



UNCLASSIFIED



Battling Nutrition Challenges on Deployment



UNCLASSIFIED

1

Good day everyone! As we get started today, we're going to cover a variety of nutrition challenges that you as a military member will face throughout your service. The focus for today's short brief is to identify limitations that you face in some unique environments, and to combat those challenges, we'll discuss a variety of tips and strategies that you can use and implement to get around these limitations. You all have to make food choices that impact not only your day to day routines, but also your long term health. Depending what you choose, habitually, it can impact a variety of outcomes in your life.



UNCLASSIFIED

Impacts of Nutrition

- ***Regardless of the limitations you face, optimal nutrition is needed to fuel you properly!***
- ***Food choices affect:***
 - ***Weight regulation***
 - ***Mental & physical performance***
 - ***Overall energy levels***
 - ***Overall quality of life***
 - ***Immune system***
 - ***Risk of diseases/cancer***
 - ***(i.e., Heart disease, diabetes, hypertension)***

2

So let's take a quick look to truly understand how much nutrition/food can affect our daily lives! Often times, we underestimate the impact that food has on us. This encompasses more than just your work performance; it affects your personal health and well being for both the short and long term. The overall goal is to feel good and energized, which can be greatly affected by what your putting in your body on a daily basis.

Read through list of everything that food can impact.

Incorporating positive eating habits can make a huge impact and improve a variety of factors and conditions in your life, but the opposite can be just as detrimental!



UNCLASSIFIED

Improper Nutrition

Short term problem



3

Following a poor diet and bad eating habits can increase the risk of developing a variety of undesirable health conditions.

The problem is, many of those complications take time. But what will impact you right away, is the lack of adequate fuel source. Instead of looking at nutrition as good or bad, wrong or right, it's better to classify everything as a fuel source, and understand that different "fuel" sources will keep you going longer than others.

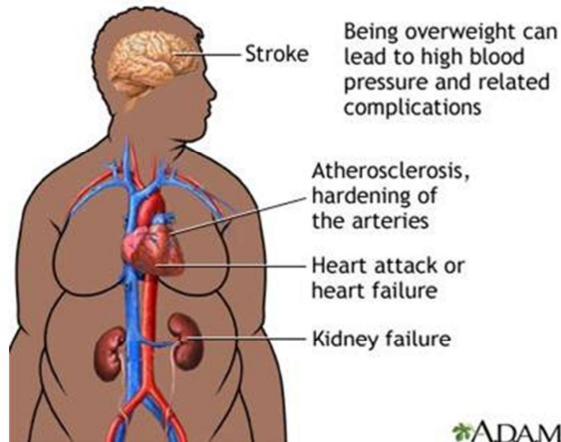
Depending on what you eat/drink, your tank will either be running on empty, or it could be full. The choice, and you make a lot of them every single day, is completely up to you.

But as we move forward and look at a variety of scenarios and information, always remember that the primary goal of food, is to provide adequate fuel for you to do what you do!



UNCLASSIFIED

Long term complications



4

Considering a longer timeline, unfortunately, inadequate food sources continually over time will have a variety of negative health consequences as well. And the negative effects go far beyond gaining weight, which is the most common association to poor eating. But poor nutrition does not always lead to gaining weight, and may negatively affect us in a variety of other ways, including decreased energy levels and loss of sleep, as well as joint pain and muscle soreness. So just because an individual is skinny, it doesn't constitute healthy.

Typically, most diseases develop over time, and while you may not be concerned about it now, what you do today will impact your future!



UNCLASSIFIED

Nutrition Challenges

- **Living environment will impact how/what you eat**

- **Barracks**

- *Rely on minimal equipment (microwave)*
 - *May rely on eating out more often*



- **Overseas deployment**

- *New culture; new foods; minimal familiarity*

- **Underway: ship/submarine**

- *Limited availability to foods*



- **General travel**

5

Now that we have a slightly better understanding about the overall importance of nutrition, let's look at the variety of challenges that you as sailors/military members face every day. Depending on your duty station or current environment, you'll face different challenges. Some will carry over, and any positive or bad habits you learn from one environment may carry over into the other. So it's important to develop good habits first!



UNCLASSIFIED

Daily limitations may include:

–Decreased accessibility to foods

- *Depends on your “environment”*



–Time constraints

- *Galley hours may not accommodate work schedules*
- *Unable to eat for extended periods of time*
- *Rely on inadequate sources for energy (i.e. soda, energy drinks)*

–Travel

- *May have to rely on boxed/bagged lunches, fast food outlets, snack foods*
- *Encounter food restrictions/cultural changes*

6

Let's look at some specific limitations from day to day, which are just carried over from the last slide.

-Read through list.

Can you think of any others?

Many times you don't need to be deployed or on travel to run into most of these restrictions.

Knowing that these are our common problems, let's look at some of the specific environments in which these occur and let's see if we can come up with some specific strategies to deal with these challenges.



UNCLASSIFIED

Deployed at Sea

- **Type of ship will carry different limitations**
 - *Know the hours of the galley, how often food is available*
- **Primary food locations**
 - *Galley, ship store, vending machines, personal supply*
- **Know the packing/storage restrictions**
 - *How much space will you have available?*
 - *Can you store foods in your rack or workspace?*
 - *Use zip lock bags instead of jars/boxed items*

Important to plan ahead!

- *Many of these items need to be identified before you actually deploy*

“Failing to Plan is Planning to Fail”

7

If you're a sailor, being deployed at sea may be the most common environment, and yet it's one of the most unique challenges you may face.

Between ship types and sizes, we'll find a variety of differences that impact food. On a ship, it's important to focus and rely on the places where you will be receiving your food. Typically you are limited to the galley, ship store, and vending machines, along with anything that you have pre-packed or bought during a port call. Besides the galley, relying on what you pre-pack may be your biggest asset to proper fueling while being deployed underway.

Storage capabilities may be the most variable, and it helps to know your specific restrictions before you deploy. When considering your options, you need to have a plan and try to prepare for some of the limitations you will face.



UNCLASSIFIED

Sample menu within galleys

	FOOD ITEM	CALORIES	PROTEIN (grams)	FAT (grams)	CARBOHYDRATE (grams)
♥	SHRIMP SCAMPI	216	26	8	8
♥	ROAST TURKEY	201	26	10	0
♥	CHILI BAR (U/O)	257	26	11	14
	CRANBERRY SAUCE	86	0	0	22
	TURKEY GRAVY	2	0	0	0
♥	OVEN BROWNED POTATOES	119	2	4	20
	CORNBREAD DRESSING	287	6	9	47
♥	DIRTY RICE	51	2	1	10
♥	SIMMERED BLACK BEANS	39	1	2	5
♥	SCANDINAVIAN VEGETABLE BLEND	50	3	0	10
♥	SALAD BAR	Varied based on selection			
	BROCCOLI AND TORTELLINI SALAD	111	5	3	16
	BLONDIES	414	4	21	55
	ASSORTED PIE	316	3	16	41
	GELATIN CITRUS	147	23	0	3
♥	FRUIT BAR 2	238	3	1	61
	BREAD BAR	245	7	3	48
	ICE CREAM BAR	Varied based on selection			
	BEVERAGE: MILK	Varied based on selection			
	BEVERAGE: HOT BEVERAGE	Varied based on selection			
	BEVERAGE: POWDERED BEVERAGE BULK (O)	Varied based on selection			
	BEVERAGE: SLUSHY VARIETY (O)	Varied based on selection			
	BEVERAGE: CARBONATED BIB (O)	Varied based on selection			
♥	Indicates a healthier choice option				
	May be healthy based on type chosen				

For further classification & understanding of "healthier" food choices, refer to "Go For Green" criteria

8

So let's look at what's available for you, starting with the galley's, which is your primary food source. For most sailors, you need to utilize the galleys and the food they provide. Above represents an actual lunch menu aboard a ship, with the heart logo indicating "well balanced" food dishes or items. As you can see, for any menu, usually around half of the items served will be "better for you" choices, although it's still important to choose a variety of the foods in moderate amounts, regardless of what it is.



UNCLASSIFIED

Go For Green

- **Green, yellow, and red color coding system within the galleys**



Entrees and Sandwiches: Less than: <ul style="list-style-type: none">• 800 calories• 15 grams of total fat• 75 mg of cholesterol• 480 mg of sodium <i>* Always try to choose low saturated fat and sodium options; try to use high fiber choices</i>	Entrees and Sandwiches: Between: <ul style="list-style-type: none">• 800-700 calories• 15-20 grams of total fat• 75-110 mg of cholesterol• 480-700 mg of sodium <i>* Always try to choose low saturated fat and sodium options; try to use high fiber choices</i>	Entrees and Sandwiches: Greater than: <ul style="list-style-type: none">• 700 calories• 20 grams of total fat• 110 mg of cholesterol• 700 mg of sodium <i>Always try to choose low saturated fat and sodium options; try to use high fiber choices</i>
Sides: Less than: <ul style="list-style-type: none">• 225 calories• 4 grams of total fat <i>* Always try to choose low saturated fat and sodium options; try to use high fiber choices</i>	Sides: Between: <ul style="list-style-type: none">• 225-350 calories• 4-6 grams of total fat <i>* Always try to choose low saturated fat and sodium options; try to use high fiber choices</i>	Sides: Greater than: <ul style="list-style-type: none">• 350 calories• 6 grams of total fat <i>Always try to choose low saturated fat and sodium options; try to use high fiber choices</i>
Desserts: Less than: <ul style="list-style-type: none">• 250 calories• 6 grams of total fat	Desserts: Between: <ul style="list-style-type: none">• 250-350 calories• 6-11 grams of total fat	Desserts: Greater than: <ul style="list-style-type: none">• 350 calories• 11 grams of total fat
Soups: Less than: <ul style="list-style-type: none">• 250 calories• 6 grams of total fat• 480 mg of sodium	Soups: Between: <ul style="list-style-type: none">• 250-350 calories• 6-11 grams of total fat• 480-700 mg of sodium	Soups: Greater than: <ul style="list-style-type: none">• 350 calories• 11 grams of total fat• 700 mg of sodium
Beverages: Less than: <ul style="list-style-type: none">• 3 grams total fat• No added sugar	Beverages: Between: <ul style="list-style-type: none">• 4-8 grams total fat	Beverages: Greater than: <ul style="list-style-type: none">• 8 grams of total fat

– Check with your galley staff for more information

<http://hprc-online.org/nutrition/fighting-weight-strategies#joint-services>

9

Available in all galleys, Go for Green helps identify foods that you should primarily focus on, as well as identifying other foods that you should consider having less of, or completely avoiding. It provides a wealth of information to help assist you in your daily food choices, and allows you to better understand what “good” food choices actually would be. Go for Green is one of the many resources that we will discuss today, and please either take a picture or write down the website information so you have it for future use. While we have limited time to discuss everything today, resources like this one are readily available for you with tons of information. So take advantage of the valid and reputable resources that are out there.



UNCLASSIFIED

Deployable Snacks/Foods

Pre-packable/ Storage Items

Nut butters (Peanut, almond)

- Pair with whole grain crackers or bread

Beef Jerky (original)

Powdered or dried Products

- Powdered Milk, dried fruit etc...

Nuts & seeds (unsalted, dry)

- Almonds, peanuts, sunflower, flax, pecans etc...
- Create home made trail mixes (mix with dried fruit)

Whole grain oatmeal/cereal packets

Granola Bars/ Protein Bars

- Natures Valley, Lara, Odwalla, Kind, Clif



****When choosing any snack, focus on keeping the amount small****

10

As we mentioned earlier, planning out and researching what you can bring on the ship prior to deploying can be advantageous to fueling properly when deployed. There are a variety of snacks that you can choose from, and understand that any snack can play a vital component to your everyday fueling strategies. However, you need to use moderation for some snacks that are calorie dense. All of the snacks listed above will provide more of an optimal fuel compared to sweets and other high fat snacking options that are common in the ship store and vending machines.



UNCLASSIFIED

Limited Shopping Options

Products to buy at NEX/Mini Mart/Ship Store

Non-Refridgeable items that may keep for multiple days

- ***Fresh fruit: bananas, apples, oranges etc...***
 - *Can last 5-10 days dry storage*
- ***Canned/snack pack fruit cups***
 - *No sugar/syrup added*

Refridgeable items or use within 2 hours of purchase

- ***Dairy Products (milk, yogurt, cheese sticks)***
- ***Hard boiled eggs***
- ***Deli meat sandwiches***
- ***Parfaits or ready to serve fruit cups/ vegetable packs***

11

When considering options at the ship store, all of those previous snacks work all the time, while above looks at some foods that wouldn't store or keep as nearly as long. But these can all be great options as well. Meals and snacks that focus on fresh, less processed products will be the best options.



UNCLASSIFIED

General Guidelines

- **Daily Characteristics**

- $\frac{1}{2}$ *your plate should be fruits and vegetables*
- *Make half your daily servings “whole grain”*
 - *Examples: oatmeal, brown rice, whole grain breads and cereals*
- *3 servings of non or low fat (0-1%) milk or plain yogurt*
 - *Avoid/limit products with added sugars such as flavored milks*
- *Incorporate a serving (small handful) of nuts or seeds*
- *Drink at least $\frac{1}{2}$ your bodyweight in fluid ounces primarily coming from water (i.e. 200lb male = 100 oz of water)*

Don't cut out your favorite foods! Learn to balance them with the above recommendations throughout the day!!

12

We've identified some of the main areas where you will get your food from, and looked at some of the positive food choices. But we can continue to look at ways to characterize how to implement this throughout the day. Some basic characteristics that can really help you build an appropriate meal plan are provided: *go through list*.

While some of the information seems very general and broad, it's important to allow flexibility based on what you have available.

Let's look at what it would actually look like, again considering the food choices and information we already mentioned.



UNCLASSIFIED

Visualizing Your Plate



13

Seeing all of the guidelines that we've mentioned can sometimes be difficult to actually visualize how it would look. The meals and snacks you choose throughout the day can take on many shapes and sizes, and this will depend on a variety of things, starting with your specific needs. Meals should be colorful and include a variety of choices and food groups. No single food type should dominate a meal or be overflowing on your plate. The pictures above represent just a few different good dishes and their general characteristics.



UNCLASSIFIED

Unbalanced Meals



14

Here are some examples of “not so good” plates. What most of these plates have in common is that they lack vegetables, which is evident in the lack of color. They also are not portion controlled at all, and are dominated by large amounts of high fat foods or one or two food groups. There’s no balance involved on any of these plates, and it should be easy to recognize the problems when compared to the previous pictures.



UNCLASSIFIED

Visualize all of the daily snacks on 1 plate



15

When it comes to snacking throughout the day, it may help to visualize all of them on a plate as well, to better understand a balance. When considering snacks, again remember that not every snack needs to be perfect. As you can see on the left plate, one of the snacks are chocolates, but this can be balanced out with the other snacks which include an apple, dried fruit (dates), and nuts (pistachios).

Similar to your meals, what your snacks actually look like can be much different than what is seen here, which may be ok.

Unless they look something like...



UNCLASSIFIED

Less Optimal Snacks



16

So when we hear snacking, this may be the type of image that comes to mind? Not your best choices here, and each individual snack may not appear that bad by itself, but when you look at it throughout the entire day, it drastically adds up to a lot of calories and not much else.

So what about the liquid options? Often times, we consume them and forget that they too provide calories and often times little else. All of these options are examples of what we consider poor “fuel” choices.



UNCLASSIFIED

7 Side Effects of Soda

Phosphoric Acid - Weakens bones and rots teeth

Excessive artificial sweeteners makes you crave more

Carmel Color - Made from the chemical caramel, is purely cosmetic, it doesn't add flavor yet is tainted with carcinogens

Formaldehyde - Carcinogen, it is not added in soda but when you digest aspartame, it will break down into 2 amino acids and methanol = Formic acid + Formaldehyde (diet sodas)



High Fructose Corn Syrup is a Concentrated form of sugar, Fructose derived from corn. It increases body fat, cholesterol and triglycerides and it also makes you hungry.

Potassium Benzoate = preservative that can be broken down to benzene in your body. Keep your soda in the sun and benzene = Carcinogen

Food Dyes = impaired brain function, hyperactive behavior, difficulty focussing, lack of impulse control

17

Now that we mentioned soda and energy drinks, let's take a closer look at all the negative effects that soda and similar drinks may have to our health. This includes regular, diet products, and any other calorie free option that we often times label as "better" than the regular option. But regardless of if it provides calories or not, the variety of chemicals and other stimulants could cause a wide assortment of negative reactions. So this may include all soda products, as well as energy drinks, sports drinks, crystal light products and so on.



UNCLASSIFIED



~~X~~ Stimulant Energy drinks-

- Typically contain caffeine, sugar, and many other ingredients:
-Gaurana, ginseng, panax, taurine, ginko biloba, etc...

These ingredients alone or in combinations could lead to multiple negative effects:

Irregular heart beat / palpitations

Tremors / shaking

Upset stomach

Headaches

Restlessness / insomnia

Light-headed / dizziness

Most stimulants are not well understood and may lead to long term issues

Actual Sources Energy: Carbohydrate, Protein, and Fat

Most optimal when eaten in combinations

18

We typically throw all of the liquid drinks together, but energy drinks tend to receive a classification of their own. One of the biggest issues with energy drinks is that many of them rarely provide “true” energy. Referring to them as “stimulant” drinks is much more accurate, and many of these stimulants when consumed in large doses or combined may cause a variety of negative effects.

Actual energy only comes from 3 nutrients: carbohydrate, protein, and fat. When feeling tired, worn down, or low on energy, rely on adequate food sources that will provide you real, sustainable energy as well as giving you a variety of other nutritional benefits. Adequate rest may also be in order to properly recover, which can also be negatively impacted by energy drinks.



UNCLASSIFIED

Portion Distortion

What you're served

What's one serving



5.2 lb cheeseburger, French fries, 1/4 cup
lettuce, tomato slice and ketchup
3,345 calories
83 grams fat



1.4 lb cheeseburger, half the French fries,
2 tablespoons lettuce, tomato slice and ketchup
685 calories
33 grams fat

19

Let's now look at another big problem with our food consumption, and that's regarding how much we eat. Our portion sizes, and what we consider 1 serving, is completely out of whack. We commonly eat 2 or even 3 times more than we should per serving, and this often leads to an excess of calories and other things we don't necessarily need in our body.



UNCLASSIFIED

Portion Control

Quick Tips:

3-4 ounces of meat is about the size and thickness of a deck of playing cards.



A medium sized piece of fruit is the size of a tennis ball.



1 ounce of cheese is about the size of four stacked dice.



1/2 cup of ice cream is the size of a tennis ball.



1 cup of mashed potatoes is the size of your fist (depending on your size; commonly the size of a female fist).



1 ounce of nuts should fit into the palm of your hand.



1 teaspoon of margarine or butter is about the size of the tip of your thumb.



20

As we discuss portion sizes, let's quickly look at some tools and visuals that you can use to size up your portions. The images on the right represent a portion size of a certain type of food.

Note: Go through the different images and identify real foods that would fit these portion sizes. If available, have a deck of cards, phone, or ball as a visual and give to attendees to see.



UNCLASSIFIED

Portion Control

- ***Snacking plays a big role when deployed or on travel***
 - *Need to use moderation & choose wisely*
- ***The foods below can be very nutritious, but what you choose may be very different when considering calories***
 - *Fresh fruits & vegetables will usually provide the most quantity per serving of calories*
- ***Focus on how much you can get for the sample size!***

All pictures represent a serving of 200 calories



21

While portion control applies to everything you eat, understanding the portions of your snacks, and how different one snack versus another can be considering calories. We always hear the focus to eating well is centered around fresh fruits and vegetables, and part of the reason is because of how much you can consume when considering the total calories it provides. Just look at a few of the plates shown above. Now other snacks such as nuts, while a great choice as a snack, can provide a lot of calories for a very small portion. Let's look at some other examples of commonly chosen snacks that may not be as beneficial for a variety of reasons.



UNCLASSIFIED

Portion Control

- **Many food choices can be less “optimal” for multiple reasons.**
 - *Usually don’t get as much per serving considering calories*
 - *Typically considered as a poor “fuel” choice*
 - *Little nutrient value*
- **Each serving below provides ~200 Calories, but often times we consume much more!**

Items commonly found in ship store or vending machines:

Snickers Doritos M&M’s Hershey Kisses Gummy Bears



22

These images represent “less optimal” choices, and are common foods found in vending machines and the ship store.

Unfortunately, most of these snacks are sold in bags and containers that provide much more than what is shown on these plates, leading to a high consumption of calories while receiving few other nutrients or benefits.



UNCLASSIFIED

Tips when Eating Out

***Regardless of what food outlet is available to you,
the choice of eating better is up to you!***

Select foods that are...

- Steamed
- Broiled
- Baked
- Roasted
- Poached
- Lightly sautéed or stir-fried

SLOW DOWN

- ***It takes up to 20-30 minutes for your body to process how much you ate.***
- ***The uncomfortable, bloating feeling indicates "overeating"***

23

Another common commodity when deployed is to eat out. Whether you're choosing 7 course meal restaurants or fast food chains, you still have the ability to make appropriate food choices. There are a variety of options that you can choose from, or specifically ask to be served. Select foods that are steamed, broiled, baked, roasted, poached, lightly sautéed, stir-fried or garden fresh.

When you have time available, slow down when eating your food. Allow your body time to process what you ate.



UNCLASSIFIED

- **Avoid fried foods or share them**

- Ask for different cooking method

- **Choose less processed options**

- **Get condiments on the side**

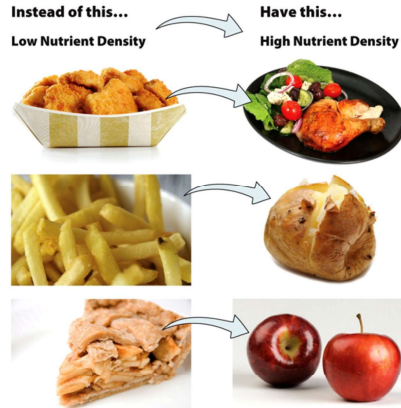
- Avoid mayo, cheese, or butter and save ~300 calories

- **Skip dessert**

- A fresh piece of fruit is a great sweet alternative

- **Decrease Portion Size!!!**

- Eat ½ your meal & take the rest home



24

Here are some additional tips to follow when eating out. Ask for steamed vegetables without butter. Avoid fried foods or share them when you do order them. Choose broiled, baked, grilled or roasted instead. For example a baked potato instead of fried potatoes. And always ask for sauces, gravy, and dressings to be placed on the side. Mayo and cheese on the side could save up to 300 calories too.

If you have a refrigerator available, ask for a doggy bag so you can bring home half of you meal, or share your meal with someone else. Don't feel obligated to eat everything on your plate.



UNCLASSIFIED

Eating on a budget?

- Many associate eating “healthier” as an increased expense.
- Look at prices and number of servings to get an accurate comparison



VS



Meal #1: Chicken Teriyaki Stir Fry	Price	# Servings	Meal #1: Whopper Value Meal	Price	# Servings
Pre-cooked Boneless Chicken Breasts (1lb bag)	\$3.79	6 (3oz)	Whopper	\$3.49	1
Uncle Ben's Instant Brown Rice (1 lb box)	\$2.29	6 (1/3 cup)	Medium Fries	\$1.89	1
Frozen Stir Fry vegetables (12 oz bag)	\$1.99	6 (1/2 cup)	Medium Regular Coke	\$2.19	1
Low Sodium Teriyaki sauce	\$1.79	8 (2 Tbsp)			
Total	\$9.86	6 servings	Total (value price)	\$6.39	1 meal
Meal #2: PB Sandwich, Milk, Fruit	Price	# Servings	Meal #2: Classic Chicken Meal	Price	# Servings
Jiffy Natural's Peanut Butter(18oz jar)	\$2.09	16 (2 tbsp)	Grilled Chicken Sandwich	\$3.99	1
1 Loaf Whole Wheat Bread	\$1.70	12 (2 slices)	Medium Onion Rings	\$2.09	1
1 gallon 1% Milk	\$2.39	16 (8 oz)	1 Milk (12oz)	\$1.89	1
6 Apples (2lb bag) or 9 Bananas (3lb)	\$2.40	6-9			
Total	\$8.58	9 Servings	Total (value price)	6.89	1 meal

25

Are you eating out to save money? Many times we hear that “eating healthy” or better, is more expensive and time consuming. But is it really? Now if you’re choosing organic type foods, that will be absolutely true, but there are a variety of ways to eat better and still keep to a strict budget. Let’s go through the chart above, which depicts a few different meals that can commonly be made in a Barracks type setting. Both meals on the left are simple, and if you check out the total number of servings those ingredients would make, it’s much more than what you can get when eating out, while the costs are fairly similar.



UNCLASSIFIED

Proper Hydration

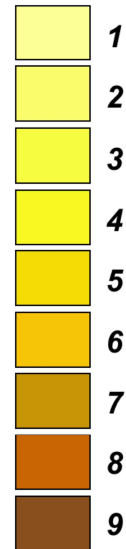
- **Hydration is crucial component to your daily performance & overall function**

– **1 liter of water loss (~2 pounds) can lead to:**

- Increased heart rate
- Increased core temperature
- Lack of concentration
- Difficulty breathing

- **Urine color isn't the most scientific method, but is a quick and easy indicator**

All types of fluid are not created equal!



26

Another common topic and important one, is Hydration!!

You hydration status will also affect your performance and work output in a variety of ways. If you sweat one Liter of water, which would equate to approximately 30-40 minutes of exercise in a warm climate, your heart will have to beat eight extra times per minute, your heart will also pump out 1 liter less blood, and your body temp will increase. All of these conditions will lead to decreased production and body efficiency, and negatively impact your performance. Also, this problem may not occur immediately, it may develop from one or even several days of inadequate hydration. Taking note of your urine color is one simple and quick method to estimate your hydration status.

The darker the color, the more dehydrated you may be. Food and vitamins can also affect urine color, but this is still a good general guideline.

When you are properly hydrated, it's common to go to the bathroom every 3-4 hours, which makes it easier to monitor. However, as you get dehydrated, the ability to urinate will decrease as the body is trying preserve as much water as possible.

Remember that other fluids you consume will also impact your hydration status, and any caffeine products such as soda or energy drinks, as well as alcohol will negatively impact your hydration.



UNCLASSIFIED

Alcohol

Negative impacts related to nutrition

- ***Increases the risk of dehydration***
- ***Interferes with bodies utilization of nutrients***
- ***Inhibits appetite and increases risk of nutrient deficiency***

Even small amounts (1-2 alcoholic drinks) can negatively impact performance in a variety of ways:

- ***Motor performance***
 - ***Hand-eye coordination***
- ***Cognitive function***
- ***Strength & power output***
- ***Aerobic Performance***

27

On the topic of proper hydration, although alcohol isn't a problem at sea, in many other environments it is readily available and often times over-consumed. Although alcohol is not a nutrient, it does provide calories, which could lead to weight gain. However the utilization of those calories are different when compared to the nutrients (carbohydrate, fat, & protein) and it cannot be sustained as a vital fuel source. Alcohol actually impairs a variety of mechanisms in the body, and will inhibit a variety of nutrients from being absorbed properly, which in turn will cause nutrient deficiencies and lead to possible health problems.

Alcohol negatively impacts performance in a variety of ways as well.



UNCLASSIFIED

Alcohol Increases Calorie Intake

*Diets of drinkers on drinking and nondrinking days: NHANES 2003–2008.
Am J Clin Nutr. May 2013, 97(5)*

***In 2013, study indicates males take in an
additional 400 calories, while females
consume 300 additional calories when
drinking alcohol***

28

When you drink, you also tend to consume more calories than you would on a non-drinking day. This increase calorie load will also lead to excess weight gain, in addition to the other negative effects that alcohol is providing. Alcohol does provide calories, and this increase may be attributed to both the alcoholic drinks in addition to foods and other items that are commonly chosen when drinking.



UNCLASSIFIED

Resources

<http://www.navyfitness.org/>

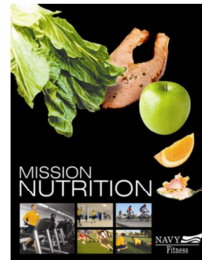
Navy Operational Fitness & Fueling Series (NOFFS)

- Detailed workouts & virtual mealbuilder based on your personal goals
- Free downloadable APP



Mission Nutrition Course

- 2 day science-based nutrition education course
- Includes a variety of topics



Contact your local MWR fitness staff for further information

29

Navy Fitness has a variety of resources and tools available for you, all focused on improving your overall health. NOFFS is just one of those resources, focused on physical activity and nutrition, it's a complete program that takes away any guesswork .

Notes: *With time permitting, click on the link and go through some of the website to show what's available online.*

UNCLASSIFIED



Additional Resources



HUMAN PERFORMANCE RESOURCE CENTER
hprc-online.org



**OPERATION
SUPPLEMENT
SAFETY**
A DoD and HPRC
DIETARY SUPPLEMENT
RESOURCE FOR
WARFIGHTERS

<http://hprc-online.org/>

30

The Human Performance Resource Center is a website that is regularly updated and answers a variety of questions and topics that are currently in the news. They also have a wealth of resources and information for any topic related to nutrition, fitness, and overall health. The OPSS initiative is focused on educating military members and making them aware regarding the risks about dietary supplements, and provides a wealth of education tools and resources.

Notes: *With time permitting, click on the link and go through some of the website to show what's available online.*



UNCLASSIFIED

Additional Resources

<http://www.choosemyplate.gov/>

10 tips
Nutrition
Education Series

choose MyPlate
10 tips to a great plate



Making food choices for a healthy lifestyle can be as simple as using these 10 Tips. Use the ideas in this list to balance your calories, to choose foods to eat more often, and to cut back on foods to eat less often.

1 balance calories

Find out how many calories YOU need for a day as a first step in managing your weight. Go to www.ChooseMyPlate.gov to find your calorie level. Being physically active also helps you balance calories.

2 enjoy your food, but eat less

Take the time to fully enjoy your food as you eat it. Eating too fast or when your attention is elsewhere may lead to eating too many calories. Pay attention to hunger and fullness cues before, during, and after meals. Use them to recognize when to eat and when you've had enough.

3 avoid oversized portions

Use a smaller plate, bowl, and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of your meal.

4 foods to eat more often

Eat more vegetables, fruits, whole grains, and fat-free or 1% milk and dairy products. These foods have the nutrients you need for health—including potassium, calcium, vitamin D, and fiber. Make them the basis for meals and snacks.

5 make half your plate fruits and vegetables

Choose red, orange, and dark-green vegetables like tomatoes, sweet potatoes, and broccoli, along with other vegetables for your meals. Add fruit to meals as part of main or side dishes or as dessert.

6 switch to fat-free or low-fat (1%) milk

They have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.

7 make half your grains whole grains

To eat more whole grains, substitute a whole-grain product for a refined product—such as eating whole-wheat bread instead of white bread or brown rice instead of white rice.

8 foods to eat less often

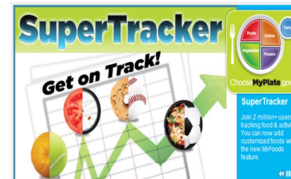
Cut back on foods high in solid fats, added sugars, and salt. They include cakes, cookies, ice cream, candies, sweetened drinks, pizza, and fatty meats like ribs, sausages, bacon, and hot dogs. Use these foods as occasional treats, not everyday foods.

9 compare sodium in foods

Use the Nutrition Facts label to choose lower sodium versions of foods like soup, bread, and frozen meals. Select canned foods labeled "low sodium," "reduced sodium," or "no salt added."

10 drink water instead of sugary drinks

Cut calories by drinking water or unsweetened beverages. Soda, energy drinks, and sports drinks are a major source of added sugar, and calories, in American diets.



USDA United States Department of Agriculture
Center for Nutrition Policy and Promotion

Go to www.ChooseMyPlate.gov for more information.

DIG TipSheet No. 1
June 2011
USDA is an equal opportunity
provider and employer.

31

The United States Department of Agriculture website www.Choosmyplate.gov is a great resource that provides a wealth of handouts and information and also gives us a simple idea of what a plate should look like. This is one handout that provides 10 simple tips/guidelines to improving your plate. The supertracker also is an online tool that allows you to put in what you ate throughout the day and track your calories, it also can compare food items and shows you the nutrient breakdown. It can also track your daily activities, and when combined with your food log, can indicate if your consuming too much or too little based on your daily needs.

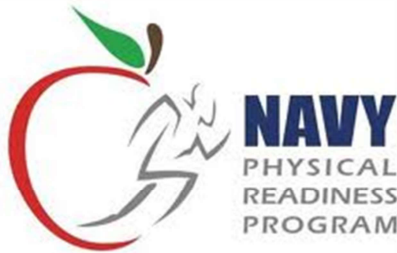
Notes: With time permitting, click on the link and go through some of the website to show what's available online.



UNCLASSIFIED

Additional Resources

<http://www.public.navy.mil/bupers-npc/support/physical/>



32

The physical readiness program website provides relevant and great information for sailors and also includes a variety of internal links and places to search for familiar information. Within this website, you can also search for Registered Dietitians that may be available at your local MTF.



UNCLASSIFIED

Questions?

