



Healthy Tea = Hearty Sales

"THROUGHOUT HISTORY, TEA HAS BEEN BELIEVED TO HELP 'PURIFY THE BODY' AND 'PRESERVE THE MIND.'

OVER THE PAST SEVERAL DECADES, THOUSANDS OF PUBLISHED STUDIES IN LEADING MEDICAL JOURNALS HAVE PROVIDED THE PROOF TO SUPPORT TEA'S ANCIENT HEALTH CLAIMS."¹

It's no secret—or coincidence—tea's popularity continues to grow as quickly as its list of attributed health benefits. With such undeniable popularity, you might say today's consumers are head-over-heels for tea. And, with a list of researched benefits that include improved cardiovascular and immune function² and reduced risk of osteoporosis and certain types of cancers³, it's no surprise that approximately 4 in 5 American consumers drink tea—to the tune of over 80 billion servings in 2014.⁴



Tea: Intrinsically Healthy

HEALTH BENEFITS ATTRIBUTED TO TEA (BLACK AND GREEN)⁵

Reduced

- Cardiovascular risk factors
- Cancer risk, particularly in colorectal and skin cancers
- Risk of kidney stones
- Risk of osteoporosis (tea drinkers have higher bone mass density)

Improved

- · Neurological health
- Metabolism, obesity and body composition
- · Diabetes and blood sugar control
- · Immune function
- Oral health

Though a host of scientific studies from all around the globe substantiate these various specific health benefits, perhaps nothing is stronger than the general public's associated positive perception of them. As a result, beverage manufacturers are pursuing the most effective ways to incorporate tea into their Ready-to-Drink RTD drink applications. According to The Washington Post, "The country's growing appreciation for tea hasn't been lost on large American food and beverage makers. Rather, companies nationwide are throwing billions of dollars into the budding industry." 6

Tea's health benefits and inherent functionality are attributed to and derived from key ingredients naturally occurring in tea, like: antioxidants, polyphenols, catechins and L-theanine (amino acid).

THE CHEMISTRY OF TEA



Antioxidants

Natural substances that may prevent or delay some types of cell damage.

Polyphenols

Effective antioxidants found in tea and attributed to play important roles in various areas of health.

Catechins

Phytochemical compounds found in high concentrations in a variety of plant-based foods and beverages.

Beneficial effects include: increased plasma antioxidant activity and brachial artery dilation.

Epigallocatechin gallates (EGCGs)

The principle catechin in tea, a strong antioxidant shown to reduce formation of certain cancers and believed to protect normal cells from cancer-causing hazards.

L-theanine

Amino acid found in tea credited with reducing mental and physical stress and promoting mental alertness. Associated with the beneficial aspects of caffeine, without the negative 'crash' effect.

Tea is #Trending

With all this positivity brewing, it's no surprise that tea consumption continues to grow; in fact, U.S. tea sales are forecasted to double over the next five years. Though they may seem remarkable, the growth estimates are based upon consumers' continuing desire for the refreshing taste of tea, the convenience of RTD beverages, and ongoing interest in tea's health benefits.

for alternative options to replace sodas and other unhealthy beverages who perceive tea as a natural, healthy choice. Many of these new tea consumers are younger, like the **87%** of millennials who drink tea⁸ and are more likely to embrace premium tea brands with unique flavors. Premium flavor and quality is also brewing in the tea marketplace, as tea drinkers are increasingly focusing on quality and bold flavors, and discovering high-end specialty teas.⁹

New-to-tea drinkers include consumers looking

TEA IS GOOD BUSINESS 7

On any given day, more than 158 million Americans (over ½ the population) are drinking tea.

In 2014, Americans consumed over **80 billion servings** (more than 3.60 billion gallons) of tea.

RTD tea has grown more than 14-fold over the last ten years, with estimated sales of \$5.2 billion in 2014 alone.

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Not only does this new generation of tea drinkers want high-quality, clean tasting teas, they care about authenticity and social responsibility when choosing beverages as "sustainable, locally produced, and transparent food systems are growing in importance to many consumers." For example, green tea (widely perceived as a more authentic, perhaps more artisanal tea choice), has experienced a growth rate of more than 60% in volume during the last ten years. 11

The opportunities for additional growth in tea sales reach much wider than one demographic and are there for the taking. For instance, beverage makers may benefit from further increasing RTD tea's appeal to families, as well as targeting the under-served male audience. RTD tea producers may also capitalize on avenues that personalize tea drinking, focusing on premium offerings and unique ingredients.

Pure and simple: clean and clear

Tea's long history—nearly 5,000 years in the making—adds to its wholesome pedigree. An all-natural, environmentally sound beverage made from a renewable resource, tea is considered naturally refreshing, and since it contains no sodium, fat, carbonation or sugar, is virtually calorie-free. In addition, tea helps maintain proper fluid balance and may contribute to overall good health.¹²

None of this goodness matters, if tea is not brewed with a clear, clean label. Though there may be no legislative definition for a clear or clean label, consumers know exactly what they think it should be when they are shopping for foods and beverages. To them, it "is the new rule," says Lu Ann Williams, director of innovations at Innova Market Insights, a market research and consulting firm. "The definition about what is clean continues to broaden every year...consumers lump it all together—whether it is no artificial colors, no additives, organic, or Fair Trade." According to Innova, more than one-fifth of U.S. product introductions in 2014 featured a clean label positioning, and the clean label trend led the list of the firm's Top 10 Trends for 2015.¹³

Just as consumers expect clear, clean labels, they have come to expect the most potential possible from their food and beverage choices. Yes, their choice must be clear and clean (according to their own imposed definition), but it also needs to provide the nutritional benefits they are looking for. And, even more importantly, their choice must taste true to its label. It's not enough to be brewed, RTD tea has to taste brewed. Sounds easy and matter of fact, but as beverage manufacturers know, it's not always as easy as it sounds. It requires a perfect blend to create a balance in brewed RTD iced tea. Without it, off-notes, off-flavors and inconsistencies can threaten the success of the end product.

Tea That Rings True

When it comes to formulating a RTD brewed tea beverage with a clean label, perhaps nothing is more important than ensuring that all the taste—and perceived benefits—of brewed tea come shining through in the final formulation. This unique challenge can only be accomplished with precise tea formulation methodology and genuine, proven expertise.

As consumers' expectations continue to grow, they expect only genuine brewed tea flavor in their RTD tea beverages. Instant tea powders, for instance, have become an outdated alternative, with their high-heat drying methods that flash off tea's top-note, fresh-brewed characteristics. Add the preservatives needed to combat the potential for a high bacterial load and the typical cloudiness, and instant tea powders are no longer a satisfying option. And, most importantly, the finished product cannot be labeled as real brewed tea.

Real-brewed products are the new essential; so what about batch brewing? Though it may be a step up from instant tea powders, batch brewing still results in product that is not ideal for the rigors of a retail environment or customer expectations for a clear and consistent product. Batch or kettle brewing—the industrial version of brewing a kettle of tea—still allows volatile flavors and aromas to drift away in the steam off a tank of batch-brewed tea. It also loses some of the freshness and can turn cloudy due to undesirable solids that remain in the finished product. Batch-brewed tea can vary in color, clarity and flavor consistency from batch to batch and site to site.



The Perfect Blend

Experts agree that a brewed tea extract provides the clearest, best-tasting, highest-quality brewed tea currently available on a commercial scale. Since it is brewed in a closed, continuous system, none of the flavors, volatiles, or key characterizing top notes disappear into the air via the steam. The tea's essential profile is captured in the brewed liquid itself.

A brewed tea extract is the highest quality option for RTD tea beverages, and it offers a multitude of possibilities in terms of functionality and flavor; the opportunities for customization are endless.

Closed, continuous brewing technology not only allows natural flavor profiles, it affords expanded capabilities to meet emerging consumer trends, like the current resistance to added color and sugar. It's one thing to remove coloring, sugar, or calories from a formulation—to do it successfully, economically and with a great taste is the real challenge. It requires a thorough understanding of the interaction and balance of flavors to meet those challenges and to create the opportunity for manufacturers to transform the RTD iced tea beverages they have ideated into reality.

Art and Science of the Brew

When utilizing brewed tea extracts, it is important to work with a brewer who has the capability and resources to separate each and every component and aspect of brewed tea—an essential element when formulating with brewed tea extracts—so they can provide the balanced attributes needed to create more desirable tea characteristics, including a truer tea profile and more tea top notes. Using less experienced brewers without this same expertise or resources can result in an unbalanced end product, often with off notes or too much acidic flavor.

In addition to using exacting formulations to enhance functionality, it is important to have the capability to create unique brewed tea formulations for any RTD applications. In recent years, these applications have increasingly involved customers' specific label claims, as beverage makers attempt to meet the demands of consumers who are health-literate and highly aware of the health benefits attributed to antioxidants, L-theanine and other ingredients. A brewer with an unparalleled capability to standardize levels of polyphenols, catechins and EGCGs allows beverage makers to meet their presented claims. They are able to meet them by balancing (and standardizing) tea's inherent properties and by developing custom formulations that enhance tea's functionality, like the addition of vitamins.

BATCH CONSISTENCY CHECKLIST

Does your RTD tea formulator provide you with a product within acceptable ranges for the following factors, to ensure consistency in taste and functionality?



Creative problem-solving is also key when assisting manufacturers to meet specific goals, like enhancing their RTD tea beverage with vitamins and juices. Vitamin and protein enhancements make great objectives, but they don't necessarily equal great taste—only an experienced flavor expert can provide solutions to compensate the vitamins' off notes and enhance the tea's true flavor.

Caramel color-free? No problem. Most brewed tea possesses its own rich red and brown color hues, but retail bottled teas made from other methods may require the addition of caramel coloring to standardize the color of products. Even though it may be natural, consumers can perceive this addition as a negative. Brewed tea bypasses this issue if desired, since no added coloring is required for beautiful, consistent color.

Tailor-made Tea

So, for a real-brewed, high-quality tea that's truly tailor-made, brewed tea extracts and a thorough understanding of functionality and flavor are both key ingredients.

Amelia Bay, the premier provider of quality brewed tea, uses a proprietary advanced brewing technology method for precise formulation. Then, proprietary, all-natural processing methods separate the brew in to multiple components, and undesirable solids are removed. The tea's core elements remain, free to be adjusted and recombined according to customer specifications for flavor, color and other properties, while also balancing the pH and standardizing all functional ingredients. Unlike other brewing methods, this advanced brewing technology allows natural flavor profiles and permits standardization of the final RTD tea to provide both consistently fresh, clean taste and uniform levels of functional ingredients. This standardization is a crucial element for beverage manufacturers who want to make and obviously, meet—specific label claims.

team at Amelia Bay also provide the highly specialized formulation expertise necessary to capture tea's essential profile. They have the experience necessary to truly understand the all-important natural aspects of tea, so they are able to ensure that tea's brewed characteristics take center stage and that they meet brewed label claims in a way that appeals to the consumer. In addition to the proper balance with other ingredients, the team knows how to marry flavor and tea formulation to hit the consumer sweet spot—providing the attributes they demand and the taste they want.

To ensure a successful beverage program, it is essential to provide customers alternate ideas and solutions as needed to guarantee the best possible outcome for an optimal product. It is also vitally important to ensure that the resulting genuinely delicious taste and appearance continue throughout the RTD beverage's shelf life. Amelia Bay's team uses accelerated shelf-life studies and testing to determine what a particular product will taste like in the future and then makes the appropriate accommodations to create the proper balance.

A Bestseller is Brewing

It's undeniable: the tea marketplace is growing, iced tea is hot—and success awaits the perfect brew.

Amelia Bay's all-natural brewing methods create the finest brewed extracts. Amelia Bay begins by brewing leaf or bean through the use of closed, continuous brewing systems. Next, the brew is optimized for each specific application by removing undesirable solids, and manipulating flavor and aroma components independently. Each component is then re-blended into a highly concentrated tea or coffee extract, where flavors and functional ingredients can be added for even more enhanced options. Partner with Amelia Bay to stake your label claims and capture tea's essential characteristics, add your preferred flavor and ingredient profiles, and find consumer-pleasing success in the balance.



FOR A SUCCESSFUL TEA PROGRAM JUST ADD AMELIA BAY

Amelia Bay can provide brewed-quality tea and coffee flavors and aromas for use as components in complex formulations, or we can tailor a complete tea program to fit your company and brand goals.

Amelia Bay tea programs offer

- · Cold-Fill and Hot-Fill applications.
- Unique brewed quality tea formulations that will set your products apart in a busy, growing industry.
- Full finished extract formulation based on flavor profiles that appeal to mass, or niche markets. With your input, we will create something uniquely yours.
- Flavor and functionality recommendations based on extensive sales data across all markets.
- Our marketing personnel can assist with up-to-date labeling recommendations as well as positioning in your target marketplace.
- Amelia Bay will fully train production plant personnel on best practices and procedures for handling and using liquid extracts.
- Co-packer recommendations based on need and geographic location.

ABOUT AMELIA BAY

Amelia Bay was founded in 1989 with the specific objective of developing new manufacturing technology that captures the true essence and taste of brewed tea and coffee. Amelia Bay proudly brews and formulates in the USA and is recognized as the "Industry Leader" for tea extracts that truly reflect the key ingredients and compounds contained in brewed tea and coffee.

We develop custom formulations to meet your specifications. Full production support is provided to your bottler, or bag-n-box manufacturer. Amelia Bay is located in Atlanta, Georgia just 30 minutes north of Hartsfield International Airport. You are welcome to visit our plant and we are prepared to work with you on new products in our lab.

For more information, visit www.AmeliaBay.com

Contact us for more information.

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