

CONTENT

1 Mechanisms of oxygen activation and reactive oxygen species detoxification	1
2 Pathophysiology and reactive oxygen metabolites	62
3 Free radical mechanisms of oxidative modification of low density lipoprotein (or the rancidity of body fat) Balaraman Kalyanarman	96
4 Synthetic pro-oxidants: drugs, pesticides and other environmental pollutants	117
5 Metabolic detoxification of plant pro-oxidants	181
6 Antioxidant mechanisms of secondary natural products	210
7 Antioxidant mechanisms of enzymes and proteins	238
8 Antioxidant defenses of Escherichia coli and Salmonella typhimurium	273
9 Antioxidant defenses of plants and fungi	298
10 Antioxidant defenses of vertebrates and invertebrates	356
11 Genetic regulation of antioxidant defenses in Escherichia coli and Salmonella typhimurium	435
Subject Index	447