



# Nutrition Guidelines and Recommendations for Service Women

*Eating properly increases energy and endurance, shortens recovery time, improves focus and concentration, and helps service members feel better. Currently, 74% of adults in the United States are overweight or obese, increasing their risk of cardiovascular disease, type 2 diabetes, and certain types of cancer. Weight loss or maintenance requires a commitment to long-term lifestyle change and often requires support from healthcare providers, family, and social networks.*

## GENERAL NUTRITION GUIDELINES

These guidelines provide a framework for a healthy diet of 2,000 calories per day. Females ages 19-30 need about 1,800-2,400 calories per day and females ages 31-59 need about 1,600-2,200 calories per day.

### VEGETABLES

**Aim for 2½ - 3 servings per day. A serving of vegetables is 1 cup raw or cooked vegetables or 2 cups leafy salad greens.** Choose a combination of vegetables each day that add up to the **weekly recommendations**:

- **Dark Green (1½ cups per week):** Amaranth leaves, bok choy, broccoli, chamnamul, chard, collards, kale, mustard greens, poke greens, romaine lettuce, spinach, taro leaves, turnip greens, watercress
- **Red and Orange (5½ cups per week):** Calabaza, carrots, red or orange bell peppers, sweet potatoes, tomatoes, winter squash
- **Beans, Peas, and Lentils\* (1½ cups per week):** Black beans, black-eyed peas, bayo beans, chickpeas (garbanzo beans), edamame, fava, kidney beans, lentils, lima beans, mung beans, pigeon peas, pinto beans, split peas (does not include green beans or green peas)

*\*based on nutritional values beans, peas, and lentils can be counted as either a vegetable or protein*

- **Starchy (5 cups per week):** Breadfruit, burdock root, cassava, corn, jicama, lotus root, lima beans, plantains, white potatoes, salsify, taro root, water chestnuts, yam, yucca
- **Other (4 cups per week):** Asparagus, avocado, bamboo shoots, beets, bitter melon, brussels sprouts, cabbage (green, red, napa, savoy), cactus pads (nopales), cauliflower, celery, chayote (mirliton), cucumber, eggplant, green beans, kohlrabi, luffa, mushrooms, okra, onions, radish, rutabaga, seaweed, snow peas, summer squash, tomatillos, turnips

### FRUITS

**Aim for 1.5 - 2 servings per day. A serving of fruit is 1 cup raw or cooked fruit, 4 oz 100% fruit juice, or ½ cup dried fruit.**

- **General:** Apples, Asian pears, bananas, cherries, dates, figs, grapes, guava, jackfruit, lychee, mangoes, nectarines, papaya, peaches, pears, persimmons, pineapple, plums, pomegranates, raisins, rhubarb, sapote, soursop
- **Berries:** Blackberries, blueberries, currants, huckleberries, kiwifruit, mulberries, raspberries, strawberries
- **Citrus:** Calamondin, grapefruit, lemons, limes, oranges, pomelos
- **Melons:** Cantaloupe, casaba, honeydew, watermelon

### GRAINS

**Aim for 5 servings of grains per day. A serving of grains is ½ cup cooked rice, pasta or cooked cereal, 1 slice of bread, or 1 cup dry cereal.**

Choose whole grains and whole-grain products over refined or processed grains.

- **Whole Grains (3 oz per day):** Amaranth, barley (not pearled), brown rice, buckwheat, bulgur, millet, oats, popcorn, quinoa, dark rye, whole-grain cornmeal, whole-wheat bread, whole-wheat chapati, whole-grain cereals and crackers, wild rice
- **Refined Grains (3 oz per day):** White breads, refined-grain cereals and crackers, corn grits, cream of rice, cream of wheat, barley (pearled), masa, pasta, white rice

## PROTEIN

**Aim for 5 - 6½ servings per day. A serving of protein is 1 oz lean meat, poultry, or seafood, 1 egg, ¼ cup cooked beans or tofu, 1 Tbsp peanut butter, or ½ oz nuts or seeds.** Choose a combination of proteins each day that add up to the **weekly recommendation**:

- **Meats, Poultry, Eggs:** Beef, goat, lamb, pork, game meat (bison, moose, elk, deer), chicken, Cornish hens, duck, game birds (ostrich, pheasant, quail), goose, turkey, organ meats (chitterlings, giblets, gizzard, liver, sweetbreads, tongue, tripe), chicken or other bird eggs
- **Seafood:** Anchovy, black sea bass, catfish, clams, cod, crab, crawfish, flounder, haddock, hake, herring, lobster, mullet, oyster, perch, pollock, salmon, sardine, scallop, shrimp, sole, squid, tilapia, freshwater trout, light tuna, whiting
- **Nuts, Seeds, Soy Products:** All nuts (tree nuts and peanuts), nut butters, seeds (chia, flax, pumpkin, sesame, sunflower), seed butters (sesame/tahini, sunflower), tofu, tempeh, soy flour, soy protein isolate, soy concentrate

## DAIRY & FORTIFIED SOY ALTERNATIVES

**Aim for 3 servings per day. A serving of dairy is 1 cup milk or yogurt, 1½ oz natural cheese, or 2 oz processed cheese.**

- All fluid, dry or evaporated milk (including lactose-free and lactose-reduced products and fortified soy milk), buttermilk, yogurt, kefir, frozen yogurt, dairy desserts, cheese; cream, sour cream and cream cheese are not included as they are low in calcium.
- While many non - dairy milk alternatives contain calcium and vitamin D, most are not an adequate source of protein. Thus, it is important to ensure that protein is consumed from other sources.

## OILS

**Aim for 27 grams (approx. 2 Tbsp) or less per day.** Avoid oils high in saturated fat (coconut, palm kernel, palm).

- **Oil:** Canola, corn, olive, peanut, safflower, soybean, sunflower
- **In food:** Nuts, seeds, seafood, olives, avocado

Recommendation	Serving Equivalent
<b>Vegetables</b> 2½ servings per day	1 cup raw or cooked vegetables or 2 cups leafy salad greens
<b>Fruits</b> 2 servings per day	1 cup raw or cooked fruit
<b>Grains</b> 6 servings per day	½ cup cooked rice, pasta or cooked cereal, 1 oz dry pasta or rice, 1 slice of bread, or 1 cup dry cereal
<b>Protein</b> 5½ servings per day	1 oz lean meat, poultry, or seafood, 1 egg, ¼ cup cooked beans or tofu, 1 Tbsp peanut butter, or ½ oz nuts or seeds
<b>Dairy</b> 3 servings per day	1 cup milk or yogurt, 1½ oz natural cheese, or 2 oz processed cheese

## FOOD & BEVERAGES TO LIMIT

Approximately 85% of daily recommended calories are needed just to meet nutritional requirements. This leaves 250-350 calories for:

- **Added sugar:** 65% of women exceed recommended intake of sugars.
  - **Added sugar should be LESS than 10% of daily calories.**
  - One 20 oz soda or candy bar reaches the limit of daily recommended calories from added sugar.
- **Saturated fat:** 70% of adults exceed recommended intake of saturated fat.
  - **Saturated fat should be LESS than 10% of daily calories.**
  - A small fast food French fries reaches the limit of daily recommended calories from saturated fat.
- **Sodium:** 80% of women exceed recommended intake of sodium.
  - **Sodium consumption should be LESS than 2,300 mg per day.**
  - One large slice of frozen pepperoni pizza has more than half of the recommended daily sodium.
- **Alcoholic beverages:** One drink per day for women when alcohol is consumed. Pregnant women should avoid alcohol.
- **General beverages:** Avoid drinking calories. Drink primarily water.
  - Consume the recommended intake of dairy and 100% fruit and vegetable juice.
  - Limit or eliminate beverages with added sugar (sodas, lemonade, most fruit drinks, mochas, lattes, sweet tea, most sport and energy drinks, hot chocolate, beer, wine, cocktails, shakes).

# NUTRITION LABELS

Use nutrition labels to make healthy choices. Learn more below and at [this link](#).

## READ AND UNDERSTAND NUTRITION LABELS

- 1 **Size matters:** Check the serving size and the number of servings per container or package.
- 2 **All fat is not created equal:** Replace saturated fats with unsaturated fats. Aim to consume monounsaturated fats over polyunsaturated fats when possible. Work to eliminate trans-fat from your diet.
- 3 **Find the salt:** Most salt (sodium) consumed is found in commercially processed or prepared food.
- 4 **% Daily Value (DV):** Five percent (5%) or less is considered low and 20% or more is considered high.

### Nutrition Facts

8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
	<b>% Daily Value*</b>
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Nutrition Facts Label | fda.gov

## NUTRIENT DEFICIENCIES

Making small changes in your diet can increase levels of important nutrients.

- **Dietary Fiber:** 90% of women do not meet recommended intake of dietary fiber.
  - Replace refined grains with whole grains and increase vegetable and fruit intake.
  - Avoid juices and smoothies where fiber is removed.
- **Calcium and Vitamin D:** 60% of women do not meet recommended intake of calcium and 90% of women do not meet recommended intake of vitamin D.
  - Increase dairy, fortified soy product, and seafood intake.
  - Consider a vitamin D supplement if exposure to sunlight is limited.

## PREGNANCY & LACTATION NUTRITION

The following are recommendations for an average woman with a normal pre-pregnancy weight. Overweight women should have fewer calories.

Stage of Pregnancy or Lactation	Estimated Change in Daily Calories
1 <sup>st</sup> trimester	+0 calories per day
2 <sup>nd</sup> trimester	+340 calories per day
3 <sup>rd</sup> trimester	+450 calories per day
Lactation 1 <sup>st</sup> 6 months	+330 calories per day
Lactation 2 <sup>nd</sup> 6 months	+400 calories per day

## SUPPLEMENTS DURING PREGNANCY

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**Folic Acid:** All women who are planning to get pregnant or are not preventing pregnancy should take 400 to 800 mcg of folic acid daily starting at least 1 month prior to conception through the first 3 months of pregnancy to prevent neural tube defects in the baby.

**Other Supplements:** Women with restrictive diets, especially vegetarian and vegan diets, should talk to their healthcare provider to determine whether they need to consider supplementation for iron, vitamin B12, choline, zinc, iodine, or omega-3.

## FISH CHOICES DURING PREGNANCY

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Pregnant women should avoid large fish to limit their baby's mercury exposure.. Avoid king mackerel, marlin, orange roughy, shark, swordfish, tile fish, and bigeye tuna. Learn more at [this link](#).

## WEIGHT RELATED RISKS DURING PREGNANCY

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Women who are overweight or obese during pregnancy have greater risk of hypertension, pre-eclampsia, pre-term birth, gestational diabetes, macrosomia, birth injury, neural tube defects, and need for a c-section.

## COMMON DIETS

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### DASH DIET

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Learn more about the Dietary Approaches to Stop Hypertension (DASH) diet at [this link](#). This diet incorporates:

- Vegetables, fruits, and fat-free or low-fat dairy
- Whole grains, beans, seeds, nuts, and vegetable oils
- Lean meats such as poultry and fish
- Targets high levels of potassium (4,700 mg daily)
- Limits sodium to 2,300 mg/day
- Limits alcohol
- Limits red meat, sweets, and sugary beverages

### MEDITERRANEAN DIET

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Learn more about the Mediterranean Diet at [this link](#). This diet incorporates:

- Fruits, vegetables, and whole grains
- Unsaturated fats such as olive oil or canola oil
- Protein from plant sources, lean poultry, or fish
- Moderate amounts of wine
- Limits sweets

### INTERMITTENT FASTING\*

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Learn more about Intermittent Fasting at [this link](#) or by reading [The Obesity Code](#) by Dr. Jason Fung. Intermittent fasting focuses on the timing of eating through either a fast for 16-20 hours per day or alternating day fasting (fasting 2 days per week and eating normally the other 5 days).

### KETOGENIC DIET\*

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Learn more about the Ketogenic Diet (commonly referred to as “keto”) at [this link](#). Over weeks of following this diet, the body goes into ketosis. This diet is:

- High in fat (over 75% of daily calories)
- Moderate in protein (10-20% of calories)
- Very low in carbs (less than 5% of calories)

## MACRONUTRIENTS

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
Learn more about macronutrients at [this link](#). The macronutrients or “macro” diet focuses on getting a certain amount (grams) of protein, carbohydrates, and fat per day instead of a calorie threshold.

*\*All diets can be risky with certain health conditions, especially ketogenic diets and intermittent fasting.*

# NUTRITION SYSTEM IN DINING FACILITIES

## STOPLIGHT NUTRITION SYSTEM

Food options in the galley or mess hall are designated by “stoplight” color codes to help Sailors and Marines make healthy and nutritious choices.

-  **GREEN:** These foods are great choices for overall health, physical, and mental performance. These foods are the least processed, most nutrient dense, higher in fiber, lower in added sugar, and include healthy fats.
-  **YELLOW:** These foods should be consumed occasionally because they are higher in total and saturated fat compared to Green Light foods. These foods are moderately processed, lower in fiber, and include added sugars or artificial sweeteners, as well as lower quality fats.
-  **RED:** Limit intake of these foods because they are the highest in unhealthy fats and may decrease performance. These foods are the most processed and have the lowest-nutrient quality, including added sugars, excess fats, and trans fats.

## MEALS READY TO EAT (MREs)

Each MRE provides approximately 1,250 calories. Depending on activity levels, most Sailors and Marines will not need all the calories that 3 MREs per day would provide (3,750 calories). Use [this link](#) to determine your recommended daily calorie intake based on sex, age, weight, and activity level. Consider skipping parts of the MRE, especially the candy or dessert, to minimize calories.

# NUTRITION FOR ACTIVE WOMEN / ATHLETES

## INCREASED CALORIE INTAKE

Very active women/female athletes require higher amounts of energy (calories) to maintain their current weight:

- Women who are active 6-10 hours per week require 2,500 calories per day to maintain current weight.
- Women who are active 10-20 hours per week require 3,000 calories a day to maintain current weight.

## RELATIVE ENERGY DEFICIENCY IN SPORT

Relative Energy Deficiency in Sport (RED-S) can result from not getting enough energy through what you eat, using too much energy through exercise, or both. RED-S can cause exercise associated menstrual dysfunction, weight loss, poor growth (in young athletes), frequent injuries or illness, fatigue, or irritability. Learn more at the RED-S Patient Guide under the Nutrition tab at [this link](#).

## HYDRATION

Adequate hydration is key to performance.

- Hydrate prior to activity/exercise with 16 oz of fluid.
- During activity, hydrate with 4-6 oz of fluid per 15 minutes of exercise.

## ADDITIONAL RESOURCES

Topic	Links
<b>Athlete Nutrition</b>	Eating for Peak Performance ( <a href="#">Link</a> , <a href="#">Link</a> ) Female Athlete Energy and Nutrition Issues ( <a href="#">Link</a> ) Ten Things to Know about Sports Nutrition ( <a href="#">Link</a> ) Warfighter Nutrition Guide ( <a href="#">Link</a> )
<b>Healthy Eating Choices</b>	Eat This Not That ( <a href="#">Link</a> ) Bad Fats vs. Good Fats ( <a href="#">Link</a> )
<b>Military Nutrition</b>	Navy Fitness Nutrition ( <a href="#">Link</a> ) Marine Corps Performance Nutrition ( <a href="#">Link</a> )
<b>Pregnancy &amp; Postpartum Nutrition</b>	Fitness and Nutrition during Pregnancy ( <a href="#">Link</a> , <a href="#">Link</a> ) Postpartum Nutrition Guide ( <a href="#">Link</a> ) Tips for Breastfeeding Moms ( <a href="#">Link</a> )
<b>Weight Loss</b>	Department of Veteran Affairs MOVE! Weight Management Program ( <a href="#">Link</a> ) My Fitness Pal Calorie Tracker ( <a href="#">Link</a> )

## REFERENCES

1. 2020 – 2025 Dietary Guidelines, United States Department of Agriculture (USDA)
2. Rethinking Drinking, National Institutes of Health (NIH)
3. Nutrition Education Resources, Food and Drug Administration (FDA)
4. Pregnancy and Women’s Health, Human Performance Resources by CHAMP (HPRC)
5. Nutrition During Pregnancy, American College of Obstetricians and Gynecologists (ACOG)

### DISCLAIMER

*The views presented in this guide do not reflect those of the Department of Defense and any medical information is not intended to replace advice from a professional health care provider. Any mention of specific apps or products does not indicate endorsement but is meant for an example that has worked for others. Further, the guidance in this document is not intended for use by individuals currently seeking medical advice or under medical care.*