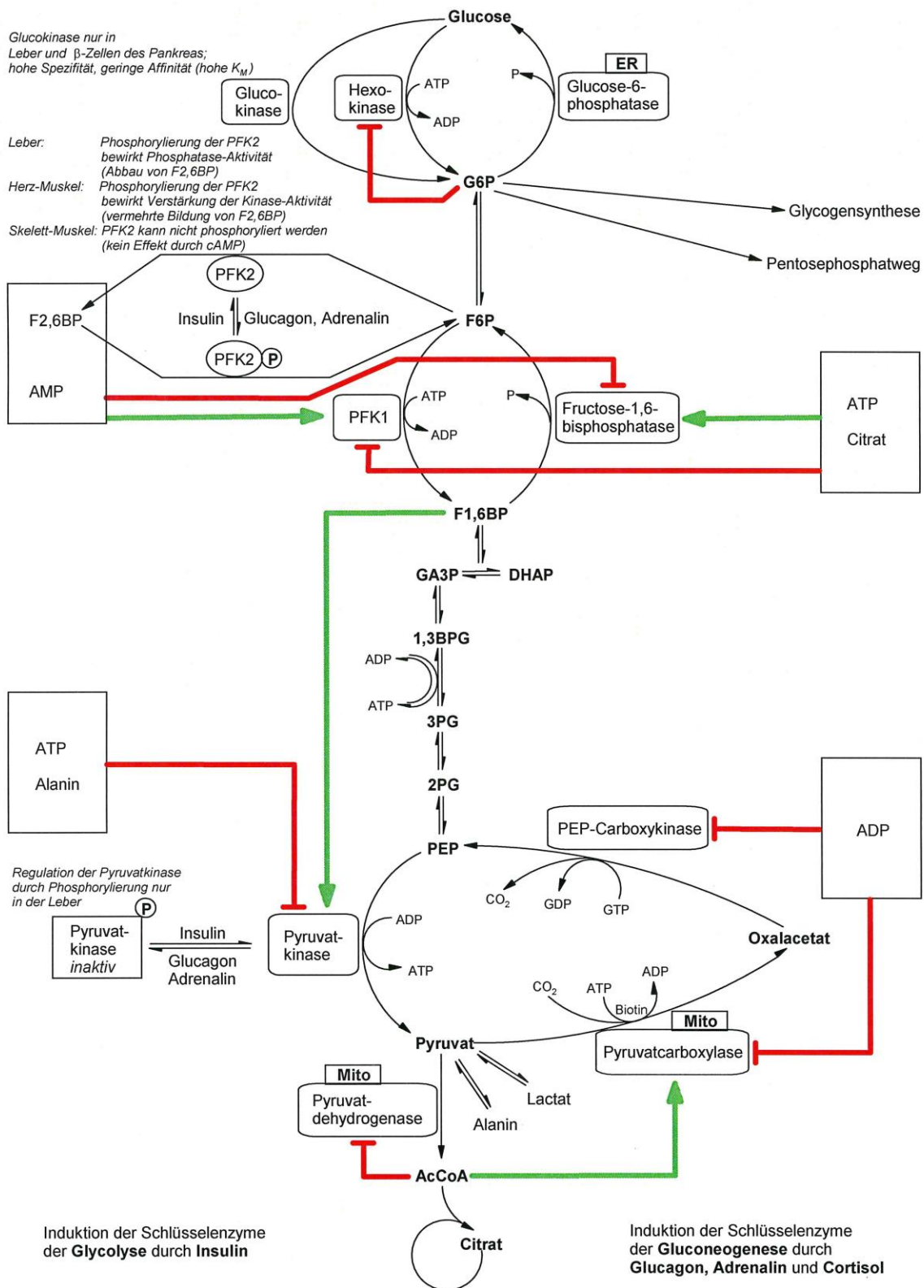
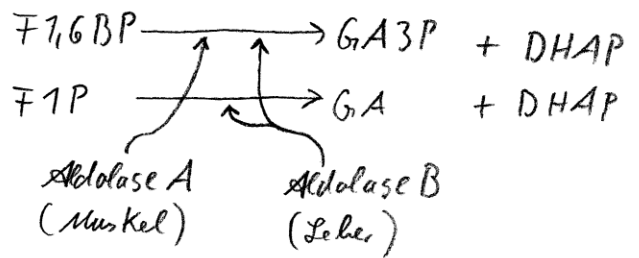
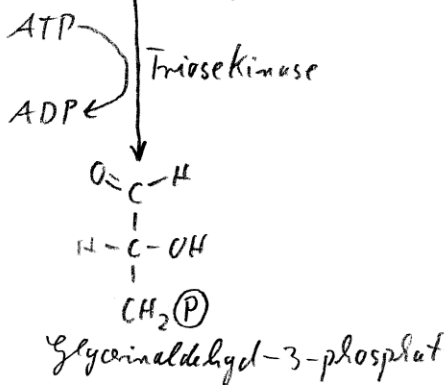
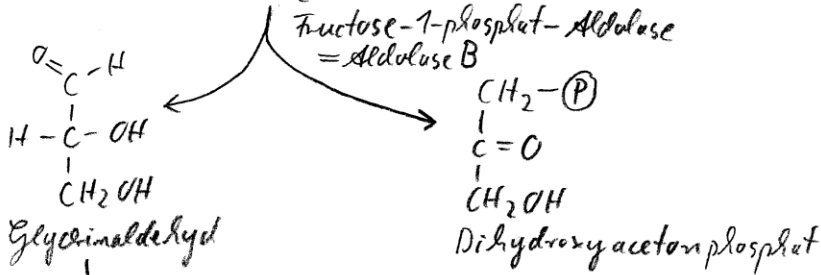
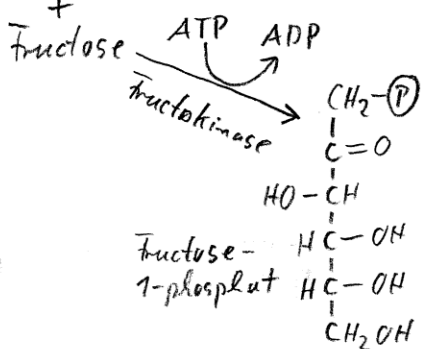
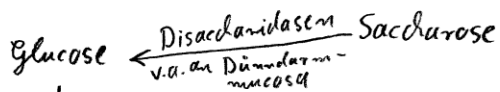
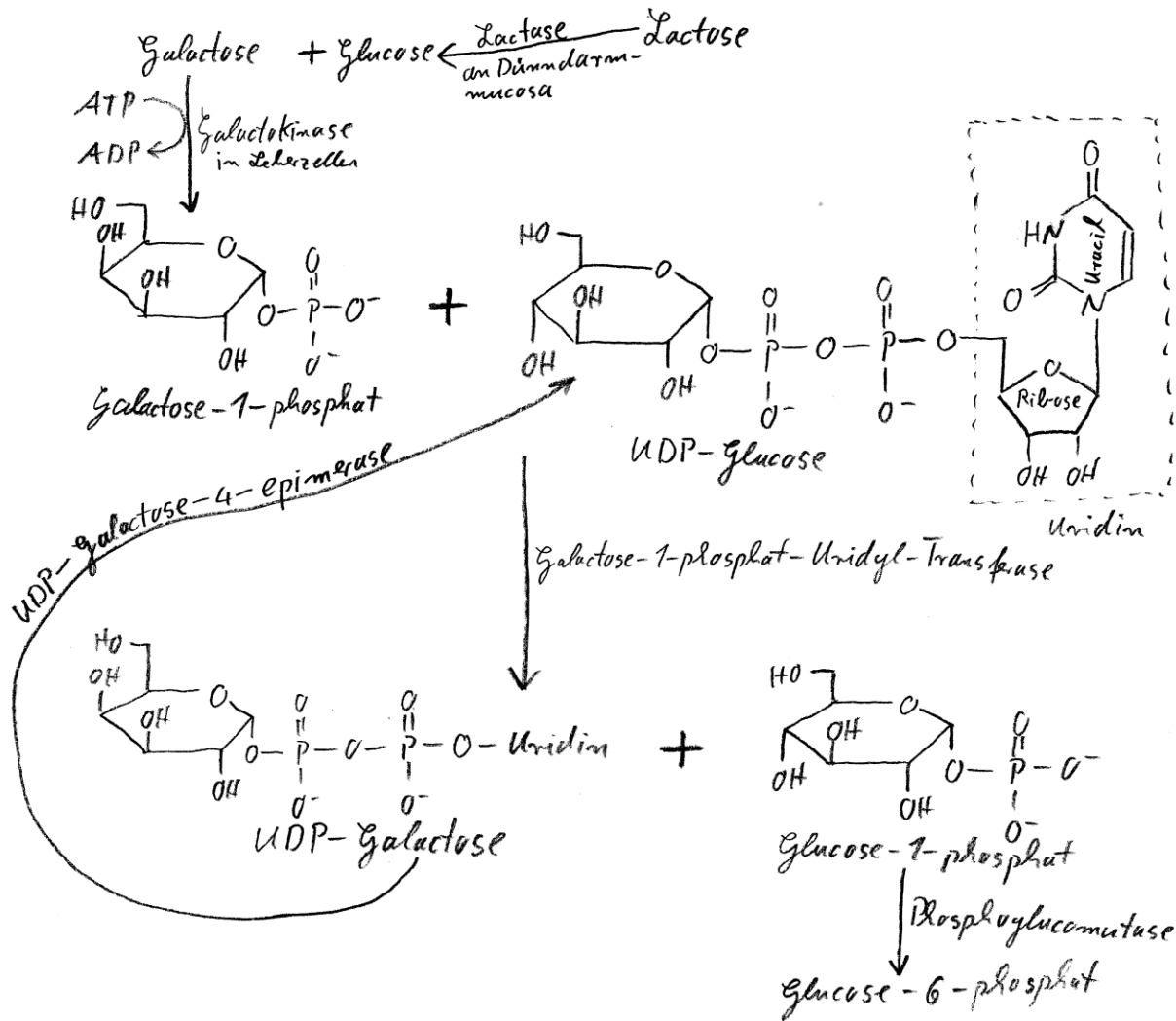










Hereditäre Fructoseintoleranz

Aldolase B ↓ → Fructose-1-P in Leberzellen ↑
→ Hemmung der Glucosefreisetzung (Gluconeogenese, Glycogenabbau)
→ Hypoglycämie (v.a. nach Verzehr von Obst)

- Katarakt (grauer Star, Trübung der Linse):
Bildung von *Sorbitol* → osmotischer Wassereinstrom in Linse

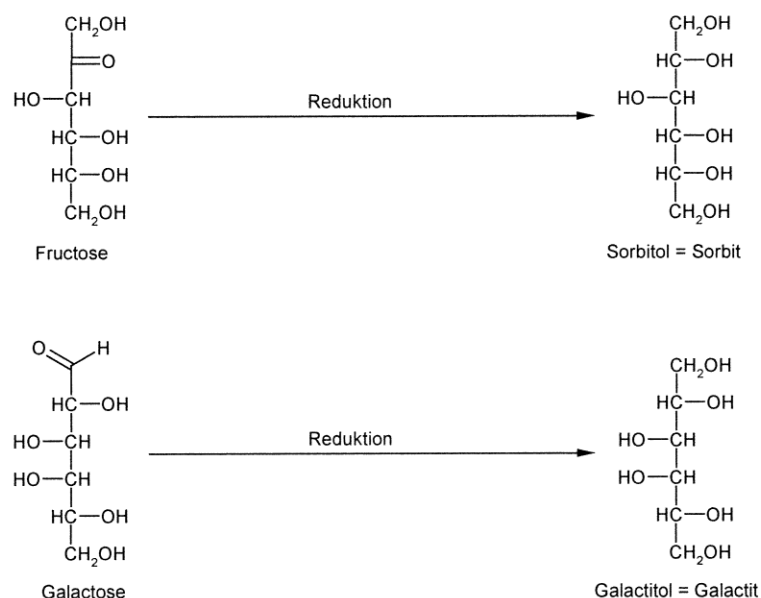
Verstoffwechselung von Fructose Insulin-unabhängig → bei Diabetikern normal

Hereditäre Galactosämie

Galactokinase ↓ → Galactose im Blut ↑ → Ausscheidung mit Urin → nicht so schlimm

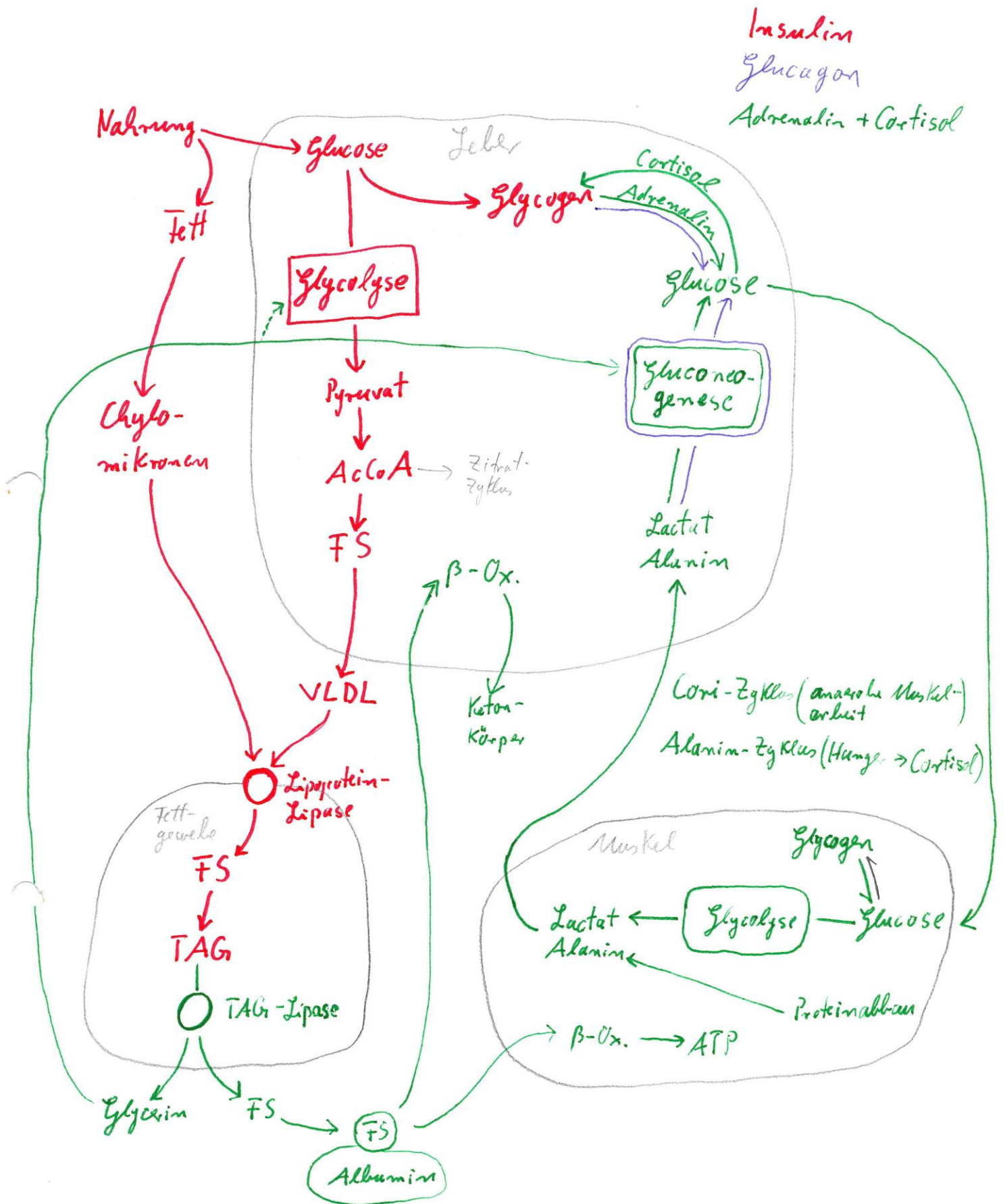
Galactose-1-phosphat-Uridyltransferase ↓ → Galactose-1-P in Leberzellen ↑
→ Hemmung der Glucosefreisetzung (Gluconeogenese)
→ Hypoglycämie

- Katarakt (grauer Star, Trübung der Linse):
Bildung von *Galactitol* → osmotischer Wassereinstrom in Linse



Lactoseintoleranz

Lactase in Dünndarmmucosa ↓ → keine Resorption der Lactose
→ Verstoffwechselung durch Bakterien im Dickdarm → Gase (CH_4 , H_2)
→ Flatulenz, Übelkeit



Glycolyse: alle Gewebe

Gluconeo-genese: Leber (+ evtl. Niere)