

Research highlights

1. Red algae *Gelidium amansii* hot-water extract (GHE) is a polysaccharide-rich fraction.
2. GHE ameliorates lipid metabolism and bile acid excretion in high-fat diet-fed rats.
3. GHE improves the altered lipid metabolism-related protein expression in fatty livers.
4. GHE increases hepatic LDLR and CYP7A1 expressions to decrease blood cholesterol.