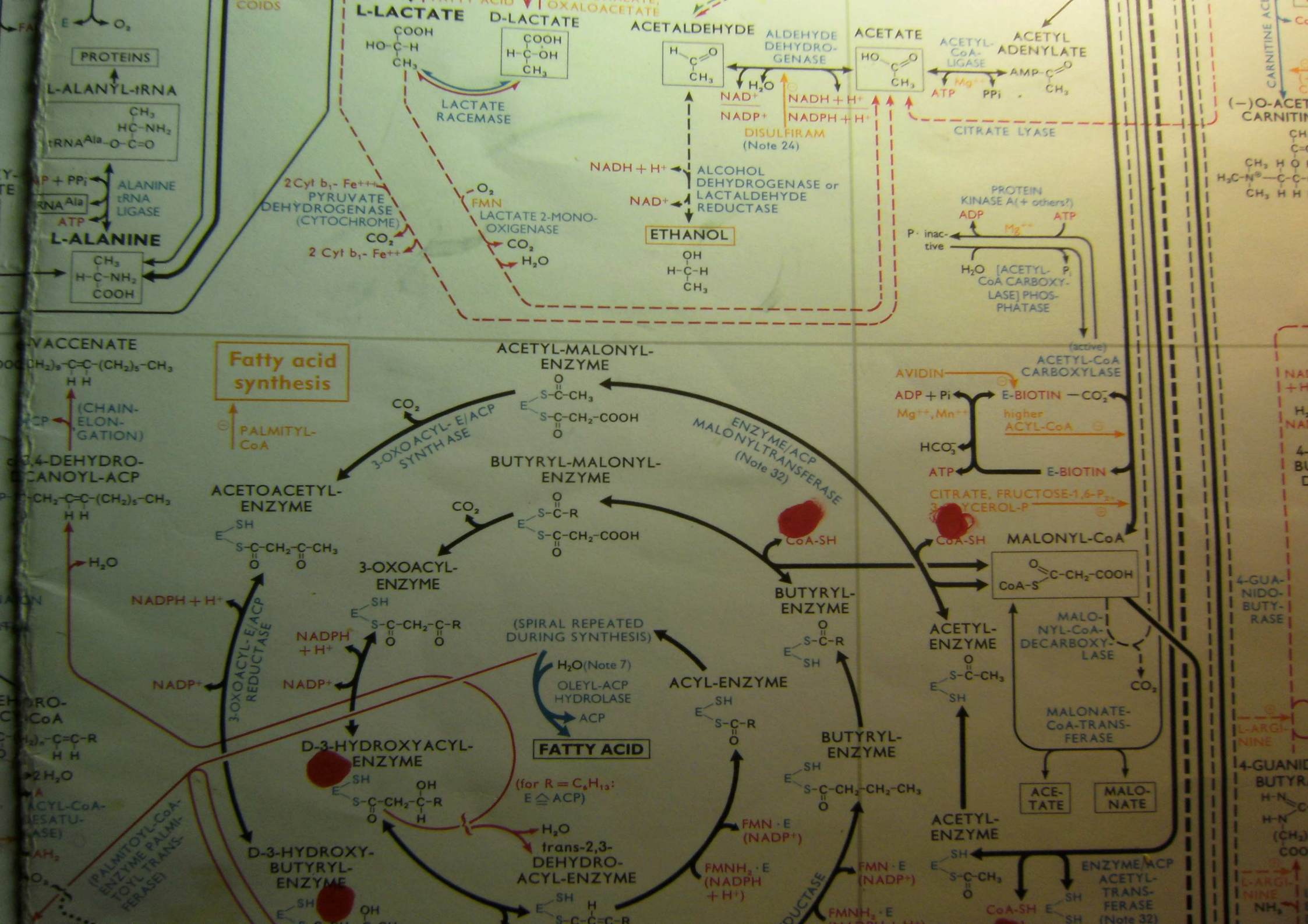
PROTEINS
L-ALANYL-tRNA
ALANINE tRNA LIGASE
L-ALANINE
L-LACTATE
D-LACTATE
LACTATE RACEMASE
PYRUVATE DEHYDROGENASE (CYTOCHROME)
2 Cyt b1- Fe++
2 Cyt b1- Fe+++
CO2
FMN
LACTATE 2-MONO-OXIGENASE
H2O
ACETALDEHYDE
ALDEHYDE DEHYDRO-GENASE
NAD+
NADH + H+
NADP+
NADPH + H+
DISULFIRAM (Note 24)
ACETATE
ACETYL-CoA-LIGASE
ACETYL ADENYLATE
ATP
PPi
AMP
CITRATE LYASE
ALCOHOL DEHYDROGENASE or LACTALDEHYDE REDUCTASE
ETHANOL
PROTEIN KINASE A(+ others?)
ADP
P· inac-tive
[ACETYL-CoA CARBOXY-LASE] PHOS-PHATASE
CARNITINE
Fatty acid synthesis
PALMITYL-CoA
ACETYL-MALONYL-ENZYME
3-OXOACYL-E/ACP SYNTHASE
ENZYME/ACP MALONYLTRANSFERASE (Note 32)
BUTYRYL-MALONYL-ENZYME
ACETOACETYL-ENZYME
3-OXOACYL-ENZYME
3-OXOACYL-E/ACP REDUCTASE
(SPIRAL REPEATED DURING SYNTHESIS)
H2O (Note 7)
OLEYL-ACP HYDROLASE
ACP
FATTY ACID
ACYL-ENZYME
BUTYRYL-ENZYME
D-3-HYDROXYACYL-ENZYME
(for R = C6H13: E ≙ ACP)
D-3-HYDROXY-BUTYRYL-ENZYME
trans-2,3-DEHYDRO-ACYL-ENZYME
FMN · E (NADP+)
FMNH2 · E (NADPH + H+)
(PALMITOYL-CoA-ENZYME PALMI-TOYL TRANS-FERASE)
(CHAIN-ELON-GATION)
AVIDIN
E-BIOTIN — CO2
higher ACYL-CoA
HCO3
E-BIOTIN
CITRATE, FRUCTOSE-1,6-P2, GLYCEROL-P
CoA-SH
MALONYL-CoA
ACETYL-CoA CARBOXYLASE
MALONYL-CoA-DECARBOXY-LASE
MALONATE-CoA-TRANS-FERASE
ACE-TATE
MALO-NATE
ACETYL-ENZYME
ENZYME/ACP ACETYL-TRANS-FERASE (Note 32)
4-GUANIDO-BUTYRASE
L-ARGI-NINE