Bottle Of Sesame Seed Oil

Simple, Unique Method for Deriving Anti-inflammatory Components from Sesame Oil

Many edible oils have potent biological benefits, including anti-inflammatory, antioxidant, and anti-atherosclerotic effects. These oils have both fat and nonfat components (e.g., tocopherols, polyphenols, etc.). Sesame oil, obtained from Sesamum indicum, is rich in both monounsaturated and polyunsaturated fatty acids. It also contains lignans, such as sesamin and sesamolin, several antioxidant compounds, such as sesamol and sesaminol, and other methylenedioxyphenol derivatives. Sesame oil has been reported to help combat diabetes, reduce high blood pressure, and promote heart health. However, due to the lipid components, the need to consume large amounts of oils to derive benefits from these has precluded their use in populations who need to restrict their fat calories. Additionally, people tend to use edible oils based on their preference, cost, and other factors.

Researchers at the University of Central Florida have developed a unique and simple method to separate the non-lipid components of sesame oil, producing a sesame oil aqueous extract (SOAE). In laboratory studies, the extract showed potent anti-inflammatory effects, and, in recent studies, was shown to significantly prevent atherosclerosis (i.e., hardening and narrowing of the arteries) in a mouse model. This extract can be freeze-dried and reconstituted with many other food types (e.g., beverages), and can be potentially used in other products such as, toothpaste, mouthwash, bandages, surgical dressings, IV fluids, and toiletries.

Looking for Partners

Looking for partners to further develop, test, and commercialize this technology.

Stage of Development

Product Development—currently researching the active component(s) in SOAE that has these anti-inflammatory benefits

Benefits

• Sesame oil
• Reduces/suppresses inflammation
• Reduces high blood pressure
• Prevents atherosclerosis
• SOAE
  ◦ Can be freeze-dried and reconstituted
  ◦ Used in a variety of products

Applications
• Additive/Supplement:
  ◦ Food

• Beverages
• Wound care articles
• Toiletries
• Oral care products

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• US Patent Pending

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