Fountain Beverage Quality & Preventative Maintenance
The Beverage Quality section is designed to educate SUBWAY® franchisees on the importance of serving a quality beverage in your restaurant to increase soft drink and tea sales. This section will educate you on the recommended daily, weekly, monthly preventative maintenance routines for maintaining your fountain dispenser. At the end of this module, you will be able to:

- Describe why Beverage Quality is important
- Describe the components of a quality beverage
- Implement the required quality routines in your restaurant to minimize service expense and increase dispenser uptime
Why is Beverage Quality Important?

Maintaining your soft drink system will ensure you are dispensing soft drinks at the Coca-Cola® “Gold Standard” specifications. Every drop you serve is an opportunity to increase soft drink sales and profits. The foundation of the basic “Beverage Marketing Pyramid” is the “Optimal Guest Experience”. Good food + a good drink. = the “Optimal Guest Experience”. Customers recognize and reward an “Optimal Guest Experience” with repeat business. Your personal involvement is the only way to ensure the customer gets a quality soft drink every time.
Your fountain dispensing system produces quality soft drinks in a simple 4-step process:

1. Syrup is transported from the Bag In Box to the dispenser using a BIB Pump, which uses CO2 pressure to activate the pump. The BIB pump maintains constant pressure through the syrup line to the dispenser, where the syrup is chilled in the cold-plate on its way to the dispensing valve.

2. Water and carbon dioxide (CO2) gas are mixed in a carbonator to produce carbonated water, or soda water.

3. Carbonated water is chilled in the cold-plate on its way to dispensing valve. The carbonation level is enhanced as the soda water is chilled in the cold plate.

4. The dispensing valve is set to mix carbonated water and syrup at the correct ratio, producing a perfectly mixed drink with a temperature less than 40 degrees F.
5 Steps to Quality

- Check Out The Taste
- Carbonation - lots of bubbles
- Cool It Right - <40°F
- Fresh Syrup – Enjoy By Date
- Sparkle! Clean!

Beverage Center

These are the fundamental five steps to the SUBWAY® Gold Standard Beverage. This gold standard is included in the SUBWAY® Store Operations Manual.
Step #1 – Carbonation  
“It’s all about the bubbles…….”

Flat Drinks?  
Check Your CO₂!!!

Because 75% of Coca-Cola® beverages are carbonated, carbonation is an important element of serving a quality drink. Proper carbonation comes from the right amount of carbon dioxide (CO₂) gas being mixed with water in soft drink systems.

WHAT TO CHECK
If drink is flat or less carbonated than it should be, check to see...

IS TANK FULL?
You can tell tanks are empty by observing 0 to 3000 psi gauge. There are several types of gauges; some will have a red pie shaped section indicating a tank change. Other tanks will have a red bar area. Some tanks do not have markings and need to be changed when pressure is under 500 psi. The contents gauge for a 20-50lb tank should be at 500 or above. The contents gauge for a bulk CO₂ tank should be at least 1/4 full.

IS PRESSURE SET CORRECTLY?
The hi pressure gauge (red 0-160) controls the flow of CO₂ to the carbonator. This gauge needs to be set at 105 psi for remote carbonators and 70 psi for fountain dispensers using cold carbonation. The low pressure gauge (gray or gold 0-100) controls the flow of CO₂ to the Bag in Box pumps and should be set at 65 psi.

IS THE CARBONATOR PLUGGED IN?
The carbonator is where plain water and CO₂ mix to form carbonated water. If the carbonator is not working, drinks will be flat or no water at all will be dispensing from the fountain machine.
Step #2 – Cool It Right < 40 Degrees

1. Check the temperature of the finished beverage without ice. It should be less than 40° F.

2. Is the ice bin draining properly?

3. Serve drinks with 1/3 cup of ice

Ice is very important to the finished drink.
- Without the proper amount of ice in your beverage dispenser you will be unable to pour a drink at the right temperature. This may contribute to a high amount of product waste that directly influences profitability for your store. Keeping your soft drinks cold helps to maintain flavor and reduces soft drink waste by controlling the “foam” on the top of the drink.
- Ice helps to keep the drink cold (thereby keeping the carbonation in the drink) by removing the heat – BTUs from the drink. The colder the drink, the better for the carbonation! As ice melts, it becomes part of the drink. This is called ice dilution.
- Serve drinks with 1/3 cup of ice for proper ice dilution – too much ice will cause drinks to taste watered-down.
- Ice is also a food and the quality of the ice is just as important as the quality of the syrup, CO₂ and water. Common issues that affect a customer’s ice maker include: Growth of bacteria, algae, yeast, mold and other microbes in ice cube makers. Scale build-up and biofilm are well documented sources of ongoing issues. The impact of these issues include operational inefficiencies, increased service and downtime and decreased water quality.
- Keeping your ice bin clean is essential to manufacturing high-quality drinks.

CHECK DRINK TEMPERATURE DAILY!
1. ENSURE PRODUCT BEING DISPENSED AT VALVE IS COOL.
   If the valve has not been in use for 30 minutes, dispense a 20 oz. drink and discard.
2. DISPENSE A TEST DRINK.
   Draw a second drink for testing drink temperature. Holding the cup by its lip, dispense a drink without ice. Insert the thermometer and stir gently.
3. READ TEMPERATURE.
   After 15 seconds, the drink temperature should be 40° F/4.4° C or less. If the drink temperature is above 40° F, the cause should be identified. Drinks have a tendency to dispense flat when above 40°.
Many soft drink dispensing systems use ice to cool beverages. Ice cooled refrigeration relies on a cold plate, which is located in the bottom of the ice bin. The cold plate is made of stainless steel coils that are cast into an aluminum plate. The syrup and plain/carbonated water are cooled by the ice on the cold plate as they pass through the coils. Ice must be in contact with the cold plate to chill the drinks properly. FLAKED ICE AND BAGGED ICE are not recommended for use with ice cooled systems. If you have to buy bagged ice, let it sit out at room temp for an hour and break it up before filling your ice bin.

**PROBLEMS with warm drinks** – foamy, flat, watery, no bubbles.

**IS ICE BIN FULL ENOUGH?**
Cold plates work best when completely covered with ice. As a general rule, keep ice bins 1/3 full at all times for proper cooling.

**IS ICE BIN DRAINING PROPERLY?**
Cold plates work poorly if water from melting ice does not drain away. Make sure your ice bin drain line is working properly draining into the floor drain.

**IS ICE IN CONTACT WITH COLD PLATE?**
Frequently stir the ice in the ice bin. This breaks up gaps called "ice bridging". For SELF SERVE dispensers, the equipment does this for you using an agitator that runs every few minutes. Ice bridging results when the ice directly in contact with the cold plate melts and there is a gap of air between the bottom of the ice and the cold plate. This will results in WARM DRINKS. Ensure ice is in contact with the cold plate at all times.
Step #3 - Taste

Taste test your soft drinks before serving your first customer…..

1. Do they taste cold?
2. Do they have that bite and sparkle of good carbonation?
3. Do they seem to have the right amount of syrup?
4. Are they free from any off taste?

If the answer is no… then corrective action is needed before you sell any drinks.

Be your own first customer. You need to make sure the drink you want is the same drink you are serving your customers all day, everyday. If there is a problem, you want to know about it first thing in the morning so you have time to correct it before your lunch rush.

To make sure you are tasting a fountain drink poured at the right temperature, fill a 20oz cup and discard it to clear the product that has been sitting at room-temperature in the syrup lines between the cold plate and the valve. Refill the cup half way and taste the drink. You don’t have to taste every brand, but pick your favorites and make sure they have that cold, refreshing, carbonated ‘bite’ that you would expect.
Water Filtration is Important to Taste

Quality water means better tasting soft drinks, ice, and tea... CONSISTENTLY

Water makes up 80% of your overall beverage which directly influences the flavor of your soft drinks. This is one of the many reasons SUBWAY® understands the need for the highest quality of water for fountain beverages and requires that all stores have a water filter.

Water filters play an integral part in beverage quality whether for fountain beverages, hot beverages or ice.

Water is the single largest ingredient in any beverage:
- Ice – 100% Water
- Fountain Drinks – 83% Water
- Tea – 99% Water
- Coffee – 98% Water

Properly maintained, the Cuno water filter systems should only require an annual change-out of the filter cartridges.
Step #4 – Fresh Syrup

CHECK THE ‘ENJOY BY’ DATE: Post Mix products have a recommended 75 - 120 DAY SHELF LIFE

Make sure the “Bag-in-Box” is properly connected!

Remember: When changing boxes, put the oldest box on first. FIFO

BIB STORAGE: Store BIB in cool dry place, 6in off the floor, and no more than 5 boxes high

MAKE SURE SYRUP IS FRESH
WHY IT’S IMPORTANT
Remember, great taste is why customers order soft drinks. Customers expect to be served great tasting, fresh products, just like SUBWAY sandwiches. Fresh syrup is essential to producing great tasting soft drinks.

WHAT TO CHECK
Syrups produced by The Coca-Cola® Company for soft drink systems are packaged in bag-in-box containers.

To make certain you always serve only fresh syrup, pay attention to these conditions:
1. Check ENJOY BY DATE. The ENJOY BY date is to ensure you are serving Coca-Cola’s products at the optimal taste. There are no immediate health risks for out of date product, but you can experience an off-taste. There is a degradation in taste due to a breakdown in the ingredients/sweeteners. Rotate syrup stock using the oldest syrup first to maintain freshness. Remember FIFO...first in, first out.
2. Avoid using syrup that is too old. Syrup should be used within 75 or 120 days from date of manufacture, depending on the flavor. There are different shelf lives for different products, based on the ingredients and sweeteners used.
3. Store syrup in a cool, dry place. Never store syrup in a warm area. Avoid condensers, coolers, and other equipment giving off heat. Keep the syrup storage area clean, dry, and free of any spilled syrup.
4. Do NOT take the syrup bag out of the box – this is not necessary to evacuate the bag, and ensures that there is no contamination through the bag from sprayed chemicals/spills.

SAFETY PRECAUTIONS
Never stack bag-in-box containers more than 5 high. Be sure containers are stored at least 5-inches off floor.

ENJOY BY: 06/30/09
Consumer satisfaction with the restaurant experience is based in part on their evaluation of the restaurant environment – what they see.

Sugar mold which will grow on your nozzles and diffusers very quickly if you are not cleaning your equipment EVERY DAY.

This of course goes beyond the appearance of the beverage center. Positive visual impressions are critical. A dirty and/or dark parking lot may influence consumers to patronize a different restaurant. A cluttered dining room says you don’t care about your appearance. And a dirty bathroom says that cleanliness isn’t important to your restaurant. Not the messages you want to send to your consumers – especially with increasing concern for food safety in restaurants.

Consumers correlate beverages to both service quality and value standards. How a restaurant maintains equipment reflects whether they care about quality.

Sources include: Coca-Cola Foodservice and Hospitality Drive-Thru Behavior and Attitudes Study, 2002; Beverage Quality Quantitative Study, 2003
Nozzles, diffusers and valves should be sanitized at the end of each business day.

Remove nozzle from dispenser by turning clockwise and pulling down.

Remove diffuser by pulling straight down.

Place nozzles and diffuser in sanitizing solution, scrub each piece individually with a brush and soak for 15 minutes.

Place sanitized nozzles and diffusers on a clean cloth to air dry.

Consumers associate a clean, tidy area with quality soft drinks. Correct brand identification lets them know the outlet serves quality brands. It’s easy to keep the dispensing area clean and orderly when following regular scheduled activities. A clean, sanitary appearance communicates to the consumer that the outlet is concerned about serving a quality drink every time.
Use a clean cloth towel and sanitizer solution to wipe clean all exterior surfaces of dispenser, including dispenser valves, levers, and underneath dispenser valves where nozzles and diffusers connect to the valves.

Do NOT use bleach, steel wool, scouring pads, or abrasives.

Straighten lids, straws, and napkins.

Wipe counter with a clean cloth towel and sanitizer solution.
Clean the drip pan
Wipe sides and bottom of drip pan with a clean cloth towel and sanitizer solution.

Keep the drain flowing
Pour ½ gallon of sanitizing solution into dispenser drip pan to ensure that you do not experience frequent drain clogging issues.

Do NOT use hot water or other hot beverages.

Clogged drains represent one of the most frequent service issues in Subway restaurants.
Weekly – Clean the Bag-in-Box Area

When changing “Bag-in-Box”, rinse the connectors

Disconnect syrup lines from the empty syrup container and soak the connectors in warm water for one to two minutes. Spin the connector to be sure it moves freely.

Rinse the connectors in warm drinkable water and connect them to a full syrup container.

Make sure each line is properly labeled to ensure the proper flavor is being dispensed.

Replace line labels if worn or missing.
Shut off/unplug ice maker AND fountain dispenser.
Empty all ice and rinse ice bin with warm water until completely empty.
Prepare a sanitizing solution and scrub the inside of the ice bin AND ice chute with a SOFT long handle nylon bristle brush.
Do NOT use a metal brush.
Rinse with clean water and allow to air dry.
Beverage Quality Job Aids

**Coca-Cola Fountain Quality Checks**

**Daily**
1. Taste it!
   - Serve one ounce/square foot in all stores.
   - Taste test performed at least once a day.

2. Some drinks cold!
   - Check the temperature of the beverage using a thermometer.
   - Ensure the temperature is within the recommended range.

3. Ice been 1/3 full?
   - Check the ice level in each freezer to ensure it is at least 1/3 full.
   - If not, add ice to bring the level up.

4. Clean it!
   - Clean the equipment and fillers in the approved boat (300 ml) in water.
   - Rinse and dry the boat thoroughly.

5. Keep the drains free!
   - Clean the drain lines regularly to prevent blockages.
   - Use cleaner to remove any debris.

6. Check the cold!
   - Check the temperature of the beverage using a thermometer.
   - Ensure the temperature is within the recommended range.

7. Check the CO2 cylinder:
   - Ensure the cylinder is connected and the pressure is at the recommended level.
   - Check the date of the calibration.

8. Waste not left!
   - Remove any unused supplies to prevent waste.
   - Ensure all equipment is turned off when not in use.

**Weekly**
1. Keep the bubble!
   - Ensure the beverage has a consistent bubble to the top.
   - Check the pressure and adjust as needed.

2. Clean it!
   - Clean the equipment and fillers in the approved boat (300 ml) in water.
   - Rinse and dry the boat thoroughly.

3. Keep it fresh!
   - Check the beverage after a new flavor is added to ensure it is fresh.
   - If not, replace the beverage.

4. Check the CO2 pressure:
   - Ensure the CO2 pressure is within the recommended range.
   - Check the date of the calibration.

5. Keep the drains free!
   - Clean the drain lines regularly to prevent blockages.
   - Use cleaner to remove any debris.

**Monthly**
1. Clean the inside of the ice bins:
   - Remove all ice and clean the bins with warm water and soap.

2. Check the filters:
   - Ensure the filters are clean and free of debris.
   - Replace as needed.

3. Order small parts:
   - Check the inventory of small parts and order as needed.

**Troubleshooting**

Call 1-800-COKE (2653) for all service, phone fix, and small parts needs.

**Check these**

5 STEPS TO QUALITY

**FILL THE CUP WITH 3/5 ICE FOR THE BEST DRINK**

1. CARBONATOR
   - Ensure the CO2 pressure is within the recommended range.
   - Ensure the ice level is at least 1/3 full.

2. COOL IT RIGHT
   - Ensure the beverage is at the recommended temperature.
   - Ensure the temperature is within the recommended range.

3. CHECK OUT THE TASTE
   - Ensure the beverage has a consistent bubble to the top.
   - Ensure the temperature is within the recommended range.

4. FRESHNESS (Storage)
   - Ensure the beverage is stored at the recommended temperature.
   - Ensure the bottle is sealed.

5. SPARKLED CLEAN (Sanitizing)
   - Ensure the equipment is clean and sanitized.
   - Ensure the temperature is within the recommended range.

**Fix it fast with phone fix**

CALL 1-800-COKE (2653)
24 hours a day, 7 days a week, when you need service help.

Coca-Cola certified professional, experienced technicians can help you fix your fountain equipment. For more information, call 1-800-COKE (2653) or visit your local authorized repair center.