

TO A TEA: BUILDING
A BETTER ICED TEA





To a Tea: Building a Better Iced Tea

DON'T LET ITS REFRIGERATED TEMPERATURE FOOL YOU: **ICED TEA IS HOT.**

Ready-to-drink (RTD) products in particular—those bottles, cartons and gallon jugs colonizing supermarkets from the soft-drink shelf to the dairy case—have proven that convenient, thirst-quenching iced teas can compete with any of the beverage options that already capture consumers' attention and dollar share.

And it's no mystery why. With health advocates and the media aiming their crosshairs at sugary sodas, juices and sports drinks, the beverage category has become a battleground, and consumers increasingly perceive RTD teas as wholesome alternatives to the "belly-wash" beverages whose sweeteners and artificial ingredients have become red flags on nutrition labels.

Yet amidst all the bad news about belly wash, there's been an equal and opposite flood of good-news stories lauding tea and the health benefits it confers. In fact, tea may be Mother Nature's original functional drink, with antioxidant polyphenols, catechins, calming L-theanine and natural caffeine built right in. So as research continues to affirm tea's health-and-wellness bona fides, expect its healthy halo to shine even brighter.

Health and wellness aren't everything, though—especially not with busy consumers hoping to hydrate on the run. **Convenient products delivered in novel flavors and single-serve formats will keep RTD teas on the radars of contemporary shoppers and Millennials in particular, who crave novelty even more than do their elders,** according to the Tea Association of the U.S.A.'s State of the U.S. Tea Industry 2014 Year in Review.

And quite simply, real brewed iced tea satisfies. It quenches thirst like water, but with a taste and mouthfeel that pack a lot more palate appeal.

No wonder then, that beverage marketers are discovering RTD iced teas as a means of diversifying their lineups and speaking to shoppers who want it all: clean labels with "real" ingredients, not "chemicals"; on-the-go ease; **and the great taste that's made tea the widely acknowledged second-most-consumed beverage on the planet, after water.**

HEALTH BENEFITS OF TEA*

Studies have found that some teas may help with:

- Cancer, Heart Disease and Diabetes
- Encourage Weight Loss
- Lower Cholesterol
- Bring About Mental Alertness



Driving Growth and Diversification

Suffice it to say that market research firm Canadean, in its Global Iced/RTD Tea Drinks Report, estimated the value¹ of the U.S. RTD tea market at **\$5.23 billion in 2014**—quite a leap from its 1990 value of about \$200 million. But that's only a taste of things to come, as Canadean predicts growth for the sector to continue at 3% to 6% through 2018.

Yet to speak of RTD iced tea as a single sector is a misnomer, as there's as much diversity among the products on offer as there is among the price points, retail venues and consumers those teas will ultimately target. **And before any beverage manufacturer even thinks about catching the RTD iced tea wave, they need to consider just which of those many products—and many consumers—they aim to target.**

That's because only with a firm grasp of finished-product goals can a beverage maker begin to conceptualize, let alone formulate, an RTD iced tea. So marketing and R&D need to sit down and ask each other some wide-ranging questions to determine what sort of product they ultimately hope to produce.

Just how well has RTD iced tea worked as a growth driver for beverage marketers?

FUTURE OF RTD TEA²

- The industry anticipates strong, continuous growth.
- Tea sales forecast to double over the next five years.

Exploring the Possibilities

FIRST ON YOUR AGENDA SHOULD BE **WHAT KIND OF TEA YOU WANT TO DEVELOP.**

As anyone who's scanned the current options knows, real, naturally brewed teas formulated without additional colors, flavors or sweeteners sit astride 24-oz. cans and econo-jugs of "tea-flavored" drink that may taste more of flavors and additives than of any actual tea itself. Which direction you're headed will determine which ingredients you use.

So, too, will your target consumer and price point.

We live in an era when foodies think nothing of shelling out serious money for "premium" anything—RTD tea included. For them, an "artisanal" tea ethically made with carefully grown leaves sourced from a region whose story appears on the label is as aspirational a drink as a trophy wine, and can fetch an impressive price compared to more mainstream offerings. Then again, much of the country still feels the recession's pinch, and budget-minded overseers of frugal family shopping lists aspire less toward status beverages than toward affordable alternatives to soft drinks. **Deciding which consumer you want to court will steer your formulation choices.**

Other questions to ask include where you plan to sell your tea—in Whole Foods-type markets, big-box outlets or convenience stores nationwide? What kind of packaging are you contemplating: ergonomically shaped 14-oz. recycled-glass bottles, 59-oz. carafes or the standard gallon- and half-gallon jugs in your regional grocer's tea program? And what, crucially, do you want your label to read?

Shoppers have never been more inclined to examine the fine print on beverage bottles, and among the ingredients they avoid are high-fructose corn syrup (HFCS), brominated vegetable oil (BVO), artificial colors, flavors and just about anything else they might associate with high-school chemistry class.

By contrast, "Filtered water, brewed black tea, sugar" is an ingredient statement anyone can wrap his head around. And though it's hardly the only formula for success, it's certainly one to consider.





Instant Tea Powder

They're also rewriting the rules for how beverage manufacturers approach RTD tea formulation, starting with the type of tea base they use. One option to consider is instant tea powder. Developed in the first half of the twentieth century, it represented a technological advance that brought its earliest industrial users both convenience and consistency, and it's still a viable choice for RTD iced tea makers today.

But because of flavor and operational characteristics, instant tea powder isn't the best fit for every formulation.

For instance, suppliers make instant tea powder either by allowing it to precipitate as a soluble tea solid or by spray-drying the tea onto a carrier. Spray-drying can involve temperatures that flash off valuable volatile flavor components, and can also trigger oxidation reactions that generate off flavors in the finished powder—not the best result if a clean, robust tea profile is your objective.

As a result, products in which instant tea powder is the principle ingredient often need additional flavors—say, a tea distillate or aromatic top note—to round out the profile and to make up for powder's muted real-tea character. Of course, sweeteners can improve a powdered tea's taste, but contribute no characterizing tea flavor of their own and may alienate consumers looking to cut sugar consumption. **And the appearance of an iced tea made with instant tea powder doesn't match the ideal, either, as undesirable particulates in the beverage base show up as cloudiness and can precipitate as sediment in the finished product.**





Instant Tea Powder, cont.

ON THE PRODUCTION FLOOR, INSTANT TEA POWDER CAN BE **MESSY AND LABORIOUS** TO DISSOLVE.

Employees working with it should use **breathing protection and goggles** to guard against dusting, and that tea “dust” can settle into equipment and demand frequent cleanup.



Further, instant tea powder is notorious for carrying a high bacterial load and therefore warrants storage under controlled temperature and humidity.

However, when packed and filled at higher temperatures or low pH—or when formulated with preservatives—the finished RTD beverage can last on a shelf for years.

All of these drawbacks may be completely acceptable if your target beverage is an economy-priced, sweetened or flavored iced tea that doesn't lose points for containing preservatives, being cloudy, having some “gunk” in the bottle or exhibiting a less-pronounced real-tea taste. And considering the high barriers to entry in the RTD tea market, mass manufacturing a low-priced, low-margin retail product using instant tea powder, in some cases, makes sense.

But instant tea powder is no longer the bargain ingredient it once was, especially when you account for the time it adds to batching, bottling and post-production cleanup, not to mention the costs involved in formulating with preservatives or flavors to top up the tea profile. *And it's worth noting one more significant drawback of using instant tea powder: You can't label the finished product “real brewed tea.”*



Batch Brewing

These days, that could be a real deal breaker. With consumers migrating toward real-brewed products with premium positioning, processors look to authentically brewed liquid teas as bases for their RTD iced tea beverages. One of the options they can choose is batch-brewed tea.

To understand the batch-brewing process—or kettle brewing, as it's sometimes called—imagine brewing a kettle of tea in your own kitchen, then enlarge that to an industrial scale. The process involves steeping tea leaf in large tanks of heated water to make a single-strength or slightly concentrated brewed tea. The resulting beverage possesses good short-term clarity and robust flavor, and earns the “real-brewed” designation on a finished-product label. But as is the case with instant tea powders, batch brewing has its downsides.

For one, even though batch brewing avoids the oxidation that occurs during spray drying, the tea still suffers organoleptically over time. To understand how, it helps again to imagine the home-brewing experience: just as the steam coming off the top of your teacup carries away volatile flavors and aromas, so, too, does the steam that drifts off a tank of batch-brewed tea. What's more, if you let a cup of tea rest on your table before you drink it, it may not taste as fresh as when you first brewed it; **that same loss of freshness can plague batch-brewed tea.** And what happens if you put a pitcher of brewed tea in your refrigerator to chill? It gets cloudy, which also happens to batch-brewed tea, as undesirable solids can remain in the finished product.



Batch Brewing, cont.

Operationally, batch brewing may be a world away from instant tea powder's mess and dusting, but it's still best managed on a small scale and in facilities sized and designed to accommodate the process and its large steeping tanks. And you'll also need space to store tea leaf itself—both before it's brewed and after. That's because manufacturers have to hold and properly dispose of brewed tea leaves as food-processing waste. Those spent leaves can't just go down the drain after steeping. Finally, the process involves thousands of gallons of water, the heating of which exacts a steep toll in energy.

Such drawbacks will pose little hindrance to a startup brand brewing modest volumes for a regional customer base. And if that brand is angling for the premium credibility of being naturally brewed, batch brewing fits the bill. But as the brand grows—and if the RTD market stays on its current trajectory, it likely will—the impulse to open new production facilities to fill larger orders will magnify batch-brewing's disadvantages. Why? When brewing at different sites, the tea's strength, color, clarity and flavor consistency vary, even as the costs of batching and disposing spent leaf grow. **Batch brewing therefore presents little price advantage over another real-brewed option that, according to some manufacturers, represents the pinnacle of commercial tea brewing: brewed liquid tea extracts.**





Brewed Tea Extract

A brewed tea extract gives processors all the advantages of batch-brewed tea without its costs, hassles or potential inconsistencies. Even better, experts insist it's the clearest, best-tasting, highest-quality brewed tea currently available on a commercial scale.

It begins by procuring the best leaf from trusted growers around the world in different strains, grades and with different certifications. This tea is then brewed in a closed, continuous brewing system that's both more efficient and consistent than batch brewing. That's in part because, as a closed system, nothing escapes with the steam—no flavors, no volatiles, no key characterizing top notes. The tea's essential profile remains captured in the brewed liquid itself.

After brewing, proprietary, all-natural processing methods separate the brew into multiple components, and undesirable solids are removed. The tea's core elements can then be adjusted and recombined according to customer specifications for flavor, color and other properties, while also balancing the extract's pH and standardizing it.

For the bottler and brand owner, the sum of these efforts is a finished beverage with greater clarity and stability and a fresher, more balanced and robust brewed flavor than you'll get with any other method. Furthermore, if the manufacturer is producing the brand at geographically dispersed locations—or if it plans on doing so any time soon—a brewed tea extract helps ensure not only ease of production but a level of finished-product consistency that, these days, is the name of the game.



BREWED BENEFITS

- Clarity
- Taste
- Easy to Use
- Shelf Life



Brewed Tea Extract, cont.

And don't forget the advantage of **customization**: Because these advanced brewing methods allow for the creation of finished extracts tailored to the marketer's and brand's needs, they make it that much easier to optimize RTD products for the retail marketplace and the challenges it poses to tea over time.

You may be thinking that these benefits must come at a high price—and brewed liquid tea extracts aren't the least expensive options available. **But they may, in fact, be the best bargain in the long run.** If a manufacturer wants to differentiate a product as a premium, real-brewed RTD iced tea, and if it wants to ensure that the product exhibits consistent quality throughout an individual bottle's shelf life and an entire brand's growth cycle, **the choice is clear.**

That's why companies like Amelia Bay (Atlanta, GA)—which has been producing its brewed tea extracts since 1989 and has honed its process to an art and a science—are so valuable to RTD tea companies with their eyes on the **premium-tea prize.**

Brewed tea extracts let manufacturers position their products on a higher tier, and in today's competitive RTD iced tea landscape, **that's an advantage no one can afford to miss.**



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 is recognized as the "Industry Leader" for tea extracts that truly reflect the key ingredients and compounds contained in brewed tea and coffee.

Customized tea extracts, natural essences and aromas are formulated, including flavor options, 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

References

¹ Types of Teas and Their Health Benefits (WebMD)
<http://www.webmd.com/diet/tea-types-and-their-health-benefits>

² Tea Fact Sheet (Tea USA News)
<http://www.teausa.com/14655/tea-fact-sheet>

If you are traveling to Atlanta, GA and you would like to set up a meeting with us at our facility, just let us know! We will be happy to show you where Amelia Bay brewed extracts are formulated!

[Contact us for more information.](#)

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Amelia Bay blends, brews and formulates all of our products in the USA.

