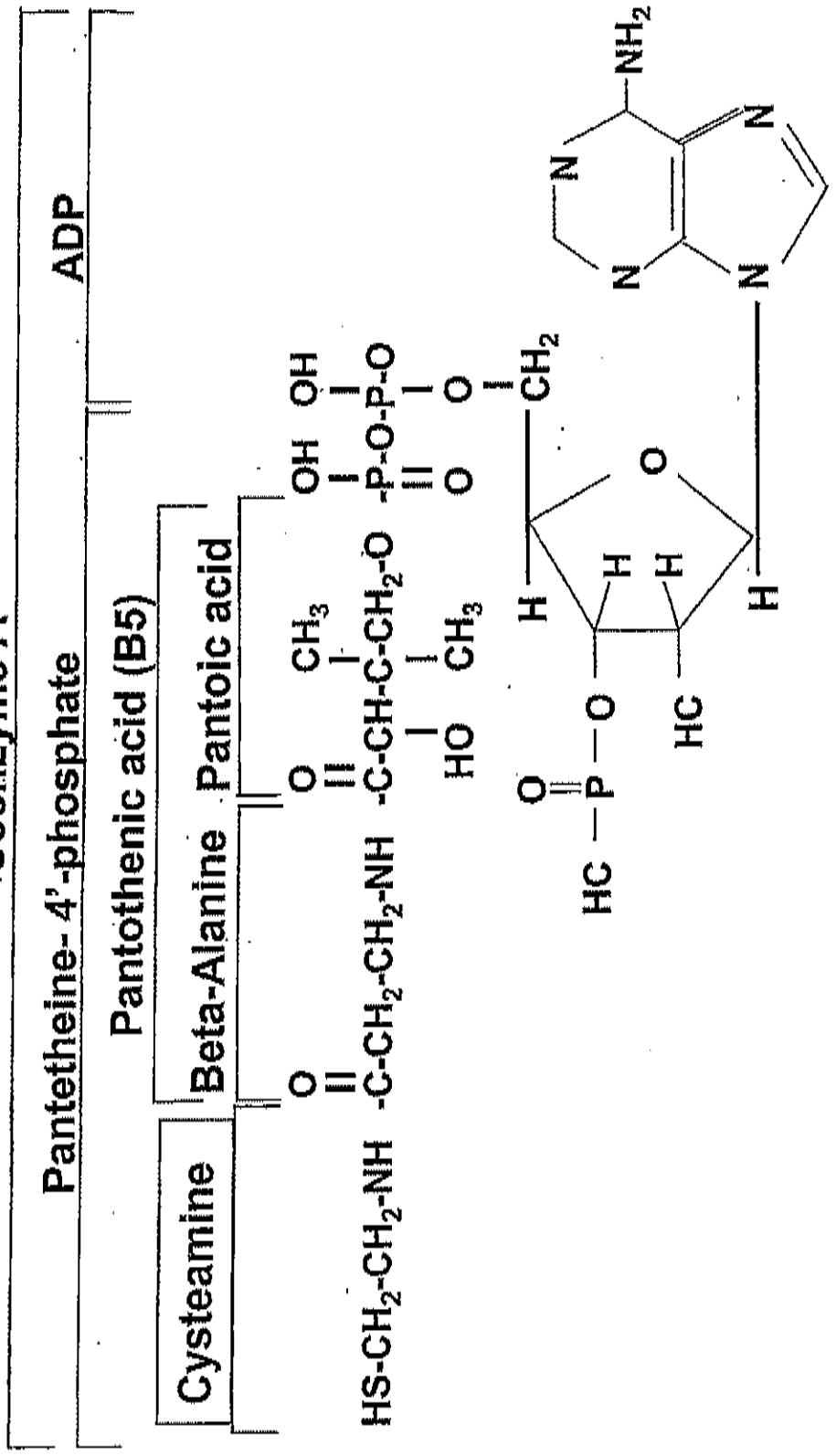

Coenzyme A
Pantetheine- 4'-phosphate
ADP
Pantothenic acid (B5)
Cysteamine
Beta-Alanine
Pantoic acid
HS-CH2-CH2-NH
-C-CH2-CH2-NH
-C-CH-C-CH2-O
HO
CH3
CH3
O
O
O
OH
OH
-P-O-P-O
O
O
CH2
HC
O
P
O
HC
H
H
H
H
N
N
N
N
NH2

FIG. 1

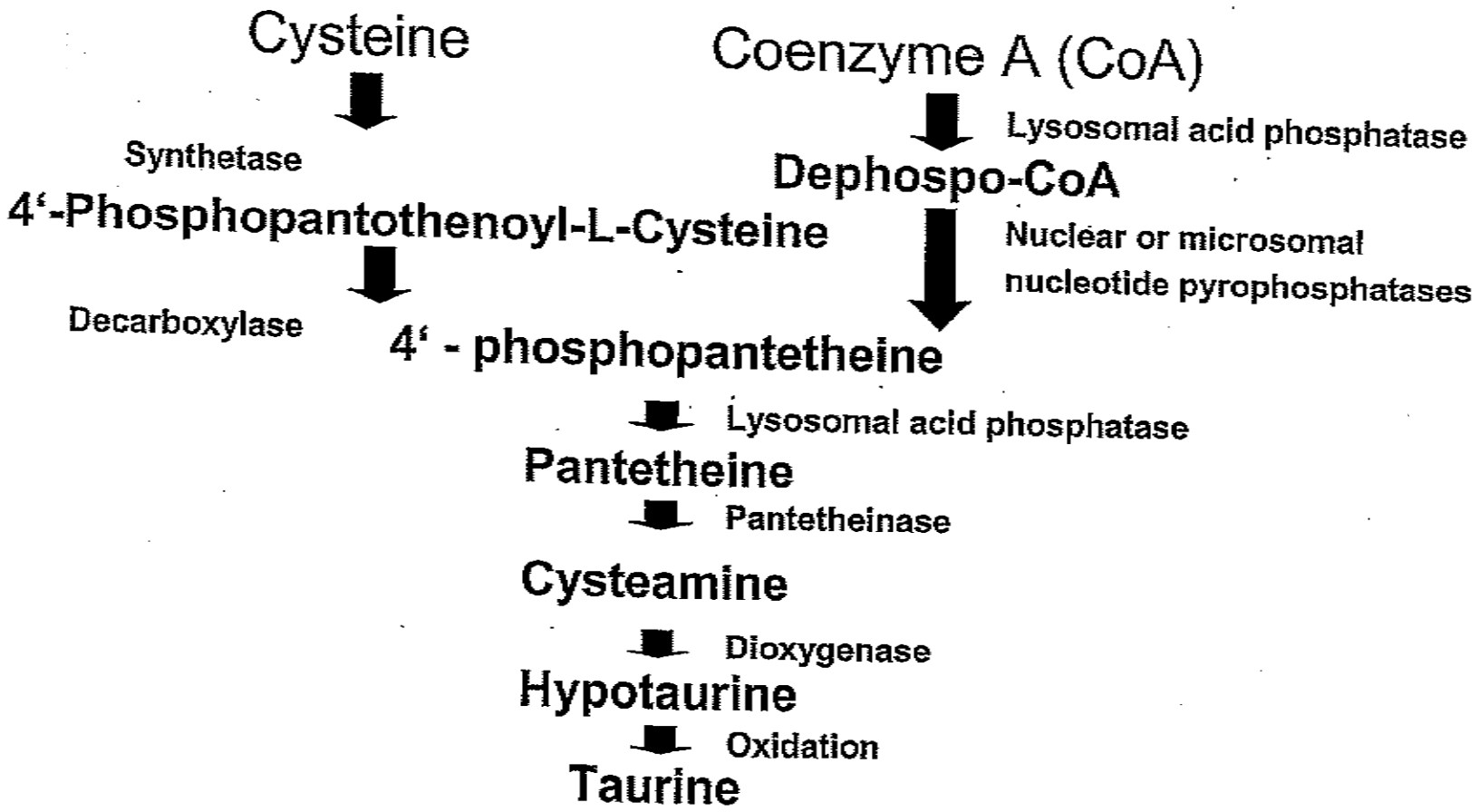

Cysteine
Coenzyme A (CoA)
Lysosomal acid phosphatase
Synthetase
Dephospo-CoA
4'-Phosphopantothenoyl-L-Cysteine
Nuclear or microsomal
nucleotide pyrophosphatases
Decarboxylase
4' - phosphopantetheine
Lysosomal acid phosphatase
Pantetheine
Pantetheinase
Cysteamine
Dioxygenase
Hypotaurine
Oxidation
Taurine

FIG. 2

FIG. 3

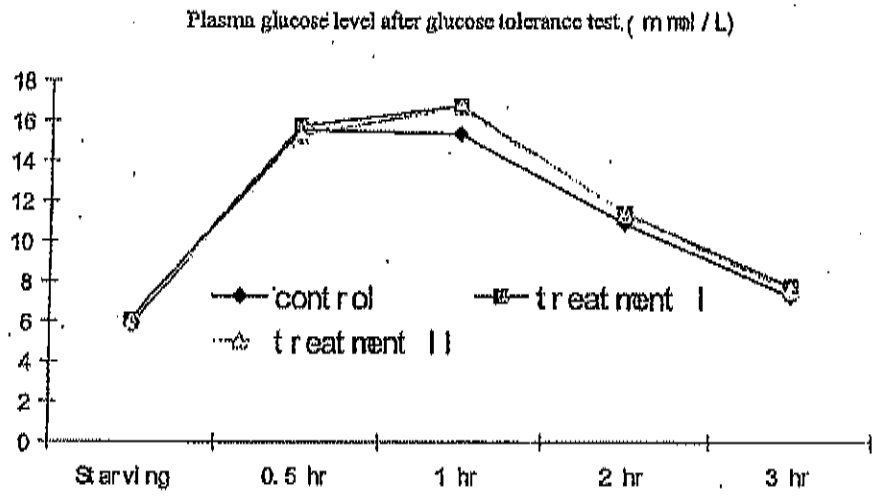

Plasma glucose level after glucose tolerance test. (m mol / L)
18
16
14
12
10
8
6
4
2
0
control
treatment I
treatment II
Starving
0. 5 hr
1 hr
2 hr
3 hr

FIG. 4

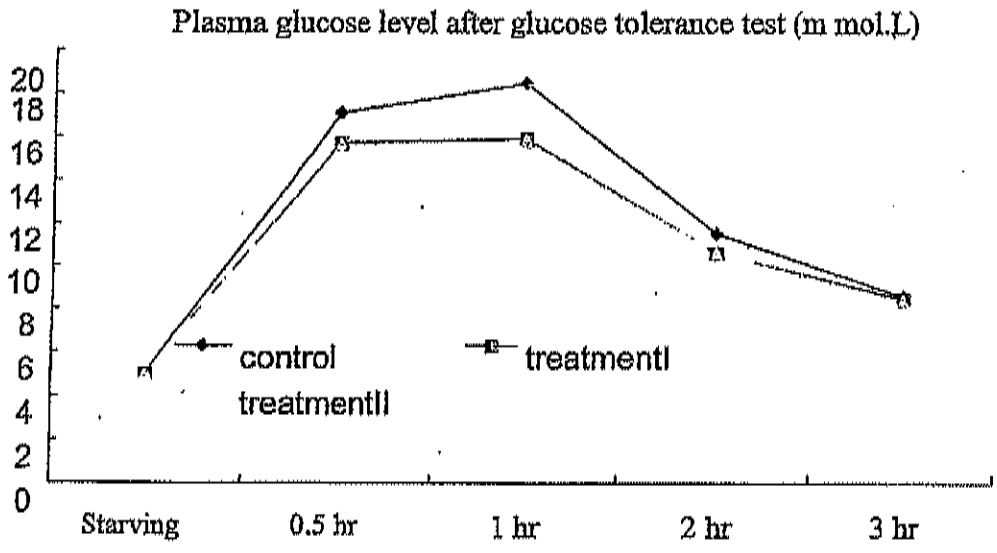

Plasma glucose level after glucose tolerance test (m mol.L)
20
18
16
14
12
10
8
6
4
2
0
control
treatmentI
treatmentII
Starving
0.5 hr
1 hr
2 hr
3 hr

FIG. 5

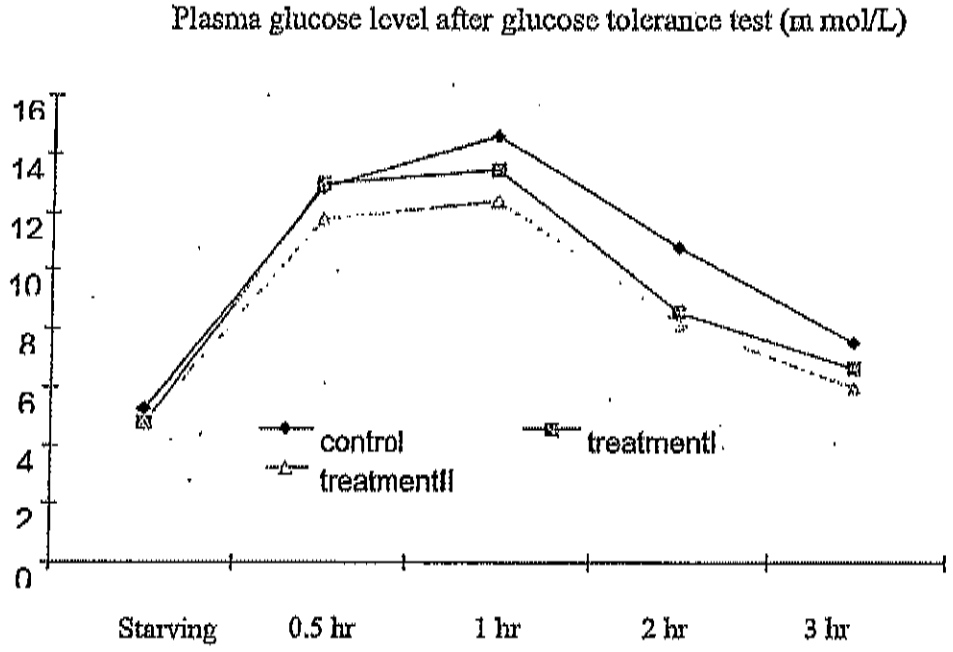

Plasma glucose level after glucose tolerance test (m mol/L)
16
14
12
10
8
6
4
2
0
control
treatmentI
treatmentII
Starving
0.5 hr
1 hr
2 hr
3 hr

FIG. 6

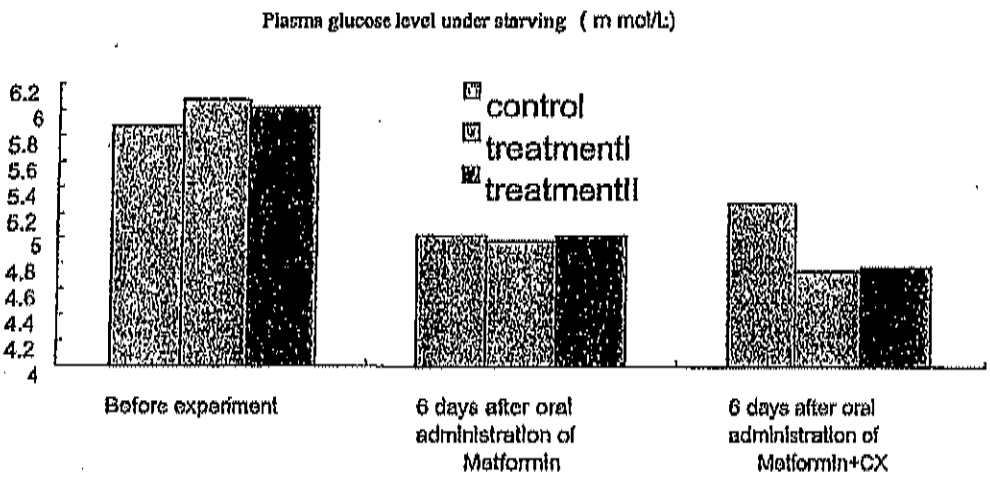

Plasma glucose level under starving (m mol/L)
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
control
treatmentI
treatmentII
Before experiment
6 days after oral administration of Metformin
6 days after oral administration of Metformin+CX

FIG. 7

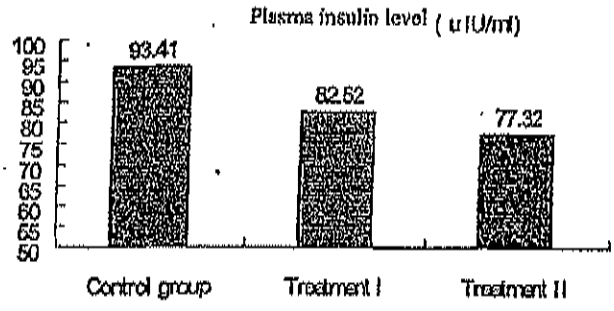


FIG. 8

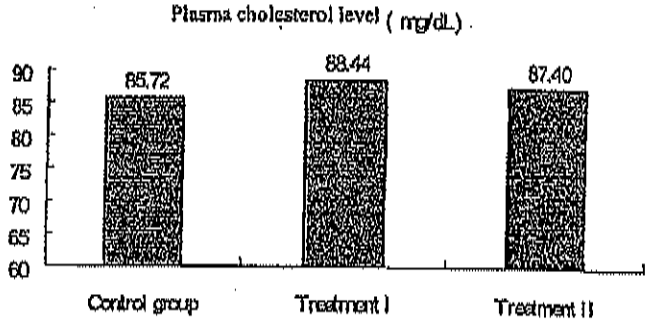


FIG. 9

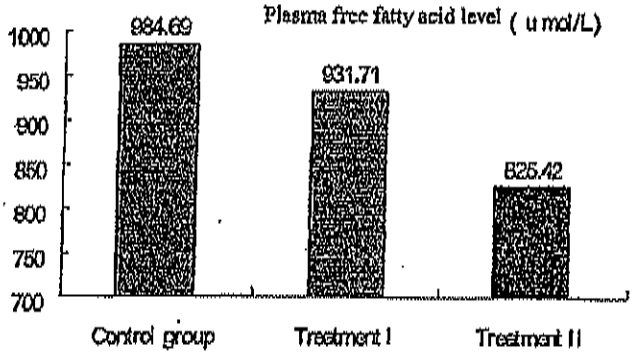


FIG. 10

