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Abstract	:	<p>Introduction: Sesame (<i>Sesamum indicum</i>) is an oil-producing plant, with seeds that contain 50 to 60% oil and 25% protein. Sesame oil is widely used as a seasoning in Asian cuisine due to its flavour and aroma. It contains a high concentration of bioactive compounds, particularly lignans, vitamin E, and phytosterols. Thus, this study was aimed to evaluate antibacterial and antioxidant activities of Ghee Hiang sesame oil extract. Methods: The sesame oil was provided by Ghee Hiang Manufacturing Co., Penang, Malaysia. The sesame oil was then extracted with methanol using liquid partitioning method. The antibacterial activity of the sesame oil extract was determined on disc diffusion and broth microdilution assays. Then, the antioxidant activity of the extract was determined using diphenylpicrylhydrazyl (DPPH) radicals. Results: Out of 8 test microorganisms, 4 Gram positive bacteria and 2 Gram negative bacteria were susceptible to the extract. The antibacterial activity was broad spectrum. Minimal inhibitory concentrations (MIC) of the sesame oil extract ranged from 3.1 to 12.5 mg/mL, where the minimal bactericidal concentrations (MBC) ranged from 6.3 to 25.0 mg/mL. The MBCs were significantly higher than MIC. DPPH scavenging activity of sesame oil extract was concentration dependent. The sesame oil extract at 1000 µg/mL showed the highest antioxidant activity, and an IC50 of 120.9 µg/mL was recorded. Conclusion: Ghee Hiang sesame oil extract showed significant antibacterial and antioxidant activities. Further investigations should be done to determine the bioactive entities present in the extract.</p>