

MELLOW BRANDS WHITE PAPER

A New Generation of Botanical Social Beverages

A science-informed approach to alcohol-free
relaxation, connection and social enjoyment

Developed with Mellow Brands

September 2026

Executive Summary

Consumers are increasingly seeking enjoyable adult beverages that fit a more mindful lifestyle. Mellow Brands has developed a beverage concept built around a proprietary blend of approximately 38 botanically derived terpenes and related botanical compounds. The goal is to deliver a sophisticated social experience without alcohol or THC.

The concept combines beverage formulation, flavor development and a carefully measured botanical system designed for a consistent sensory experience. It is informed by published research on individual botanical compounds and by third-party consumer testing of a related multi-terpene formulation.

NO ALCOHOL	NO THC	BOTANICALLY DERIVED
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This paper provides an overview of the market opportunity, the role of terpenes, the development approach and the available consumer-study results. It does not claim that the finished beverage treats, prevents or cures any condition.

Important distinction

Mellow Brands developed the beverage concept and product application described here. Published scientific literature and third-party formulation studies remain the work of their respective authors and study sponsors.

The Shift Toward Alcohol-Free Social Drinking

Moderation, wellness and social connection are reshaping adult beverage choices. Consumers increasingly want products that feel special and social while avoiding alcohol's calories, next-day effects and impairment.

A 2023 consumer survey reported that 34% of respondents were trying to drink less, 28% were trying to stop drinking, 24% identified as teetotal and 25% identified with the sober-curious movement.[1] Broader beverage-industry reporting has likewise identified moderation and low/no-alcohol options as important consumer trends.[2]

The opportunity

- Create an adult social ritual without alcohol or THC.
- Deliver flavor complexity beyond conventional soft drinks.
- Support moderation occasions such as dinners, gatherings and celebrations.
- Offer a measured, repeatable formulation in a convenient ready-to-drink format.

The emerging category sits between ordinary refreshment and the traditional cocktail: flavorful, intentional and designed for the social occasion.

Terpenes: Botanical Building Blocks

Terpenes are aromatic compounds found throughout the botanical world. They help create the recognizable aroma and flavor of citrus, herbs, flowers, hops, pine and many other plants. In foods and beverages, selected terpenes may be used as flavor and aroma components, subject to formulation, dosage and applicable regulatory requirements.

Familiar examples

Limonene	Citrus fruit	Bright, citrus-like
Linalool	Lavender and herbs	Floral
Myrcene	Hops and mango	Earthy, herbal
Pinene	Pine and herbs	Fresh, resinous
Eucalyptol	Eucalyptus	Cool, mint-like

Terpenes are not a single-effect ingredient class. Their properties depend on identity, purity, concentration, combinations, delivery system and intended use. Research on isolated compounds does not automatically establish the effect of a finished beverage.

How Botanical Compounds May Interact With Biology

Scientists study how plant-derived compounds interact with signaling systems in the body, including the endocannabinoid, GABA, serotonin and dopamine systems. These systems are associated with many functions, including mood, stress response, sleep, appetite, movement, motivation and cognition.

A receptor can be thought of as a lock on or within a cell. A ligand is a molecule that interacts with that receptor. Depending on the compound and receptor, the interaction may activate, partially activate or block a signal.

Published research has examined several terpenes. For example, beta-caryophyllene has demonstrated activity at the CB2 receptor in laboratory and animal research,[6,11-13] while myrcene has been studied in relation to TRPV1 signaling.[5,14,15] These findings are useful for hypothesis generation, but they are not proof of a clinical benefit from a particular commercial beverage.

Science-informed, not a medical claim

- Laboratory findings may not predict a person's experience.
- The effect of a blend may differ from the effect of an isolated compound.
- Consumer perception studies measure reported experience, not treatment outcomes.
- Finished-product claims must be supported and reviewed for regulatory compliance.

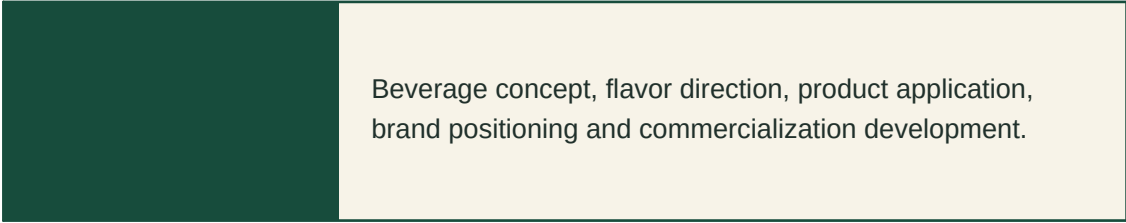
Developed With Mellow Brands

Mellow Brands applied this emerging science to the development of a modern social beverage. The concept uses a proprietary blend of approximately 38 botanically derived terpenes and related botanical compounds within a flavored, alcohol-free and THC-free beverage system.

Development priorities

- A balanced and enjoyable flavor profile suitable for social occasions.
- A precisely measured botanical serving in each container.
- A stable, uniform beverage system across shelf life.
- Quality ingredients selected for the intended food-and-beverage application.
- Clear positioning that avoids alcohol, THC and unsupported medical claims.

Product development includes ingredient qualification, bench formulation, sensory refinement, emulsion and stability work, packaging compatibility, manufacturing validation and finished-product testing. Commercial production should follow documented specifications and all applicable food-safety and labeling requirements.



Beverage concept, flavor direction, product application, brand positioning and commercialization development.

The Mellow Goose Brand

Mellow Brands will market and sell these botanical beverages under the **Mellow Goose Social Tonics** brand.

Mellow Goose brings the beverage platform to life as a consumer-facing line built for social occasions. The brand combines real fruit flavors, plant-based botanicals and a distinctive alcohol-free experience in four planned flavors: Black Cherry, Orange Crush, Lemonade and Transfusion.



MELLOW GOOSE™
SOCIAL TONICS

Mellow Goose Social Tonics are crafted to enhance your social moments and elevate your state of mind—naturally. Made with plant-based botanicals and real fruit flavors, our tonics help you feel balanced, focused, and present in the moment.







PLANT-BASED BOTANICALS NO ARTIFICIAL INGREDIENTS BALANCE MIND & MOOD

Nutrition Facts	
1 serving per container	
Serving size 12 fl oz (355mL)	
Amount per serving	
Calories	5
	% Daily Value*
Total Fat 0g	0%
Sodium 0mg	0%
Total Carbohydrate 1g	0%
Total Sugars 0g	
Includes 0g Added Sugars	0%
Protein 0g	

Not a significant source of saturated fat, trans fat, cholesterol, fiber, vitamin D, calcium, iron and potassium.



PLEASE RECYCLE & ENJOY RESPONSIBLY



MELLO GOOSE™
SOCIAL TONICS

ELEVATE YOUR SOCIAL MOMENTS

 FOCUS THE MOMENT

 BALANCE YOUR MIND

 ENJOY NATURALLY

 CONNECT AUTHENTICALLY

BLACK CHERRY
NATURALLY FLAVORED



ORANGE CRUSH
NATURALLY FLAVORED



LEMONADE
NATURALLY FLAVORED



TRANSFUSION
NATURALLY FLAVORED





PLANT-BASED BOTANICALS



NO ARTIFICIAL INGREDIENTS



BALANCE MIND & MOOD



NO CAFFEINE

A Better State of Social™

LIVE LIGHTER. CONNECT DEEPER. ENJOY MORE.

SOCIAL TONICS • NON-ALCOHOLIC • NO CAFFEINE • NATURAL FLAVORS • PLANT-BASED 12 FL OZ (355mL) 

Mellow Goose Social Tonics: a Mellow Brands beverage platform created to elevate social moments through flavor, ritual and botanical innovation.

Concept packaging shown for brand and product-development purposes. Final ingredients, nutrition information, claims and label copy remain subject to formulation and regulatory review.

MELLOW BRANDS | BOTANICAL SOCIAL BEVERAGES

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Consumer Testing: What the Available Data Suggest

Third-party testing supplied in support of the underlying formulation evaluated carbonated ginger beverages containing a multi-terpene blend. These studies were not conducted on the final Mellow Brands commercial beverage and should not be represented as product-specific clinical proof.

Study 1: controlled tasting

- Design: randomized, double-blind, placebo-controlled tasting over four days.
- Participants: 50 adults, ages 21-67.
- Test servings: 250 mL ginger beverage with 5 mg, 10 mg or 15 mg of the blend, plus placebo.
- Reported result: at 5 mg, a statistically significant difference versus placebo was reported for 'high feelings' and a feeling described as similar to after drinking alcohol ($p < 0.05$).
- Reported adverse experiences: two participants at 5 mg reported headache or apathy, compared with three participants receiving placebo.

Study 2: home-use test

- Design: randomized, double-blind, placebo-controlled home-use test.
- Participants: 195 adults, ages 20-60, who consumed alcohol at least once every two weeks.
- Test servings: 250 mL ginger beverage with 2.5 mg or 5 mg of the blend, plus placebo.
- Reported result: the 2.5 mg serving showed a difference in relaxation versus placebo at 30 minutes using a $p < 0.10$ threshold.
- Reported adverse experiences: fewer than 3% reported dizziness or fatigue, similar to placebo.

Interpreting the Evidence Responsibly

The studies offer an early signal that a multi-terpene beverage can influence self-reported sensory or mood-related experiences. They do not establish medical efficacy, safety for every consumer, equivalence to alcohol or performance of a different finished formula.

Important limitations

- The first study was small and involved consumers familiar with the organizations behind the research.
- The studies measured short-term, self-reported feelings rather than clinical outcomes.
- One finding used a $p < 0.10$ threshold, which is less stringent than the commonly used $p < 0.05$ threshold.
- The tested ginger beverage is not the same as every future flavor, dose or commercial formulation.
- Long-term use, medication interactions and use by sensitive populations were not established.

For Mellow Brands, the appropriate path is finished-product validation: confirm composition, stability, microbiological safety, sensory acceptance, serving consistency and compliant consumer communication before broad commercialization.

Consumer guidance

The finished label should include an ingredient statement, serving guidance and appropriate cautions. Consumers who are pregnant or nursing, take medication, have a medical condition or are sensitive to botanical ingredients should consult a qualified healthcare professional before use. Do not drive or operate machinery if the product makes you feel impaired.

The Future of Social Beverages

The next generation of adult beverages can offer more than the absence of alcohol. It can deliver flavor, ritual and a distinctive social experience in a format designed for moderation.

Mellow Brands is developing this concept around three principles:

1	Enjoyment	A beverage must first taste good and feel appropriate for the occasion.
2	Consistency	Each serving should follow a controlled formula and documented quality standards.
3	Responsibility	Product language should be accurate, transparent and supported by evidence.

This work supports a compelling new space: botanical, alcohol-free social beverages developed for consumers who want to participate fully in the moment while making a more mindful choice.

Disclaimer

This document is for informational and product-development purposes only. Statements about botanical compounds have not been evaluated by the U.S. Food and Drug Administration. The product concept is not intended to diagnose, treat, cure or prevent any disease. Regulatory status and permitted claims must be confirmed for each ingredient, dose, market and finished product before sale.

References

Consumer-study details summarized in this paper were supplied in the source technical white paper. The named commercial entities and proprietary product names from that source have intentionally been omitted.

1. NCS Solutions. The Goods: Sober Curious Nation (2023).
2. GlobalData. Top Trends in Alcoholic Beverages 2023 (2023).
3. Mintel Group Ltd. Alcohol Alternatives US 2022.
4. Anandakumar P, Kamaraj S, Vanitha MK. D-limonene: A multifunctional compound with potent therapeutic effects. *Journal of Food Biochemistry*. 2021;45(1):e13566.
5. Jansen C, et al. Myrcene and terpene regulation of TRPV1. *Channels*. 2019;13:344-366.
6. Gertsch J, et al. Beta-caryophyllene is a dietary cannabinoid. *PNAS*. 2008;105:9099-9104.
7. Menezes IO, et al. Biological properties of terpinolene: a systematic review. *Phytomedicine*. 2021;93:153768.
8. Salehi B, et al. Therapeutic potential of alpha- and beta-pinene. *Biomolecules*. 2019;9(11):738.
9. Mieres-Castro D, et al. Antiviral activities of eucalyptus essential oils. *Pharmaceuticals*. 2021;14(12):1210.
10. Russo EB. Taming THC: potential cannabis synergy and phytocannabinoid-terpenoid entourage effects. *British Journal of Pharmacology*. 2011;163(7):1344-1364.
11. Aly E, Khajah MA, Masocha W. Beta-caryophyllene in a mouse model of neuropathic pain. *Molecules*. 2020;25(1):106.
12. Scandiffio R, et al. Protective effects of beta-caryophyllene in chronic inflammation. *Nutrients*. 2020;12(11):3273.
13. Goncalves ECD, et al. Terpenoids, cannabimimetic ligands beyond the cannabis plant. *Molecules*. 2020;25:1567.
14. Jansen C, et al. Myrcene and terpene regulation of TRPV1. *Channels*. 2019;13:344-366.
15. Surendran S, et al. Myrcene: potential health benefits of this flavouring and aroma agent. *Frontiers in Nutrition*. 2021;8:699666.