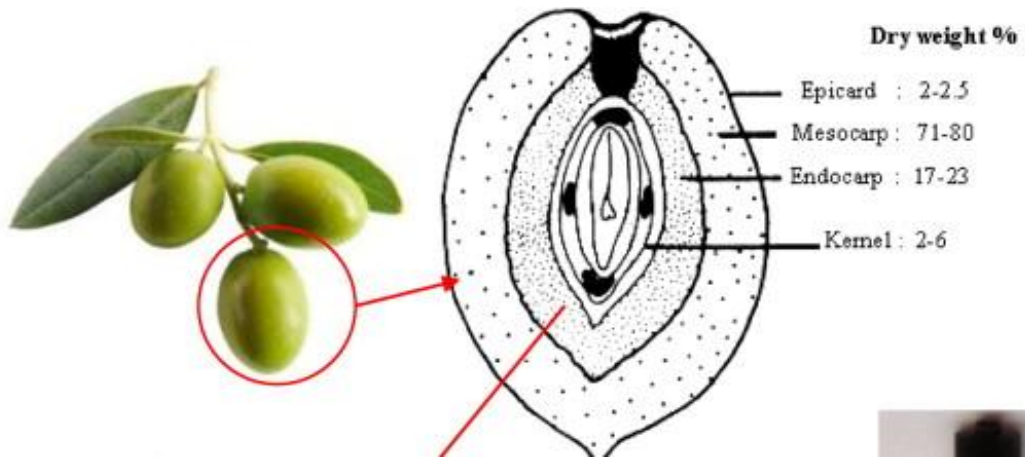


LESSON NO. 2 OLIVE TREE & OLIVE OIL.



• **Basic encyclopedia of Olive tree & Olive oil: -**

The olive tree exist since 6000 B.C or much before. Its fruit & oil is been used since 3500 B.C or before; to destruct olive tree was not allowed since long. The Olive tree is mentioned in Quran &

Bible; for complete Quran & Hadith references read lesson on Olive on my website www.tib-e-nabi-for-you.com or read my book part-2 lesson no. 40 Olive, page no. 82 onwards.

• **In Quran it is mentioned in following Sura/verses: -**

1. Chapter no. 6 (Sura) An'am verse no. 99
2. Chapter no. 6 (Sura) An'am verse no. 141
3. Chapter no. 16 (Sura) Nahl verse no. 11
4. Chapter no. 23 (Sura) Mu'minun verse no. 20
5. Chapter no. 24 (Sura) Noor verse no. 35
6. Chapter no. 80 (Sura) Abasa verse no. 29
7. Chapter no. 95 (Sura) Teen verse no. 1

In Chapter no. 24 (Sura) Noor verse no. 35 Allah Ta'lah has mentioned Olive tree as MUBARAK TREE this shows how blessed and precious the tree & its products are & we will learn why we should eat olive fruit & its oil & apply its oil on the body.

Come let's study what modern science has discovered about it till date. Let me tell you one thing that science has discovered very limited things & what it has discovered is very less & what is yet to discover it much more, science has not made or created anything it has only discovered and invented the creations of Allah & discovered or invented the things which Allah has made possible to invent or discover.

In Hadith of Prophet Muhammed (s.a.w) olive tree & its oil is mentioned; its tree is called as MUBARAK TREE in Hadith of Trimizi, Ibn ma-jah, please refer my book part-2 lesson no. 40 Olive, page no. 84 onwards. In Hadith it is said to eat olive oil & to massage with it; it is a good remedy for Juzaam & Basoor (both are deadly skin diseases since that time), piles & cure for 70 diseases, it is advised to use its oil with white costus & Memecylon in throat infection & pleurisy.

Read researches done on olive oil mentioned in my book in lesson no. 40 Olive in part-2. There are separate lessons in part-2 of my book on Memecylon, costus etc.

• **Olive tree: -**



The Olive tree is a member of ever green family; it is from Oleaceae family; its botanical name is *Olea europaea*; its strong roots can penetrate sand, lime stone & mostly all types of soils. The tree thrives best in regions with rainy winters & hot dry summers. It takes about 8 years to get the tree producing its fruits (olive). The tree lives for centuries; it is not very tall, its trunk is short, thick, irregular, twisted, light gray & full of bumps & cracks specially as it gets older. It

flourishes around the month of May, during summer & autumn. Its tree are grown more in Spain, Africa, Mediterranean basin, china, Arabian Peninsula, California, Argentina etc.

- **Leaves:-**



The olive leaves are arranged opposite to each other, they are lanceolate shaped (tapering to appoint at the apex and at the base) up to about 8 cm is length, its edges are complete & leaves are attached by small stalk, the colour is whitish on the underside which aims to protect it from cold in winter & heat in summer & bright green colour on upper side.

- **Flower:-**



In last spring small flowers appear on olive tree; Flower (burs) are very small & are clustered in inflorescences, they have 4 white petals & a strong fragrance, these petite flowers have the calyx & the corolla in one piece with very short tube & limb divided into 4 lobes.

- **Fruits:-**



Fruits are called olive; Wind pollination results in the blossoming of the olive fruit which reach their peak oil content approximately 6 months later, thus olive fruits are harvested from November to March. It is of green, reddish violet or black coloured depending on maturation & geographical region. Oil is expressed out from it; olive has one single seed (stone) of ovoidal shaped inside. Olives are of different sizes depending on the variety from which they come,

usually range between 1.5 & 3 cm. They are of green colour at first, as they mature & ripen turns blackish or purple or copper brown coloured. It is believed the olives resemble the shape of ovaries & assist the health & function of ovaries (female reproductive organ).

- **Olive Oil: -**

Oil is expressed out from the ripen olive fruits, it requires 2000 olive fruits to express out 950ml of extra virgin olive oil. The bitter taste in it is mainly due to presence of Oleuropein in it, to reduce the bitterness the fruits are flushed with warm water & rinse in cold water before expressing oil from it.

How Olive oil is expressed out: -

The ripen olives are collected & stored in a clean place & kept for a particular period to make the olives properly ripe but avoiding them from getting fermented, then it is flushed with warm water followed by rinse in cold water to reduce its bitter taste. Then it is crushed in machines the crushed material is then milled in machine to form a homogenized paste, and this paste is send for cold pressing to extract oil from it (the term cold pressing refers to that the oil is extracted out without heating the paste), then the paste is loaded on disk or in hemp pressing bags these disk or bags are kept in hydraulic pressing machine & tons of hydraulic pressure is given on stalks of the hemp bags loaded with the olive paste & oil is extracted out & the pulp remains in the bags. This is extra virgin olive oil expressed out in first pressing, it has less than 1% of acid in it, if the acidity is more than 2% then this oil is virgin olive oil though both are expressed out form 1st pressing, in this about 70% to 90% ingredients get extracted out in the oil. Then water is separated from the oil extracted out with centrifuge machine specially design for it, the water will be floating at the top of the oil after centrifuge cycle & the water is separated (Remember olive fruits are first flushed with warm water & rinse in cold water to reduce the bitter taste, but the water it to be removed), the colour of this oil may be deep-green or yellowish-green colour, later this oil is packed in different size bottle to market it.

Further more pressing cycles are done in different method to extract more oil from the remaining pulp its detail is given below in types of oil available in the market.

Types of Olive oil available in market: -

- 1) Extra virgin olive oil: - it is extracted out from the first cycle cold pressing method as mentioned above, in it no solvent & chemicals are used, the PH (acidity) is low from 0.225 to 0.80, in it the taste & odour of olive fruit is present.
- 2) Virgin olive oil: - same as above only the PH (acidity) is more than 2% (higher than extra virgin oil).
- 3) Refined olive oil: - it is taken out from the remaining pulp of first cold press this will be 2nd pressing cycle, in it solvents & chemicals are used to make pulp clean & pure also the pulp is boiled to remove oil from it.
- 4) Pomace olive oil: - in it seeds, skin, remaining pulp from the 2nd pressing is used, this will be the 3rd pressing cycle to remove oil.

- 5) Lampante olive oil: - it is not used for human, in it bad rotten olive fruits are used to express the oil & no refine process is done. It has high levels of acidity in it, it is mostly from the 1st pressing, the name Lampante comes from its use as burning lamps in olden days, it is used for animals, industries & etc, but it is not edible (not eatable).

- **Quality control: -**

Quality control of olive oil is regulated by FDA (Food & Drug Administration); In 1995 FDA reported that only 4% of the 73 domestically produced or distributed olive oil was pure. American olive oil association reported that the 300 olive oil they test each year only a handful are found to be impure.

- **Future: -**

New methods are in invention to exact out olive oil by centrifugation method or other method to press the oil out & to remove water from it. (Remember olive fruits are first flushed with warm water & rinse in cold water to reduce the bitter taste but the water it to be removed). The new methods will require less time, space, money & etc, also the pressing bags will not be used in new method because it needs to be washed properly after every pressing which is again time & money consuming.

- **Properties & uses of olive oil: -**

It is one of the most digestible edible oil, it is worlds 3rd best selling oil for cooking, frying also used directly as natural medicine to maintain health, used in cosmetic products, used for massaging the body for complexion and maintain skin health. Extra virgin is very costly comparing to other types of olive oil but it is the best to be used though others type can be used as well. It is used as dressing oil in salads, applied on wounds, post operative wounds, applied on hairs & etc.

Its melting point is 6.0 degree Celsius, boiling point is 700 degree Celsius, smoke point is 190 degree Celsius, specific gravity is 0.911 (density of a substance divided by density of water) (density means a amount of matter in an object compare with its volume), viscosity (thickness) is 84 (cP), acid value is 0.8 in extra virgin, 1 to 2 in virgin & 6.6 in refined & pomace oil.

- **Adulteration: -**

Colza oil (Rape seed oil) is used to cheat the market.

- **Calories: -**

1 teaspoon of olive oil contains 40 calories. 100 gram contains 884 calories.

- **Contents of extra virgin olive oil: -**

The contents in refined & pomace olive oil have lesser amount of quantity & quality.

Oleic acid, linoleic acid, palmitic acid, stearic acid, sterols, phenols (like hydroxytyrosol, tyrosol, oleuropein), natural triacylglycerol (triglycerides), squalene, chlorophyll, carotenoid, vitamin E,

vitamin D, vitamin K and in mild ratio calcium, zinc, iron, copper, manganese, selenium, amino acids, folic acid, vitamin B1, B2, B6, B12 & there are more than 200 minor components in extra virgin olive oil.

The above ingredients are based on scientific study, means these has been indentified, known & learnt by modern science, it does not means that it contains only these ingredients, there may be many more ingredients which are yet to be discover, learnt & known by modern science.

- **Natural Basic Pharmacology of extra virgin olive oil based on human intake in natural food products: -**

The details given below are based on natural ingredients found in extra virgin olive oil and not synthetically prepared, for example oleic acid is found naturally in olive oil but is also prepared synthetically, here we are learning about natural form: -

- **Oleic acid: -**

Its short hand notation is C18:1, it is a non essential (means it is produce naturally in the body) monounsaturated omega 9 fatty acid, it makes up 55% to 85% or more of extra virgin olive oil, It is insoluble in water & soluble in alcohol. It increases absorption of many drugs through skin by disrupting the lipids under the skin and penetration of the drugs, so olive oil is best to be used with other applications on skin and used in cosmetic formulas. It is advised in Hadith to eat it & massage with it just notice the importance of it.

Main sources of oleic acid: -

It is present in extra virgin olive oil is the best, also present in avocado oil, camellia oil, shea nut oil, apricot oil, sweet almond oil, whole egg, nuts, argan oil etc.

Basic pharmacokinetics of oleic acid (based on human intake in natural food products): -

It is believed that it is absorbed by different tissues mediated via passive diffusion to facilitate diffusion (this is under research) after taken up by the tissues it is stored in the form of natural triglycerides or oxidized, it is transported by lymphatic system; it is also believed to penetrate through skin (it is under research), its excretion is in stool. It is stored 98% in adipose tissues depots in form of triglycerides. Its metabolism & plasma half life is yet not known.

Basic clinical pharmacology of oleic acid: -

It increases bioavailability of following medicines cortisol, hydrocortisone, betamethasone, 17 benzoate betamethasone, 17 valerate (betamethasone), ketarolac (anti inflammatory), metronidazole, progesterone & estradiol. So I advised to mixed powder of prednisolone mixed in extra virgin olive oil and apply on eczema & psoriasis and get good results in cheaper rates.

Oleic acid prevents cardio vascular disease, blood pressure, skin disease, breast cancer, colon cancer, prostate cancer, stomach cancer, diabetes, gall stones, gastrointestinal disease and pancreatic disease. It reduces cholesterol, triglycerides, LDL, inflammation, swelling etc.

- **Phenolic constituents of extra virgin olive oil: -**

The main phenolic includes hydroxytyrosol, tyrosol, oleuropein, they are well absorbed in human body, they preserve the olive oil for longer period, presence of them makes the olive oil bitter (so extra virgin olive oil is more bitter) and they are present in olive leaves, fruits thus present in olive oil also (specially oleuropein). It is semi water soluble.

Main sources of phenolic constituents: -

It is present in extra virgin olive oil mainly & also cuphea oil.

Basic pharmacokinetics of phenolic constituents (based on human intake in natural food products): -

They are absorbed extensively & modified in the body & excreted in urine (but it is in research & the complete metabolism will be known after the research). Its storage in the human body is not known.

Basic clinical pharmacology of phenolic constituents: -

They are powerful anti-oxidant (prevent cancer and deadly disease) by acting as a free radicals scavengers & radical chain breaker. It prevents heart disease (reduces cholesterol & LDL & prevent hardening of heart arteries-atherosclerosis), metabolic disease, diabetes, cancers of many types (it acts on anti-oncogenic pathway thus the growth of tumour cells & cancer cells is inhibited), they protect the brain damage; they are anti-microbial specially bacteria of lungs & intestines. They are also metal chelator (metal stabilizer & make metal soluble).

- **Squalene: -**

It is a natural organic compound obtained from olive oil or shark liver oil.

Main sources of squalene: -

It is present in extra virgin olive oil, soybean oil, grape seed oil, peanut, rice, wheat germ, corn, shark liver oil etc.

Basic pharmacokinetics of squalene (based on human intake in natural food products): -

Squalene is better but slowly absorbed through skin & poorly through intestines. Its absorption, metabolism & excretion are not known yet, it is under research.

Basic clinical pharmacology of squalene: -

Squalene is best of skin diseases, (specially psoriasis, eczema & inflammatory skin diseases) it promotes skin health & complexion (thus olive oil is ideal for skin) it has anti cancer activity also. It is a strong anti-oxidant thus prevents the skin from UV damages & aging because it is a good skin moisturizer. It is also an anti-bacterial thus heals wound & ulcer on skin.

- **Linoleic acid: -**

It is a carboxylic acid, it make up 3% to 15% of extra virgin olive oil, It is polyunsaturated with omega 3 & 6 fatty acids; its short hand notation is 18:2, it is an essential fatty acid that must be consumed for health.

Main sources of linoleic acid: -

It is present in olive oil, evening primrose oil, sunflower oil, walnut oil, hemp oil, grape seed oil, safflower oil, egg yolk, butter & etc.

Basic pharmacokinetics of linoleic acid (based on human intake in natural food products): -

It is first hydrolyzed from dietary fats & pancreatic enzymes & then with the help of bile it is absorbed in small intestine; metabolism & excretion are under research.

It gets converted into gamma linoleic acid (GLA) in the body, GLA is converted in the body into dihomogamma linoleic acid (20 carbon chain) & it is converted into Arachidonic acid which is converted into Docosahexaenoic (long chain fatty acid with 22 carbons) acid.

Basic clinical pharmacology of linoleic acid: -

It acts on prostaglandin system of the body thus is anti-inflammatory, blood thinner, vasodilator (expand the blood vessel) it is very helpful in treatment of rheumatoid arthritis, breast lumps, fibro-adenoma (nodes in breast), cancers, reduces cholesterol, it prevents heart disease, diabetes, skin ulcers, irritable bowel syndrome etc.

- **Palmitic acid: -**

It makes up 7% to 13% of extra virgin olive oil; it is a common saturated fatty acid; it is the first fatty acid produced during lipogenesis (fatty acid synthesis) & from which longer fatty acids can be produced.

Main sources of palmitic acid: -

It is present in olive oil, flaxseed oil, soyabean oil, sunflower oil, palm oil, cocoa butter, meat, milk & etc.

Basic pharmacokinetics of palmitic acid (based on human intake in natural food products): -

Its absorption, metabolism & excretion are under research.

Basic clinical pharmacology of palmitic acid: -

It softens the skin & keeps it moist thus good for psoriasis & eczema. It coats the skin, it is powerful anti-oxidant; it maintains the health of hair & skin from aging, cleans them from dirt, sweat, excessive sebum (main cause of acne and boil on face & other parts of the body).

- **Stearic acid: -**

It makes up 0.5% to 5 % of extra virgin olive oil; it is saturated fatty acid.

Main sources of stearic acid: -

It is mainly present in olive oil, also present in butter, whole milk, yeast bread, egg & etc.

Basic pharmacokinetics of stearic acid (based on human intake in natural food products): -

Its absorption, metabolism & excretion are under research.

Basic clinical pharmacology of stearic acid: -

It cleans the skin & removes dirt, sweat & excessive sebum from skin & hair. The colour of olive oil is due to pigments of stearic acid like chlorophyll, pheophytin & carotenoid that's why extra virgin olive oil has colour of its own which refined & pomace do not have.

- **Vitamin K: -**

It is a fat soluble vitamin; it is essential for normal blood clotting; it occurs naturally in two forms, vitamin K1 (phylloquinone) which is widely distributed in plants; it is present in olive oil; Leafy vegetables are good sources of K1; vitamin K2 (menaquinones) is synthesized in alimentary tract by bacteria (Escherichia coli & other bacteria).

Main sources of vitamin K1: -

It is present in olive oil & also present in green leafy vegetables (spinach, kale etc) cauliflower, cabbage, broccoli, sprout, fish, liver, meat, egg, cereals etc.

Basic pharmacokinetics of vitamin k (based on human intake in natural food products): -

It is absorbed in small intestine, bile is required for it absorption & stored in fatty tissues & liver; it is excreted 40% to 50% in stools & 30% to 40% in urine.

Basic clinical pharmacology of vitamin K: -

It acts on synthesis of certain proteins that are prerequisites (necessary) of blood coagulation (means act on stop bleeding) & body also needs it to control the binding of calcium in bones & other tissues. Deficiency of it makes bones weaker, calcification of arteries & other tissues thus take care of bones, joints & heart; it reduces tumour growth & is helpful in cancers.

- **Vitamin E: -**

It is fat soluble vitamin; it is a group of eight fat soluble compounds that includes four tocopherols & four tocotrienols.

Main sources of vitamin E: -

It is present in olive oil, almonds, cereals, wheat germ, sunflower oil, corn oil, soybean oil, peanuts, green leafy vegetables & etc.

Basic pharmacokinetics of vitamin E (based on human intake in natural food products): -

It is absorbed in small intestines & metabolized in liver & distributed through lymphatic system & stored in fat droplets of adipose tissue cells; it is mainly excreted in stool, little in urine & through skin.

Basic clinical pharmacology of vitamin E: -

It prevents coronary heart disease, supports immune system, prevent inflammation, promotes eye health, lowers the risk of cancer; It is a powerful anti-oxidant thus reduces UV damage of skin, nourishes & protects the skin when applied on face; also promotes hair growth.

- **Vitamin D: -**

It is a fat soluble vitamin; it is a group of fat soluble secosteroids responsible for increasing intestinal absorption of calcium, magnesium, phosphate etc.

Main sources of vitamin D: -

It is present in olive oil, fish, liver, egg yolk, milk, salmon oil, orange, cereals, soy milk, legumes etc.

Basic pharmacokinetics of vitamin D (based on human intake in natural food products): -

It is absorbed in small intestines; it is mainly excreted in stools. All forms of vitamin D are biological inactive (body cannot use it directly) & get activated in liver & kidney by some enzymes; it is mainly of 2 types, 1) Vitamin D3 (cholecalciferol) 2) Vitamin D2 (ergocalciferol). Both can be ingested from diet.

Vitamin D3 is naturally synthesis from cholesterol by skin on sun exposure (UVB short radiations). It is converted in liver into Calcifediol (25-hydroxycholecalciferol) & kidney converts it into Calcitriol & this is biologically active (usable by the body). Vitamin D2 is converted in liver into (25-hydroxyergocalciferol).

Basic clinical pharmacology of vitamin D: -

It increases absorption in intestines of calcium, magnesium, phosphate & many other minerals; it acts on metabolism of calcium, phosphate thus promotes bone health & growth, promotes remodeling of bones in children; it reduces inflammation, improves cell growth, neuromuscular functions, immune function, prevents osteoporosis (pores in bones), rickets in children. Calcitriol binds with vitamin D receptors (VDR) which are mainly present in the nuclei of target cells. Its deficiency may cause rickets (mainly in children), weak bones, weakness in muscles, fatigue, headache, blood pressure, inflammation in mouth, skin pigmentations, obesity etc.

- **Sterols: -**

There are many times of phytosterols in extra virgin olive oil, research is on, the main types of phytosterols present in extra olive oil are beta sitosterol, delta 5 avenansterol, campesterol etc; phytosterols present in extra virgin olive oil have little different structure comparing to other phytosterols thus making them more beneficial for heart health, reducing cholesterol absorption & various other health benefits.

Main sources of sterol: -

It is present in olive oil, nuts, legumes, orange, wheat germ, wheat bran, fresh salad, vegetable oil etc.

Basic pharmacokinetics of sterols (based on human intake in natural food products): -

They are absorbed in small intestines; it is in research & not known properly yet.

Basic clinical pharmacology of sterol: -

It reduces absorption of cholesterol thus good for heart health.

- **Chlorophyll: -**

The green colour of olive fruit is mainly due to pigments of chlorophyll & yellowish colour due to carotenoid; the presence of chlorophyll-A make the extra virgin olive bluish-green colour & chlorophyll-B make the oil yellowish-green. Its atomic symbol is Mg, & atomic number is 12; its salts are essential in nutrition, required for activity of many enzymes, it is component of both intra & extra cellular fluids.

Main sources of chlorophyll: -

Chlorophyll is present in olive oil, wheatgrass, broccoli, grapes, celery, peas, sprouts, dark leafy vegetables etc.

Basic pharmacokinetics of chlorophyll (based on human intake in natural food products): -

It is absorbed in small intestines but little can be absorbed because it cannot resist long to get digested & is excreted in urine & stools.

Basic clinical pharmacology of chlorophyll: -

Its deficiency causes irritability of nervous system, also causes vasodilation (dilate the blood vessels), tremors, depression, psychotic behavior. It helps the entire body to flush out toxins that can cause diseases, improves heart function, also helps in losing weight, reduces acne & pimples, and also prevents cancers, acts on skin & body healthy.

- **Carotenoid: -**

It is a fat soluble; it is also called as tetraterpenoid; it is an organic pigment produced in plants giving them bright red, yellow, orange etc colour. It helps the plant to absorb light energy for photosynthesis; it protects our body from diseases & maintains health. It is of more than 600 types of which 50 to 60 types are eaten in food by human. It is not made by our body we depend on food source to be eaten.

Main sources of carotenoid: -

Carotenoid is present in olive oil, watermelon, tomato, kale, oranges, olive, carrot, plums, apricots, mango, sweet potato, kale, spinach, coriander etc.

Basic pharmacokinetics of carotenoid (based on human intake in natural food products): -

It is fat-soluble; It first gets emulsified followed by solubilized in micellar then require bile salts & absorbed in intestine, little is absorbed in stomach; it is excreted in stools (research in on), it is stored in body fats and will convert the stored carotenoid into vitamin A when needed by the body and use it.

Basic clinical pharmacology of carotenoids: -

It is converted into vitamin A in our body, it is essential for vision, immune system, prevents cardio vascular disease, it helps reducing inflammation, cancers risk.

- **Gross basic pharmacokinetics of olive oil based on human intake in natural food products: -**

As the olive oil is consumed specially oral alone or with some eatable or food cooked with it (but mainly alone on empty stomach) it first gets hydrolysis (means breakdown of compounds due to reaction of water) in the stomach & duodenum. Then pancreatic juices, gastric juices & bile (from gall bladder) leads to lipolysis (breakdown of fats & lipids to release fatty acids), then the substance get emulsified (it is mixing of 2 or more liquids mixe together to form a thick liquid) now digestion starts in the jejunum (upper small intestine) followed by digestion in ileum (lower small intestine) now the digested material is send to liver through portal veins for metabolism. Extra virgin olive oil needs less gastric juices & pancreatic juices because it is rich in natural digestive enzymes & get digest better in proper time without giving load on gastric organs.

Olive oil does not reduces tone of sphincter at the upper end of the stomach thus prevent gastro-esophageal reflux disease (GORD) (reflux back of eaten food into food pipe); It partially inhibits the gastric motility (movements) & due to this, content of stomach (eaten food processed) are released slowly & gradually in duodenum (giving a feeling of fullness in stomach) by this digestion take place properly and less gastric & pancreatic juices are released giving less load on the digestive organs & helpful in all pancreatic diseases.

Olive oil acts on optimal bile drainage & full emptying of gall bladder by acting on contraction of gall bladder thus prevents gall stones & gall bladder disease, it also acts on synthesis of bile salts in liver & increase the amount of cholesterol excretion by liver; thus improves function of liver & gall bladder.

Olive oil produces digestives juice naturally same as produced by pancreas thus give rest to pancreas & prevent pancreas disease; it reduces the absorption of cholesterol in the intestine & increases the absorption of calcium, iron, magnesium & other nutrients. It is very well digested & help in constipation due to mild laxative properties & stops bad breath. It takes about 5 to 10 hours to fully digest depending the mode & amount of intake.

- **Excretion: -**

It is excreted about 62% in urine & 38% in stools. Hydroxytyrosol present in olive oil is a powerful anti-oxidant is excreted mainly in urine as glucuronide-conjugate. It is excreted about 90% in urine, 5% in stools.

- **Metabolism: -**

Metabolism of olive oil is in liver (it is under research and not known fully).

- **Organ: -**

In research it is found that the radio-labeled oleic acids present in olive oil reaches the heart, liver, lungs, spleen, kidneys, muscles, intestine, adrenal glands & dental tissues; Oleic acid is primarily transported via lymphatic system of the body. It also penetrates through skin.

- **Plasma Half life: -** It is yet not clear and research is going on.

- **Health benefits & indications of extra virgin olive oil: -**

Extra virgin olive oil is useful in following diseases & conditions:- cardiovascular disease, Alzheimer's, nervous diseases, cancers, colon cancer, breast cancer, prostate cancer, makes blood pressure normal, reduces inflammation (swelling), reduces cholesterol, triglycerides, L.D.L, oxidative stress, blood sugar in diabetes, good for bones & joints, anti thrombotic (heals thrombosis), good for all skin diseases, best for aging, complexion, hairs, nails, muscles, liver, lungs, kidneys, spleen, pancreas & their related diseases, also best for gall bladder disease, gall stones, intestinal disease, gastric ulcers, gastritis, dental problems & much more.

- **Modern uses of olive oil: -**

For Complexion: -

Take ¼ cup yogurt, ¼ cup of pure honey, 2 tea spoon extra virgin olive oil, mixe all properly & apply on face, leave for 20 minute & wash with warm water. (Apply it once or twice a week at night time).

Eat 7 pieces of watermelon daily on empty stomach early morning with 1 table spoon of honey daily for 11 days than alternative 11 days than once a week for 11 weeks. Rub watermelon & little extra virgin olive oil in the morning on face & cucumber & little extra virgin olive oil at evening daily for 15 days then alternative days for 40 days wash your face with luke warm water after 15 minutes.

For aqing: -

2 tea spoon of extra virgin olive oil, 1 table spoon of lemon juice, a pinch of sea salt, first apply a little extra virgin olive oil on face & mixe the lemon juice, olive oil & sea salt properly & apply on face leave it for 20 minute & wash with warm water (apply this once or twice a week).

For hair: -

Take ½ cup extra virgin olive oil, 2 table spoon of pure honey & one egg, mixe all together properly & apply on hair leave it for 20 minute & wash off with luke warm water & follow up with hair conditioner. Do it once a week.

For general health: -

Take 1 table spoon of extra virgin olive oil, 1 table spoon of pure honey & 3 pinch of black caraway (kalonji) powder, mix together all three & lick & drink 1 cup water on it, early morning empty stomach & bed time. Massage full body once a week at night & take bath in morning with warm water. Put 3 drops in both nostrils 3 times a week at night while sleeping.

According to researches eating 2 table spoon of extra virgin olive oil everyday reduces risk of many types of cancer & heart diseases.

Take extra virgin olive oil with fresh salad or fruits because they are of opposite qualities & nutrition facts & eating together both get neutralized & it is Sunnah to eat a neutralized food, example it is Sunnah to eat cucumber with dates or watermelon with dates or butter with dried dates. Refer lesson dates, cucumber & watermelon in my book part-2.

For irritable bowel syndrome: -

Give enema per rectum of extra virgin olive oil, 1st 3 days 10ml twice a day followed by 15 ml for more 3 days followed by 21 ml for 34 days enema should be taken by an expert only who knows to give enema or refer YouTube video on how to give enema per rectum.

For gall stones & pancreatic disease of all types: -

7 drops of fresh lemon juice, 1 table spoon of extra virgin olive oil & 1 table spoon of pure honey, mix together & lick, drink 1 cup water on it, take early morning empty stomach, evening & bed time.

Olive oil is the best natural oil to be used, its tree is referred as MUBARAK by ALLAH (The Almighty) in QURAN by this we can imagine the importance of it. We should use it in cooking, frying, eating, massage etc regularly.

For Blood pressure: -

Eat 7 pieces of watermelon with 1 teaspoon of extra virgin olive oil, early morning before 7.00 am & evening 5.30 pm (lick olive oil first and eat watermelon); do not leave your blood pressure medicine suddenly but monitor the blood pressure daily & consult your doctor or leave the medicine gradually if blood pressure is normal continuously & monitor it daily after leaving the medicines if your BP is normal, continue taking watermelon & olive oil.

For acidity & cardiac (heart) health: -

Lick one table spoon of extra virgin olive oil, 1 spoon of honey, 1 spoon of aloe vera gel & drink 1 cup water on it, empty stomach morning & evening 6.00 pm for 15 days or more.

- **Conclusion: -**

Olive is mentioned as MUBARAK by its CREATOR ALLAH and in HADITH also, admire the health benefits & importance of olive oil mentioned above, it is beneficial for whole body to keep us healthy and disease free, also prevents & heal many diseases. It is amongst the best natural products & easily available.

Use it regularly in eating & massaging. Health benefits of it cannot be compared with any medicinal products or eatables. Combining it with honey make the world best natural product for health & healing the diseases. It is suitable to all age all season. Use with vegetables or fruits salad as a dressing oil, cook food in it, it seems to be costly but reduces medical expense & other expenses regarding health thus is cheaper economically.

Also massage with it once a week or once in 15 days whole body at night and bath with warm water in the morning, bath with sidr leaves (jujube) water, means boil water with some sidr leaves (jujube leaves) and pour this boiled water in your bathing water.

Apply its oil on face for complexion 5 times a week at night; mix some cucumber or watermelon in extra virgin olive oil prepare a paste and apply on face for 30 minutes and wash with luke water. Come let's use it & teach others this valuable herbal medicine of Prophetic medicine.

- **Contraindications: -**

Allergy to olive oil (it is very rare).

Olive oil nutritional facts.

Amount Per	1 tsp (4.5 g)	100 grams	
Calories	884		
		% Daily Value*	
Total Fat	100 g	153%	
Saturated fat	14 g	70%	
Polyunsaturated fat	11 g		
Monounsaturated fat	73 g		
Cholesterol	0 mg	0%	
Sodium	2 mg	0%	
Potassium	1 mg	0%	
Total Carbohydrate	0 g	0%	
Dietary fiber	0 g	0%	
Sugar	0 g		
Protein	0 g	0%	
Vitamin A	0%	Vitamin C	0%
Calcium	0%	Iron	3%
Vitamin D	0%	Vitamin B-6	0%
Cobalamin	0%	Magnesium	0%

*Per cent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.