

Determination of Table Olive and Olive Oil Consumption and Preference of Children from Yalova/Turkey

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Abstract

This research aimed to determine consumption amount of table olive and choice of olive oil of children from elementary schools of Yalova/Turkey. For this aim 497 questionnaire forms were conducted with parents of children. Results of this study will provide some information about table olive and olive oil consumption of children. That will be useful for policy maker and producer which willing to increase their table olive and olive oil production in Turkey. In this study table olive and olive oil consumption of children were found at low level only 38 % of children consume table olive every day. 60 % of children did not consume olive out of breakfast so that bread, appetizer or bakery products produced with table olive can be use a toll to increase consumption of children. Only 39 % of children like to consume olive oil in foods and 68 % of children never asked to use olive oil in cooking. Sweeter and more delicate olive oils should be produced to increase consumption of children.

Keywords: consumption, olive oil, olive oil in cooking, prefer, table olive

INTRODUCTION

Turkey is an important olive producer but olive oil consumption is only one 1.9 l per person in a year (IOC, 2015b). According to 2015 years report of the International Olive Council, Turkey has soared table olive consumption from 110 000 t in 1990/91 to 350 000 t in 2014/15. Turkey has personnel table olive consumption between 4.0 and 4.7 kg per year (IOC, 2015a). The share of the table olive production of Turkey in the world is about 17 %. Turkey is the number one country in the world for producing black olives. Moreover, 11% of the world table olive consumption was provided by Turkey (Anonymous, 2013). However olive and table olive consumptions were not at a satisfied level because there are new olive plantation at huge areas in Turkey. The main reason of the low table olive consumption was thought as the increases in interest of the corn flakes and fast food consumption instead of breakfast (contain table olive, chess, butter, etc.) and home food (Smith, 2009; Vijayapushpam et al., 2003). This consumption behavior changing trend was more dramatic in children. Food consumption behavior of a person takes form during childhood. So that children should be trained and informed to form a healthy food selection behavior for their life (Dollman et al., 2005; Smith, 2009). For this reason, children should be informed about which food has which effect on their body (IOC, 2015b). Thus this research focused on children from elementary schools of Yalova City Center/Turkey to determine their table olive and olive oil consumption behavior.

MATERIAL and METHOD

The material of the study was face to face filled consumer survey by parents of children from 18 elementary schools of city center of Yalova/ Turkey. Questionnaire form was used only one child from each family. This study completed between 1 October 2013 – 24 December 2013. Target group of the study was these children whose ages between 6 and 12 years old to measure the table olive and olive oil consumption habit. Survey forms according to research objectives and contents were prepared. As a result of grading and sorting of survey 497 research has been recognized as the ultimate material.

RESULTS and DISCUSSION

Socioeconomic and demographic factors such as age, gender, education and income were reported as affected factors on table olive and olive oil preferences of consumers (Kailis and Harris, 2007; Tumer, 2013). Demographic characteristics of 497 participants of this study were given in Table 1.

Table 1. Demographic characteristics of participants who responded to the survey

Gender	Number of children	%
Female	236	47.58
Male	261	52.42
Age	Number of children	%
6-8	163	32.79
9-10	136	27.36
11-12	198	39.83
Family income per month (Turkish Lira)	Number of family	%
<1500	32	6.44
1500-3000	247	49.70
3000<	218	43.86
Education time of parent (year)	Number of parent	%
<8	130	26.16
8-12	194	39.03
12<	173	34.81

Table olive is one of the main component of breakfast culture besides cheese and bread, the olive consumption rate increase depending on the size and members of the household of Turkey (Tumer, 2013). Percentage distribution of responses to the question of “Does your child consume olives in breakfast?” was shown in Figure 1. Increases in interest of the corn flakes and fast food consumption instead of Mediterranean traditional breakfast may cause a decline of table olive, chess, butter, etc. (Ozdemir, 2016; Smith, 2009). In this study everyday consumption of table olive in breakfast was detected for only 38 % of children. This result indicate us a need to increase the table olive consumption with healthy breakfast nutrition habit of children.

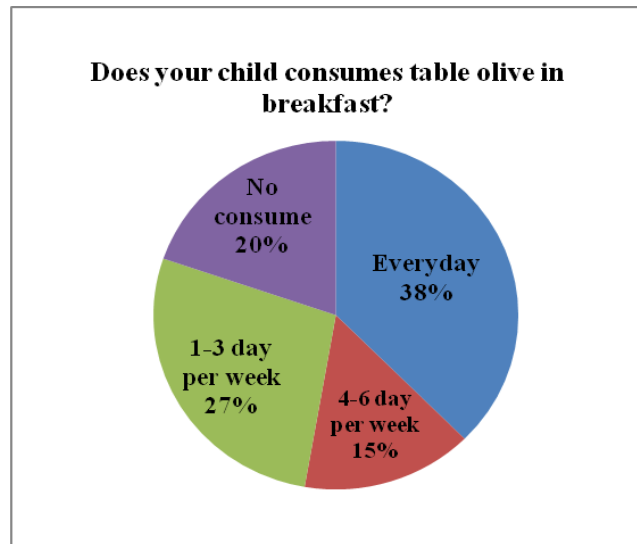


Figure 1. “Does your child consume olives in breakfast?” percentage distribution of responses to the question.

There has been found a positive relation between age of consumer and table olive consumption. The consumers between ages 26 and 45 consume more olives than the consumers under the age of 26 (Tumer, 2013). Percentage distribution of responses to the question of “Does your child consume olives except from breakfast?” was shown in Figure 2. National and international olive councils, olive producer associations support some promotion activities to increase table olive consumption. Increase of table olive consumption out of breakfast probably important factor for increase its total consumption. But result of this research showed that % 60 of children did not consume olive out of breakfast. Using table olives in production of bread, bakery products, appetizers or meals will help to increase its consumption in children.

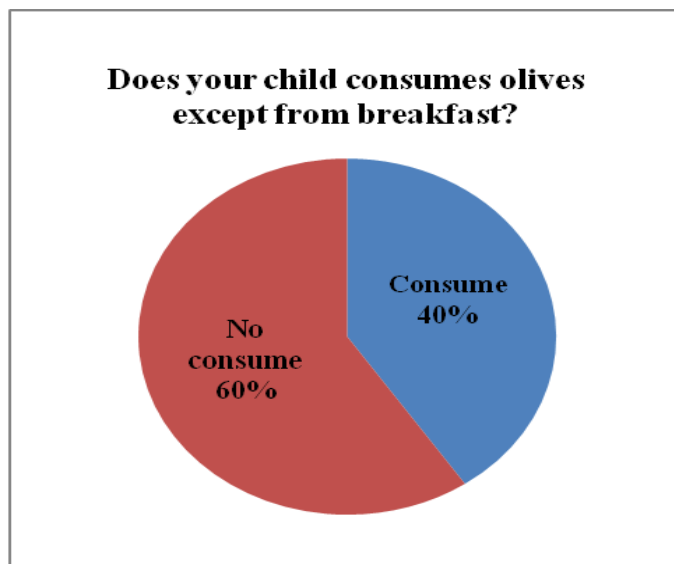


Figure 2. “Does your child consumes olives except from breakfast?” percentage distribution of responses to the question.

Nowadays, people, who want to live a long and healthy life, have understood the importance of this diet and they have begun consuming more olives, which is one of the most important elements belonging to Mediterranean diet. Percentage distribution of responses to the question of “How many olives does your child consume for a day?” was shown in Figure

3. Per capita olive consumption is 0.35 kg in Argentina, 1.88 kg in Greece, 3.13 kg in Egypt, 3.69 kg in Turkey and 3.88 kg in Spain (Anonymous, 2011). Turkey takes place in the fourth in the world olive consumption is because olives constitute a major part of traditional Turkish breakfast combined with bread, cheese, and black tea (Tumer, 2013). But this study showed that 20 % and 27 % of children no consume olive and consume only 1-3 olive per a day respectively. So that total 47 % of children had potential or increase their consumption of table olive.

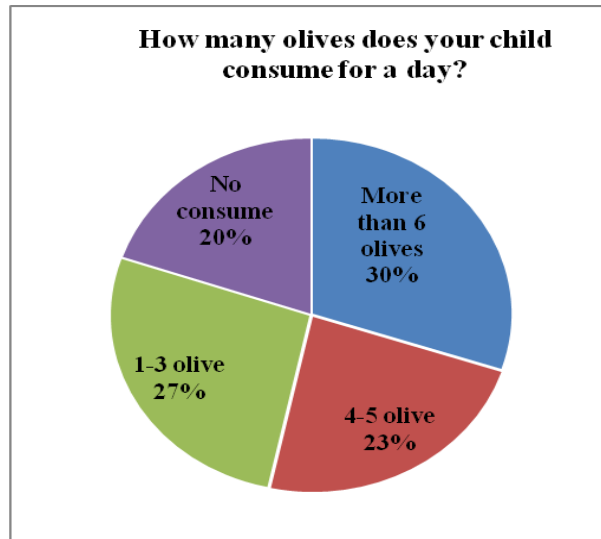


Figure 3. “How many olives does your child consume for a day?” percentage distribution of responses to the question.

High amount of table olive consumption among women should be gained the consciousness for the healing and other positive effects of the olive (against cancer and other coronary heart diseases) on the human health system (Tumer, 2013). Percentage distribution of responses to the question of “Does your child like to eat table olive?” was shown in Figure 4. Because of olive consumption, mothers will also lead and influence their children positively towards to the olive consumption. Thus, there will be a wide and conscious wave on the olive consumption not only for present, but also for the future generations (Tumer, 2013). But according to result of this study, 18 % and 22 % of children were not like and liked a little to consume olive respectively. This result may be solved by production of table olive to meet the sensory expectation of children. In general table olives had high salt content (5.3 - 6.75 %) and total titratable acidity (0.34 - 1.07 % lactic acid) so that children did not attracted by taste of table olives (Kailis and Harris, 2007). To increase attraction of children for table olive, new table olive production method and formulations which include lesser amount of salt and acidity should be developed.

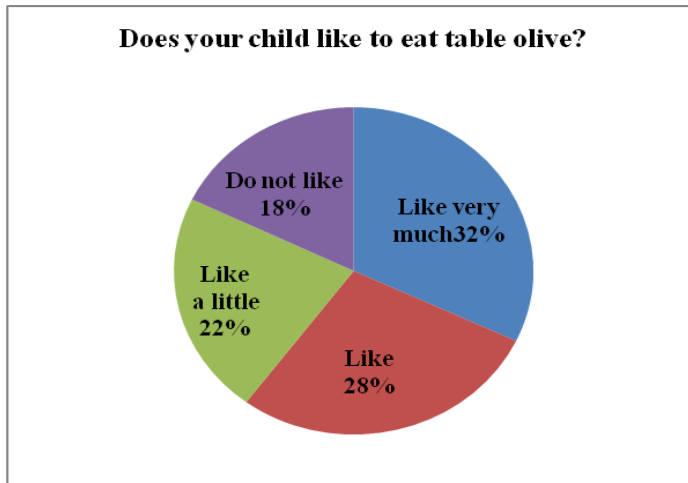


Figure 4. “Does your child like to eat table olive?” percentage distribution of responses to the question.

Dietary recommendations for children with hypercholesterolemia are aimed to reduce the saturated fat consumption and increase the intake of monounsaturated (MUFAs) and polyunsaturated fats (PUFAs). Mediterranean diet, which includes many vegetables, fruit, legumes, nuts, cereals and fish, in which fat represents about 35 % of the energy and comes mainly in form of MUFAs, especially from olive oil (Estevez-Gonzalez, 2010). In this research percentage distribution of responses to the question of “Does your child like to eat food with olive oil?” was shown in Figure 5. Olive oil is an example of a product for which consumption is marked by local culture; it is emblematic of the diet and culture of the Mediterranean region (Achabou et al., 2010). The consumption of skim milk enriched with olive oil increases the HDL cholesterol and apolipoprotein A-I levels in children with hypercholesterolemia (Estevez-Gonzalez, 2010). But in this research ratio of children like to consume olive oil in foods were detected at low levels (39 %). So that olive oil consumption of children should be increased by informing activates which designed according to children ages.

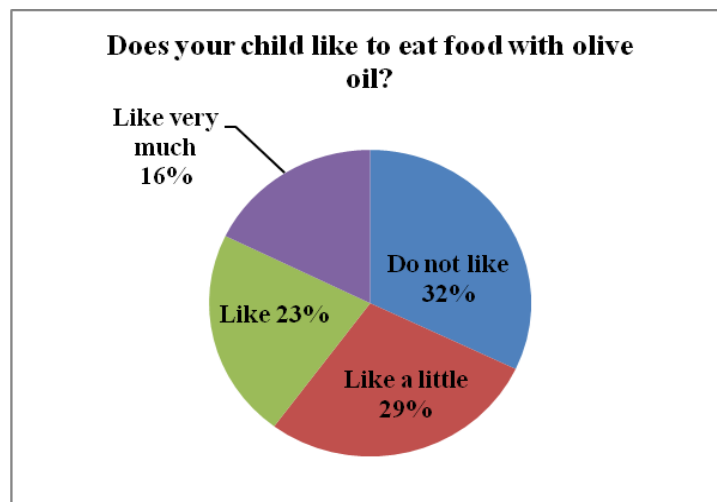


Figure 5. “Does your child like to eat food with olive oil?” percentage distribution of responses to the question.

Age was reported as a statistically significant factor and plays an important role on olive oil consumption choices among Turkish households (Yildiz Tiryaki, 2008). Percentage distribution of responses to the question of “Does your child ever asked you to use olive oil in cooking?” was shown in Figure 6. Olive oil consumption reported as reduce the total

cholesterol levels (7.2 %) and LDL-C (9.5 %), but there were no changes in HDL-C in children (Estevez-Gonzalez, 2010). Olive oil also stimulates bone growth and mineralization, and thus is recommendable both for children and the elderly (Arcas et al., 2013).

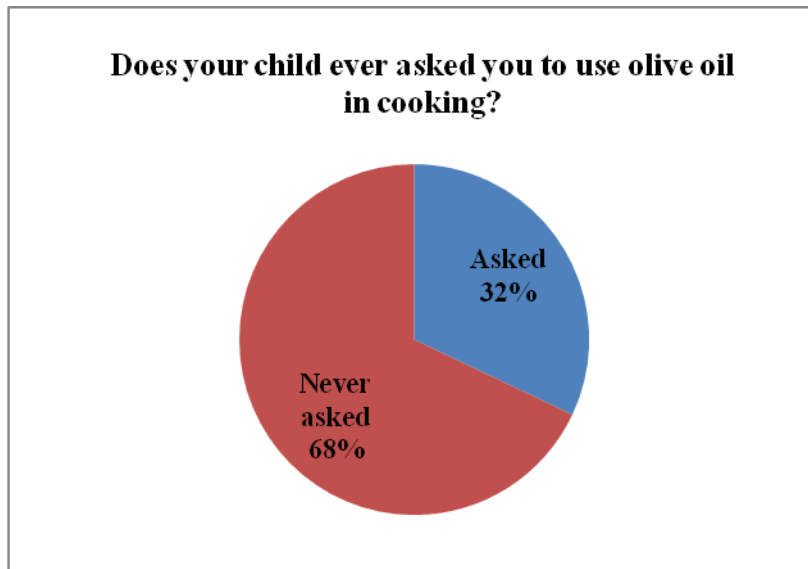


Figure 6. “Does your child ever asked you to use olive oil in cooking?” percentage distribution of responses to the question.

According to results % 68 of children never asked to parents to use olive oil in cooking. Thus there was need to developing studies on the taste of olive oil. By this sensory expectation of children will be met by producers. Similar result also discussed by Arcas et al. Sweeter and more delicate olive oils can be more consumed by children, who will not perceive any strong or unpleasant taste of olive oil (Arcas et al., 2013). Specially formulated olive oils which had smooth, sweet and fruity taste were also produced for children by some companies (Anon., 2013; Anon., 2016a). Increase in olive oil production with respect to sensory expectation of children will help to increase its consumption by children.

CONCLUSION

The objective of this study is to analyze the table olive and olive oil consumption of children in Yalova. A questionnaire has been conducted with the 497 parents of these children by using the face to face interview method in 2013. Parents answered the question about according to their observation in daily life of their children. According to the evaluation results of questionnaire forms; both table olive and olive oil consumption of children were at low levels 47 % and 39 %.

So that producer and marketing companies had potential to increase table olive and olive oil consumption of children. Future studies will be need to determine sensory expectation of children from table olive and olive oil.

By this way specific product can be developed for children to satisfy children expectation. Food consumption habit takes form during childhood so that informing children about healthy nutrition has significant importance. Consumption of olive oil and table olive; insures high health benefits and prevents from diseases especially cancer and cardiovascular diseases. Thus olive oil and table olive should be put in diet for a healthily life.

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