An Overview of Olive Oil

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Background:

Olive oil is an oil obtained from the olive (Olea europaea; family Oleaceae), a traditional tree crop of the Mediterranean Basin. The composition of olive oil varies with cultivar, region, altitude, time of harvest and extraction process.

Olive oil contains the monosaturated fatty acid oleic acid (56%-83%), palmitic acid (8%-20%) and linoleic acid (4%-20%) [1,14].

Olive oil also contains a group of related natural products, phenolics, with potent antioxidant properties that give extra-virgin unprocessed olive oil its bitter and pungent taste and are esters of tyrosol, hydroxytyrosol, and oleuropein including oleocanthal and oleuropein[2]. Squalene is another chief constituent of olive oil, which as been identified as anticancer properties [15].

Olive oil can be used safely orally as 14% of total daily calorie intake or proximately 2 tablespoons (28 grams) daily [3,4,5,6,7,8,9]. It can also be safely used topically [10].

Olive oil has been studied and shown to have effects for use in/as:

- Constipation [11,12]
- Breast Cancer [5,6,7]
- Cardiovascular Disease [3,4,13,14,29]
- Colorectal cancer [16]
- Hypercholesterolemia [1,3,4,8,9,17,18,19,20]
- Hyperglycemia
- Hypertension [3,4,12,19,21]
- Diabetes [22,32]
- Migraines [23]
- Osteoarthritis [24]
- Rheumatoid Arthritis [25,26]
- Anti-inflammatory [19,25,27]
- Antioxidant [28,30]

While some of the above uses are backed by strong evidence which shows effectiveness, others still need further evaluation to strengthen present evidence. The variations and quality of olive oil used in different studies may explain the variations in the results, as a good olive oil extraction can result in higher content of phenols and antioxidants.

**Dosage and Administration:**

**ORAL:** For constipation, 30 mL has been used [11].

For hypertension, 30-40 grams per day of extra-virgin olive oil has been used as part of the diet [21]. Olive leaf extract 400 mg four times daily has also been used for hypertension [33].

For reducing the risk of myocardial infarction, consuming 54 grams per day has been associated with a reduced risk of first myocardial infarction [22].

For hyperlipidemia and to decrease cardiovascular disease risk, olive oil 23 grams/day (about 2 tablespoons) providing 17.5 grams mono unsaturated fatty acids in place of saturated fats in the diet has been used [14].

For osteoarthritis, a freeze dried aqueous olive fruit extract 400 mg daily has been used [24].

For rheumatoid arthritis, a freeze dried aqueous olive fruit extract 400 mg daily has been used [24].

**TOPICAL:** No typical dosage.
References:


24. Bitler CM, Matt K, Irving M, et al. Olive extract supplement decreases pain and improves daily activities in adults with osteoarthritis and decreases plasma homocysteine in those with...


