#### Health Benefits Olive Oil1

#### 1. Olive Oil Is Rich in Healthy Monounsaturated Fats

Olive oil is the natural oil extracted from olives, the fruit of the olive tree. About 14% of the oil is <u>saturated fat</u>, whereas 11% is polyunsaturated, such as omega-6 and omega-3 fatty acids. But the predominant fatty acid in olive oil is a monounsaturated fat called oleic acid, making up 73% of the total oil content. Studies suggest that oleic acid reduces inflammation and may even have beneficial effects on genes linked to cancer. Monounsaturated fats are also quite resistant to high heat, making extra virgin olive oil a healthy choice for cooking.

**SUMMARY:** Olive oil is rich in monounsaturated oleic acid. This fatty acid is believed to have many beneficial effects and is a healthy choice for cooking.

### 2. Olive Oil Contains Large Amounts of Antioxidants

Extra virgin olive oil is fairly nutritious. Apart from its beneficial fatty acids, it contains modest amounts of <u>vitamins E</u> and K. But olive oil is also loaded with powerful <u>antioxidants</u>. These antioxidants are biologically active and may reduce your risk of chronic diseases. They also fight inflammation and help protect your blood cholesterol from oxidation — two benefits that may lower your risk of heart disease.

**SUMMARY:** Extra virgin olive oil is loaded with antioxidants, some of which have powerful biological effects.

#### 3. Olive Oil Has Strong Anti-Inflammatory Properties

Chronic inflammation is thought to be a leading driver of diseases, such as cancer, heart disease, metabolic syndrome, type 2 diabetes, Alzheimer's, arthritis and even obesity. Extravirgin olive oil can <u>reduce inflammation</u>, which may be one of the main reasons for its health benefits. The main anti-inflammatory effects are mediated by the antioxidants. Key among them is oleocanthal, which has been shown to work similarly to ibuprofen, an anti-inflammatory drug. Some scientists estimate that the oleocanthal in 3.4 tablespoons (50 ml) of extra virgin olive oil has a similar effect as 10% of the adult dosage of ibuprofen. Research also suggests that oleic acid, the main fatty acid in olive oil, can reduce levels of important inflammatory markers like C-reactive protein (CRP). One study also showed that olive oil antioxidants can inhibit some genes and proteins that drive inflammation.

**SUMMARY:** Olive oil contains nutrients that fight inflammation. These include oleic acid as well as the antioxidant oleocanthal.

#### 4. Olive Oil May Help Prevent Strokes

<sup>1</sup> https://www.healthline.com/nutrition/11-proven-benefits-ofolive-oil#section13 Stroke is caused by a disturbance of blood flow to your brain, either due to a blood clot or bleeding. In developed nations, stroke is the second most common cause of death, right behind heart disease. The relationship between olive oil and stroke risk has been studied extensively. A large review of studies in 841,000 people found that olive oil was the only source of monounsaturated fat associated with a reduced risk of stroke and heart disease. In another review in 140,000 participants, those who consumed olive oil were at a much lower risk of stroke than those who did not.

**SUMMARY:** Several large studies demonstrate that people who consume olive oil have a much lower risk of stroke, the second biggest killer in developed countries.

#### 5. Olive Oil Is Protective Against Heart Disease

Heart disease is the most common cause of death in the world. Observational studies conducted a few decades ago showed that heart disease is less common in Mediterranean countries. This led to extensive research on the Mediterranean diet, which has now been shown to significantly reduce heart disease risk. Extra virgin olive oil is one of the key ingredients in this diet, protecting against heart disease in several ways. It lowers inflammation, protects "bad" LDL cholesterol from oxidation, improves the lining of your blood vessels and may help prevent excessive blood clotting. Interestingly, it has also been shown to lower blood pressure, which is one of the strongest risk factors for heart disease and premature death. In one study, olive oil reduced the need for blood pressure medication by 48%. Dozens — if not hundreds — of studies indicate that extra virgin olive oil has powerful benefits for your heart. If you have heart disease, a family history of heart disease or any other major risk factor, you may want to include plenty of extra virgin olive oil in your diet.

**SUMMARY:** Extra virgin olive oil has numerous benefits for heart health. It lowers blood pressure, protects "bad" LDL cholesterol particles from oxidation and improves the function of blood vessels.

# 6. Olive Oil Is Not Associated with Weight Gain and Obesity

Eating excessive amounts of fat causes weight gain. However, numerous studies have linked the Mediterranean diet, rich in olive oil, with favorable effects on body weight. In a 30-month study in over 7,000 Spanish college students, consuming a lot of olive oil was not linked to increased weight. Additionally, one three-year study in 187 participants found that a diet rich in olive oil was linked to increased levels of antioxidants in the blood, as well as weight loss.

**SUMMARY:** Consuming olive oil does not appear to increase the likelihood of weight gain. Moderate intake may even aid weight loss.

#### 7. Olive Oil May Fight Alzheimer's Disease

Alzheimer's disease is the most common neurodegenerative condition in the world. One of its key features is a buildup of socalled beta-amyloid plaques inside your brain cells. One study in mice showed that a substance in olive oil can help remove these plaques. Additionally, a human study indicated that a Mediterranean diet rich in olive oil benefitted brain function. Keep in mind that more research is needed on the impact of olive oil on Alzheimer's.

**SUMMARY:** Some studies suggest that olive oil may combat Alzheimer's disease, but more research is needed.

### 8. Olive Oil May Reduce Type 2 Diabetes Risk

Olive oil appears to be highly protective against type 2 diabetes. Several studies have linked olive oil to beneficial effects on blood sugar and insulin sensitivity. A randomized clinical trial in 418 healthy people recently confirmed the protective effects of olive oil. In this study, a Mediterranean diet rich in olive oil reduced the risk of type 2 diabetes by over 40%.

**SUMMARY:** Both observational studies and clinical trials suggest that olive oil, combined with a Mediterranean diet, can reduce your risk of type 2 diabetes.

#### 9. The Antioxidants in Olive Oil Have Anti-Cancer Properties

Cancer is one of the most common causes of death in the world. People in Mediterranean countries have a lower risk of some cancers, and many researchers believe that olive oil may be the reason. The antioxidants in olive oil can reduce oxidative damage due to free radicals, which is believed to be a leading driver of cancer. Many test-tube studies demonstrate that compounds in olive oil can fight cancer cells. More research is needed to determine whether olive oil in fact reduces your risk of cancer.

**SUMMARY:** Preliminary evidence suggests that olive oil may reduce cancer risk, but further studies are needed.

### 10. Olive Oil Can Help Treat Rheumatoid Arthritis

Rheumatoid arthritis is an autoimmune disease characterized by deformed and painful joints. Though the exact cause is not well understood, it involves your immune system attacking normal cells by mistake. Olive oil supplements appear to improve inflammatory markers and reduce oxidative stress in individuals with rheumatoid arthritis. Olive oil seems particularly beneficial when combined with fish oil, a source of anti-inflammatory omega-3 fatty acids. In one study, olive and fish oil significantly improved handgrip strength, joint pain and morning stiffness in people with rheumatoid arthritis.

**SUMMARY:** Olive oil can help reduce joint pain and swelling from rheumatoid arthritis. The beneficial effects are greatly increased

when combined with fish oil.

Olive oil contains many nutrients that can inhibit or kill harmful bacteria. One of these is Helicobacter pylori, a bacterium that lives in your stomach and can cause stomach ulcers and stomach cancer. Test-tube studies have shown that extra virgin olive oil fights eight strains of this bacterium, three of which are resistant to antibiotics. A study in humans suggested that 30 grams of extra virgin olive oil, taken daily, can eliminate Helicobacter pylori infection in 10–40% of people in as little as two weeks.

**SUMMARY:** Extra virgin olive oil has antibacterial properties and has been found to be particularly effective against Helicobacter pylori, a type of bacterium that can cause stomach ulcers and stomach cancer.

### Make Sure to Get the Right Type

Buying the right kind of olive oil is extremely important. Extra virgin olive oil retains some of the antioxidants and bioactive compounds from olives. For this reason, it's considered healthier than the more refined variety of olive oil. Even so, there is a lot of fraud on the olive oil market, as many oils that read "extra virgin" on the label have been diluted with other refined oils. Therefore, examine labels carefully to ensure you're getting real extra virgin olive oil. It's always a good idea to read ingredients lists and check for quality certification.

#### The Bottom Line

At the end of the day, quality extra virgin olive oil is incredibly healthy. Due to its powerful antioxidants, it benefits your heart, brain, joints and more. In fact, it may be the healthiest fat on the planet.

## 11. Olive Oil Has Antibacterial Properties

The health benefits of the Mediterranean diet<sup>2</sup> have been cited in numerous studies, and now with a new large study confirming that it protects from metabolic syndrome we have yet another reason to adopt this style of eating. But why is this latest study important? We asked Dr. Antonis Pothoulakis, an interventional cardiologist at the lasis Clinic in Chania, Crete to comment. Pothoulakis explained that the metabolic syndrome is a combination of abdominal obesity, high blood pressure, abnormal cholesterol, and high blood sugar. "Metabolic syndrome is connected to the obesity epidemic of our time, a big belly poisons our metabolism and a poisoned metabolism can result in type 2 diabetes, heart attacks, stroke, or sudden death," he says.

The new study included data from almost 535,000 people, with the conclusion that a Mediterranean style diet, which includes consumption of monounsaturated fats mainly in the form of olive oil, daily consumption of fruits, vegetables, whole grain cereals, and low-fat dairy products, weekly consumption of fish, poultry, legumes, and a relatively low consumption of red meat, may reduce the risk of metabolic syndrome.

Pothoulakis noted that following the Mediterranean diet led to a small but statistically significant reduction of metabolic syndrome and improvement in *all* its individual components (waist circumference, blood pressure, high blood sugar, low HDL and high triglycerides). "As these are average figures it means that some individuals following the Mediterranean diet could get larger improvements and some less or no improvement. But considering the enormity of the obesity and metabolic syndrome problem, it is definitely worthwhile adopting the diet and <u>olive oil</u>, with their anti-oxidant and anti-inflammatory properties," he stressed. Pothoulakis believes that the latest findings are great news for both the Mediterranean diet and olive oil. "The studies selected were of very good quality and the researchers used much "harder", that is scientifically more accurate, end-points such as waist circumference, blood pressure and blood sugar," he noted.

However, Pothoulakis pointed out, the Mediterranean diet and olive oil use alone cannot protect us against heart attacks and stroke. "We also need to modify the other two, very important lifestyle behaviors; smoking and exercise, as well as implement early and aggressive treatment of high blood pressure, abnormal cholesterol and high blood sugar," he says.

### Why Extra Virgin Olive oil?3

Researchers at the Universitat Autonoma de Barcelona decoded a complete cascade of signals within breast tumor cells activated by virgin olive oil and concluded that benefits include decrease in the activity of the oncogene p21Ras, changes in protein signaling pathways, stimulation of tumor cell death and prevention of DNA damage. The study was carried out in an experimental model and researchers have already begun a new study with human cell lines. Breast cancer is the most common type of cancer in Western countries. Research carried out with animal models demonstrate that a diet rich in fats is directly related to the

incidence of cancer. Some types of fats however can play a protective role against the development of these tumors.

Such is the case of virgin olive oil, rich in oleic acid, a monounsaturated fatty acid, and containing several bioactive compounds such as antioxidants. A moderate and regular intake of virgin olive oil, characteristic of the Mediterranean diet, is associated with low incidences of specific types of cancer, including breast cancer, as well as with having a protective role against coronary diseases and other health problems. The study carried out by UAB researchers decoded the mechanisms operating within the tumor cell and induced by the intake of olive oil, in comparison to those activated by corn oil, rich in n-6 polyunsaturated fatty acids, which increase the aggressiveness of tumors.

Scientists demonstrated that virgin olive oil is associated with higher incidences of benign breast tumors and at the same time with a decrease in the activity of the p21Ras oncogene, which spurs uncontrolled cell proliferation and stimulates the growth of tumors. In addition, olive oil suppresses the activity of some proteins, such as the AKT, essential for the survival of cells since they prevent apoptosis, the cell's "suicide" program. Between proliferation and apoptosis in tumor cells, these effects tip the balance towards cell death, thereby slowing the growth of tumors.

Another result obtained by researchers is the protection of DNA in the cell nucleus. Cells from animals fed a diet rich in virgin olive oil contained less DNA lesions than those fed a control diet.

Scientists of the UAB Breast Cancer Study Multidisciplinary Group (GMECM) have spent over twenty years working to determine the effects fats have on breast cancer, and in particular the effects of virgin olive oil.

Previous studies of the group revealed the beneficial effects of this component of the human diet on the clinical conduct of mammary tumors and on their histological grade (malignancy). Scientists also described several molecular mechanisms producing these effects and in 2004 the same group was the one to identify the four genes involved in the effects dietary fats have on experimental breast cancer. The mechanism recently discovered was published in the journal Carcinogenesis.

<sup>&</sup>lt;sup>2</sup> https://www.oliveoiltimes.com

<sup>&</sup>lt;sup>3</sup> https://www.oliveoiltimes.com