A top-down photograph of a white ceramic teapot and a white teacup filled with tea on a saucer. The teapot is tilted, pouring tea into the cup. In the foreground, a glass coffee cup filled with coffee and foam is visible. The background is a blue and white patterned fabric with a star and spiral design.

# TEA

Steeping a flawless infusion...

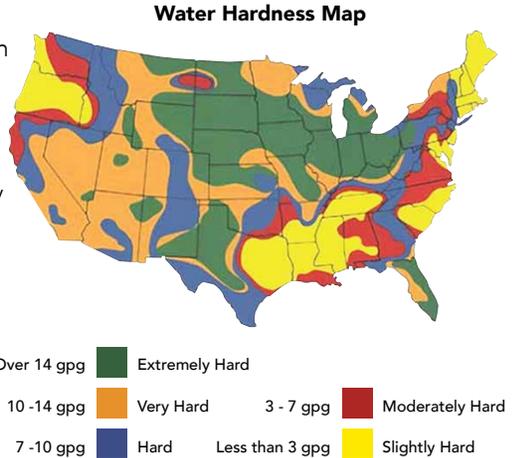
# BASICS

# SOLVING WATER PROBLEMS

## WATER PROBLEMS AFFECTING ICED TEA QUALITY

Water hardness is caused by a high mineral content. Tests show any hardness in excess of 200 ppm can cause clouding in iced tea. Chemical taste and/or odor caused by chlorination of municipal water and the presence of hydrogen sulfide in the water can also detract from tea flavor. In addition, the presence of particulate matter in water can cause scale and lime accumulation, detracting from the operational efficiency of automatic tea steeping equipment.

To minimize problems associated with a less than optimal water supply, the Tea Association recommends installation of filtration/conditioning equipment and water softening equipment to reduce or eliminate water hardness caused by excessive mineral content. In extreme hard water areas, a preventive maintenance service arrangement may be necessary.



## THE IMPORTANCE OF ROUTINE CLEANING

**To guarantee your steeping equipment is clean and your customers receive only the best fresh-steeped iced tea, follow these simple steps:**

Prepare only enough tea that you expect to sell within 12 hours. Discard any unused tea after 12 hours.

To protect tea flavor and to avoid bacterial contamination and growth, clean and sterilize tea steeping and storage equipment at least once a day as follows:

- Dismantle dispensing spigots, hoses, storage reservoirs (removing gaskets, "O" rings, etc) and rinse in warm water along with other steeping and storage utensils.
- Wash in hot water using a dish detergent. Remove any encrusted soil deposits with a brush or cleaning pad.
- Rinse thoroughly with clean hot water.
- Sanitize non-stainless steel parts by immersing for at least 1 minute in hot water at 180°F (82.2°C) or by rinsing in warm water mixed with chlorine (minimum 50 ppm – one capful of chlorine bleach to one gallon of water). Do not use chlorine bleach on stainless steel urns or dispensers – it will promote small leaks.
- Disassemble dispenser spigot, then clean and sanitize according to manufacturer's directions.
- Replace any worn gaskets, "O" rings, or any other scratched or damaged parts before reassembling.



# THE ELEMENTS OF TEA STEEPING

## WATER

All tea, both hot and iced, is affected by water quality. Because of tea's light flavor, the quality of input water is crucial to the beverage.



## TEMPERATURE

Temperature is critical to tea steeping and varies based on the type of tea being steeped. Recommended steeping temperatures range from 160°F (71.1°C) to 210°F (98.9°C).



## TIME

In order for the leaves to unfurl during steeping, tea needs to be exposed to hot water for a certain amount of time. This time will vary depending on the type of tea and the temperature of the water.



Actual steeping times will vary with the preferences of the individual tea consumer.

## TEA

Today, iced tea accounts for 75-80 percent of America's tea consumption. Of the more than 240 million pounds of tea packaged for consumption in the United States, over 65 percent comes in tea bags.



## CLEANING

To protect tea flavor and to avoid bacterial contamination and growth, the Tea Association of the USA recommends that storage and dispensing equipment for tea be cleaned and disinfected at least once a day. Detailed cleaning instructions are given under "The Importance of Routine Cleaning."



# THE ART OF TEA STEEPING

The finished tea will be only as good as the quality of the water source and tea used in the preparation. The Tea Association recommends water filtration of the incoming supply and proper cleaning of all equipment.

At 3 to 45 cents per serving, hot tea can be an excellent low cost/high profit beverage for the foodservice operator. You can realize even more profit from iced tea.

## THE TEA STEEPING PROCESS

### Heating the water

If you are preparing water for hot tea, you can heat it on the stove or use a hot water dispenser. Bring fresh cold water to the correct temperature for the type of tea being brewed. Never allow water to boil for a long period of time, because it will dissipate the air bubbles and “flatten” the beverage, adversely affecting the taste. Iced tea steep water should be at least 195°F (90.6°C).

### Steeping the tea

For single-serve hot tea, if you use tea bags, add one tea bag for each cup of tea you expect to serve. If you are using loose tea, place 1 teaspoon per cup in an infuser.

### Temperatures recommended by the Tea Association of the USA for each type of tea:

- **Black tea** – 3-5 minutes at 201-210°F (96.1 – 98.9°C)
- **Darjeeling tea** – 3 minutes at 190-195°F (87.8 – 90.6°C)
- **Oolong tea** –3-5 minutes at 175-195°F (79.4 – 90.6°C)
- **Chinese green tea** –1- 3 minutes at 170-180°F (76.7 – 82.2°C)
- **Japanese green tea** – 1 to 2 minutes at 160-175°F (71.1 – 79.4°C)
- **White tea** – 3 to 4 minutes at about 185°F (85°C)



For iced tea, pour one quart of boiling water for each 1 ounce tea bag used over the tea and steep for 3-5 minutes. Minimally, tea leaves should be exposed to water at a temperature of 195 °F (90.6 °C) for approximately 5 minutes. Remove tea bag and add fresh, cold tap water to yield final quantity of iced tea.

If you are using an automatic iced tea brewer, place the tea into the steeping basket and start the steeping cycle. When steeping is finished, stir contents with a sanitized stirrer if steeping equipment is not equipped with an auto-blend feature.

*For commercial purposes, “sun” tea is not an acceptable practice for steeping tea.*

### Serving

As with other beverages, merchandising tea is a vital step. Whether you choose to enhance your iced tea servers with colorful wraps or serve your hot tea in a porcelain teapot, your goal is to entice your customers to buy more of this beverage. An appropriate server also affects the flavor of the beverage. Hot tea should be kept hot and iced tea, cold.

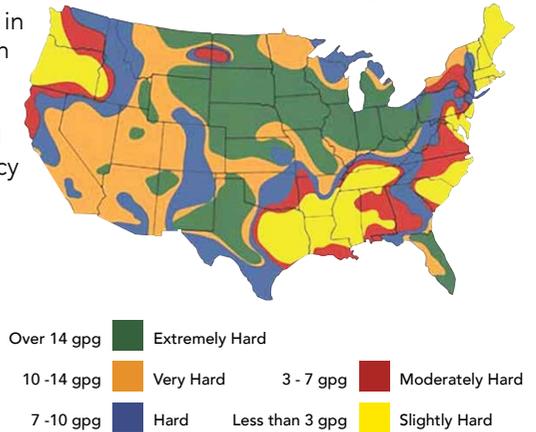
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Water Hardness Map



## THE IMPORTANCE OF ROUTINE CLEANING

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# A FLAWLESS INFUSION YOUR CUSTOMERS CANNOT FORGET

A soothing potion or a bracing beverage. The perfect concoction of subtle flavors or a mouth-watering pick-me-up on a steaming day. Multi-faceted, aromatic and flavorful. Flawless tea starts with the tea leaves slowly unfurling in steeping, and ends as your patron savors a perfect cup of tea.

## THE ART OF SELECTING TEA

### TYPES OF TEA

**Black teas** are withered, rolled, fully oxidized and dried.

**Flavored teas** are usually black but could be any teas with flavor added.

**Oolong teas** are partially oxidized and feature leaves that are withered, rolled, partially oxidized and dried.

**Green teas** are not allowed to oxidize and their leaves are steamed, rolled and dried.

**White teas** are very rare and produced predominately in China. White tea is actually defined by a process which lacks the rolling stage of usual tea production.



### GRADES OF TEA

As a part of their processing, tea leaves go through sieves with graduated mesh to sort them for commercial sale. These sieves divide them into three grades: **leaf, broken, and fines.**

**Leaf** grades are made up of the larger leaves left after the broken grades have been sifted out.

In orthodox manufacture, **broken** grades made up of smaller and broken leaves represent roughly 80 percent of the total crop.

The name for the smallest grade produced is **Fines (Dust)**. This grade is very useful for a quick brewing, strong cup of tea.

*Tea selection and steeping information provided by the Tea Association of the USA.*



# BUNN AND TEA

For hot tea, iced tea – or both – choose BUNN equipment. Besides creating traditional fresh-brewed tea, BUNN equipment offers operators the choice of single cup brewing or of making tea from concentrate.

## SERVE HOT TEA EASILY

**Precision Temperature Water Dispensers** – a great way to have the right temperature water instantly for your tea. BUNN hot water dispensers can dispense 2-10 gallons and a pourover model is also available (OHW).

**Single Cup Brewing** – a single cup of wonderful tea is no problem with the AutoPOD Brewer. This tiny dynamo can preinfuse tea with water so that the tea leaves have the appropriate amount of contact time to water, then pulse brew for perfect steeping.

## THE ANSWER TO YOUR ICED TEA QUESTIONS

Before 1978, when George Bunn introduced the first iced tea brewer to the foodservice industry, there were very few options for those who wanted to serve fresh iced tea. But that's all changed... here are some of the many BUNN iced tea brewers.

**Fresh Brewed Iced Tea with the TB3** – available in regular, quick-brew and low-profile models, all the tea brewers will brew 16.3 to 26.7 gallons (61.7 to 101.1 litres) per hour of tea from real tea leaves. The three-gallon brewers (TB3, TB3Q) brew into any style server that can hold up to 4 gallons. Choose from a variety of servers to meet your needs.

**Tea Concentrate Offers Another Option** – Using tea concentrate reduces the amount of time necessary to serve iced tea. For many foodservice establishments, tea concentrate is the perfect solution. The Tea Concentrate Dispenser (TCD-1 or TCD-2) offers another option for these environments.

**Hot Tea, Iced Tea – Serve Them Both with the ITCB** – Leave it to the company that introduced the commercial iced tea brewer to come up with a brewer that will make both hot and iced tea (and hot coffee too). Ideal for use where space is limited, the Infusion Series® Tea and Coffee Brewer incorporates BrewWISE® precision and simplicity into a tea brewer.



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