

Alcohol and Cooking - What You Need to Know!

A Note From Chef Dave

For many years now, I have been asked about using alcohol when cooking. In addition, the majority of people think that once heat is added that all the alcohol is removed and only the flavor is left. In this month's newsletter, you will see that this statement could not be further from the truth! As a reminder, it is very important to consult with your physician before using alcohol when making your favorite dish.

Wishing you a happy and healthy New Year!

Cook Smarter...



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Why Use Alcohol in Cooking?

Universally, the main reason alcoholic beverages are used in recipes is to add flavor. After all, the most premium of extracts with the most concentrated flavors are alcohol-based, particularly vanilla.

In many recipes, the alcohol is an important component to achieve a desired chemical reaction in a dish. Alcohol causes many foods to release flavors that cannot be experienced without the interaction of alcohol. Beer contains yeast which raises breads and batters. Alcoholic beverages also help to break down tough fibers in marinades. Lastly, other dishes use alcoholic content to provide entertainment such as flambé and flaming dishes. As for fondue, wine and kirsch are added because it lowers the boiling point of the cheese which helps prevent curdling.

"When wine enters, out goes the truth!"

- Benjamin Franklin



Does the Alcohol Burn Off?

Alcohol not only evaporates without heat, but the majority also burns off during the cooking process. How much remains in the dish depends on the cooking method and amount of cooking time. Those alcohol-soaked fruitcakes would have to turn into solid bricks before the alcohol would evaporate. A bottle of beer in a long-simmered stew is not going to leave a significantly measurable alcohol residue, but will add a rich, robust flavor. A quick flambé may not burn off all the alcohol, whereas a wine reduction sauce will leave little, if any, alcohol content. Heat and time are the keys. Obviously, uncooked foods with alcohol will retain the most alcohol.



Alcohol Burn-Off

The following chart data comes from the U.S. Department of Agriculture with information on how much alcohol remains in your food with specific cooking methods. Keep in mind that this is the percentage of alcohol remaining of the original addition.

Preparation Method	Percent Retained
Alcohol added to boiling liquid & removed from heat	85%
Alcohol flamed	75%
No heat, stored overnight	70%
Baked, 25 minutes, alcohol not stirred into mixture	45%
Baked/Simmered Dishes with Alcohol Stirred Into Mixture	Percent Retained
15 minutes cooking time	40%
30 minutes cooking time	35%
1 hour cooking time	25%
1.5 hours cooking time	20%
2 hours cooking time	10%
2.5 hours cooking time	5%



Check out page 3 for some ideas and recommendations for substitutions for alcoholic ingredients in recipes!



Cooking with Alcohol - Tips & Hints



In most cases, you have to use your own judgment on substituting alcohol in recipes. Sweet recipes will require different substitutions than savory recipes. Amounts will also make a difference. You

wouldn't want to use a quarter cup of almond extract to replace the same amount of amaretto liqueur. And remember, the final product will not be as the original recipe was intended. Some tips:

- Look at the main liquid of your recipe. Usually the main liquid ingredient can be increased to cover a small amount of the required alcoholic ingredient.
- If less than a tablespoon of alcohol is needed, it can be omitted although the flavor will be different.
- Any variety of juices and/or tomato juice can often be substituted in marinades.
- Non-alcoholic wine or wine vinegar can be substituted for wine.
- Add a small amount of sugar substitute to imitate sweeter wines.
- Extracts, flavorings, syrups, and juices can be substituted for flavor-based liquors and liqueurs. In addition, extract may need to be diluted.
- Use non-alcoholic wines instead of cooking wine or sherry. It should be drinkable or don't use it! All cooking wines and sherries are loaded with sodium which detracts from flavor and adds a salty and vinegar flavor to food.
- To help burn off more alcohol and reduce potential injuries when using it for flamed dishes, be sure to warm the liquor before adding to the heat (the food must also be hot!), and use a long match or lighter to ignite it. Always tilt the pan away from you when igniting. The liquor should be added at the very last possible moment and lit as quickly as possible to avoid the liquor soaking into the food. Let the alcohol burn off enough so the flavor does not overpower the dish.
- When using milk or cream in a sauce containing alcohol, be sure to burn off the alcohol before adding the cream or the sauce may curdle.
- If the alcoholic ingredient in the recipe is intended to be the main flavor and you must avoid alcohol, find another recipe. It just won't taste the same.

Recommendations for Alcohol Substitutions

Alcoholic Ingredient:	Description:	Substitution:
Amaretto	Italian almond-flavored liqueur	Almond extract
Beer or ale	Various types	For light beers, substitute chicken broth, ginger ale or white grape juice. For heavier beers, use a stronger beef, chicken or mushroom broth or stock. Non-alcoholic beers may also be substituted.
Brandy	Liquor made of distilled wine or fruit juice	Scotch or bourbon. If a particular flavor is specified, use the corresponding fruit juice, such as apple, apricot, cherry, peach, raspberry, etc. or grape juice. Corresponding flavored extracts can be used for small amounts.
Calvados	Apple brandy	Apple juice concentrate or juice
Chambord	Black raspberry liqueur	Raspberry juice, syrup or extract
Champagne	Sparkling white wine	Sparkling white grape juice, ginger ale, white wine
Claret	Light red wine or Bordeaux	Non-alcoholic wine, diluted currant or grape juice, cherry cider syrup
Cognac	Aged, double-distilled wine or fermented fruit juice. Cognac is considered the finest brandy	Other less expensive brandies may be substituted, as well as Scotch or whiskey, or use peach, apricot or pear juice
Cointreau	French, orange-flavored liqueur	Orange juice concentrate or regular orange juice that has been reduced to a thicker consistency
Curacao	Liqueur made from bitter Seville oranges	Orange juice frozen concentrate or reduced fresh orange juice
Crème de menthe	Thick & syrupy, sweetened mint liqueur. Comes both clear and green.	Mix spearmint extract or oil with a little water or grapefruit juice. Use a drop of food coloring if you need the green color.
Framboise	French raspberry liqueur	Raspberry juice or syrup
Frangelico	Italian hazelnut liqueur	Hazelnut or almond extract
Galliano	Golden Italian anise liqueur	Licorice extract
Grand Marnier	French liqueur, orange flavored	Orange juice frozen concentrate or reduced fresh orange juice
Grappa	Italian grape brandy	Grape juice or reduced red wine
Grenadine	Pomegranate syrup, sometimes alcoholic	Pomegranate syrup or juice
Hard Cider	Fermented, alcoholic cider	Apple cider or juice
Kahlua	Syrupy Mexican liqueur made with coffee and cocoa beans	Strong coffee or espresso with a touch of cocoa powder
Kirsch (Kirchwasser)	Colorless liqueur made of cherries	Black cherry, raspberry, boysenberry, currant or grape juice or syrup, or cherry cider
Red Burgundy	Dry French wine	Non-alcoholic wine, red wine vinegar, grape juice
Red wine	Sweet or dry wine	Non-alcoholic wine, beef or chicken broth or stock, diluted red wine vinegar, red grape juice diluted with red wine vinegar or rice vinegar, tomato juice, liquid from canned mushrooms, plain water.
Rum	Liquor distilled from molasses or sugar syrup	For light rum, use pineapple juice flavored with almond extract. For dark rum, use molasses thinned with pineapple juice and flavored with almond extract, or use rum extract flavoring.

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Recommendations for Alcohol Substitutions *(cont)*

Alcoholic Ingredient:	Description:	Substitution:
Sake	Fermented rice drink	Rice vinegar
Schnapps	Flavored, colorless liquor	Use corresponding flavored extract such as peppermint, peach, etc.
Sherry	Fortified dessert wine, sweet or dry, some with a slightly nutty flavor	Orange or pineapple juice
Southern Comfort	Bourbon mixed with peach liqueur	Peach nectar mixed with a little cider vinegar
Tequila	Liquor made of the agave plant	Cactus nectar or juice
Triple Sec	Orange flavored liqueur	Orange juice frozen concentrate or reduced fresh orange juice
Vermouth	Wine-based drink infused with herbs, sweet or dry	For sweet, use non-alcoholic sweet wine, apple or grape juice or balsamic vinegar. For dry, use non-alcoholic white wine, white grape juice or white wine vinegar.
Whiskey	Distilled liquor	Bourbon, Scotch, and whiskey may be used interchangeably. Small amounts may be eliminated. Large amounts cannot be effectively substituted.
White Burgundy	Dry French wine	Non-alcoholic wine, white grape juice diluted with white wine vinegar
White wine	Sweet or dry wine	Non-alcoholic wine, chicken broth or stock, diluted white wine vinegar or cider vinegar, white grape juice diluted with white wine vinegar, ginger ale, canned mushroom liquid, water. For marinades, substitute 1/4 cup vinegar plus 1 Tbsp sugar plus 1/4 cup water.

Chicken Marsala

Servings: 4 (1 chicken breast with 1/3 cup sauce)

Ingredients:

1/8 tsp black pepper
 1/4 tsp salt
 1/4 cup flour
 4, 4 ounce chicken breasts, boneless/skinless
 1 tbsp olive oil
 1/2 cup dry Marsala wine
 1/2 cup low sodium chicken broth
 2 tbsp fresh lemon juice
 1 cup sliced mushrooms
 1 tbsp fresh parsley, chopped

Nutritional Information:

240 calories; 28g protein; 5g fat (1g saturated fat);
 11g carbohydrate; 0g fiber; 230mg sodium

Directions

1. Mix together pepper, salt, and flour. Coat chicken with seasoned flour.
2. In a non-stick sauté pan, heat oil.
3. Place chicken breasts in sauté pan and brown on both sides.
4. Next, remove chicken from sauté pan and set aside.
5. To the sauté pan, add wine and stir until the wine is heated.
6. Add lemon juice, broth and mushrooms. Stir to toss, reduce heat, and cook for about 10 minutes until the sauce is partially reduced.
7. Return browned chicken breasts to sauté pan and spoon sauce over the chicken.
8. Cover and cook for about 5– 10 minutes or until chicken is done (165F)
9. Serve sauce over chicken. Garnish with chopped parsley.

Ingredients:

6 vanilla beans, split
 1 (fifth) bottle of vodka (rum may also be used)

Directions:

1. Combine split vanilla beans with vodka in a 1 quart glass jar.
2. Store in a dark, cool place for a minimum of 2 months. However, the longer it is stored, the stronger and better the flavor will be. Some prefer to store homemade vanilla for up to 1 year before using.

Homemade Vanilla Extract

