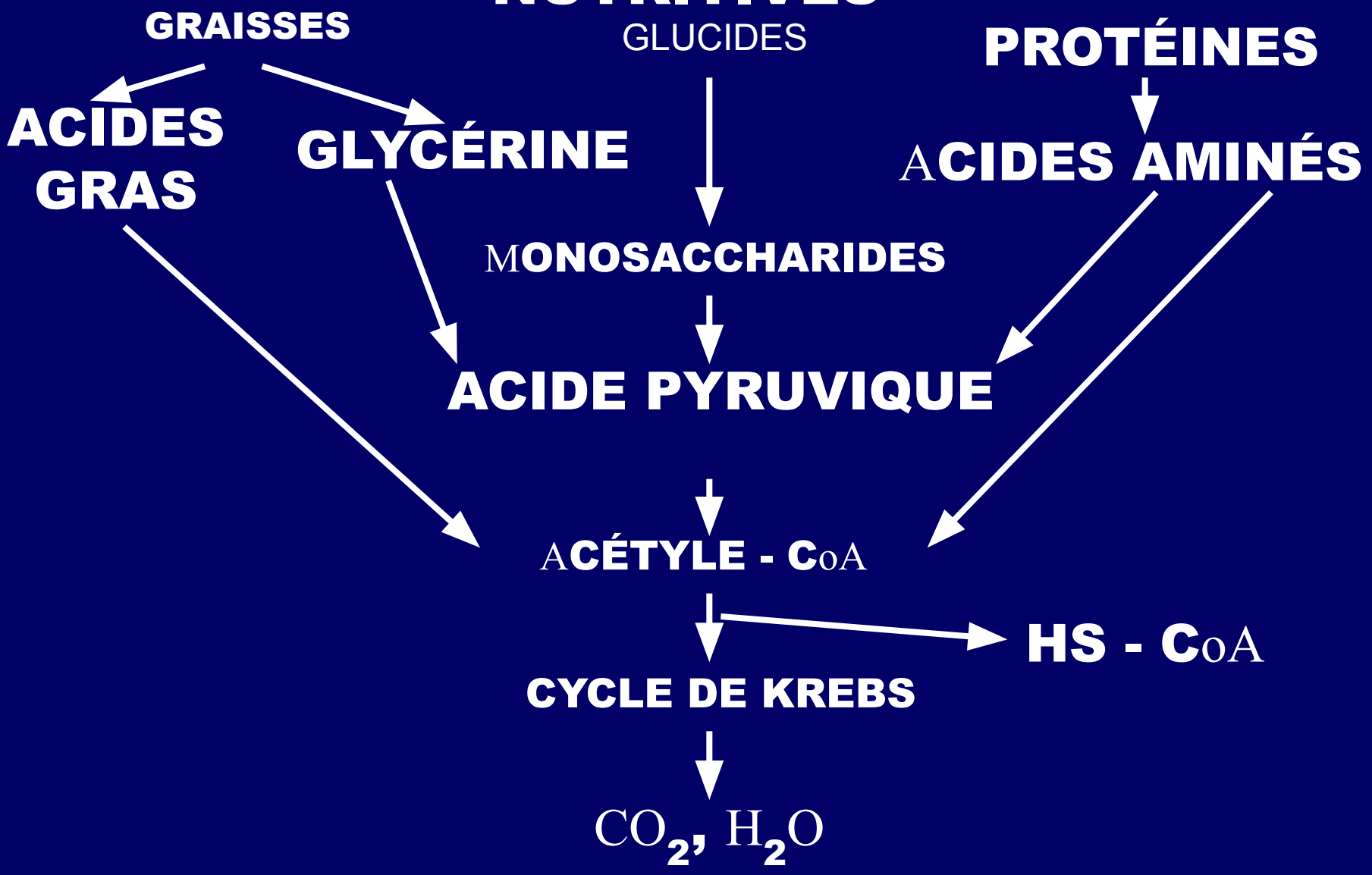
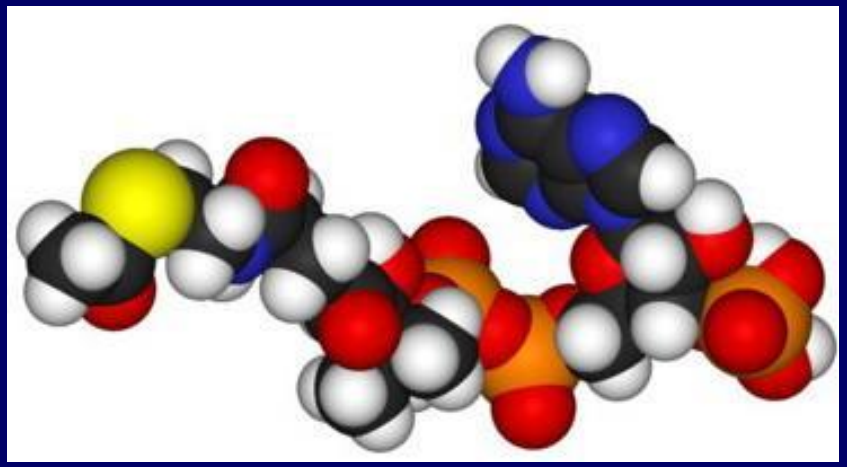
LES NOTIONS DE CATABOLISME ET ANABOLISME. LA VOIE TOTALE DU CATABOLISME. DÉCARBOXYLATION OXYDATIVE DE L`ACIDE PYRUVIQUE. CYCLE DE KREBS.

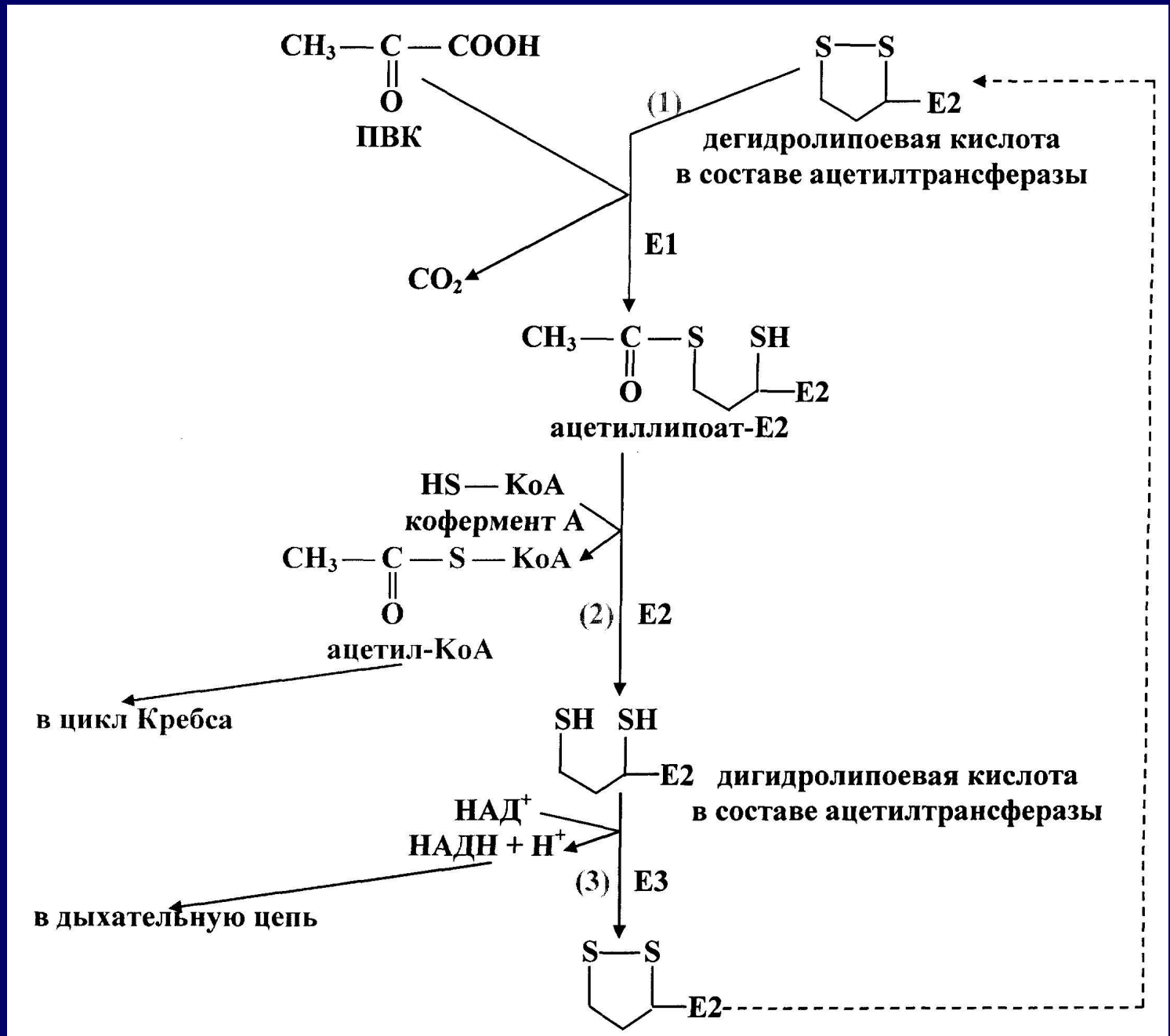
LE CATABOLISME DES SUBSTANCES NUTRITIVES



LA MOLÉCULE DE L`ACÉTYLE-CoA



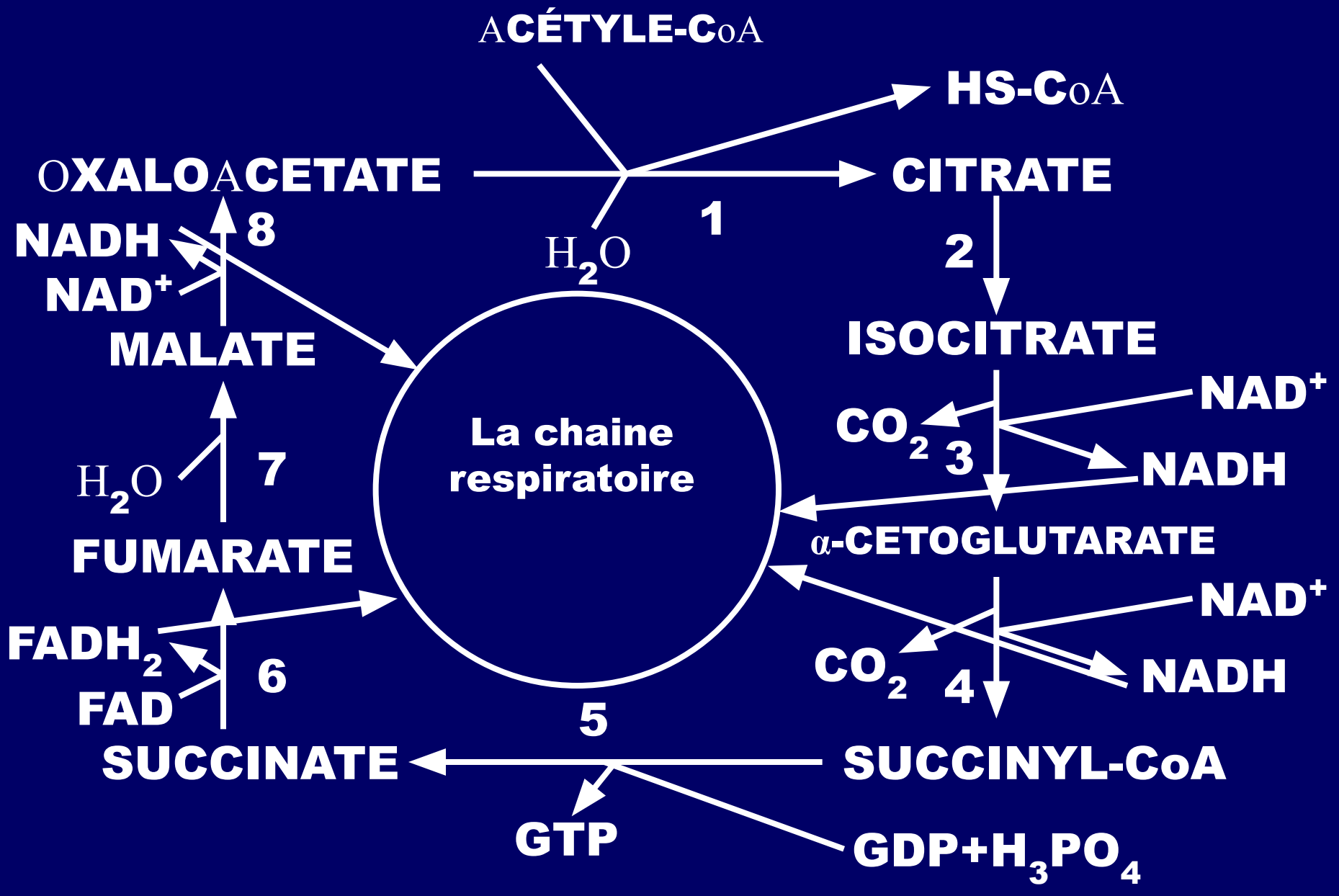
LA DÉCARBOXYLATION OXIDATIVE DE L`AP



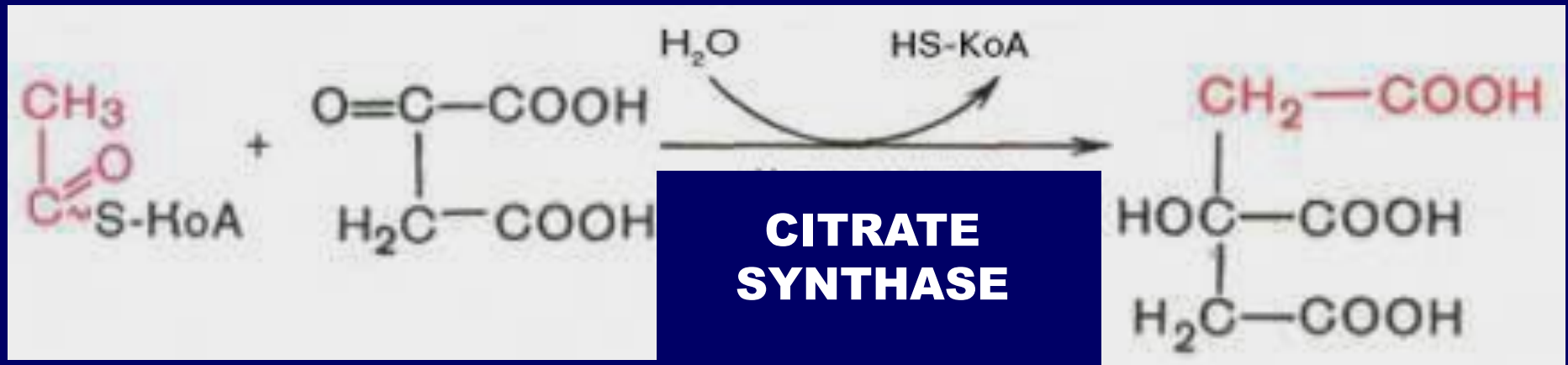
Hans Krebs

Pour la découverte du cycle des acides tricarboxyliques Hans Krebs a recu en 1953 le prix Nobel

CYCLE DE KREBS



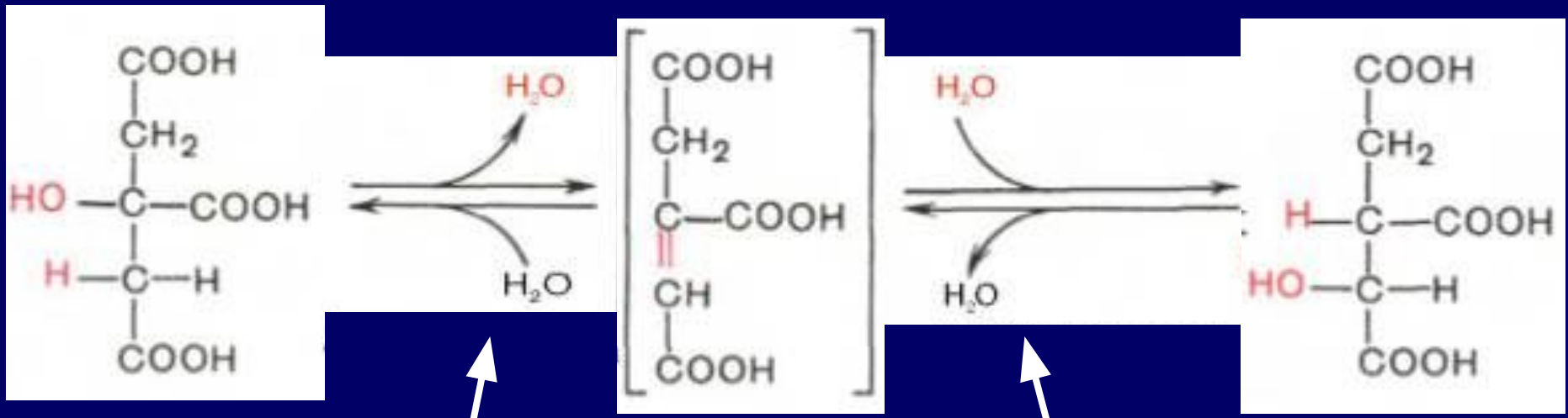
LES RÉACTIONS DU CYCLE DE KREBS



ACÉTYLE -CoA

OXALO ACÉTATE

CITRATE



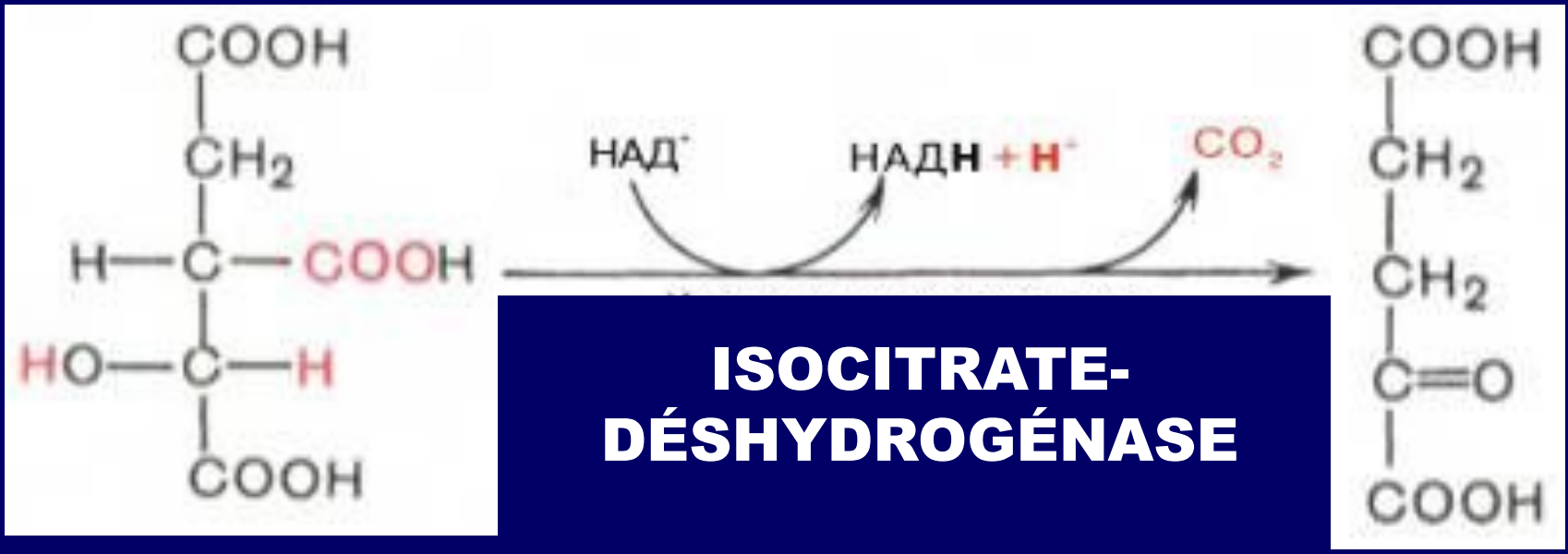
CITRATE

CIS-ACONITATE

ISOCITRATE

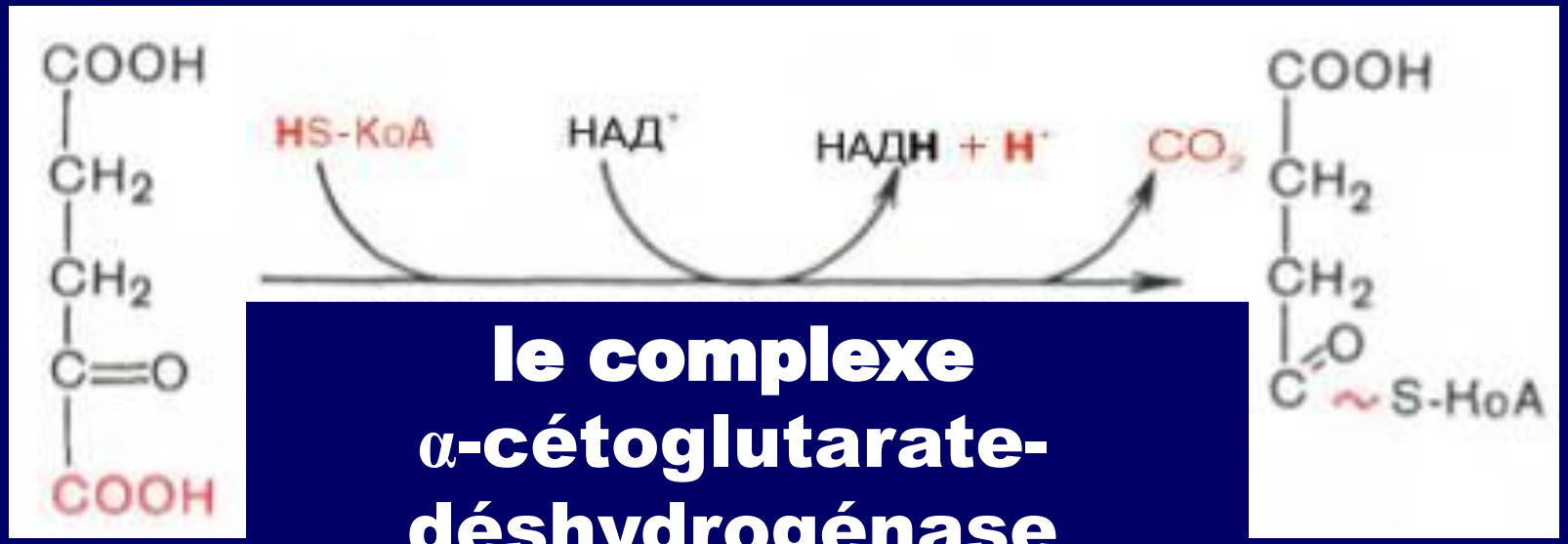
ACONITATE-HYDRATASE

ACONITATE-HYDRATATE



ISOCITRATE

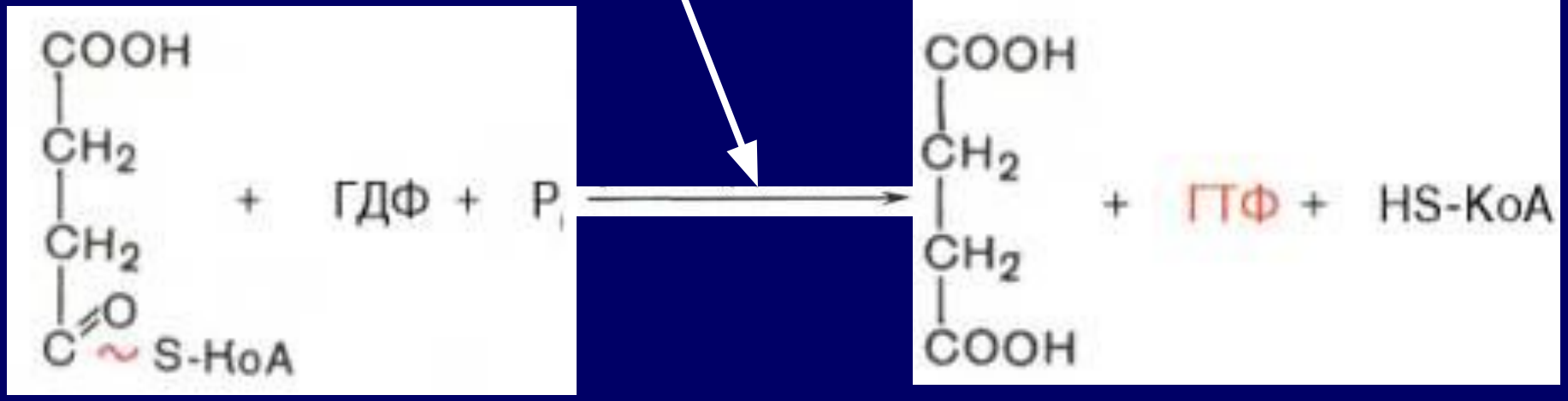
α-CÉTOGLUTARATE



le complexe α-cétoglutarate-déshydrogénase

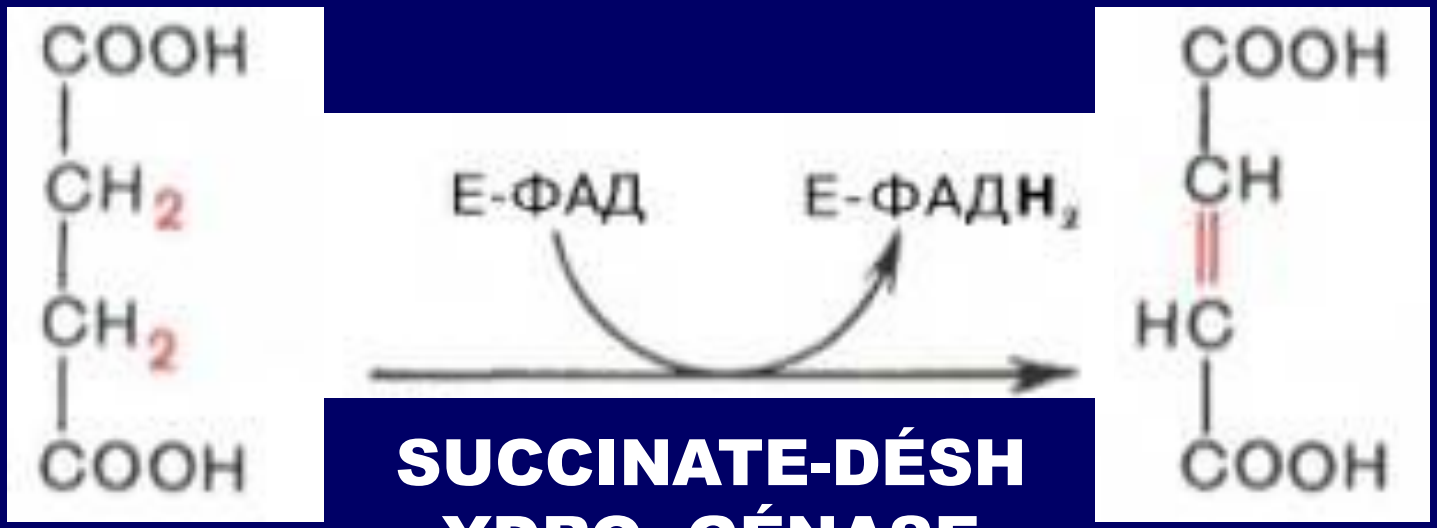
α-cétoglutorate → **succinyl-CoA**

SUCCINYL-CoA-SYNTHÉTASE



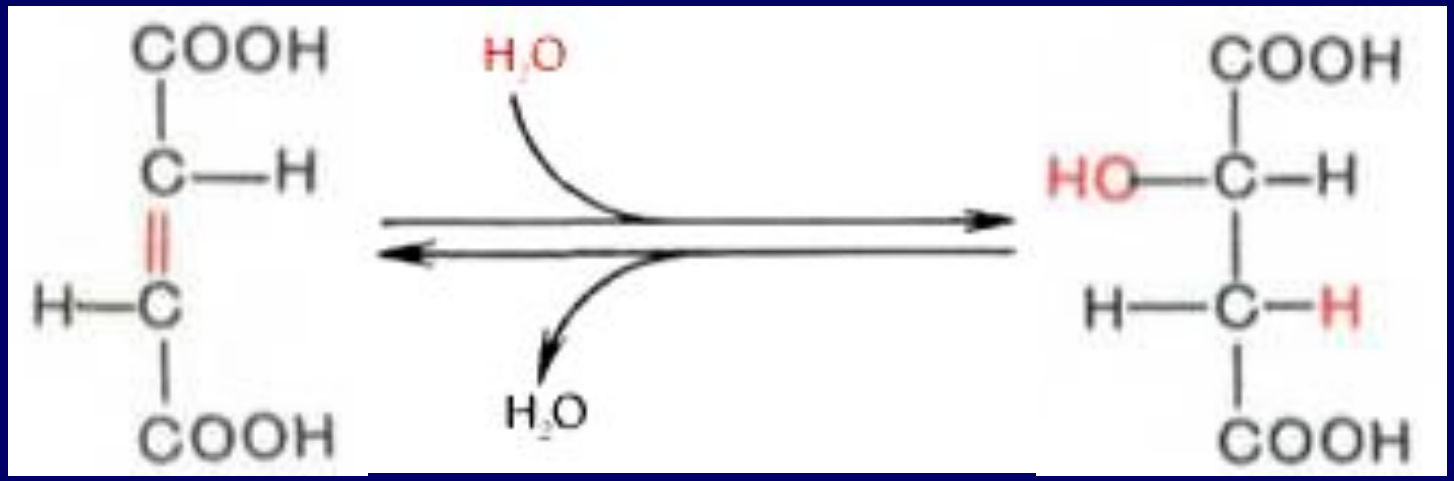
SUCCINYL-CoA **SUCCINATE**

GTP + ADP → ATP + GDP

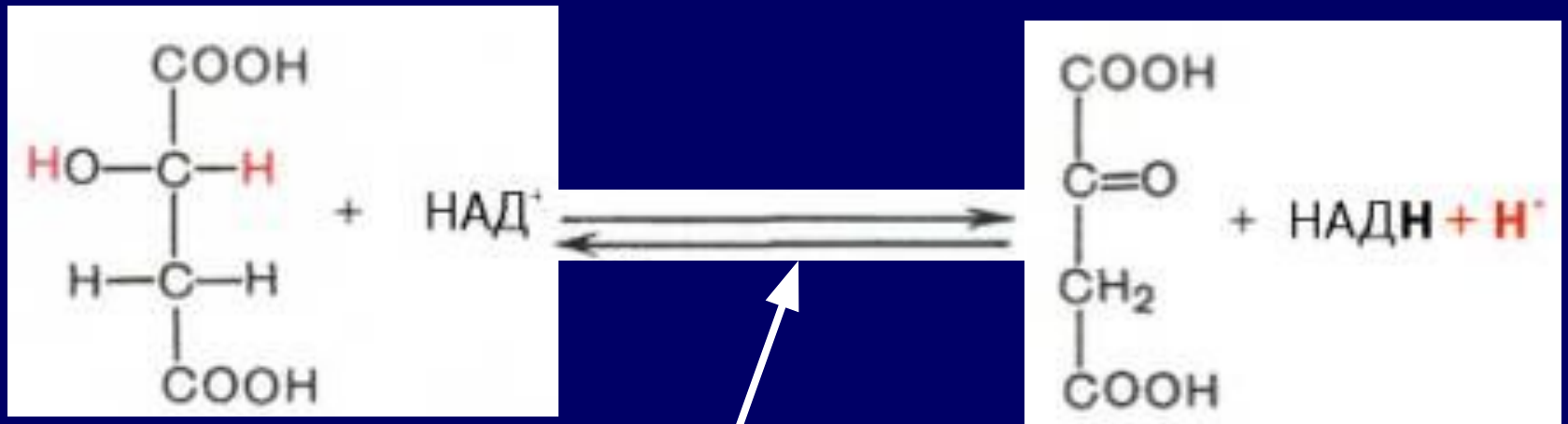


SUCCINATE-DÉSH YDRO GÉNASE

SUCCINATE **FUMARATE**



FUMARATE **FUMARASE** **L-MALATE**



L-MALATE

OXALOACÉTATE

MALATEDÉSHYDROGÉNASE
(ENZYME MALIQUE)