THE PROCESSING OF NATURAL PRODUCTS USING
SUPERCRITICAL FLUID-CARBON DIOXIDE

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This review explains why Supercritical Fluid Extraction (SFE) and natural products are important. Some advantages and uses of SFEs are described in a table.

Natural products have received a lot of interest in various fields of chemistry, such as food science, material science, and medicinal science. There are also many sources of these products such as: plants, animals, micro-organisms, algae, and marine life. Due to their value to human health and commercial enterprise, natural products have become an important subject area of research. Natural products can be synthesised from chemicals or extracted from nature using different chemical techniques. Extractions have been generally carried out by solvent extraction which renders the natural products less suitable for the human use. The compounds should preferably be clean, with no solvent residues, to make edible and safe for the both producers and consumers.

SFE is a new extraction technique which can obtain a pure compound under safe conditions. Articles in the chemical literature have accepted SFE as one the most promising methods for the extraction of natural products, and interest in this area is increasing. Carbon dioxide (CO₂) is non toxic, inexpensive and used as a fluid to remove chemicals in the food industry.