Polysaccharides from the fruit bodies of mushroom have drawn a great deal of attention in the area of biochemistry and pharmaceutical science due to their broad spectrum of therapeutic properties, expecially anti-oxidant, immunotimulatory, anti-oxidativie and anti-tumor effects. Currently the main sources of bioactive polysaccharides include tea, mushrooms, ganoderma lucidum, ginseng, and astragalus. Polysaccharides play an important role in the development ofnew products, including foods, pharmaceuticals, and biodegradable packaging materials.

*Craterellus cornucopioides*, commonly known as Black Trumpet, is a highly nutritious edible mushroom and is also considered as a soured even of valuable medicinal compounds. *Craterellus cornucopioides* is an edible fungus with a wide distribution in most parts of China, especially in the Southwestern. In previous work, the fungus has been reported to produce a series of keto esters. It was investigated using free radical scavenging activities, metal chelating effects, inhibition of lipid peroxidation (inhibition of peroxyl radicals), xanthine oxidase, and lipoxygenase, and identification of antioxidant compounds.