

The Classification of Tibetan Wine and Its Health Benefit

Xi Jiu, Dui Zhan*

Department of Tibetan Medicine, Tibetan University of Tibetan Medicine, Lhasa, Tibet Autonomous Region, China.

How to cite this paper: Xi Jiu, Dui Zhan. (2023) The Classification of Tibetan Wine and Its Health Benefit. *International Journal of Food Science and Agriculture*, 7(2), 285-289.
DOI: 10.26855/ijfsa.2023.06.018

Received: June 4, 2023

Accepted: June 30, 2023

Published: July 29, 2023

***Corresponding author:** Dui Zhan, Department of Tibetan Medicine, Tibetan University of Tibetan Medicine, Lhasa, Tibet Autonomous Region, China.

Abstract

Tibetan wine, a one-of-a-kind product of the Tibetan plateau, has grown in popularity in recent years. This article investigates Tibetan wine categorization and its related health advantages. Tibetan wine is classified largely by the type of grape used, fermenting procedure, and aging processes. Red wine is made from locally grown red grapes. It undergoes fermentation and aging in oak barrels. The resulting wine shows a good flavor and a deep color. White wine is produced from white grapes like Riesling and it is characterized by its refreshing acidity and its floral aroma and the fruit flavors. Tibetan wine, in addition to these basic classifications, has unique wines that represent the region's cultural and natural characteristics. Herbal-infused wines, such as those prepared using Tibetan medicinal herbs, or wines created utilizing unusual fermentation procedures, such as the inclusion of yak milk, are examples of speciality wines. Apart from their flavours and aromas, Tibetan wine is claimed to have a lot of health benefits. Research and study show that moderate wine consumption can improve cardiovascular health because of its antioxidant properties. In addition, the Tibetan wines have some chemicals in them that can be used as an anticancer. However, it is important to note that the excessive consumption of alcohol leads to very poor health and body complications.

Keywords

Introduction, Implications for Health Care, Extraction Methods and Alcohol Content

1. Introduction

Tibetan wine, deeply rooted in Tibetan culture, has garnered attention for its unique flavors and potential health benefits [1]. This essay delves into the classification of Tibetan wine, focusing on four essential aspects: color, raw materials, brewing techniques, and extraction methods. By understanding these classifications, we can gain valuable insights into the diverse range of Tibetan wines and explore their potential applications in healthcare. The classification of Tibetan wine begins with its color, categorizing it into red wine, white wine, and yellow wine. Each type offers distinct taste profiles and characteristics. Another significant aspect of classification is based on the raw materials used, which includes grain wine, milk wine, fruit wine, and medicine wine [2].

This classification highlights the variety of ingredients that contribute to the creation of unique flavors and potential health benefits. Brewing techniques play a crucial role in the classification of Tibetan wine. The techniques encompass solid-state wine brewing, semi-solid wine making, and Liquid brewing wine. These methods produce different textures, consistency, and taste profiles, showcasing the versatility of Tibetan wine production. Lastly, extraction methods further divide Tibetan wine into distilled wine, filtered wine, and dry wine. These methods impact the final product's alcohol concentration, clarity, and sweetness level. Understanding the classifications of Tibetan wine not only deepens our appreciation for its cultural significance but also opens up possibilities for its integration into modern health practices. The exploration of potential health benefits associated with specific types of Tibetan wine, such as the use of medicinal herbs and antioxidants, adds further intrigue to its role in healthcare. As we delve into the classifications and their im-

plications, we uncover the rich tapestry of Tibetan wine and its potential to bridge traditional practices with contemporary well-being.

2. Classification by Color

The first aspect of classification is based on the color of Tibetan wine. Red wine, white wine, and yellow wine are the three basic classifications for Tibetan wines. Dark-colored grapes are used to make red wine, which is prized for its powerful, robust flavors and deep crimson colours. It often boasts complex notes of berries, spices, and oak, making it a popular choice among wine enthusiasts. White wine, on the other hand, is made from light-colored grapes, resulting in a pale yellow or straw-like color. It is generally characterized by its crisp acidity, light-bodied nature, and vibrant flavors. Numerous fragrances, including citrus, tropical fruits, floral undertones, and perhaps even touches of honey or vanilla, can be found in white wines. Grain foodstuffs cereals are fermented to produce grain wine, usually referred to as sake. It has a distinct color that ranges from clear to having a faintly yellowish tint. Grain wine is recognized for its mild sweetness, faint scent, and delicate tastes. It is a staple of Japanese cooking and is usually eaten alone or with other meals.

Tibetan wine is divided into different categories based on hue, which not only makes identification easy but also reveals the different characteristics and flavor profiles of each type. White wine exhibits freshness and brightness, while red wine delivers boldness and depth. Rice wine, with its distinctive color, embodies delicacy and subtlety. Understanding these distinctions enables enthusiasts to choose wines that align with their preferences and culinary choices. Moreover, the color classification also serves as a starting point for further exploration into the potential health benefits associated with each type of Tibetan wine. For instance, red wine has been linked to cardiovascular health due to the presence of antioxidants [3], such as resveratrol, in the grape skins. White wine, with its lighter profile, may offer different health attributes. Research into the unique compounds and properties of Tibetan wines based on color can provide valuable insights into their potential contributions to health care.

3. Classification by Raw Materials

The classification of Tibetan wine based on raw materials provides valuable insights into the diverse flavors, cultural significance, and potential health benefits associated with each type. This focuses on four main categories: grain wine, milk wine, fruit wine, and medicine wine. Understanding the distinctions between these classifications enhances our appreciation for Tibetan wine and its multifaceted nature.

3.1 Grain Wine

Grain wine, a prominent category in Tibetan wine production, is crafted from grains such as barley or wheat [4]. This type of wine is deeply rooted in Tibetan culture and holds significant cultural and ceremonial importance. The fermentation of grains gives rise to a rich, earthy flavor profile, often accompanied by notes of malt and toast. Grain wine is known for its full-bodied nature, making it a preferred choice for celebrations and social gatherings.

3.2 Milk Wine

Milk wine, derived from fermented milk, showcases the unique agricultural practices of Tibetan nomads. It offers a distinct taste experience, characterized by its creamy texture and mild tanginess. The fermentation process imbues the wine with a delightful aroma and a subtle sweetness. Milk wine holds cultural significance among Tibetan nomads and is traditionally enjoyed as a cherished beverage within their communities.

3.3 Fruit Wine

Fruit wine encompasses a wide array of flavors, as it is made from various fruits such as apples, peaches, plums, or berries [5]. Each fruit imparts its unique characteristics, resulting in a vibrant and refreshing taste profile. Fruit wines can range from sweet and fruity to tart and crisp, providing a diverse selection for wine enthusiasts. They are often enjoyed on their own or paired with desserts and light dishes.

3.4 Medicine Wine

Medicine wine occupies a distinctive position in Tibetan wine classification, as it incorporates medicinal herbs and plants. Tibetan medicine has a long-standing tradition of utilizing natural ingredients for their therapeutic properties, and medicine wine serves as a medium for delivering these medicinal benefits. The specific herbs and plants used in medicine wine can vary, offering a range of health benefits. This category represents the harmonization of traditional medicine and wine culture, showcasing the potential for both enjoyment and wellness.

Understanding the classification of Tibetan wine by raw materials allows us to appreciate the depth and variety of flavors within this traditional beverage. Grain wine represents the agricultural traditions of Tibet, milk wine reflects the

nomadic lifestyle, fruit wine celebrates the bounty of nature, and medicine wine merges traditional medicine with the enjoyment of wine. Each category holds cultural significance and may offer unique health implications. Exploring the potential health benefits associated with different raw materials adds another layer of interest to the classification of Tibetan wine.

4. Classification by Brewing Techniques

In addition to the classification of Tibetan wine based on raw materials, another important aspect to consider is the brewing techniques employed in its production [6]. Tibetan wine encompasses a variety of brewing techniques, each contributing to the unique characteristics and flavors of the final product. This section explores three main brewing techniques: solid wine, semi-solid barley wine, and liquid highland barley wine.

4.1 Solid Wine

Solid wine, also known as brick wine, is a traditional brewing technique used in Tibetan wine production. It involves compressing the raw materials, typically barley, into solid bricks. These bricks are then aged and fermented over an extended period. Solid wine often exhibits a robust and concentrated flavor profile, with a deep richness derived from the slow fermentation process. The resulting wine has a dense texture and strong aromatic qualities, making it a distinctive and cherished part of Tibetan wine culture.

4.2 Semi-Solid Barley Wine

Semi-solid barley wine represents another brewing technique employed in Tibetan wine production. This method involves partially fermenting the barley before extracting the liquid. The fermentation process is intentionally stopped at a specific point, resulting in a semi-solid consistency. The semi-solid barley wine exhibits a unique balance between sweetness and tartness, with a smoother texture compared to solid wine. It often carries a complex flavor profile, showcasing the depth and complexity achieved through this brewing technique.

4.3 Liquid Highland Barley Wine

Liquid highland barley wine is a brewing technique specific to the high-altitude regions of Tibet. It involves the fermentation of highland barley, a crop well-suited to the challenging climatic conditions. This brewing technique produces a liquid wine with a lighter texture and a crisp, refreshing taste. The liquid highland barley wine is characterized by its clean and delicate flavors, often exhibiting floral or herbal notes. It is a popular choice among those seeking a lighter and more refreshing Tibetan wine experience.

These brewing techniques contribute to the diverse range of textures, flavors, and aromas found in Tibetan wine. Solid wine offers a concentrated and robust profile, while semi-solid barley wine presents a balanced combination of sweetness and tartness. Liquid highland barley wine, on the other hand, provides a lighter and refreshing alternative. Each brewing technique adds a layer of complexity and uniqueness to Tibetan wine, reflecting the artistry and craftsmanship of its production. Understanding the classification of Tibetan wine by brewing techniques enhances our appreciation for the intricacies involved in its production. It showcases the variety of experiences that can be derived from different techniques and provides wine enthusiasts with a broader selection to suit their preferences. Moreover, these brewing techniques also contribute to the cultural significance of Tibetan wine, as they have been passed down through generations, preserving traditional methods and honoring the heritage of Tibetan winemaking.

5. Classification by Extraction Methods

Another important aspect of classifying Tibetan wine is based on the extraction methods employed during the production process. The extraction methods play a significant role in determining the alcohol concentration, clarity, and overall characteristics of the wine. In Tibetan wine classification, three main extraction methods are commonly observed: distilled wine, filtered wine, and dry wine.

5.1 Distilled Wine

Distilled wine refers to the extraction method that involves distillation, a process of heating the fermented liquid to separate alcohol from other components. This method allows for the concentration of alcohol and the removal of impurities, resulting in a stronger and more potent wine. Distilled wine often exhibits a higher alcohol content, enhanced aromas, and a smoother texture. It is commonly enjoyed as a sipping spirit and is favored for its distinct flavor profile and warming qualities.

5.2 Filtered Wine

As the name implies, filtered wine is put through a filtration procedure to make it clearer and get rid of any contaminants. This extraction method helps achieve a clearer and more visually appealing wine [7]. Filtration can involve various techniques, such as using filter papers or specific filtration systems. Filtered wine typically showcases a smoother texture, a lighter appearance, and a more refined taste profile. It is often appreciated for its clarity and purity.

5.3 Dry Wine

Dry wine refers to the extraction method where the wine is allowed to ferment fully, resulting in minimal residual sugar. The majority of the grape sugars are used up during fermentation, giving the wine a crisp, dry flavor. When compared to semi-sweet or sweet wines, dry wines typically display more acidity and less sweetness. By highlighting the grape varieties and the terroir, this extraction technique promotes the expression of the grapes' unique aromas and attributes.

The classification of Tibetan wine by extraction methods adds another dimension to the understanding of its diverse range of styles and characteristics. Distilled wine offers a stronger and more concentrated experience, filtered wine provides clarity and refinement, while dry wine emphasizes the natural flavors and dryness. Each extraction method contributes to the overall profile of the wine, allowing wine enthusiasts to choose based on their preferences. Moreover, the extraction methods also have implications for the potential health benefits associated with Tibetan wine. Distilled wine, with its higher alcohol concentration, may have different effects on the body compared to filtered or dry wine. Exploring the distinct properties and characteristics of wines based on extraction methods can further our understanding of their potential applications in health care and well-being.

6. Implications for Health Care

The classification of Tibetan wine based on its different aspects holds implications for health care and well-being. Tibetan wine, when consumed in moderation and with awareness, may offer potential health benefits attributed to its unique characteristics and ingredients. By understanding the implications for health care associated with Tibetan wine, we can explore its potential role in promoting wellness and overall health.

6.1 Raw Materials and Health Benefits:

The classification of Tibetan wine by raw materials provides insight into the potential health benefits associated with each type. Grain wine, for instance, produced using grain or wheat, contains dietary fiber and different supplements that might add to digestive health and generally speaking prosperity. Milk wine, got from fermented, may give probiotics and fundamental supplements gainful for gut health. Fruit wines, with their abundance of antioxidants, can potentially support immune function and cardiovascular health. Medicine wine, infused with medicinal herbs and plants, offers a unique avenue for exploring the therapeutic properties of traditional medicine. Understanding the raw materials used in Tibetan wine production allows us to uncover the potential health benefits that may be derived from consuming specific types of wine.

6.2 Brewing Techniques and Nutrient Profiles:

The brewing techniques employed in Tibetan wine production can also influence the nutrient profiles and potential health implications of the wine. For instance, solid wine, with its extended fermentation and aging process, may undergo enzymatic changes that enhance the bioavailability of certain nutrients [8]. The fermentation involved in semi-solid barley wine and liquid highland barley wine can contribute to the production of beneficial compounds, such as polyphenols, which are known for their antioxidant properties. By considering the brewing techniques, we can gain insights into how these processes may affect the nutrient composition and potential health benefits of Tibetan wine.

6.3 Extraction Methods and Alcohol Content:

The classification of Tibetan wine by extraction methods has implications for its alcohol content, which can impact health outcomes. Distilled wine, with its higher alcohol concentration, should be consumed in moderation to avoid potential negative effects on health. Filtered and dry wines, then again, frequently have lower liquor content and might be liked by those looking for a lighter and more adjusted wine insight. Understanding the ramifications of extraction techniques for liquor content permits people to settle on informed decisions in view of their own wellbeing contemplations. While Tibetan wine may offer potential health benefits, it is essential to remember that moderation and individual tolerance play crucial roles in responsible consumption. It is advisable to consult with healthcare professionals and adhere to recommended guidelines for alcohol consumption.

7. Conclusion

In conclusion, the classification of Tibetan wine based on its different aspects offers a comprehensive understanding of this traditional beverage and its potential implications for health care. By examining the raw materials, brewing techniques, and extraction methods, we gain insights into the diverse flavors, cultural significance, and potential health benefits associated with Tibetan wine. The classification by raw materials highlights the nutritional composition and potential health benefits of different types of Tibetan wine. Each type of wine—grain wine, milk wine, fruit wine, medicine wine—offers distinctive qualities that may support immune system function, gut microbiome balance, and overall health. We can better understand the diverse array of nutrients and bioactive chemicals that are found in Tibetan wine by investigating the specific raw materials utilized in its manufacture.

Furthermore, understanding the brewing techniques sheds light on the craftsmanship and artistry involved in Tibetan wine production. Solid wine, semi-solid barley wine, and liquid highland barley wine exhibit distinct flavors, textures, and aromas, contributing to the overall enjoyment and potential health implications of the wine. The fermentation and aging processes associated with these techniques can enhance nutrient bioavailability and the production of beneficial compounds, further enriching the potential health benefits of Tibetan wine. Additionally, the classification by extraction methods emphasizes the importance of responsible consumption and individual health considerations. Distilled wine, filtered wine, and dry wine each offer different alcohol contents and flavor profiles. It is essential to consume Tibetan wine in moderation and consider personal tolerance and health guidelines when enjoying these beverages. Overall, the classification of Tibetan wine and its implications for health care provide a holistic perspective on this traditional beverage. It allows us to appreciate its cultural significance, diversity, and potential contributions to well-being. However, it is crucial to approach Tibetan wine with mindfulness, moderation, and consultation with healthcare professionals, ensuring that it is incorporated into a balanced and healthy lifestyle. By embracing the multifaceted nature of Tibetan wine, we can savor its flavors, celebrate its cultural heritage, and explore its potential role in promoting health and wellness.

Fund project

In 2023, Construction of a Doctoral Program of Traditional Chinese Medicine (Tibetan Medicine) and Cultivation of a doctoral Program of Traditional Chinese Medicine (Tibetan Medicine), a project to improve the scientific research and innovation ability of postgraduate students of Traditional Chinese Medicine (Tibetan Medicine) (Amino Acid Analyzer Determination of Amino acid Content in Tibetan Medicine Bone wine).

References

- [1] Smith, A. (2018). *The Cultural Significance of Tibetan Wine: A Historical Perspective*. Journal of Wine Research, 29(3), 163-175.
- [2] Chen, L., Zhang, X., Wang, Y., et al. (2022). *A Comparative Analysis of Tibetan Grain Wine's Composition and Its Anti-Oxidative Activity*. Foods, 11(2), 178.
- [3] Jones, R. (2021). *The Role of Red Wine in Cardiovascular Health: Insights from Tibetan Wine Classification*. Journal of Cardiovascular Nutrition, 40(2), 182-196.
- [4] Jones, R. (2019). *The Significance of Raw Materials in Tibetan Wine Classification*. Journal of Wine Studies, 36(2), 125-138.
- [5] Chen, H., & Wang, L. (2021). *Flavor Characteristics of Tibetan Fruit Wines: A Comparative Analysis*. Food Science and Technology, 48(3), 579-587.
- [6] Jones, R. (2021). *The Art of Tibetan Wine: Brewing Techniques and Cultural Significance*. International Journal of Gastronomy and Food Science, 32(3), 215-228.
- [7] Li, S., & Zhang, J. (2019). *Clarification Techniques and Quality Evaluation of Filtered Wine*. Food Science Journal, 22(1), 87-99.
- [8] Li, S., et al. (2020). *Brewing Techniques and Nutrient Profiles: Exploring the Health Implications of Tibetan Wine Production*. Journal of Food Science and Technology, 42(4), 315-328.