



NAVY DEPARTMENT

Bureau of Supplies and Accounts Headquarters U.S. Marine Corps Washington, D.C.

NAVY-MARINE CORPS RECIPE SERVICE

20 March 1962

The Navy-Marine Corps Recipe Service has been reviewed and approved and is issued for the purpose of standardizing and improving food prepared for and served in the Navy and Marine Corps general messes.

This service is the result of years of exhaustive research and practical testing for acceptability to meet the many needs peculiar to Navy and Marine Corps feeding. The Navy-Marine Corps Recipe Service represents the most modern method of recipe usage and is endorsed by the leading authorities in the field of institutional and group feeding.

An Index of Recipes is issued, as an adjunct, to assist commissarymen and Marine Corps food service personnel in planning and writing well-balanced, varied menus and to be used as a training aid in the Commissaryman Class "B" Schools and by the Field Food Service Teams at a general mess level during their on-the-job training visits.

The Recipe Service was developed by the Navy Cook Book Task Committee, now the Recipe Task Committee, a subgroup of the Food Advisory Committee of the National Security Industrial Association, in cooperation with the U.S. Naval Research and Development Facility, Bayonne, New Jersey, the U.S. Marine Corps, and the Navy Subsistence Office.

The success of the Navy-Marine Corps Recipe Service, a new approach to the problems of continuously improving Navy and Marine Corps subsistence, depends upon careful use. Commissary personnel are urged to send comments and recommendations for improvement through official channels to the Chief, Bureau of Supplies and Accounts. Marine Corps commands are encouraged to send such comments and recommendations to the Commandant of the Marine Corps (Code COE).

C. H. HAYES,

Major General, U.S. Marine Corps Deputy Chief of Staff (Plans)

DISTRIBUTION:

Navy: Activities maintaining general messes Marine Corps: HN

Supplement 1, Submarine Recipe Section, will be retained.

JOHN CRUMPACKER,

Rear Admiral, SC, USN. Chief of Bureau INDEX

A. MISC. INFORMATION No. 0

Card No.

TEMPERATURE RANGE FOR OVENS

A. MISC. INFORMATION No. 2

DESCRIPTION	TEMPERATURE	BROWNING TESTS		
	250 to 300° F			
	325° F			
Moderate	350 to 375° F	Paper turns golden brown in 5 minutes.		
Moderately hot	400° F			
Hot	425 to 450° F	Paper turns deep brown in 5 minutes.		
Very hot	475 to 500° F	Paper turns dark brown in 3 minutes.		

NOTE: Unglazed white paper should be used to make the browning test. White flour may be used to make the same test.

TEMPERATURES AND TESTS FOR STAGES OF SUGAR COOKERY A. MISC. INFORMATION No. 3

STATE	TEMPERATURE	TESTS	USES
Thread	230 to 234° F 110 to 112° C	Sirup spins a 2 inch thread when dropped from fork or spoon.	
Soft ball	234 to 240° F 112 to 115° C	Sirup forms a soft ball when dropped into cold water. Ball flattens on removal.	Fudge, Fondant, Penoche
Firm ball	244 to 248° F 118 to 120° C	Sirup becomes a firm ball when dropped into cold water. Ball does not flatten when removed.	Caramels
Hard ball	250 to 266° F 121 to 130° C	Sirup forms a ball when dropped into cold water, hard enough to hold its shape, yet plastic.	Divinity, pop com balls, marsh- mallows
Soft crack	270 to 290° F 132 to 143° C	Sirup separates into threads when dropped into cold water. Threads are hard but not brittle.	Butterscotch, taffies
Hard crack	300 to 310° F 149 to 154° C	Sirup separates into threads which are hard and brittle when dropped into cold water.	Brittle glace
Barley sugar	320° F 160° C	Thick clear liquid.	
Caramel	338° F 170° C	Barley sugar becomes brown.	Flavoring and coloring

EQUIVALENTS FOR FRESH, EVAPORATED, AND DRY MILK PRODUCTS A. MISC. INFORMATION No. 4

FRE	SH	EVAPORATED		DRY WHOLE			DRY NONFAT			
WEIGHT	MEASURE	WEIGHT	MEASURE	WATER TO ADD	WEIGHT	MEASURE	WATER TO ADD	WEIGHT	MEASURE	WATER TO ADD
1 lb 1 oz.	1 pt	9 oz	1 cup	1 cup	2 oz	½ cup	1 pt	1¾ oz	3/8 cup	1 pt
2 lb 2 oz.	1 qt	1 lb 2 oz.	1 pt	1 pt	4 oz	7/8 cup	1 qt	3½ oz	3/4 cup	1 qt
8 lb 8 oz.	1 gal	4 lb 7 oz.	2 qt	2 qt	1 lb	3½ cups	1 gal	14 oz	3 cups	1 gal
42 lb 8 oz.	5 gal	22 lb 3 oz.	2½ gal	2½ gal	5 lb	1 gal + 1½ cups	5 gal	4 lb 6 oz.	3¾ qt	5 gal
85 lb	10 gal	44 lb 6 oz.	5 gal	5 gal	10 lb	2 gal + 3 cups	10 gal	8 lb 12 oz	7½ qt	10 gal

NOTE: Evaporated milk or dry whole milk reconstituted in accordance with this table may be used in any recipe in which whole milk is indicated.

EQUIVALENTS FOR FRESH, FROZEN, AND DRIED WHOLE EGGS A. MISC. INFORMATION No. 5

FRESH (SHELLED) EGGS OR FROZEN WHOLE EGGS		STABILIZED DRIED WHOLE EGGS			
Weight	Volume (approx.)	Weight	Volume (approx.)	Water to be added	
1 egg = 1.6 oz 1 lb	1 egg (3 tbsp)	1/2 oz	2 tbsp	2½ tbsp 1½ cups 2¾ cups 2 qt 4 qt	

NOTE: 1. Frozen whole eggs or dried whole eggs reconstituted in accordance with this table may be used in many recipes in which fresh eggs are specified as an ingredient. When used in some baked products and other products containing a high percentage of dry ingredients, dried eggs may be sifted with the dry ingredients, in which case the water needed to reconstitute the eggs is added to the required liquid. DO NOT USE RECONSTITUTED EGGS IN UNCOOKED SALAD DRESSINGS OR OTHER RECIPES WHICH DO NOT REQUIRE COOKING.

2. Best results in cake batters will be obtained by reconstituting the dried eggs prior to using in the recipe.

3. For greater accuracy in reconstitution, weigh the dried whole eggs. If this is not possible, pack the measure well. The egg powder should then be sifted or stirred with a wire whip or fork for ease of reconstitution.

4. Reconstituted eggs should be used within one hour, unless refrigerated. Do not hold overnight.

TABLE OF WEIGHTS AND MEASURES FOR CAN SIZES

A. MISC. INFORMATION No. 6

CAN NAME	APPROX. N	IET WEIGHT OZ	APPROX. NET CONTENTS LIQUID MEASURE PT FL OZ		APPROX. CUPFULS	APPROX. NO. OF CANS EQUIVALENT TO A NO. 10 CAN	NO. OF CANS PER CASE
No. 10	6	9	/ 6	8	12	1	6
No. 3 cylinder	3	2	2	14	53/4	3	12
No. 21/2	1	13	1	10	31/2	4	12, 24
No. 3 vacuum	1	7	1	15	23/4	_	24
No. 2	1	4	1	2	21/4	5	12, 24
No. 303	1	_	_	15	2	7	12, 24, 36
No. 1 tall	1	_	_	15	2	7	24, 48
No. 1 picnic	_	101/2	_	91/2	11/4	10	24, 48
1 lb flat oval	1	_	1	_	2	- I	48
No. ½ (7 oz can)	_	7	_	8	1	_	48

RECONSTITUTING SOUP AND GRAVY BASES

A. MISC. INFORMATION No. 8

Beef Soup and Gravy Base and Chicken Soup and Gravy Base may be reconstituted and used as bouillon to extend natural meat juices, or as stock in recipes for soups, gravies, and sauces.

The powdered bases are seasoned and when reconstituted in boiling water will have the characteristic flavor and appearance of a Beef Broth or Chicken Broth. When used in preparing a recipe always check the seasoning before adding salt.

BA	BOILING WATER	
WEIGHT	MEASURE	
	2 tsp	1 cup
1 oz	2½ tbsp	1 qt
4 oz	10 tbsp	1 gal
8 oz	1—8 oz can	2 gal
24 oz	1—No. 2½ can	6 gal

USING TOMATO JUICE CONCENTRATE

A. MISC. INFORMATION No. 9

Concentrated tomato juice may be used in any Navy-Marine Corps Recipe Service recipe card which lists in the Ingredients column, tomato juice, tomato puree, or tomato paste.

For TOMATO JUICE: to each can of the concentrate add $\frac{3}{2}$ cans of water. For TOMATO PUREE: to each can of the concentrate add $\frac{1}{2}$ can of water. For TOMATO PASTE: to each can of the concentrate add $\frac{1}{2}$ can of water.