

STUDY ON THE IMPORTANCE OF TEA IN THE BODY'S HEALTH

VENTER GABRIELA MIHAELA¹, AGĂNENCEI MARIA ADRIANA¹, PEȚ ELENA*¹

¹*Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Faculty of Management and Rural Tourism, România*

*Corresponding author's e-mail: *elenapet@usab-tm.ro

Abstract: *Tea is a drink obtained by infusing the dried leaves of the plant Camellia Sinensis. Depending on the degree of oxidation of the leaves, the four main types of tea are: white tea, green tea, Oolong tea and black tea. The chemical composition of tea varies depending on the harvest, soil and climatic conditions and the method of processing; among the components we mention: theine (alkaloid similar to that found in coffee, maté and cola nuts), tannin and volatile oils. In the cold season and not only, hot herbal teas are recommended for both hydration and therapeutic effect, healing to relax, invigorate and improve certain diseases. They taste great and are easy to drink. Herbal tea can consist of a single main herbal ingredient or a mixture of ingredients. Tea is an essential element to many of the existing people, and its role is important for health. It grows with the treatment of many diseases, without medical intervention, being a stimulus for life. Our work wants to bring forth the importance of tea.*

Key words: *market, preferences, tea, consumers, consumption*

INTRODUCTION

The culture of tea is almost five thousand years old and, although its history has been thoroughly studied, many gaps remain. Even today, its area of origin is much discussed, long thought to be from China, but the very ancient remains of tea plants have been discovered in one of the provinces of India, which has put under question mark China's preeminence.

There is a legend in China that it was discovered by mistake when the leaves of a tree accidentally fell into the vessel in which Emperor Shen Nung's servant was boiling drinking water. It happened in 2737 BC, and the tree from which the leaves fell was Camellia sinensis - the one from which both green and black tea are obtained.

It has developed real rituals in the countries that have adopted it as a national drink. The same thing happened in Russia and even if it has no religious connotations, drinking tea is indeed an art and hence the invitation to drink tea is considered a proof of appreciation.[12]

Dutch merchants brought tea to Europe in 1610; According to historians, tea arrived in 1636 in France, in 1638 in Russia, in 1652-1654 in England and in 1657 in Germany.

Arriving in Great Britain, it was quickly adopted by aristocrats, the famous "five o'clock tea" ritual being introduced, around 1840, by Queen Victoria's maid of honor (1819-1901), Anna Maria Stanhope (Duchess of Bedford).). She was weak during the day, as there was a very long period of time when she ate nothing, between English lunch, served at 12 o'clock, and dinner served between 20 and 21 o'clock. and he commanded that they should bring him into the room, with the cup of hot drink, and some bread, and butter, and cake. She is said to have shared the idea with several friends, and in the mid-1840s, "five o'clock tea" became a widespread social event in England.

Although the tea is so old, it was not until December 15, 2005, that International Tea Day was established, the 15th being chosen symbolically, to commemorate the incident that took place on December 16, 1773, in Boston. At that time, American settlers destroyed a huge amount of tea that should have reached Britain. The incident marked the beginning of the War of Independence, the event that started the American Revolution and

culminated in the emergence of an independent and sovereign state in North America, the United States of America.

International Tea Day is officially celebrated in countries where tea production and export are at the forefront of the economy, such as India, Sri Lanka, Bangladesh, Nepal, China, Vietnam, Indonesia. In Europe, many countries organize tea fairs on this day, with presentation and tasting of new varieties and flavors. Exhibitions and museums dedicated to this drink are also open in many countries.[13]

MATERIALS AND METHODS

Two main varieties of the plant are cultivated: the small-leaved variety of China (*C. Sinensis Sinensis*) and the large-leaved variety of Assam (*C. Sinensis Assamica*). The tea plant requires a tropical climate and acid soils, permeable and rich in humus. The tea is grown on a slope, so that rainwater can drain, too much moisture being harmful. The best quality of the leaves is obtained from crops located at altitudes higher than 1500 m, because the plant grows more slowly and acquires a better aroma. On the plantations the multiplication is done by cuttings. After a period in the nurseries, the new tea plants are transplanted and allowed to grow for four years before the first harvest. If no changes are made to the plant, it will grow in the form of a tree, reaching a height of 9 m, but those on the plantations are kept at low heights (up to 1.25 m) to be easier to harvest.

Indirect sunlight favors obtaining leaves with a richer aroma, so among the pruned bushes are allowed to grow trees that filter and disperse the sun's rays. The life of the tea plant usually does not exceed 40-50 years, but there are varieties that can reach the age of 100 years. The harvesting times depend on the climate of the tea crop.

In China and northern India (Darjeeling, Assam) the season lasts from February to November; in Taiwan, from the end of March to the end of October; in Japan, from May to October; in southern India, Sri Lanka (Ceylon) and Indonesia the harvest is done all year round, except in high altitude areas. Harvesting is done by several methods: either only the apical buds are harvested, or the first 2-3 leaves are collected at the bottom of the stem or the first 4-5. The leaves are collected together with the part of the stem on which it is located, to allow the tips to regenerate. After a period of 7-10 days, during which time the tops of the plant recover, the harvest will resume. In Asian countries most collectors are women, and in Africa among collectors there are more men. They carry baskets of twigs in which they throw the harvested leaves. Several times a day the basket is unloaded, the harvest collected by each collector is weighed and inspected qualitatively; each is paid according to the amount of leaves harvested.

Black tea is the most popular type of tea in North America and Europe. The leaves are left to oxidize completely, darkening before drying, this process giving black tea a slightly astringent taste, complexity and lack of vegetable aromas that are usually found in other types of tea. The name "black tea" refers to the color of the leaves because the infusion is generally reddish-orange.

Green tea is made known by its vegetal notes and by its green leaves and infusion, it is kept for a short period of steam or it is fried to denature its oxidizing enzymes and to keep its characteristic freshness. Although all types of tea are rich in antioxidants, due to minimal processing, green tea is the one with the highest concentration. Green teas should be infused with great care because, if left to infuse too much or at too high a temperature, they become bitter.

Herbal tea - covers anything that can be infused in hot water and does not come from the tea leaves of the *Camellia Sinensis* plant. This means that herbal teas are not, by definition, teas; It would be much more correct to call it herbal tea, but this term is not widely used, so the popular name is "herbal tea". These include herbs, flowers, berries,

spices, roots, fruits or other floral sources. Used since ancient times for their medicinal qualities, most of the ingredients in our herbal teas have been consumed for centuries, maybe even thousands of years.

Oolong tea - are related to black tea. While the appearance of the infusion is more like black tea, the taste is closer to green tea, but somehow richer. Oolong teas are produced in Fujian Province, China and Taiwan. It is one of the most popular types of tea.

White tea "Silver Needle" - contains only the buds of the plant and very young leaves, being known as the least processed type of tea, so it is rarer and more expensive than other types. Its delicate taste and the fact that it is healthy, like green teas, have increased its notoriety in recent years.[9,10]

RESEARCH RESULTS

Even though it might seem hard to believe, tea is the most widespread drink in the world, placing coffee on a second spot. This is a stimulant, refreshing and almost calorie-free (less than 2 cal / 100 g), it is not only pleasant and comforting, but is a powerful antioxidant against aging and multiple degenerative diseases related to aging.

There are many scientific studies that aim at the beneficial effects of tea on health, many of its qualities making it almost miraculous. Tea is a product necessary for the optimal functioning of the body and should be present in the daily diet, as a functional food.[11]

Cardiovascular diseases:

Large tea drinkers have a low risk of death from cardiovascular disease, the mechanism responsible for this phenomenon being the reduction of cholesterol oxidation and thus reducing the progression of atherosclerosis. The antioxidant power of tea prevents cholesterol from adhering to the arterial walls and further reduces its level in the blood.

A consumption of tea of at least 5 cups / day reduces by 70% the risk of stroke and by 40% the risk of heart attack.

Immune system:

A report by American researchers states that in tea there is a factor that increases 5 times the activity of the immune system and stimulates the body's natural defenses. The substance called L-thea-nina activates lymphocytes, the primary elements in the fight against bacterial, viral and parasitic infections, which also have anti-tumor function by regulating interferon secretion.

Cancer:

Laboratory research has shown that phytonutrients in tea block the proliferation of cancer, and animal studies have shown the same effect. There is no evidence in humans, but it is clear that there is a low incidence of breast, skin, stomach and esophageal cancer in populations that consume a lot of tea. Topical applications of green tea slow down the progression of skin cancer.

Tea prevents cancer:

Anti-cancer molecules called catechins have the ability to block the vascularization, growth and progression of malignant microtumors.

In Arizona, the effect of green tea on smokers has been studied and a 30% decrease in pre-cancerous DNA changes has been found. The tea provides protection against neoplastic processes caused by smoking.

Digestive system:

The tannins in tea have the property of "gathering" protein molecules on the surface of the mucous membranes, which explains the astringent sensation that tea exerts on the oral cavity. This action recommends the use of tea in diarrhea, because it relieves dehydration and reduces fluid loss.

Respiratory system:

Theophylline in tea dilates the airways and is useful in relieving breathing problems. Moreover, they are part of the drugs used to treat asthma and lung failure.[14]

Questionnaire

1. Do you get used to drinking tea?

- a) Yes
- b) No

Table 1.

Do you get used to drinking tea?

Answers	Absolute value (number)	Relative value (%)
Yes	44	88%
No	6	12%
Total	50	100%

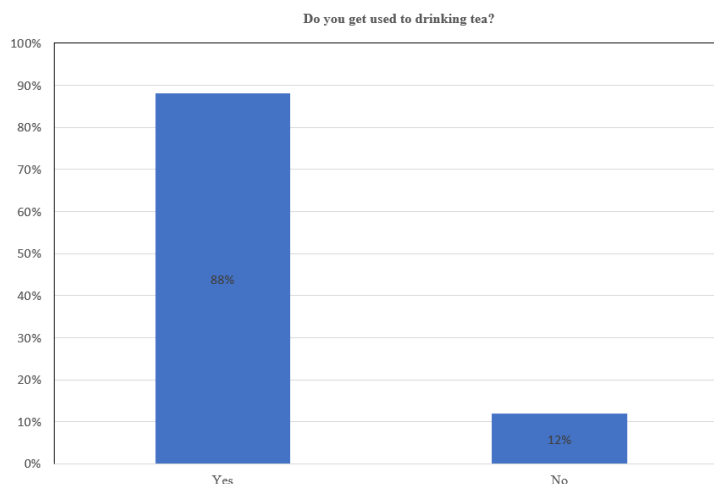


Figure 1. Do you get used to drinking tea?

Source: Own calculations

According to the results, the number of people consuming tea exceeds the number of those who do not get used to drinking tea, by 88%.

2. How many cups of tea you consume per day?

- a) 1
- b) 2
- c) 3

Table 2.

How many cups of tea you consume per day?

Answers	Absolute value (number)	Relative value (%)
1	28	63,6%
2	11	24%
3	5	11,4%
Total	44	100%

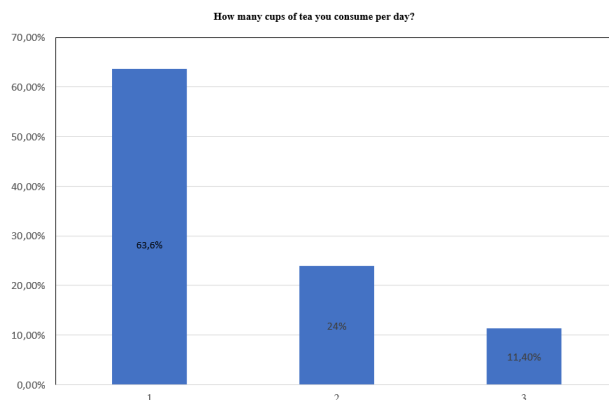


Figure 2. How many cups Figure 2. Of tea you consume per day?

Source: Own calculations

Due to the fact that there are a large number of people consuming coffee, (50 people) the daily quantity is limited to only 1 cup of tea. (64%).

3. Do you prefer tea?

- a) Regular
- b) Strong

Table 3.

Do you prefer tea?

Answers	Absolute value (number)	Relative value (%)
Regular	10	22,7%
Strong	34	77,3%
Total	44	100%

Source: Own calculations

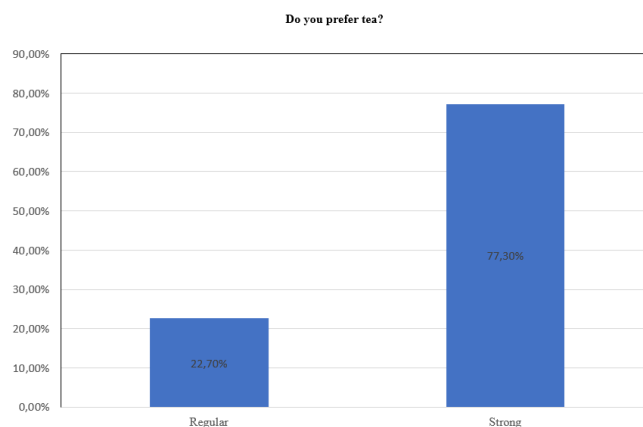


Figure 3. Do you prefer tea?

The consumer is offered the opportunity to choose how to brew tea. Thus, 77,3% opt for strong tea.

4. Which brand of tea do you prefer?

- a) Fares
- b) Lipton
- c) Artaceaiului
- d) Manutea

Table 4.

Which brand of tea do you prefer?

Answers	Absolute value (number)	Relative value (%)
Fares	24	54,5%
Lipton	15	34%
Artaceaiului	3	6,8%
Manutea	2	4,7%
Total	44	100%

Source: Own calculations

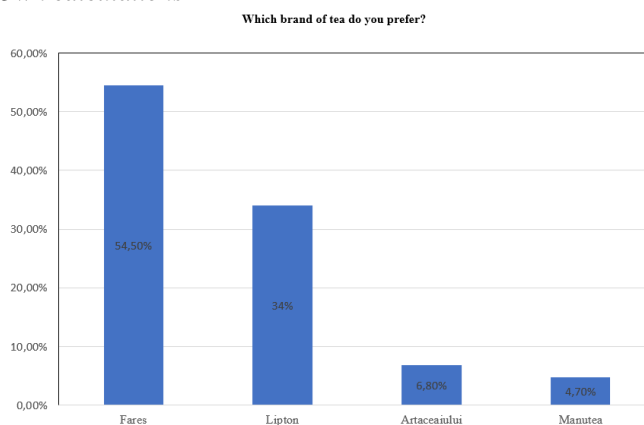


Figure 4. Which brand of tea do you prefer?

The Fares tea brand is the top brand that meets the preferences of the consumers, which is demonstrated by a percentage of 54,5%.

5. In what form do you prefer to buy tea?

- a) Tea bag
- b) Spilled tea
- c) Granulated tea

In what form do you prefer to buy tea?

Answers	Absolute value (number)	Relative value (%)
Tea bag	30	68,1%
Spilled tea	10	22,7%
Granulated tea	4	9,2%
Total	44	100%

Source: Own calculations

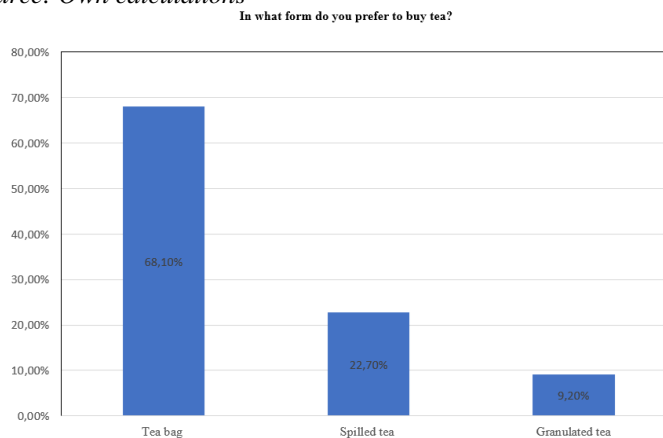


Figure 5. In what form do you prefer to buy tea?

The statistics above point to the fact that most consumers appreciate tea for its tea bag.

6. Why do you consume tea?

- a) Health
- b) Taste
- c) Habbit

Table 6.

Why do you consume tea?

Answers	Absolute value (number)	Relative value (%)
Health	11	25%
Taste	23	52,2%
Habbit	10	22,8%
Total	44	100%

Source: Own calculations

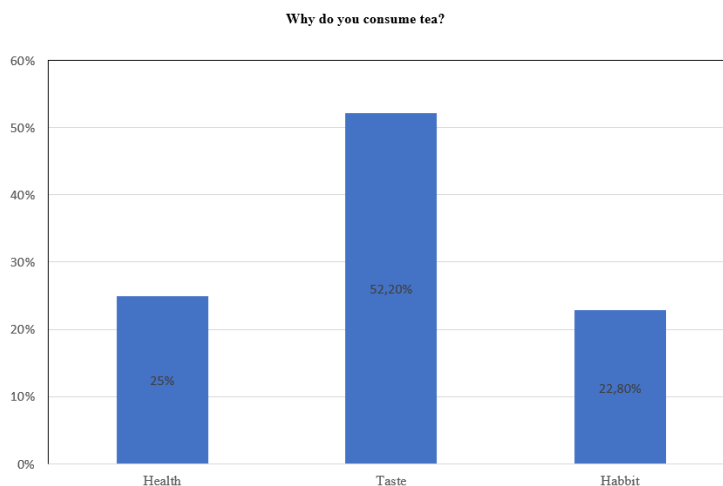


Figure 6. Why do you consume tea?

At the question "Why do you consume tea?", in 52,2% the predominant answer was "taste".

7. What do you usually drink tea with?

- a) Honey
- b) Lemon
- c) Sugar
- d) Nothing

Table 7.

What do you usually drink tea with?

Answers	Absolute value (number)	Relative value (%)
Honey	15	34%
Lemon	8	18,1%
Sugar	9	20,4%
Nothing	12	27,5%
Total	44	100%

Source: Own calculations

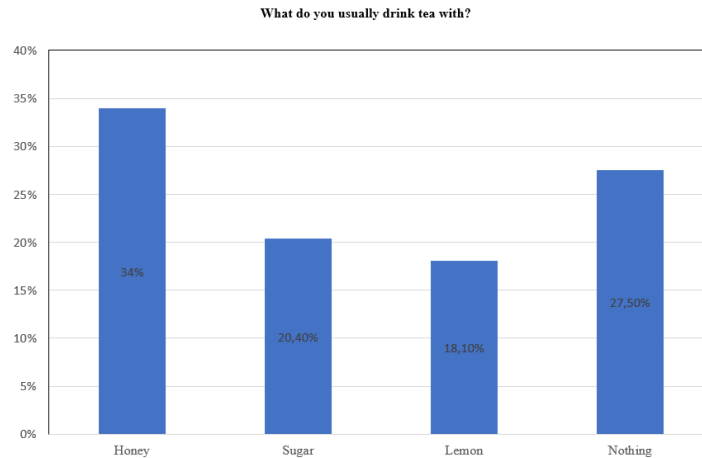


Figure 7. What do you usually drink tea with?

Statistics show that 34% of consumers drink tea with honey.

8. Which age category you belong to?

- a) 18-30
- b) 30-60
- c) Over 60

Table 8.

Which age category you belong to?

Answers	Absolute value (number)	Relative value (%)
18-30	33	75%
30-60	12	25%
Over 60	0	0%
Total	44	100%

Source: Own calculations

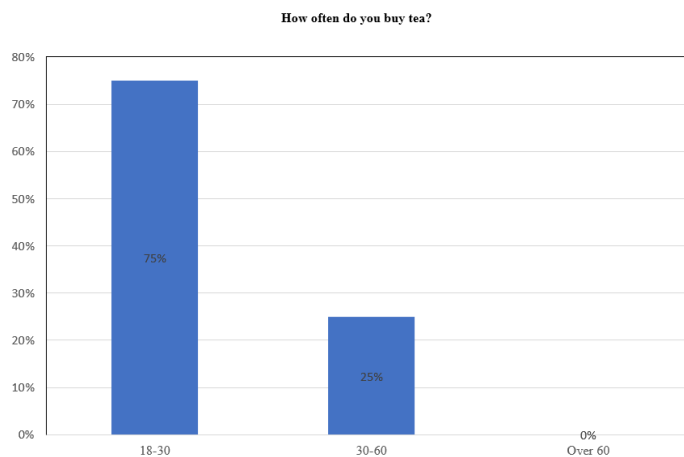


Figure 8. Which age category you belong to?

The above results show that most of the tea consumers belong to the age group of 18-30 years.

9. How often do you buy tea?

- a) Once a month
- b) Two, maximum three times a month
- c) Weekly

Table 9.

How often do you buy tea?

Answers	Absolute value (number)	Relative value (%)
Once a month	27	61,3%
Two, maximum three times a month	5	11,3%
Weekly	12	27,4%
Total	44	100%

Source: Own calculations

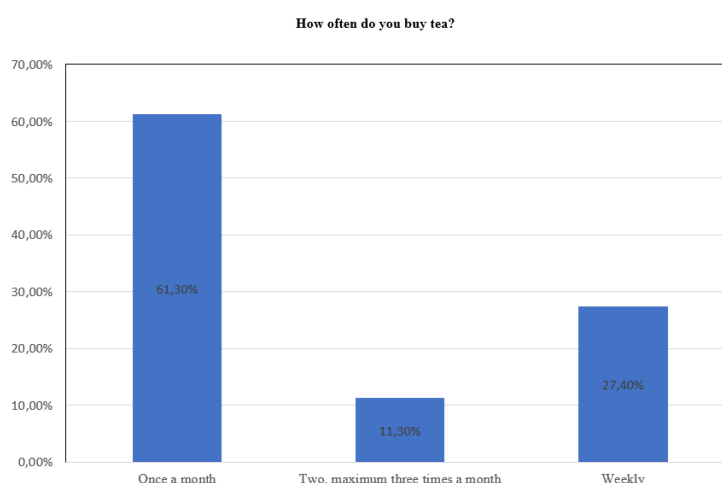


Figure 9. How often do you buy tea?

Considering the daily consumption of tea, consumers purchase the product once a month.

10. Have you felt a positive effect of tea consumption?

- a) Yes
- b) No

Table 10.

Have you felt a positive effect of tea consumption?

Answers	Absolute value (number)	Relative value (%)
Yes	33	75%
No	11	25%
Total	44	100%

Source: Own calculations

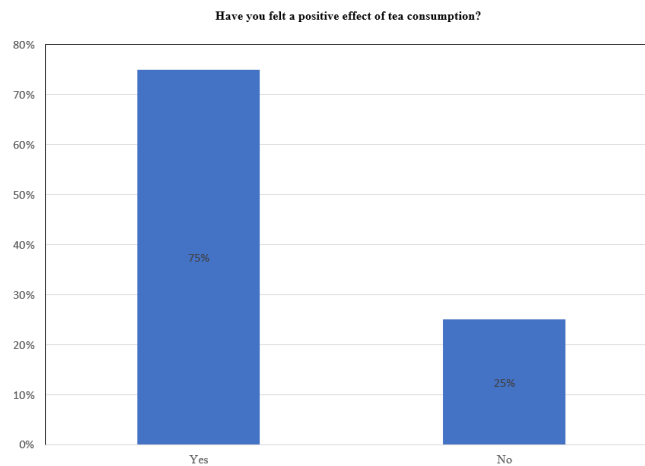


Figure 10. Have you felt a positive effect of tea consumption?

CONCLUSIONS

Tea is a highly praised and appreciated drink for its properties. From ancient times the Chinese considered tea a good cure for various ailments. The lower incidence of some diseases among tea consumers has aroused the interest of researchers, finding:

- Tea drunk during meals decreases the absorption of iron from food by up to 80% due to the presence of tannins. People at high risk of anemia (vegetarians, children, teenagers and women before menopause) should wait 1-2 hours after a meal before drinking a cup of tea; consumed between meals, tea no longer has this disadvantage.

- The inhibitory effect of flavonoids can be partially offset by a few drops of lemon (vitamin C increases iron absorption) or a little milk that binds the tannins and blocks their action. Here is the scientific explanation for the English habit of drinking milk tea - it is an effective measure to prevent anemia.

- Green tea is rich in catechins, and black tea in theaflavine and thearubine; no black tea contains catechins, which are destroyed during the process of drying the leaves.

- Green tea in the form of leaves contains 5 times more catechins than other varieties called "green tea", which actually have only 10-30% dry matter from tea leaves.

These are just a few of the hundreds of characteristics of teas grown around the world.

China produces 2,230,000 tons of tea annually, making it the world's number one tea maker[15]. A happy thing, realizing that the influences are approaching us, and the curiosities connect us.

Tea is considered a healthy component of food, not too expensive and indispensable in people's homes.

REFERENCES

- [1]. **BALAURE V. și colab.**, 2002, Marketing, Editura Uranus, București
- [2]. **CONSTANTIN M., CHIRAN A., FUNAR SABINA, PET ELENA**, 2009, Marketingul producției agroalimentare, Editura AgroTehnica, București
- [3]. **DIACONESCU M.**, 2005, Marketing Agroalimentar, Editura Universitară, București
- [4]. **KOTLER PH.**, 2002, Managementul marketingului, Editura Terra, București
- [5]. **KOTLER PH.**, 2004, Principiile marketingului, Editura Terra, București

- [6]. **MANOLE V., STOIAN MIRELA, ION ANDREEA RALUCA**, 2003, Agromarketing, Editura ASE, Bucuresti
- [7]. **PET ELENA**, 2004, Marketing Agrar, Editura Marineasa, Timisoara
- [8]. **PET ELENA**, 2015, Marketing, Editura Eurobit, Timisoara
- [9].*** - <https://www.teaforte.ro/informatii-utile/tipuri-de-ceai-223/>
- [10].*** - <https://ro.wikipedia.org/wiki/Ceai>
- [11].*** - <https://www.reginamaria.ro/articole-medicale/ceaiul-si-infuziile-de-plante>
- [12].*** - <https://www.historia.ro/sectiune/general/articol/o-scurta-istorie-a-ceaiului>
- [13].*** - <https://transilvaniareporter.ro/analize/istoria-si-drumul-ceaiului-din-asia-in-europa/>
- [14].*** - <https://www.mediafax.ro/stiinta-sanatate/care-sunt-beneficiile-ceaiului-si-cat-ar-trebui-sa-bei-zilnic-7943325>
- [15].*** - <https://www.fabricadeceai.ro/statistici-privind-consumul-de-ceai-la-nivel-mondial>
- [16].*** - https://ro.wikipedia.org/wiki/Cafea#Efectele_cafelei, accesat octombrie 2019
- [17].*** - www.magazinulprogresiv.ro, accesat octombrie 2019
- [18].*** - www.capital.ro, accesat octombrie 2019