



## **Review Article**

ISSN 2320-4818 JSIR 2016; 5(4): 152-155 © 2016, All rights reserved Received: 07-07-2016 Accepted: 20-08-2016

#### Medha Kulkarni

Professor & HOD, Department of Swathsavrutta, Dr.D.Y.Patil Ayurveda college, Pimped, Pune, Maharashtra-411018, India

#### A.P.Dubewar

Professor & HOD, Department of Rasashastra and Bhaisjajya Kalpana, Dr.D.Y.Patil Ayurveda college, Pimped, Pune, Maharashtra-411018, India

#### Y.D.Kutte

Assistant Professor, Department of Sharir Rachana, Dr.D.Y.Patil Ayurveda college, Pimped, Pune, Maharashtra-411018, India

# A conceptual review of properties of olive oil as per Ayurveda with special reference to *Anukta Dravya*

Medha Kulkarni\*, A.P.Dubewar, Y.D.Kutte

### Abstract

Due to globalization world has come closer. Today means of communication has become very fast, incidentally people travel from one country to other frequently. They consume the food available in respective country. These food items consumed apart from India are not mentioned in Ancient Ayurvedic text. Hence they can be called as *ANUKTA DRAVYAS*. Present article is an attempt to study one such oil that is olive oil from the perspective of Ayurveda because these substances when consumed regularly must be having effect on the health of a person.

Keywords: Anukta Dravya, olive oil, swasth-hitakardravyas, Prayopgicdravyas.

# INTRODUCTION

Ayurveda deals with every aspects of human life. But it is clearly mentioned in the ayurvedic text that this ancient science should develop, updated in all aspect as the time progresses. It should be doubtless. The principles of Ayurveda are eternal but its applications can be modified as per the timely changes in society, at the same time the newer inputs should be tested as per the principals of ayurved.

In today's era of globalization and modernization with changing lifestyle patterns, people opt for a variety in their diet. Persons travelling from one place to other or from one country to another are changing their dietary habits. They are consuming the food substances which are in practise in the place where they are travelling. After returning back to their own places also they are continuing the same food.

The food items like cheese, pasta, noodles, variety of sauces, vegetables like broccoli, zukini, lettuce, oils like soyabene, rice bran, and olive are becoming popular all over the world. All these food substances are becoming popular in Indian urban population and consumed regularly.

Such food items are not mentioned in the ancient *Ayurvedic* texts. They are considered as *ANUKTA AAHAR DRAVYAS* (Food not mentioned in texts).

### Need of study

It is the need of present era to study these *anuktadravyas* from perspective of *Ayurveda*. Because these substances when consumed regularly must be having effect on the health of a person.

Ayurveda has mentioned the *Dravyas* (substances) in three categories, [1]

- 1: Substances rectifying the discordance of the body elements (*Doshaprashamanam*)
- 2: Substances vitiating the body elements (*Dhatupradushanam*)
- 3: Substances conducive to the maintenance of good health (Swasthvrittamatam).

Swathahitakara substances includes cereals, pulses, vegetabls, fruits, dryfruits, alcohol, various types of milk, various types oils and fats etc.

In present article olive oil which is in use today all over the world is considered. Olive oil is not mentioned in *Ayurvedic* texts as it is not produced in India. Hence it can be considered as *Anukta dravya*. <sup>[2]</sup> The study of olive oil is not done till date from *Ayurved* point of view scientifically.

## Correspondence: Dr. Medha Kulkarni

Professor & HOD, Department of Swathsavrutta, Dr.D.Y.Patil Ayurveda college, Pimped, Pune, Maharashtra-411018, India As olive oil has become regular oil (*prayopgic*) [3] in present era determination of its properties and actions have now become the need of society.

Hence this article is made to emphasize on the conceptual understanding of olive oil as *Anuktadravya* and effort is made to determine the properties of it.

The word *Anukta* is derived from the root vac with negation attached to the basic root. Thus *Anukta* literally means unsaid and unuttered. With specific reference to *Ayurveda*, the entity, which is not directly or specifically mentioned in the *Ayurvedic* texts, is *Anukta*. Literary meaning of the word *anukta* is 'unstated'. In the context where nothing is clearly said; *Anukta* is taken as standard parameter. It helps not only in understanding the classical concepts but also becomes base for understanding the new diseases, drugs and treatment principles and so on. The description of *Anukta* is very interesting because it clarifies the confusions that arise from the terms and definitions which are not clearly dealt.

As the scope of perception is limited, the unlimited is the scope of things known through the other sources of knowledge, viz. scriptural testimony, inference and reasoning. Thus with the help of scriptural testimony, inference and reasoning, knowledge of new drug, disease and formulation are ascertained. [4]

## Concept of anukta

IT is stated in the context of *tantrayukti*. The specific *tantrayukti* i.e. *Atideshatantrayukti* is attributed to understand the concept and technology of *anukta*. The general guidelines for understanding concept of *Anukta* based on existing principles: The understanding, analyzing and applying *trisutras* of *ayurveda* viz. *hetu*, *linga* and *oushadha* - is the need of present era, this is applicable for new disease and new drug and new formulation. This requires the appropriate theoretical description. Here an effort has been made to understand the concept of *Anukta* with above background.

Chakrapani comments that atideshatantrayukti <sup>[5,6]</sup> (getting the knowledge of unsaid things) helps for clarification of the hidden meaning and also derives the unsaid things. Based on the method followed to explain the existing condition, explanation of the new disease or drug or formulation should be made. To understand the extension of existing technology / concept is atideshatantrayukti.

All the dravya are made up of *panchamahabhoota* (five basic elements) such as *Prithv*i, *Ap*, *Tej*, *Vayu* and *Akasha*. Thus depending upon the concept of *panchamahabhuta*, the new *dravyas* (*ahara/aushadha*) evolved, which are not mentioned in *ayurvedic* texts, can be understood. [7-10]

It is stated that any drug can be studied by taking consideration of some determining points of constitution of *panchamahabhutas*.

## Olive oil as anukta dravya

According to those points an effort has been made to determine the properties of olive oil. [11]

1. Name and Natural order of the drug : Olive (Oleaeuropaea)oil

The word "oil" in multiple languages ultimately derives from the name of this tree and its fruit.

- Physical and Chemical properties: olive oil its bitter and pungent taste, having acidic properties, as it is oil it is oliating and hot
- 3. Soil required to grow oil: They grow in any light soil, even on clay if well drained,
- 4. Climate required for Olives: Olives grows well in hot weather and sunny positions without any shade.
- 5. Therapeutic action: Olive oil is used to prevent heart attack and stroke, cardiovascular diseases, breastcancer, various cancers, migraine headache.

Some people use olive oil to treat constipation, high cholesterol, hypertension, constipation, blood vessel problems associated with diabetes, and pain associated arthritis, and gall bladder disease. Some people also use olive oil to boost bacteria in the gut and as a "cleanser" or "purifier."

6. Habitat or places where it grows:

Olive is a species of small tree in the familyOleaceae, found in much of Africa, theMediterranean basin from Portugal to the Levant, the Arabian Peninsula, and southern Asia as far east as China, as well as the Canary, Maurotius and Reunion.

7. Season in which it grows:

The Mediterranean climate is characterized by warm to hot, dry summers and mild to cool, wet winters. Olives are harvested in the autumn and winter

- 8. Methods of collection: The olive fruit into olive paste by crushing or pressing. This paste is then malaxed(slowly churned or mixed) to allow the microscopic oil droplets to agglomerate. The oil is then separated from the watery matter and fruit pulp with the use of a press (traditional method) or centrifugation (modern method). After extraction the remnant solid substance, called pomace, still contains a small quantity of oil.
- 9. Method of preservation: It should be stored in cool dark place.
- 10. Pharmaceutical processing's and its properties: Olive oil is produced by grinding olives and extracting the oil by mechanical or chemical means. Green olives usually produce more bitter oil, and overripe olives can produce oil that is rancid.

Olive oil is composed mainly of the mixed triglyceride esters of oleic acid and palmitic acid and of other fatty acids, along with traces of squalene (up to 0.7%) and sterols (about 0.2% phytostosterol and tocosterols). The composition varies by cultivar, region, altitude, time of harvest, and extraction process.

11. Dosage: Olive oil is the main cooking oil in countries surrounding the Mediterranean and now a day it is consumed in all parts of world.

Extra virgin olive oil is mostly used as a salad dressing and as an ingredient in salad dressings. It is also used with foods to be eaten cold. If uncompromised by heat, the flavor is stronger. It also can be used for sautéing.

# CLINICAL TRIALS AND RESULTS [12-20]

Patients with active rheumatoid arthritis completed a 24-week, prospective, double-blind, randomized study of dietary supplementation with 2 different dosages of fish oil and 1 dosage of olive oil.

**Results:** The clinical benefits of dietary supplementation with omega-3 fatty acids are more commonly observed in patients consuming higher dosages of fish oil for time intervals that are longer than those previously studied. Dietary supplementation with olive oil is also associated with certain changes in immune function, which require further investigation.

In a prospective study of Mediterranean individuals at high cardiovascular risk, it was found that baseline total olive oil consumption, especially the extra-virgin variety, was associated with a significant reduced risk of major cardiovascular events and cardiovascular mortality in a Mediterranean population at high cardiovascular risk

Hence Properties of oil are same as of the substance from which it is extracted.

And as olive is a fruit and consumed as dietary substance hence it can be said that olive oil is non toxic.

As olive requires dry and light soil, and in hot and dry weather, as per ayurveda one can define it as it grows well in Agni, Vayu, and Aakashmahabhuta dominant conditions. Hence it contains more aagneya qualities. As it requires hot and dry climate and it does not require more rain hence can be said that it is laghu.

After extraction of olive oil the remaining substance – pomace is used as fodders hence it can be definitely say that it has *dhatuposhan* as well as *jivaniya* property.

The taste of the olive oil is influenced by the varietals used to produce the oil from and by the moment when the olives are harvested and ground (less ripe olives give more bitter and spicy flavors – riper olives give a sweeter sensation in the oil).

Olive has bitter and pungent taste. As bitter taste creates cleansing of oral cavity and pungent taste creates tingling sensation on tongue, nasal and eye secretions.

As olive oil is stored in cool and dark place it must be of ushna property.

- > Density of Olive oil is 20 hence it has *sandra* property.
- ➤ Olives are soft and fleshy hence of *mrudu* property.
- > Olive oil relieves constipation hence sara property.
- As oil can be extracted from olive it is of snigdha property.
- ➤ Olive if preserved in cool dark place it is stable and does not become rancid hence *sthira* property.
- Olive oil can penetrate through minute channels hence of sukshma property.
- When consumed it creates sliminess in oral cavity hence of pichila property.

## CONCLUSION

From above discussion one can conclude by defining the properties of olive oil as follows:

- 1. We can say that olive oil posses, sthira, mrudu, property of prithvimahabhta, drava,snigdha,mrudu, pichila and saraguna of jalamahabhuta. Ushna, tikshna, laghu, sukshmaguna of agnimahabhuta, laghu, ruksha properties of vayumahabhuta and sukshma,laghu property of aakashmahabhta.
- 2. Again from taste point of view olive oil is of Bitter and Pungent taste. Bitter taste is of *prihvi* and *vayumahabhuta* dominance and pungent tase is of *tej* and *vayumahabhuta*dominance.
- 3. As olive grows well in *Agni, Vayu*, And *Aakashmahabhuta* dominant conditions, its *veerya* (potency) must be *ushna*.
- 4. And ultimately as olive oil is beneficial in reliving constipation its *vipak* (After taste) must be *katu*.

### REFERENCES

- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak –Chandrika , Edition II , Sutrasthana; chapter 1 Ver 68.Reprinted.Varanasi: Chowkhambha Surbharati prakashan:2002.
- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak -Chandrika , Edition II ,Vimanasthana; chapter 8 Ver 149.Reprinted.Varanasi: Chowkhambha Surbharati prakashan; 2002 .
- 3. BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak –Chandrika , Edition II ,Chikitsasthana; chapter 27 Ver 329.Reprinted.Varanasi: Chowkhambha Surbharati prakashan; 2002 .
- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak –Chandrika , Edition II ,sutrasthana; chapter 1 Ver 124-125.Reprinted.Varanasi: Chowkhambha Surbharati prakashan; 2002.
- Anant Ram Sharma, Editor. Susruta Samhita of Maharshi susruta, vol III, Uttartantra, Edition I; chapter 65, Ver 506 Varanasi: Chowkhambha Surbharati prakashan; 2001.
- Anant Ram Sharma, Editor. Susruta Samhita of Maharshi susruta, vol III, Uttartantra, Edition I; chapter 65, Ver16 Varanasi: Chowkhambha Surbharati prakashan; 2001.
- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak -Chandrika , Edition II ,sutrasthana; chapter 1 Ver 124-125.Reprinted.Varanasi: Chowkhambha Surbharati prakashan; 2002.
- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak –Chandrika , Edition II , Vimansthana; chapter 8 Ver04.Reprinted.Varanasi: Chowkhambha Surbharati prakashan; 2002.
- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak –Chandrika , Edition II , Chikitstasthana 27/329 chapter 27 Ver329.Reprinted.Varanasi: Chowkhambha Surbharati prakashan; 2002 .
- BrahmanadTripathi, Editor.The Charaksamhita of Agnivesha elaborated by caraka and Dridhbala edited with Charak –Chandrika , Edition II , sutrasthana 26 chapter 27 Ver 40,46,59,62.Reprinted.Varanasi: Chowkhambha Surbharati prakashan;2002.
- 11. https://en.wikipedia.org/wiki/Olive\_oil
- Choudhury N, Tan L, Truswell AS. Comparison of palmolein and olive oil: Effects on plasma lipids and vitamin E in young adults. Am J ClinNutr. 1995;61:1043–51.
- Trevisan M, Krogh V, Freudenheim J, Blake A, Muti P, Panico S, et al. Consumption of olive oil, butter, and vegetable oils and coronary heart disease risk factors. The Research Group ATS-RF2 of the Italian National Research Council. JAMA. 1990;263:688–92.
- 14. Namayandeh S, Sadr S, Rafiei M, Modares-Mosadegh M, Rajaefard M. Hypertension in Iranian urban population, epidemiology, awareness, treatment and control. Iran J Public Health. 2011;40:63–70.
- Tsuruoka N, Kidokoro A, Matsumoto I, Abe K, Kiso Y. Modulating effect of sesamin, a functional lignan in sesame seeds, on the transcription levels

- of lipid- and alcohol-metabolizing enzymes in rat liver: A DNA microarray study. BiosciBiotechnolBiochem. 2005;69:179–88.
- Covas MI, Nyyssönen K, Poulsen HE, Kaikkonen J, Zunft HJ, Kiesewetter H, et al. The effect of polyphenols in olive oil on heart disease risk factors: A randomized trial. Ann Intern Med. 2006;145:333–41.
- 17. Chang NW, Huang PC. Effects of dietary monounsaturated fatty acids on plasma lipids in humans. J Lipid Res.1990;31:2141–7.
- Cicero AG, D'Addato S, Fiorito A, Poli A, Gaddi A. Plasma lipid effects of corn oil and extra-virgin olive oil in hypercholesterolaemic subjects: A randomised, controlled trial. Mediterr J NutrMetab. 2009;1:187–92.
- Olive and Sesame Oil Effect on Lipid Profile in Hypercholesterolemic Patients, Which Better? Namayandeh SM, Kaseb F, Lesan S. Int J Prev Med. 2013 Sep;4(9):1059-62.
- Olive oil and the cardiovascular systemMar´ıa-Isabel Covas\*Lipids and Cardiovascular Epidemiology Unit, Institut Municipal d´ıInvestigaci ´o M´edica (IMIM – Hospital del Mar),Parc de RecercaBiom´edica de Barcelona (PRBB), CarrerDr.Aiguader, 80. 08003 Barcelona, Spain.