

3 Considerations for Developing Botanical Food & Beverage

BY: KAYLIND COOK, SR. APPLICATION TECHNOLOGIST

With interest in health and wellness on the rise, many consumers are looking to implement functional and better-for-you ingredients such as botanicals in their diet. From chocolate confections to cocktails, pet treats and more, botanicals and botanical inspired flavors have expanded into a variety of categories. And though developers can find success in this space, botanicals can cause a variety of taste challenges throughout product development. We're taking a look at a few considerations to help guide your product development, flavors for inspiration and some notable products.



1 CONSIDER THE “HEALTH HALO” EFFECT

Consumers are now more tuned into their health and wellness. And botanicals in the food and beverage space today have a “health halo”, meaning that consumers perceive them to be clean label, pure and overall positive for their wellbeing. With functionality in mind, consumers want to be able to recognize the “healthy” or functional taste of the product, but they also prioritize flavor. Food and beverage developers can take advantage of flavor and flavor technologies to help preserve the perceived healthiness through the natural taste of the ingredient, all while adding a craveable flavor.

There's opportunity in this space for product developers, but what is a botanical exactly?

According to the National Institute of Health, “A botanical is a plant or plant part valued for its medicinal or therapeutic properties, flavor, and/or scent.”

2 BATTLE BITTERNESS & UNPLEASANT NOTES

Due to their often floral, earthy or vegetative off-notes, botanicals often feature a bitter taste that may be unpleasant for some consumers. By adding a complementary flavor, food and beverage developers can help mitigate any unpleasant notes. For example, citrus flavors like lemon, grapefruit and lime can pair well with floral notes like lavender. Flavor technologies such as Optify™ Taste Modification can also help to alleviate this taste challenge by masking or blocking bitter notes.

3 KEEP REGULATORY IN MIND

Flavor and taste aren't the only considerations you need to make while developing these products. As botanical products have more complex flavor profiles and ingredients, it's important to keep in mind potential regulatory challenges. For example, prior to being added to the FEMA GRAS (Generally Recognized As Safe) list, FDA regulations officially allowed hibiscus for use as flavor in alcoholic beverages only. The updated FEMA GRAS list confirms that Natural Hibiscus Flavors may be used in more applications. Since there are often development parameters to keep in mind when using certain flavors, make sure to consult with your regulatory team.

Let's take a look at a few botanicals and some flavor inspiration for your next product innovation.

BOTANICAL CATEGORY	BOTANICAL EXAMPLES	FLAVOR INSPIRATION
<i>FLORAL</i>	<ul style="list-style-type: none"> Hibiscus Lavender Chamomile Rose Dandelion Jasmine Elderflower Violet 	<ul style="list-style-type: none"> Grapefruit Hibiscus Chamomile Ginger Cardamom Rose Espresso Rose Tangerine Ginger Green Tea Jasmine Elderflower Keylime Cherry Violet
<i>HERBS</i>	<ul style="list-style-type: none"> Mint Lemongrass Tulsi Green/Black Tea 	<ul style="list-style-type: none"> Watermelon Mint Raspberry Lemon Mint Yuzu Lemongrass Pomegranate Mint Lemongrass Citrus Tulsi
<i>SPICES</i>	<ul style="list-style-type: none"> Cinnamon Ginger Turmeric Cardamom 	<ul style="list-style-type: none"> Blueberry Cinnamon Peach Ginger Citrus Turmeric Orange Mango Ginger Pistachio Cardamom Dark Chocolate Plum Cardamom

***ADAPTOGENS** are also commonly paired with botanical flavor profiles to cater to those consumers looking to improve their health through functional ingredients. They are often paired with the floral or citrus flavors of botanicals. See some of those ingredients below alongside some of the benefits they are said to bring.

- Ashwagandha- Increased Stamina & Stress Relief
- Reshi Mushrooms- Immune Boosting
- Maca Root- Boost Energy & Endurance
- Ginseng- Boost Energy & Reduce Stress

PRODUCTS OF NOTE:



MOMENT DRINK YOUR MEDITATION

is a variety beverage pack including hibiscus dragon fruit, rooibos blood orange and tulsi lemon flavors. The product contains l-theanine and ashwagandha with no caffeine, added sugars or artificial flavors.



WOLF SPRING CALMING HYDRATING ELECTROLYTE DOG WATER

features chamomile, l-tryptophan, l-theanine and hemp seed extract which claim to provide relaxing, anti-stress and calming benefits. It is said to fight stressful situations for our dogs to make them calm and happy.



CULINA BLUEBERRY LAVENDER YOGURT

is a plant-based product that includes only seven ingredients, boosts immune and digestive health and features alive and thriving probiotics.

22% of consumers responded that they likely or definitely would buy this product.

Sources: National Institute of Health, Mintel GNPD, Wolf Spring, Drink Moment

NEED DETAILS?

FONA can help guide you through these steps to get you to the perfect flavor profile for your product. Let's talk flavors, innovation and anything in between.



Kaylind Cook

Sr. Application Technologist

Kcook@fona.com

(331) 276-9818

