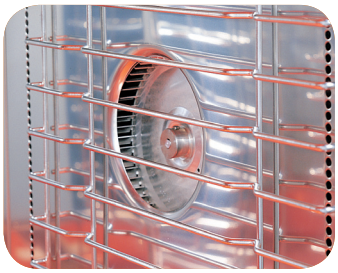

steamers
culinary collection
groen™





smartsteam100
boilerless steamers

hypersteam

groen™

Welcome to the Unified Brands Culinary Collection.

We are pleased to present the Unified Brands Culinary Collection. This collection of application information, cook times, and recipes for Groen Steamers will benefit all foodservice operations or service providers.

The first section of the Culinary Collection includes topics that directly affect every foodservice operation; food safety, event planning, calculation formulas, and charts to aid in determining the cost of shrinkage, cost of labor and volume sizing. The second section addresses how the ComboEase works along with offering great application ideas.

Since these collections are working documents, periodic updates will include timely application suggestions for current menu trends or food safety challenges along with recipes from Unified Brands Culinary Center or from users like you. A compilation of the Culinary Collection recipes for all Groen products; braising pans, steamers, combination Oven-Steamers, and kettles is available in PDF format in the Culinary Collection section of the Unified Brands website at unifiedbrands.net. The collection is also available on CD when requested through our literature department. Either format allows for simple printing of the new pages of interest which can be added to your Unified Brands Culinary Collection materials.

We know you'll find the Unified Brands Culinary Collection to be valuable when used in your foodservice operation!

INDEX

Are You In Compliance?

The FDA food code includes greater emphasis on the when, where and how of hand-washing.

Hand-Washing: Code revisions set the minimum temperature on hand-washing stations at 100°F. The code also clarifies and strictly enforces that hands must be washed for 20 seconds and only in an easily accessible hand-washing sink in the kitchen. No hand-washing should occur in food prep or three compartment sinks. Also, the code clarifies that hands must be washed before donning gloves, and alcohol gels are not suitable for proper hand-washing.

Bare Hand Contact: There is some confusion about gloves and bare hand contact. The regulation prohibits bare hand contact, but does not dictate gloves in all instances. The regulation reads: “Except when washing fruits and vegetables, food employees may not contact exposed ready-to-eat foods with their bare hands and shall use suitable utensils such as deli tissue, spatulas, tongs, single use gloves or dispensing equipment.” For example, a fry cook would not be required to wear gloves as gloves can become contaminated and lead to cross-contamination just as hands. Check with your local health department for regulations regarding bare hand contact.

Date Marking and Storage Time Limits: All potentially hazardous food prepared and held for more than 24 hours should be clearly marked to indicate the date or day by which the food shall be consumed or discarded. If the food is in a manufacturer’s sealed package, the manufacturer’s use-by date is sufficient. Once opened, that date must be replaced by a label with a date assigned by the kitchen. The maximum time shall be seven days if the food is kept at a temperature of 41°F or below the entire time. If food is taken in and out of the refrigerator, that time span must be shortened. You must not, however, exceed the manufacturer’s use by date. It is the manufacturer’s use-by date or up to seven days, whichever comes first. Day one of the seven-day period starts with the prep date of the oldest ingredient. For example, if you prepare potatoes for a salad on Sunday, but actually make the salad on Monday, day one would be Sunday.

Thermometers: The new regulations require you to have proper equipment to measure temperatures accurately. Calibrated bimetallic stem thermometers are good for certain applications but do not register temperatures instantly. Therefore, the use of thermocouples may be required in certain situations. Buffets, for example, must be checked at least every two hours and an instant reading thermocouple would be needed to accurately check each station. The code also requires a thin probe to measure items such as meat patties. Thin probes are available for use with certain thermocouples.

Time and Temperature Logs: Environmentalists can require time and temperature logs to be maintained. The logs simply require temperatures to be recorded at least every two hours and this record maintained on file. Buffets, barbecue operations, and other places where potentially hazardous foods are held are most likely to have this mandate. This would include foods held in the kitchen and front of the house service. Hot foods must be maintained at 135°F or above and cold foods at 41°F or lower. Even if the health department does not require that you maintain these logs, it is good practice to make sure that food temperatures are being checked and documented, and the food is being kept above 135°F or below 41°F.

NOTES:

Time/Temperature Log Example:

Time/Temperature Log

Must be recorded at least every two hours

Date:

Cold Foods: **41°F or lower**

Hot Foods: **Reheat to 165°F /Hold 135°F or higher**

Time	Temp	Product	Comment/Action Taken	Initials

Planning A Successful Event

1. **List All Items Needed For A Job:** Recheck that list for items you may have overlooked.

2. **Use A Contract**

3. **Get A Deposit**

4. **Keep Your Eye On Inventory:** Don't use a lot of special items that you do not use in your business.

5. **Prep Certain Foods Ahead Of Time:** i.e. make toast rounds, blanch vegetables, pack dry goods and supplies.

6. **Use Labor Wisely:** Schedule labor for the appropriate times, stagger talent to hold down overtime.

7. **Schedule Deliveries:** Make sure supplies are ordered well in advance to avoid surprises, especially special items that are hard to find.

8. **Keep The Onsite Event Prep Simple:** Eliminate as much onsite cooking as possible.

9. **Do A Site Inspection In Advance:** Determine what facilities will be used and what is available to you. Be sure to check for Ice Machines and Garbage Disposal facilities.

10. **Use Alternating Colors And Shapes:** Use contrasting colors and shapes on trays; ex. cut and roll meats, layer cheeses and arrange in alternate colors. For the finishing touch, use fresh Green Leaf Lettuce Leaves to separate layers and add height to the tray.

11. **Keep Cold Foods Cold:** Save setting cold trays and garnishes until as close to serving time as needed. Most garnishes can be prepped ahead of time and kept in resealable bags.

12. **Keep Food Trays Fresh And Supplies Well Stocked:** Prepare spare or backup trays and hold them in the cooler. Never prepare trays at the table. Have staff prepared to quickly replace as needed. Be sure to have spare meats and garnishes ready for replenishment in prep area.

13. **Rent Early:** Reserve any equipment or linens in plenty of time before the event and confirm the week before the event.

14. **Be Creative But Know Your Limits:** Do not experiment on the actual event. Practice a recipe first and make sure you and others like it before you sell it. Sometimes recipes sound better than they taste.

15. **Taste Before You Serve:** To make sure the food meets your standards by personally tasting all items before you serve them. Have disposable spoons available for tasting.

16. **Calculate Your Costs:** When calculating event prices, make sure you categorize your costs. i.e. a) food b) labor c) equipment and linen rental d) facility rental.

17. **Food:** Markup can be calculated several ways, 3 x food cost will give you a 33%, 4 x food cost will give you 25%. Many restaurants find a happy medium between the two (usually 28%).

Food Calculation Cart: How to determine food cost/food cost percentage

Menu Item: _____ # Servings: _____ Estimated Prep Time: _____

Ingredient:	Recipe Amount:	Price:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total food cost for this recipe	$ _____
Divided by the number of servings	/ _____
Subtotal of food cost per serving	= _____
Cost of seasonings per serving	$ _____
Food cost per serving	= _____
Divided by menu price	/ _____
Food cost percentage	= _____

18. **Labor:** Your best estimate of how many hours it will take you and your staff to do all of the activities necessary to service your customers completely will do. This includes preparing the food, setting up the facility, working the actual party and time spent cleaning the facility after the event.

Labor Calculation Chart: The following table calculates the actual hourly cost of time for people at various income levels. The value of each of your hours, even each of your minutes, is something to bear in mind when you review your dietary record. Look at your time as money to invest. (all below values in dollars)

Salary -Year	Salary-Week	Benefits-40% Total Salary	Total Week	Value Per Hour	Value Per Minute
$5,000	96	38	135	3	.06
$6,000	115	46	162	4	.07
$7,000	135	54	188	5	.08
$8,000	154	62	215	5	.09
$9,000	173	69	242	6	.10
$10,000	192	77	269	7	.11
$15,000	288	115	404	10	.17
$20,000	385	154	538	13	.22
$25,000	481	192	673	17	.28
$30,000	577	231	808	20	.34
$35,000	673	269	942	24	.39
$40,000	769	308	1,077	27	.45
$45,000	865	346	1,212	30	.50
$50,000	962	385	1,346	34	.56
$55,000	1,058	423	1,481	37	.62
$60,000	1,154	462	1,615	40	.67

19. **Equipment And Linen Rental:** If you need any equipment, silverware, glassware, plates, bowls, etc., get firm prices on cost of rental ahead of time so it can be included in the contract.

20. **Facility Rental:** (if needed) Reserve the site well in advance and make sure it is included in the deposit section of the contract. This covers you in case of customer cancellation.

21. **Your Food Is Your Best Advertisement:** It is important, especially in the case of catering parties, that each item placed on a tray or in a display is given careful attention. All members of the party are prospective clients, they eat first with their eyes. Keep your business cards handy.

22. **Use Your Party Staff Wisely:** Assign select members of your staff to pick up plates, glasses, napkins, etc., keeping the serving area neat and tidy.

23. **When Is Case Cost Not Usable Case Cost:** When working on your food cost, keep into account what your finished cost is going to be. As an example - shrimp (31-35 count) may cost $6 per pound. After it is thawed, cooked, and peeled, the finished weight will decrease as much as 25% or up to 1/4 lb of shrimp which makes the cost increase to $7.50 per lb. This is a strong consideration when preparing large amounts of shrimp. Considering waste, labor savings and ease of preparation, you might consider using pre-cooked shrimp.

Conversion Exercise (Scratch vs. Cooked, Pulled and Diced Chicken Meat):
10 Lbs of cooked boneless pulled chicken meat wanted. No skin, natural proportion of light and dark meat.

25% Cook Shrink – The fat cooks away when raw chicken is cooked; therefore, allowing meat shrinkage. The water that is added to fresh chicken during processing also cooks away. A minimum of 25% is lost.

\+ 30% Bone Weight – 30% of the chicken's weight is bone.

\+ 15% Skin Weight – 15% of the chicken's weight is skin.

\+ 5% Unusable Carcass Meat – This accounts for any meat left on the carcass that is unusable for pulled or diced chicken meat.

= 75% Total Loss – There is only 25% usable meat on a raw bird.

1. Cost per pound _____ x 40 pounds _____
   (to yield 10 lbs, 40 is needed)

2. Labor rate per hour _____ x 1.3 hours _____
   (based on 30 lbs/hour, an industry average)

3. Credit for fat and broth @ $.30 per pound x 10 pounds _____
   (current value approx. $.30 per pound)
   (when cooking chicken, 25% broth and fat are created)

For 10 lbs of pulled chicken, meat prepared from scratch _____

For 10 lbs of pulled chicken, meat prepared from frozen _____

Cooking Yield Of Raw Whole Turkey: Are you buying turkey the most economical way? Here are some facts that may surprise you (figures based on averages taken from independent tests on 20 lb turkeys).

Cost/Lb Raw Turkey	Cost of Servable Cooked Meat/Lb From Raw Turkey
.70	2.07
.72	2.13
.74	2.19
.76	2.25
.78	2.31
.80	2.37
.82	2.43
.84	2.49

In the left column find the price you most recently paid for your raw turkey. Compare that price with the price in the column at the right and you will see how much you actually paid per lb for the servable meat. Surprised? The difference between the price paid and the cost of the usable meat is made up from a combination of water loss, cooking loss, carcass, bones and unservable scrap. Only 33.8% of a frozen raw bird is available for serving. Usable cooked meat – 20.6% white, 13.2% dark, 33.8% total. Unusable part of bird – 5.2% giblets, 3.4% water on thawing, 27.1% cooking loss, 30.5% carcass and bones.

24. **Avoid Confusion:** To eliminate as much miscommunication as possible between you and the customer, design a function sheet and contract. Have the customer sign the contract and share a copy with them. Changes can be made, just note them on the form and initial it. Don't leave anything to question.

This form should include:

- Customer name
- Name of function
- Person responsible for payment
- Number of guests expected
- Date and time (beginning and ending)
- Location
- Items and amounts to be served
- Equipment, smallwares and linens needed
- Labor needed (servers, carvers, bussers, bartenders, etc)
- Labor hours contracted (ending time for party is important for this)
- Party decor and person(s) responsible
- Cost of party
- Deposit required

25. **Plan Your Work:** Assemble your staff in advance and discuss an unpriced copy of the function sheet. This is your opportunity to assign duties, describe the party theme, and create an expectation of performance. Distribute a checklist to each department.

26. **Use An Inventory List:** Before the party have an inventory list of all items to be used (equipment, smallwares and linens). After the party, use this list to clean and repack to avoid loss. Catering equipment and linens can be expensive, loss could cost you the profits from your event.

27. **Confirm A Job Well Done:** Follow up with your customer a couple of days after the party to make sure they are satisfied and get their permission to use them as a reference for future business.

28. **Employee Feedback:** Encourage employees to give feedback on both good and not so good aspects of the process. Always work to improve yourself and your business, it pays big dividends.

Convection Steamer - SmartSteam™ 100 Boilerless Steamer

SmartSteam lit a fire under convection steamers, combining the convenience of boilerless with the performance of a heavy-duty bulk steamer.

SmartSteam Features:

- Most advanced boilerless steamer on the market—in both gas and electric versions.
- Easy to install, operate and maintain.
- Fast preheat and cook times with no recovery issues.
- Bad-water proof—uses even poor quality tap water.
- Single-point water and gas connections, even if stacked.
- Automatic water fill and drain.
- Convection fan circulates steam throughout the cooking cavity for fast, even cooking from pan to pan—top to bottom, front to back and side to side.
- Steam lid allows adding cold pans of food without lowering cavity or water temperature.
- Increased water-resistance on the front and sides.
- Easy-to-clean stainless steel interiors with polished finishes.

SmartSteam Boilerless Steamers From A Chef's Perspective

Starting with the Industrial Revolution, pressure boilers have harnessed the power of steam to run machines, transfer heat, and cook food on a large scale. In recent years, pressure boilers have been engineered to be safe and highly efficient. An offshoot from the traditional boiler has been the steam generator. Boiler and steam generator technologies work great in ideal water conditions but those conditions are rare. Water filters, deliming schedules, and boiler replacements keep foodservice managers awake at night. Boilerless technology has emerged to help answer some of those challenges.

Boilerless technology has gained prominence in the recent evolution of foodservice steaming equipment. Boilerless technology addresses the age-old foodservice question: Has my staff been deliming the boiler on schedule? This can be compared to the question of: Is there really a Santa Claus? You have a very good idea of the answer, but knowing the truth will probably change things forever. Boilerless technology allows you to see where the steam is generated so you can answer the question for yourself.

Some help here – Steam is produced when water is boiled, right? So how do you have a "Boiler-less" steamer? Before you go running to the TV to find this amazing technology on the latest infomercial, let's take a few minutes to understand this technology from a user's view.

I joke about the infomercial but chances are the first time many of us saw a “boilerless” steamer was on an infomercial. Remember the Bamboo Steamer that makes your Wok a steamer in minutes? A series of round bamboo steamer inserts were placed in a stack, the handy bamboo dome lid sat on the top of the stack to make the amazing bamboo steaming chamber. Most of us realize that the Chinese had this going back about 3000 years and is widely used for a variety of applications today. If you eat Dim Sum, you have probably seen one.

Here’s another one. This handy device was an essential part of my college culinary arsenal. It is the self-expanding perforated stainless steel insert that is placed into a pot containing about 1-inch of boiling water. Place a lid on the pot and allow the product to steam for the desired time. Yes, I still have one.

Both of these devices are cheap and simple to use. The only drawback is the white film left on the pan. You know that film, it is the same sediment that you have in the bottom pan of a double boiler after making a sauce. We all know this residue as lime; however, this sediment is actually made up of an amazing array of elements that are found in the local water supply. Some water has more impurities than others, so sediment build-up is heavier in some cities. I discovered that soap does little to clean this build-up. High school chemistry helped me discover that a solution of white vinegar and water cleaned metal very well. When the build-up got too bad I just added the solution and allowed it to boil a while. This works great in foodservice too. When I do a thorough cleaning of the water pan once a week, I do not have to use a caustic substance to clean. To an operator that means no MSDS sheet, reduced labor accidents and stable worker comp costs.

Let’s talk about Boilers and Steam Generators when used with steamers. In both methods of generating steam, a container usually made of stainless steel is filled with water. This container is then heated until the water boils, which produces steam. In the case of a boiler, the steam builds pressure and is allowed to escape through nozzles into a steam cabinet aiding in the circulation of steam to all parts of the cavity. A steam generator uses a container to hold the water while being heated. As the steam is produced it is allowed to vent into the cavity without restricting the flow, and a convection fan is used to aid in circulation of energy to all parts of the cavity.

Both of these technologies are highly effective in producing steam for cooking; however, there is a recurring issue that plagues any device for handling water especially heating water. You guessed it, lime! Fortunes greater than the net worth of small countries have been spent on water purification to reduce this sediment. Anything from steamers to coffee makers to hot water heaters has a problem with lime. Ever wonder why you were told never to use hot water in cooking? Water from hot water tank heaters generally contains a very high level of sediment and can affect the end results of your food.

Lime build-up in steamers has a detrimental effect on the ability of the boiler or generator to fill and drain during normal operation. Remember those improvements in boiler safety we discussed? One of those improvements is to regulate the flow of water into and out of the vessel. The systems will not operate properly if the inlets or outlets are restricted by build-up, and safety features will shut the system down. Rust or metal deterioration can also result from lime build-up. Delimers and other

cleaning agents have been formulated to dislodge these build-ups. Many of these solutions are very effective when used as part of a regimented cleaning schedule. However, when used sporadically, the build-up dislodges in large particles or flakes. These flakes can cause blockage and result in service calls or even boiler/generator replacement.

These factors have lead to the search for technologies to address the issues. During the past several years, steamers have appeared that use the same steaming concept that we discussed earlier with the Bamboo Steamer and the stainless insert. An open pan at the bottom of a traditional steamer cavity is manually filled with water. Heaters, either enclosed or exposed, heat the water creating steam. The steam fills the cavity and transfers heat to the food items. At the end of the day the operator manually opens a drain valve allowing the remaining water and sediment to drain out of the cavity into a dump pan. These units are referred to as connectionless because in their standard form they do not have a water inlet or drain connection. These steamers are a revolution for operators that have significant water issues. Just like the Wok or the pan application, you could get to the water pan, see the build-up and clean it. Models were originally available in electric only, recent models have been made available in gas as well.

Even though we have seen how boilerless steaming has been around for years, Connectionless steamers were the first to widely apply boilerless technology in commercial foodservice steaming. These units have come quite a long way since the early models. These units are excellent for certain applications, such as batch cooking. They are easy to clean, operate, and electric models can be put just about anywhere. The water usage is very reasonable and they do not utilize condensate-cooling spray since condensate does not drain from these units. Overall, these units do a great job, but they do have some drawbacks when applied to broad-spectrum foodservice.

Connectionless steamers generally have an open steam cavity. Because of this, most of the condensate and some debris land in the cavity. During times of heavy use, this contamination can cause odors that give the perception of off flavors. Though most of this is perception, perception is reality to those that work with their senses as a vital part of the cooking process. Some protein rich condensate from seafood that makes its way to the water pan can cause foaming if not captured. Placing a pan in the bottom rack to capture the liquid generally helps the operator avoid this problem. Recovery speed as it relates to cooking speed can also be considered a drawback; the absence of a condensate drain lid/water pan cover allows a large amount of steam to escape when the door is opened. When used as a primary line steamer, continuous door opening can cause operators to experience a little time to recover steam levels to provide desired cooking speed. Pan placement inside these steamers can also be important. Since the water pan creates steam from the bottom, the pan directly above the water pan will get the most heat. Some manufacturers have included convection fans to address this heat balance issue with good results.

In natural progression, manufacturers are taking boilerless technology to the full powered steamer category. There are some models that have used a hybrid approach with attributes of both connectionless and fully functional steamers. There is another series of units that applies boilerless technology to a fully powered steamer ready for any application.

These innovative models use a removable lid to cover the steam cavity. This lid has a dual purpose; it holds in the latent heat during constant door openings and also acts as a catch pan for condensate. The condensate is then channeled off through a separate drain to the main drain and out of the steamer. Like in the steam generator, the steam in this type of unit is channeled from the water pan through vents into the cavity of the steamer. Since the steam is not introduced with pressure like with a boiler, a convection fan is especially effective in circulating the steam through out the cavity.

Just like the pot for the stainless insert, boilerless units are very easy to clean. Since any debris or sediment carried in the water can be seen and cleaned very easily, daily cleaning is a snap. A white film on the surface of the water pan is a natural occurrence. Only heavy build-up needs heavy cleaning. A cup of white vinegar can be added to a full tank of clean water in the pan and steamed for 20 minutes for weekly cleaning. In extreme build-up or heavy conditions a solution of commercially available delimer can be added to the pan and steamed for 20 minutes. This cleans even the heaviest build-up on any model.

This has been a quick introduction to the boilerless world. Like any new technology, the greatest challenge is acceptance. These boilerless steamers give the operators everything that they had before and a little less — a little less hassle from hidden lime build-up and a little less financial pressure from costly boiler repair or replacement.

NOTES:

Convection Steamers - Suggested Cook Times

Atmospheric Convection Steamer: The following cook times are approximate and have been compiled to assist you in utilizing your versatile convection steamer. Your actual cook times may vary due to normal differences in raw ingredient quality, portion size, production quantity, room temperature, and the condition of product and your steamer at time of preparation. Your personal taste and "desired" degree of doneness will also effect cook times and will require some operator judgment and recipe testing.

Times listed are intended for bulk steamers such as the SmartSteam Boilerless Steamer and HyPerSteam/HyPlus™ Atmospheric Convection Steamers. A la carte times will increase, due to frequent door openings.

Steamer Cooking Tips:

- For best results, use 2-1/2 inch deep **perforated** steamer pans. If solid pans are used, cook times will be longer.
- When steaming meat, poultry, seafood and other protein products, use a solid "catch pan" under the perforated pan(s). Position solid pan on steamer bottom rack support.
- When steaming pasta, shrimp or ground meat, use a perforated pan nested in a solid pan. After steaming, just lift out perforated pan to drain product.
- When steaming frozen items or tightly packed vegetables, such as green beans and asparagus, using 1-inch deep pans will allow more uniform steam penetration and faster heating (Note that the pan rails in the steamer allow insertion of two 1-inch pans in each 2-1/2 inch position, so there is no reduction in total steamer capacity).
- If only using one steamer pan, center it in cooking chamber.
- Always leave some space between lowest pan and the steamer cavity bottom.
- If possible, break up frozen vegetables to speed cooking.
- Place solid blocks of frozen products on their narrow side in pan. This exposes more surface area to steam.
- When reheating prepared foods, stir occasionally to speed heating.
- Do not power down the steamer if you plan to use it again shortly. Turn the timer control knob to the OFF position until the next use.

Dried Beans, Rice, and Pasta:

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Beans, Garbanzo, Soaked	*	Dry	3 lbs	1 Solid	75
Beans, Black	*	Dry	3 lbs	1 Solid	75
Beans, Lentils	*	Dry	3 lbs	1 Solid	25 - 30
Pasta, Lasagna	*	Dry	1 lbs	1 Perf/Solid	12
Pasta, Lasagna	*	Dry	3 lbs	3 Perf/Solid	17 - 18
Pasta, Macaroni	*	Dry	3 lbs	1 Perf/Solid	12
Pasta, Mostaccoli	*	Dry	3 lbs	1 Perf/Solid	14
Pasta, Egg Noodle, Med	*	Dry	3 lbs	1 Perf/Solid	12
Pasta, Spaghetti	*	Dry	3 lbs	1 Perf/Solid	12
Rice, White, Long Grain	§	Dry	5 lbs	1 Solid	30
Rice, White, Parboiled	§	Dry	5 lbs	1 Solid	19
Rice, Brown	§	Dry	5 lbs	1 Solid	40

* = cover with water § = mix with 3 quarts cold water

Eggs:

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Soft Boiled	NA	Fresh	6 ea	1 Perf	6
Hard Boiled	NA	Fresh	24 ea	2 Perf	13

Seafood (Fresh):

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Clams, Cherry Stone	‡	Fresh	3-1/2 lbs	1 Perf	4
Halibut, Filet	‡	Fresh	2-6 oz	1 Perf	5
Red Snapper, Filet	‡	Fresh	1 -6 oz	1 Perf	8
Grouper, Filet	‡	Fresh	1 -8 oz	1 Perf	5
Scallops, Sea	‡	Fresh	1 lb	1 Perf	5
Scallops, Bay	‡	Fresh	2 lbs	1 Perf	3
Shrimp, Shell -on (26-30 ct)	‡	Fresh	2 lbs	1 Perf	3
Lobster, Live, 2.5-3 lbs	‡	Fresh	1 ea	1 Perf	16

‡ = always use a drip pan when cooking seafood

Seafood (Frozen):

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Cod, Filets	‡	Frozen	2 - 4.5 oz	1 Perf	7
Halibut, Filet	‡	Frozen	2 - 6 oz	1 Perf	8
Lobster, Tail	‡	Frozen	1 - 7 oz	1 Perf	12
Lobster, Tails	‡	Frozen	21 - 7 oz	3 Perf	14
Salmon, Filet	‡	Frozen	1 - 4.5 oz	1 Perf	7
Salmon, Filets	‡	Frozen	8 - 4.5 oz	1 Perf	7
Shrimp, Shell -on	‡	Frozen	5 lbs	1 Perf	8 - 10

‡ = always use a drip pan when cooking seafood

Meat & Poultry:

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Beef Cubed	◊	Fresh	3 lbs	1 Perf	7
Beef, Ground (80% Lean)	◊	Fresh	2 - 1/2 lbs	1 Perf	4
Chicken, Breast	◊	Fresh	8 oz	1 Perf	6 - 7
Chicken, Whole (deboning)	◊	Fresh	3.85 lbs	1 Perf	34
Corned Beef	◊	Fresh	3 - 1/2 lbs	1 Perf	26
Corned Beef	◊	Frozen	3 - 1/2 lbs	1 Perf	40
Hot Dogs (8 per lb)	◊	Frozen	2 oz	1 Perf	4 - 6
Hot Dogs (8 per lb)*	◊	Frozen	48 - 2 oz	1 Perf	6 - 8

* Frozen 48-2 oz, 1 Perf, 6-8 Vegetables (Fresh)

◊ = use a solid drip pan in bottom rack position

Vegetables (Fresh):

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Asparagus, Whole Spears	NA	Fresh	8 oz	1 Perf	3 - 5
Beans, Green Whole	NA	Fresh	1 lb	1 Perf	5 - 8
Broccoli, Florets	NA	Fresh	1 lb	1 Perf	4 - 5
Broccoli, Whole	NA	Fresh	12 oz	1 Perf	6
Brussel Sprouts	NA	Fresh	1 - 1/2 lb	1 Perf	6
Cabbage, Wide Shred	NA	Fresh	1-head	1 Perf	4
Cabbage, Whole (cabbage rolls)	NA	Fresh	1-head	1 Perf	2
Carrots, Sliced	NA	Fresh	1 lb	1 Perf	6 - 8
Potatoes, Red (New)	NA	Fresh	4 lbs	1 Perf	18
Potatoes, Sweet, Whole	NA	Fresh	2 - 1/4 lbs	1 Perf	40
Potatoes, Russet, Whole	NA	Fresh	8 oz	1 Perf	40
Squash, Acorn, Lg Dice	NA	Fresh	1 lb	1 Perf	5
Squash, Butternut, Lg Dice	NA	Fresh	1 lb	1 Perf	5 - 7
Zucchini, Sliced	NA	Fresh	1 lb	1 Perf	4

Vegetables (Frozen):

Product Description	Prep Tips	Type	Weight/ Count	Number & Pan Type	Cook Time (minutes)
Beans, Green, Cut, IQF	NA	Frozen	2 lbs	1 Perf	3
Beans, Green, Cut, IQF	NA	Frozen	1 lb	3 Perf	5
Carrots, Baby, Whole, IQF	NA	Frozen	2 lbs	1 Perf	3 - 4
Carrots, Baby, Whole, IQF	NA	Frozen	6 lbs	3 Perf	5
Corn, Cut, IQF	NA	Frozen	1/2 lb	1 Perf	3
Corn, Cut, IQF	NA	Frozen	7 - 1/2 lbs	3 Perf	6
Corn, On Cob	NA	Frozen	1 ear	1 Perf	11 - 13
Corn, On Cob	NA	Frozen	10 ears	1 Perf	13
Spinach, Block	•	Frozen	3 lbs	1 Perf	14
Spinach, Block	•	Frozen	9 lbs	3 Perf	16
Vegetables, Mixed, IQF	NA	Frozen	2 - 1/2 lbs	1 Perf	4
Vegetables, Stir Fry, IQF	NA	Frozen	2 lbs	1 Perf	4

• = frozen items cook faster if separated from block form

proportion charts

Yield Proportion Chart

1 tbsp	3 tsp liquid	1/2 fl oz
1/8 cup	2 tbsp liquid	1 fl oz
1/4 cup	4 tbsp liquid	2 fl oz
1/3 cup	5 tbsp + 1 tsp	
1/2 cup	8 tbsp liquid	4 fl oz
2/3 cup	10 tbsp + 2 tsp	
3/4 cup	12 tbsp liquid	6 fl oz
1 cup	16 tbsp liquid	8 fl oz
1 pt	2 cups liquid	16 fl oz
1 qt	4 cups liquid	32 fl oz
1/2 gal	8 cups liquid	64 fl oz
1 gal	16 cups liquid	128 fl oz
1 lb	16 oz	

Insert Your Own Proportion Chart

Servings Per Gallon Chart

Svgs/Gallon	1	2	3	4	5	6	7	8	9	10
0.5 oz	256	512	768	1024	1280	1536	1792	2048	2304	2560
1 oz	128	256	384	512	640	768	896	1024	1152	1280
2 oz	64	128	192	256	320	384	448	512	576	640
3 oz	42.6	85.2	127.8	170.4	213	255.6	298.2	340.8	383.4	426
4 oz	32	64	96	128	160	192	224	256	288	320
5 oz	25.6	51.2	76.8	102.4	128	153.6	179.2	204.8	230.4	256
6 oz	21.3	42.6	63.9	85.2	106.5	127.8	149.1	170.4	191.7	213
7 oz	18.3	36.6	54.9	73.2	91.5	109.8	128.1	146.4	164.7	183
8 oz	16	32	48	64	80	96	112	128	144	160

Gallons Needed to Serve Large Groups

	Svgs / Gallon	100	200	300	400	500	600	700	800	900	1000
0.5 oz	256	0.4	0.8	1.2	1.6	2.0	2.3	2.7	3.1	3.5	3.9
1 oz	128	0.8	1.6	2.3	3.1	3.9	4.7	5.5	6.3	7.0	7.8
2 oz	64	1.6	3.1	4.7	6.3	7.8	9.4	10.9	12.5	14.1	15.6
3 oz	42.6	2.3	4.7	7.0	9.4	11.7	14.1	16.4	18.8	21.1	23.5
4 oz	32	3.1	6.3	9.4	12.5	15.6	18.8	21.9	25.0	28.1	31.3
5 oz	25.6	3.9	7.8	11.7	15.6	19.5	23.4	27.3	31.3	35.2	39.1
6 oz	21.3	4.7	9.4	14.1	18.8	23.5	28.2	32.9	37.6	42.3	46.9
7 oz	18.3	5.5	10.9	16.4	21.9	27.3	32.8	38.3	43.7	49.2	54.6
8 oz	16	6.3	12.5	18.8	25.0	31.3	37.5	43.8	50.0	56.3	62.5

groen™

Other quality products from Groen:
Tilting Braising Pans
SmartSteam100™ Boilerless Steamers
ComboEase™ Combination Oven-Steamers

unified brands™
A DOVER COMPANY

888.994.7636
unifiedbrands.net

Unified Brands is one of many individual operating companies of Dover Corporation, a multi-billion dollar, global manufacturer of industrial products. The product lines of Unified Brands–Groen, Randell, Avtec, A La Cart and CapKold–have leading industry positions in cooking equipment, cook-chill production systems, custom fabrication, foodservice refrigeration, ventilation and conveyor systems. Headquartered in Jackson, MS, Unified Brands operates manufacturing facilities in Weidman, MI and Jackson, MS.

Information contained in this brochure is known to be current and accurate at the time of printing. Unified Brands recommends referencing our website for updated and additional information.

12/2010