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HISTORY OF ALCOHOLIC BEVERAGES USE IN TRADITIONAL MEDICINE IN CHINA

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Abstract: This article examines the historical and contemporary role of alcoholic beverages, particularly Baijiu, within Chinese traditional medicine. While historically used as a solvent to extract active compounds from medicinal herbs, modern scientific inquiry has increasingly focused on the health implications of its consumption. Research highlights significant risks associated with excessive intake, including liver damage and addiction, alongside its deep-rooted cultural and social significance. The conclusion emphasizes the need to balance cultural heritage with public health awareness, advocating for informed consumption practices and further scientific study to navigate this complex relationship.
Keywords: Alcohol consumption; Public health; Standards

1 INTRODUCTION

Traditional medicine encompasses a wide range of practices that rely on natural remedies, including herbs and, in some cases, alcoholic beverages. Various cultures across the globe have their own traditions rooted in the use of natural components for healing[1]. For instance, in India, Ayurveda incorporates herbs like turmeric and neem for medicinal purposes. In Mexico, traditional medicine often includes the use of herbs like chamomile and sage. In China, traditional Chinese medicine (TCM) utilizes alcoholic beverages as a carrier for herbal extracts to enhance their effectiveness. For example, in TCM, alcoholic beverages is commonly used to extract active compounds from herbs like goji berries and ginseng, preserving their potency and aiding in their absorption by the body.
Baijiu, a revered distilled liquor deeply rooted in the heart of Chinese tradition, encapsulates centuries of culture[2]. Dating back to ancient times, Baijiu holds a revered status in Chinese history, evolving from a simple alcoholic beverage to a symbol of heritage[3]. The production of Baijiu has been evolved over generations, blending a range of distinct flavors and aromas[4,5,6].

2 HEALTH CLAIMS

Traditional Chinese liquor is a cultural staple with a long history, commonly consumed during meals and social occasions. It is important to present information accurately. Any claims regarding specific effects of alcohol consumption are not universally established and should be viewed as anecdotal or culturally contextual observations[7]. The relationship between Baijiu consumption and cardiovascular health is a subject of ongoing discussion in certain cultural and observational contexts. Some perspectives reference studies that explore this association[8]. The role of Baijiu extends into cultural and social domains. It is traditionally associated with concepts of relaxation and communal bonding, and is deeply embedded in Chinese traditions[9]. Its presence in social gatherings is associated with a sense of community and conviviality within traditional practices. It is viewed as part of certain customs that emphasize social connection[10]. Excessive intake of Baijiu, like any other alcohol, can lead to adverse health effects such as addiction, liver damage, and increased health risks. Therefore, the consumption of Baijiu is primarily situated within its long-standing cultural and social traditions. Any discussion of its broader implications remains a subject of varied perspectives.
In both Chinese, Japanese, and Korean cultures, herbal liquor holds a special place in traditional medicine and cultural heritage. Baiju, also commonly used in China for herbal wine, finds its counterpart in Japan with herbal beverages like Yomeishu Oriental Herbal Liqueur, which has been crafted for about 400 years and contains a blend of natural medicinal herbs[11]. In Korea, ginseng liquors like Kooksoondang sambiju and Insamju blend ginseng with alcohol to create traditional herbal drinks. The KSD Korean Ginseng Liquor exemplifies the premium quality of Korean ginseng in a refined liqueur. Recent research into Korean Red Ginseng has explored its interaction with alcohol consumption, contributing to ongoing scientific dialogue across several East Asian regions[12].

3 RESEARCH IN BAIJIU

Current scientific research on Baijiu has started to uncover potential negative aspects associated with this traditional Chinese liquor. Studies have raised concerns about the health implications of excessive Baijiu consumption, highlighting its link to an increased risk of liver damage, addiction, and other alcohol-related health issues. Research indicates that alcohol content in Baijiu can have detrimental effects on the liver, leading to conditions such as fatty liver disease, alcoholic hepatitis, and cirrhosis. Furthermore, studies have identified a potential association between heavy Baijiu consumption and an elevated risk of alcohol dependency and addiction[13]. The addictive nature of Baijiu, coupled with its cultural significance and social acceptance, poses a concern for individuals at risk of developing alcohol use disorders.

Moreover, research has suggested that Baijiu's negative impact extends beyond individual health to societal levels, raising concerns about alcohol-related accidents, violence, and social disruptions associated with excessive consumption[14]. Studies have emphasized the need for public health awareness campaigns and interventions to address the harmful consequences of Baijiu consumption on both personal health and social well-being. In light of these findings, current scientific research on Baijiu underscores the importance of informed consumption and regulatory measures to mitigate the potential negative effects of this beloved Chinese liquor on individuals and communities[15].

Research on Baijiu has developed in recent years, contributing to a broader understanding of this traditional Chinese liquor. Studies have explored its cultural significance and examined various compositional and consumption-related topics from multiple perspectives[16]. Researchers have examined the chemical composition of Baijiu, documenting its ingredients and fermentation process. This analysis contributes to the understanding of its production methods and characteristic flavors.

Chinese Baijiu is classified as one of the world's major distilled spirits. Its production methods differ from those of several other distilled spirit traditions [17]. Unlike spirits typically produced from a single primary raw material—such as grapes, barley, corn, or potatoes—using specific yeast strains in closed fermentation systems, Chinese Baijiu utilizes a variety of grains. Its production involves open fermentation pits where a diverse microbial community, including various yeasts, bacteria, and fungi, participates in a solid-state fermentation process that combines saccharification and fermentation.

This production system results in a distinctive chemical composition. Literature documents the presence of numerous flavor compounds in the spirit. The raw materials and processes used are contributing factors to its sensory profile. Academic research into its composition and production techniques continues, which forms part of the broader scientific study of traditional fermentation practices and food science [18].

Scientific inquiry has examined the role of Baijiu within Chinese social and cultural contexts. Studies document the practices and traditions associated with its consumption, noting its presence in various communal and ceremonial settings.

Scientific inquiry regarding Baijiu extends beyond cultural studies into areas of economic analysis. Research has documented aspects of its production, supply chains, and market dynamics, noting its established domestic presence and its distribution in international markets.

Research into the physiological effects of alcohol consumption employs various methodological approaches. These include epidemiological observations, clinical studies, controlled experiments, and laboratory analyses at the cellular or molecular level.

Such methodologies are utilized to examine and document the range of bodily responses associated with alcohol intake. The collective findings from these diverse research approaches contribute to the broader scientific understanding of this subject.

To research the effects of alcohol on the human body, health claims and negative impacts, various methods are employed.

3.1 Methods for Research on Alcohol Effects

3.1.1 Health claims

1. Epidemiological Studies: These studies observe populations over time to analyze the relationship between alcohol consumption and health outcomes[19].
2. Clinical Trials: Controlled experiments are conducted on human subjects to determine the causal effects of alcohol on specific health markers[20].
3. Animal Studies: Using animal models helps researchers understand the physiological impact of alcohol at a cellular level and its potential health benefits[21].
4. Meta-Analyses: Pooling data from multiple studies helps to provide a comprehensive overview of the impact of alcohol on health and benefits[22,23].

3.1.2 Negative health effects

1. Longitudinal Studies: Tracking individuals over an extended period allows researchers to observe the long-term effects of alcohol consumption on health[24].
2. Laboratory Experiments: Controlled experiments in a laboratory setting help isolate the effects of alcohol on specific organs or bodily functions[25].
3. Observational Studies: Observing individuals in their natural environment provides insights into the immediate impacts of alcohol on health markers[26].

4. Biomedical Research: Using advanced techniques like imaging and molecular analysis, researchers delve into the cellular and molecular changes induced by alcohol consumption[27].

4 CONCLUSION

In conclusion, while Baijiu holds a significant place in Chinese culture and traditional medicine as a carrier for herbal extracts with potential health benefits when consumed moderately, recent research has highlighted the harmful effects of excessive consumption on liver health and addiction. It contains complex cultural and social aspects to individual . Public health awareness and informed consumption practices are crucial in navigating the complex relationship between tradition, health, and social context.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

DISCLAIMER

Where authors are identified as personnel of the International Agency for Research on Cancer/WHO, the authors alone are responsible for the views expressed in this article and they do not necessarily represent the decisions, policy or views of the International Agency for Research on Cancer/WHO.

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