



The Composition, Benefits and Risks of Wine Consumption

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ABSTRACT

In terms of its composition, wine is considered the second liquid after blood. The average is wine contains 85% water, 12% alcohol, and the remaining 3% contains 1000 other elements such as residual sugar, potassium, magnesium, sodium, iron, calcium, iron, phosphorus, as well as polyphenols, sulfates, nitrates, lactic acid. Amino acids are almost everything the human body needs to function properly. The purpose of the study is to identify the composition of wine, vitamins and minerals in wine, as well as the effect of drinking wine on the human body, in order to present it to the general public present during trips to wineries and cellars. The scientific study included various discussions and reports on the benefits, risks and contraindications of drinking wine. This was done on the basis of scientific works of various scientists on the world map, encyclopedic information and Internet publications. The main results concern the beneficial and unfavorable effects of drinking wine on the health of the human body, which are summarized in the tables and conclusions of this article.

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1. Introduction

What is wine? According to the Law of Vine and Wine no. 57 of 10.03.2006 of the Republic of Moldova, wine is the food product obtained exclusively through alcoholic fermentation, total or partial, from fresh grapes, crushed or not, or from grape must (Lungu & Cebotari, 2023; Mîrza, 2022; Silivestru, 2023).

The encyclopedic dictionary Wikipedia states that "wine is an alcoholic drink (7-16%) obtained from fermented grape must. Technically, wine can be made from any fruit (eg: apples, cranberries, plums, pomegranates, etc.), but if the label just says 'wine', then it's made from grapes" (Crnjac & Rotim, 2023; Świdnicki, 2023; "Wine Traceability," 2020).

So, wine is at the same time food, creative stimulus, medicine but not least a product, a commodity (Arvanitoyannis, 2005).

In March 2017, according to the amendment of the Vine and Wine Law, wine is declared a food product in the Republic of Moldova, and its trade market was liberalized, allowing the advertising of wine products. The initiative for this change came at the proposal of deputy Ion Balan, who mentioned that out of the total consumption of alcoholic beverages: beer is consumed in a proportion of about 64% (150 million liters out of 235 million liters in total), strong alcoholic beverages are consumes 30% (70 million liters out of 235 million liters total), and wine is consumed only 6% (15 out of 235 million liters total). In his lordship's view, this legislative amendment contributes to educating the population about the consumption of natural grape wines. This will bring benefits for the health of citizens, but will also boost local businesses.

At the same time, it is worth noting that the members of the Human Rights Commission criticized this draft law saying that, in fact, the liberalization of the alcohol market will further increase the amount of alcohol consumed per capita (Stratan et al., 2015).

Wine appeared first in the Caucasus, Mesopotamia and then in Egypt, but the Greeks turned it into a consumer product, becoming their main export commodity (Cavalcante, 2023; Estreicher, 2002).

According to the latest archaeological discoveries, winemaking in Moldova has a history of over 7,000 years, starting with the Cucuteni-Tripoli Neolithic civilization. The wine of the Republic of Moldova is a symbol of national pride. Moldova is one of the oldest countries in the world with the greatest historical viticultural heritage. Moldovan wines are produced by generations of winemakers in the largest underground galleries in the world and are appreciated by Western and Eastern consumers (Guțan et al., 2023; Oltean & Gabor, 2022).

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Moldova has over 128,000 hectares of wine plantations, and the total density of agricultural land ranks first in the world. Each bottle of Moldovan wine sold directly or indirectly brings income to every fourth working-age citizen of Moldova, or over 200,000 people. Approximately 85% of wine is sold outside the borders of the Republic of Moldova, in 63 countries around the world, making wine one of the most important export products for the economy of the Republic of Moldova. Currently, over 70% of bottled wine is exported to EU countries, Asia-Pacific and North America (Guțan et al., 2023; Oltean & Gabor, 2022).

Wine and grapes, since ancient times, have become a component of the culture, myths, folklore and legends of the country, being a component of the national traditions, customs and gastronomy. Wine is an indispensable part of festive meals: romantic dinners, family celebrations, social, religious events, etc.

In the Republic of Moldova, wine tourism has been expanding its development area in recent years. At the same time, we believe that tourists and hikers, for the most part, wine has been consumed for thousands of years, and its effects on health have been extensively studied. Since there are countless studies and controversial opinions regarding wine consumption, the authors of this publication set out to identify:

- the composition of the wine in general and in particular: white and red;
- the effects and risks of consumption of wine to the human body;
- the contraindications of wine consumption for categories of people;
- what is the amount of wine consumed to be considered responsible consumption;
- wine labeling according to ANSA.

Thus, the results of this research are important for winery owners as well as for a wider audience: both wine drinkers and non-wine drinkers.

2. Literature review

Research on the composition of wine is studied by different authors. The most relevant examinations are identified in the works of researchers Cabras, Paolo., Martelli and Covaci, Ecaterine.

Investigations on the benefits and risks of wine consumption are researched by different scholars, such as: Barbu, A. C., Dumitrașcu, L., Burlacu, L., Negru, A., Cârțumaru, D., Crăciun, A., Mihăilescu, A., Mihalcea, R., Lungu, E., Moraru, C., Popescu, S., Popescu, I., Vasilescu, Tudor, A., Nastase, G.

Researchers Barbu, A. C., Dumitrașcu, L. explored the evolution of wine consumption in Romania, including aspects related to old traditions and modern influences on consumer behavior (Soare, I., Zugravu, C. L., Drasovean, R., & Zugravu, 2024). Burlacu, L., Negru, A. reviewed studies analyzing health in the context of the Romanian population, with an emphasis on public health indicators. (Guțan et al., 2023), (Hrelia et al., 2023; Vecchio et al., 2017). Crăciun, A., Mihăilescu, Mihalcea, R., Lungu, E. performed a comparative study of the antioxidant properties of different types of red wine produced in Romania, and their implications on health (Hrelia et al., 2023; Vecchio et al., 2017) (Gao et al., 2023; Tedesco et al., 2000). Moraru, C., Popescu, S. analyzed the role of wine in the economy and culture of the Republic of Moldova, including consumption traditions and the economic impact of the wine industry. Popescu, I., Vasilescu analyzed the combination of wine with various foods, both traditional and modern, and their impact on a healthy diet.

3. Methodology

We adopted a mixed research approach, combining both qualitative and quantitative methods. Regarding the theoretical approach, we integrated principles and concepts from fields such as viticulture, wine tourism, regional economy, tradition and health to obtain a comprehensive understanding of the impact of wine consumption on the country's population.

The choice of research methods was justified by our research objectives. Thus, we used quantitative methods to quantify the composition of macronutrients in wine, to differentiate the composition of white and red wine, to identify moderate wine consumption. At the same time, we combined qualitative methods, such as content analysis, as well as critical thinking to obtain a deep understanding of the benefits and risks of wine consumption and the role of its consumption on the daily life of the country's population. This mixed approach allowed us to obtain a comprehensive and balanced perspective on the studied phenomenon.

4. Results

In order to establish the composition of the wine, we will find out the science that deals with the study of wine and we will identify the definitions of oenology, winemaking, vintage, non-vintage. All these elements can be found in the Wikipendia Encyclopedia.

The study of wine is the concern of the science of oenology. The name derives from the Greek oinos (wine) and logos (study). It deals with viticulture, winemaking, aging (including cellaring) and tasting. Oenology has two parts:

- General oenology, studies the raw material (Uvology, from Greek uva = grape and logos = speech, a term introduced by Prostoserdov N. N., in 1947), microbiological, physico-chemical and biochemical processes that occur during the crushing and destemming of grapes, maceration-fermentation, alcoholic fermentation, malolactic fermentation, maturation and aging of wine;

- Special oenology studies the technologies for the elaboration of various types of wines and special drinks (liqueurous, sparkling, sparkling wines, sparkling wines, wine distillates, etc.), as well as the utilization of secondary products from the wine industry (yeasts, pomace, seeds, tartrates, etc.).

The process of turning grapes into wine is called vinification. The varied number of wines existing in the world is explained by the differences between territories, grape varieties, winemaking methods and types of aging. Thus, there are red, rosé or white wines, but also wines with a different residual level of sugar (dry or sweet) or an effervescent variant (quiet or effervescent). The wine is produced only once a year because the wine grapes ripen in a whole season. This is where the term vintage comes from: vint means winemaking and age implies the year it was made. Therefore, the year written on the wine bottle label is the year the grapes were picked and turned into wine. Bottles of wine without a year on the label are usually a blend of wine from several vintages at once. Champagne labeled NV indicates non-vintage.

In the Republic of Moldova there are protected geographical indications, which cover the four wine-growing areas: Valul lui Traian, Ștefan Vodă, Codru and Divin. At the same time, as in most states in the European Union, wine is classified in:

- wine with protected designation of origin;
- wine with protected geographical indication;
- wine with varietal name;
- wine without a protected designation of origin, without a protected geographical indication and without a variety designation, called wine.

The grape harvest season in the Northern Hemisphere (Europe, USA) is from August to September, and the harvest season in the Southern Hemisphere (Argentina, Australia) is from February to April.

The quality of a wine is directly determined by the physico-chemical composition, harvesting conditions and degree of ripening of the processed grapes. Scientists Cabras Paolo and Martelli Aldo conclude that wine from a chemical point of view is a liquid, which mainly contains water and ethyl alcohol (also called ethanol), but also many other substances. Some substances in wine are beneficial because they give a pleasant taste to the wine or have a positive effect on health (e.g. polyphenols and anthocyanins), while other substances are not beneficial because they give an unpleasant taste to the wine or have a negative effect on health (for example, sulfur dioxide, the maximum concentration of which is established by law, being very toxic).

The moldovan researcher Ecaterina Covaci in her doctoral thesis: The influence of some physico-chemical factors on the complex stabilization of young wines drew up the following table, which shows the typical concentration values of the main components of the wine.

Table 1. Constituent chemical compounds of wine

Nr.	Group of compounds	The main components	Limit quantities, g/l	The origin or provenance of the constituent component	The role in the composition of wine
1.	Biological water		750 ÷ 900	The grapes	It denotes the authenticity of the wines
2.	Alcohols	Etanol	70:150	Alcoholic fermentation	Chemically stable but microbiologically unstable
		Methanol	0,015÷ 0,5	Grapes, hydrolysis of pectins during fermentation	Content of 0.1 ÷ 0.2 g/l in red wines and 0.35 g/l in hybrid wines
		Alcohols senior and aromatic	0,15 ÷ 0,5	Alcoholic fermentation and amino acid metabolism	In small contents, it positively favors the sensory characteristics (aroma and bouquet) of the wine, and large contents disfavor these parameters
3.	Acid	Tartaric	3 ÷ 6	Grapes, exogenous to correct acidity	In reduced contents, it imparts veininess to the wines
		Malice	1 ÷ 6	The grapes	Metabolized by some yeasts. It gives the aroma of fruits and in excess the taste of raw acidity of the wines
		Lactic	0,25 ÷ 0,5	Malolactic fermentation	Impress suppleness and softness
		Acetic	0,1 ÷ 1	Alcoholic fermentation and activity	Describes health and increases over time wine storage

Nr.	Group of compounds	The main components	Limit quantities, g/l	The origin or provenance of the constituent component	The role in the composition of wine
				acetic bacteria	
		Sulphurous	0,15 ÷ 0,2	Exogenous to sulfiting	It has antibacterial action, volatilizes easily
4.	Reducing sugars	Glucose, fructose	1 ÷ 5	Concentrated grapes and must	It gives the sweet and pleasant taste of the wines
5.	Phenolic compounds	Total phenolic acids	0,001 ÷ 0,0124	The grapes	It gives color, biological value and aging bouquet to wines
		Tannins	0,2 ÷ 3,5		They decrease by polycondensation during the aging period
		Flavones	0,001 ÷ 1		They decrease by copolymerization and mutual condensation during the aging period of the wines
		Monoglucosidic anthocyanins	0,2:0,9		
		Resveratrol cis/trans	0,0012 ÷ 0,071		It disappears during the aging period of the wines
6.	Nitrogenous substances	Total	0,08 ÷ 2,4	Grapes, alcoholic and malo-lactic fermentation	Responsible for the aromatic compounds in the wine that give the specificity of the variety
		Ammonia	0,001 ÷ 0,007	Malolactic fermentation	Increased content in wines with malolactic fermentation
		Amino	0,8 ÷ 1,3	Grapes and alcoholic fermentation	It gives foaming properties and the content is reduced through the gluing and ripening operations
		Protein	0,1 ÷ 1,5	Grapes and yeast autolysis	Content reduction through gluing and ripening operations
		Biogenic amines	0 ÷ 0,002	Malolactic fermentation	Increase during the long maturation period
		Nitrate	0,001 ÷ 0,0012	Grapes	Magnification by maceration on oak bark
7	Mineral substances	Total	1,3 ÷ 4	Grapes, vessels, technological treatments	They create the food value of the product and produce metal scraps in excessive content
	Cation	Potassium	0,4 ÷ 1,5	Grapes and sulfiting with potassium sulfites	It gives the taste acidity and fullness It precipitates as potassium acid tartrate
		Calcium	0,05 ÷ 0,25	Grapes and deacidification with calcium carbonates	It precipitates as calcium tartrate
		Sodium	0,01 ÷ 0,15	Grapes and technological operations	It contributes to the precipitation of unstable colloids
		Magnesium	0,05 ÷ 0,76	Grapes	
		The iron	0,005 ÷ 0,03	Grapes, equipment and non-enameled technological connections	It contributes to the precipitation of phenolic substances

Nr.	Group of compounds	The main components	Limit quantities, g/l	The origin or provenance of the constituent component	The role in the composition of wine
	Anion	Copper	0,001 ÷ 0,006	Grapes and pesticide contamination	Decreases during fermentation and storage
		SO ₄ ²⁻	0,4 ÷ 1,5	Grapes, dishes, treatments, etc.	It favors the development of alcoholic fermentation (PO ₄ ³⁻) It maintains the redox balance of wines
		ClO	0,2 ÷ 0,8		
		PO ₄ ³⁻	0,06 ÷ 0,8		
8.	Odorous substances	Terpenes	0,2 ÷ 2,8·10 ³	Grapes, fermentation and storage	It creates the varietal flavor and some specific flavors
9.	Natural colloids	Carbohydrate polymers	Variable content	Alcoholically fermented grapes, yeasts	The impoverishment of the wine in colloids reduces the magnitude of the taste In excess it hinders the natural colloidal and crystalline stabilization

Source: Pittari et al., 2018

Next we will appreciate the interdependence of acid number and pH. The pH value represents the active acidity and depends on the amount of acids in the wine, the nature of the acids as well as the form in which they are, dissolved free acids, acid or neutral serums. The pH value of the wort is important for increasing the number of yeasts and carrying out the fermentation. The action of pH depends on the concentration in sugar and ethyl alcohol. Thus, at lower pH values, yeasts produce an increased amount of glycerol through fermentation, which implies a reduction in fermentable activity. Lower pH numbers indicate higher acid levels, while high pH means lower acidity. For comparison, acidic white vinegar tends to have a pH level of 2.5, while milk registers around 6.5 and water comes in at a neutral level of 7. Typically, a wine's pH level varies from 3 to 4 (Pittari et al., 2018).

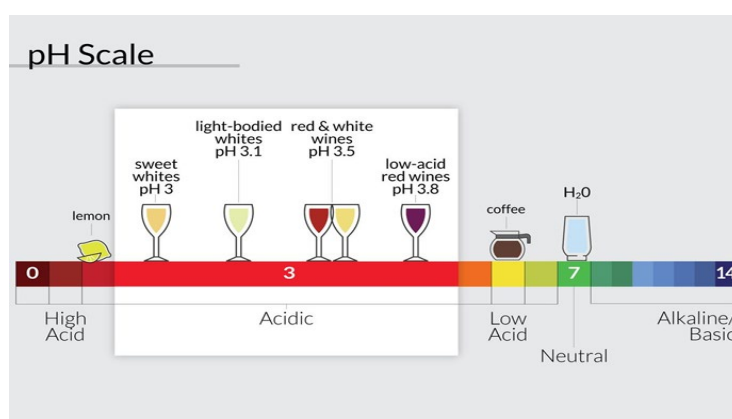


Figure 1. PH level in wine in relation to other products

Source: Sturza & Covaci, 2015

We note that sweet white wine has acidity of 3pH, light shade white wine of 3.1pH, rosé wine has 3.5pH, and deep red wine has 3.8pH. Wines with lower acidity can also take on a brown color because they are more prone to oxidation. It may not be as noticeable in red wines, but it can be off-putting in young white wines. Red wines with higher acidity are more likely to have a bright ruby color because the lower pH gives them a red hue. Higher pH, less acidic red wines can take on a blue or purple hue.

Mrs. Ecaterina Covaci's research allowed us to conclude that "unripe grapes have a high level of acid, but that decreases as they ripen. Grapes grown in cooler climates typically contain higher acidity because there is less heat and sun available to raise the grape's sugar and pH levels. A winemaker can increase acidity by adding tartaric acid to the grape juice before fermentation. The process is common in warmer climates, where the grapes can become overripe and the pH can rise too high."

From the studies presented above, we conclude that wine contains a variety of beneficial compounds, including:

- antioxidants: polyphenols, resveratrol, flavonoids;
- vitamins: vitamin C, vitamins from the B complex;
- minerals: potassium, magnesium, iron.

Scientific studies on the effects of moderate wine consumption on the human body are multiple and impressive.

Further using the works of researchers Cociorvă, S., Cîrciumaru, D., Moraru, C., Popescu, S., Tudor, A., Năstase, G. and the daily press we will summarize in table 2 the advantages of wine consumption.

Table 2. Benefits of moderate wine consumption

N o/o	Indicators	The effect of wine consumption
1.	Reducing the risk of cardiovascular diseases	Antioxidants in wine may reduce heart disease risk by protecting arteries and improving endothelial function
2.	Improving the lipid profile	Polyphenols in wine can raise HDL (good cholesterol) and lower LDL (bad cholesterol), contributing to cardiovascular health.
3.	Reduction of processes anti-inflammatory	Resveratrol in wine has anti-inflammatory effects
4.	Prevention of cognitive decline	Resveratrol may have neuroprotective effects, helping to prevent neurodegenerative diseases such as Alzheimer's and Parkinson's.
5.	Metabolism and weight control	Positive impact on metabolism and can help maintain a healthy body weight
6.	Dental health	It can prevent tooth decay and keep tooth enamel strong. The polyphenols found in red wine tend to reduce gum inflammation, thus preventing gum disease.
7.	Prevention of diabetes	Regulating blood sugar levels
8.	Immunity	It helps the immune system fight against viruses and infections
9.	Healthy skin	The antioxidants in red wine prevent aging and also reduce fine lines and wrinkles
10.	It reduces the risk of cancer	Red wine in combination with dark chocolate works to stop the growth of cancer cells and suppresses them
11.	Depression	Drinking two to seven glasses of wine per week reduces the odds of depression in men and women compared to people who abstained from wine
12.	Prevents sunburn	The flavonoids in red wine limit the oxidation of skin cells exposed to sunlight

Source: developed by the author based on Admin & Covaci, 2023; Macari et al., 2024.

Wine is a drink that is served with certain dishes, be it red or white. Both types are healthy. A logical question: which wine is the best? However, the differences between white wine and red wine are not significant. If we compare a glass of red wine to white, checking the values provided by the USDA, the differences are as follows:

Table 3. Criteria for comparing white and red wine

N o/o	Indicators	Red wine	White wine
1.	Calories per 100 ml of wine,	150-195	70-173
2.	Natural sugar, gr	0,9	1,4
3.	Iron, %	4	2
4.	Magnesium	5	4
5.	Choline, mg	8,4	6,3
6.	Phosphorus	3,4	2,6
7.	Lutein and zeaxanthin	7	-
8.	Risk of hangover	mărit	reduc
9.	Influence on tooth enamel	pătează dinții	nu pătează dinții

Source: developed by the author based on [22]

At the same time, it is necessary to note that excessive consumption of alcohol, including wine, is also associated with negative health effects. Studies by researchers Barbu, A. C., Dumitrașcu, L., Burlacu, L., Negru, A., Crăciun, A., Mihăilescu, A., Cîrciumaru, D. Tudor, A., Năstase, G. and the MedLife blog allowed us to establish in the following table the following risks regarding the excessive consumption of wine for the human body.

Table 4. Risks of excessive wine consumption

N o/o	Indicators	The effect of wine consumption
1.	Dependency Risk	It changes the structure and function of the brain, leading to behavioral disorders and addiction
2.	Liver problems	It can lead to hepatic steatosis, alcoholic hepatitis and cirrhosis. A study published in "Liver International" revealed that alcohol is a major risk factor for chronic liver disease
3.	Affecting the Central Nervous System	It can affect the functioning of the central nervous system, causing cognitive and motor problems. A study in "Alcohol Research & Health" showed that alcohol can cause permanent damage to neurons
4.	Drug interactions	Wine can interact with various medications, affecting their effectiveness and increasing the risk of side effects. For example, alcohol can interact with anticoagulants, increasing the risk of bleeding.
5.	Impact on Fertility	It can negatively affect fertility in both men and women
6.	Risk During Pregnancy	Alcohol is teratogenic and can cause fetal alcohol syndrome. Pregnant women are advised to avoid drinking alcohol to prevent birth defects and developmental problems in the fetus

Source: developed by the author based on Chang et al., 2016; Deroover et al., 2021

As a result of the investigations carried out, the natural question arises: what does moderate wine consumption mean? According to the American Heart Association, moderate consumption means two glasses of wine per day for men (200 milliliters) and one for women (100 milliliters). In our opinion, this volume of wine is recommended not to be exceeded, but of course it can be reduced and consumption is not mandatory. For most people, wine intake can be a beneficial thing. The only criterion to keep in mind, in general, for the consumption of wine is moderation.

The doctor Serge Renaud impressed the general public in 1991, when he appeared on American television and presented the "French paradox". It was known that the increase in cardiovascular mortality is directly proportional to the consumption of fatty foods or alcoholic beverages. However, in many areas of France, such as Toulouse, where French dishes such as beans with fatty pork, goose or duck are popular, coronary heart disease is extremely low. The explanation found by scientists, including Prof. Masquelier from the University of Bordeaux, was that the presence of wine in the blood contributes to the rapid elimination of cholesterol. Thus, frequent drinkers of white wine twice as much times less are subject to heart disease.

Heart diseases are not the only conditions where wine-based treatment gives miraculous results. Thus, under laboratory conditions, hamsters with carcinomas who received food based on solid extracts of red wine increased their life expectancy by 40% compared to those who received regular food. Researchers attribute these spectacular results in fighting cancer to the presence in wine of a polyphenol, catechin, with special antioxidant properties. In addition, resveratrol, identifiable in the skin of the grape seed, inhibits the development of leukemia cells. A French study also reveals the connection between wine and the fight against Alzheimer's disease.

At the same time, we establish that some doctors conclude that people with certain diseases, for example with hypertension, a glass of wine a day can be too much. This is because the drugs can no longer regulate the blood pressure, and the heart enlarges and fatigue occurs at minimal efforts, due to the regular consumption of alcohol. Although we have previously established the beneficial effect of wine on the heart, we also see controversial discussions.

In our view, wine should not be consumed in the case of the use of certain drugs, in which the contraindication is clearly indicated. At the same time, drinking wine in moderate quantities in the company of loved ones with selected dishes and a good mood can only improve well-being and will have a positive effect on health.

From the reported data, we establish that the consumption of a higher dose of wine than the recommended one can seriously affect the human body. At the same time, there are categories of people who are forbidden to drink wine. Who should avoid drinking wine? Minors and people suffering from certain medical conditions should avoid drinking wine. Among them it refers:

- people with elevated triglyceride levels;
- those who suffer from migraine;
- people trying to lose weight;
- pregnant women;
- people suffering from allergies. Finally, we offer the following tips for responsible wine consumption:
- Choose quality wines, preferably organic;

- Combine wine with meals to reduce the rapid absorption of alcohol;
- Monitor consumption and avoid excessive drinking.

The National Food Safety Agency of the Republic of Moldova informs all merchants and consumers regarding some labeling requirements for alcoholic production and wine products (all categories of wines, including sparkling wines, flavored wine products, wine-based products wine). Alcoholic production and wine products, bottled and put into circulation, must be labeled. Mandatory indications are used for labeling: the name or brand under which the product is marketed; name of the product category; the name of the protected geographical indication or the protected designation of origin; the mentions "protected designation of origin" or "protected geographical indication"; alcohol concentration; product category according to mass concentration of sugars; nominal volume of the product; the country of origin of the product. Please note that for vitivinicultural products and alcoholic production, the obligation to indicate the "warranty period" on the label or on the sales packaging is not regulated. At the same time, it is mandatory to indicate the "expiry date" on the label of alcoholic products whose alcohol concentration is up to 10% vol., including wine drinks, alcoholic drinks, including beer. The notion of "alcoholic production" is defined according to art. 1 of Law no. 1100/2000: alcoholic production – food products intended for human consumption, having an alcohol concentration higher than 1.2% by volume. Alcoholic production and wine products sold through retail establishments must be accompanied by certificates of conformity issued by an accredited certification body and, where appropriate, quality certificates issued by the producer, and must be presented at the request of consumers with the release of a child if necessary. The National Agency for Food Safety has imposed, starting on April 20, 2023, the labeling of alcoholic products with regard to health claims or their pictogram:

Table 5. Labeling of alcohol production regarding health claims

Nr.	Health mention
1.	Health mention
2.	Alcohol can harm the unborn child
3.	Don't give alcohol to minors
4.	Alcohol slows down your reaction speed - don't drink alcohol if you drive

Source: Chang et al., 2016

5. Conclusions

Following the research, we conclude that wine is the healthiest alcoholic drink, it should be consumed in moderation and can be included in some main meals for the fermentation of the dishes and the positive effect on the body. However, the risks associated with excessive consumption should not be neglected.

The research carried out allows us to establish the following:

- 1) The benefits of wine consumption are due to the antioxidants, minerals and vitamins in its content;
- 2) Wine consumption can be beneficial in moderate amounts for a day: 100 milliliters for women and 200 milliliters for men;
- 3) Daily consumption of wine is not recommended, as it can cause addiction;
- 4) It is recommended to consume natural wine without aggressive industrial manipulations;
- 5) Wine consumption is recommended in combination with a balanced diet. This fact contributes to the rapid absorption of alcohol;
- 6) Some categories of people should avoid drinking wine: minors, people with a high level of triglycerides, those who suffer from migraines, people who want to lose weight, pregnant women, minors, people with allergies, people who drive cars.
- 7) Consulting a doctor or nutritionist is essential to benefit from the positive effects of wine and minimize risks.

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