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.
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!
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!
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!
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!
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.
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”

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.
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.

*For further classification & understanding of “healthier” food choices, refer to “Go For Green” criteria*
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.
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.
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.
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.
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.
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.
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…
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.
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.
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.
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.
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.
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.
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.
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.
• 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

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.
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.

<table>
<thead>
<tr>
<th>Meal #1: Chicken Teriyaki Stir Fry</th>
<th>Price</th>
<th># Servings</th>
<th>Meal #1: Whopper Value Meal</th>
<th>Price</th>
<th># Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-cooked Boneless Chicken Breasts (1 lb bag)</td>
<td>$3.79</td>
<td>6 (3oz)</td>
<td>Whopper</td>
<td>$3.49</td>
<td>1</td>
</tr>
<tr>
<td>Uncle Ben’s Instant Brown Rice (1 lb box)</td>
<td>$2.29</td>
<td>6 (1/3 cup)</td>
<td>Medium Fries</td>
<td>$1.89</td>
<td>1</td>
</tr>
<tr>
<td>Frozen Stir Fry vegetables (12 oz bag)</td>
<td>$1.99</td>
<td>6 (1/2 cup)</td>
<td>Medium Regular Coke</td>
<td>$2.19</td>
<td>1</td>
</tr>
<tr>
<td>Low Sodium Teriyaki sauce</td>
<td>$1.79</td>
<td>8 (2 Tbsp)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$9.86</strong></td>
<td><strong>6 servings</strong></td>
<td><strong>Total (value price)</strong></td>
<td><strong>$6.39</strong></td>
<td><strong>1 meal</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meal #2: PB Sandwich, Milk, Fruit</th>
<th>Price</th>
<th># Servings</th>
<th>Meal #2: Classic Chicken Meal</th>
<th>Price</th>
<th># Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jiffy Natural’s Peanut Butter (1oz jar)</td>
<td>$2.09</td>
<td>16 (2 tbsp)</td>
<td>Grilled Chicken Sandwich</td>
<td>$3.99</td>
<td>1</td>
</tr>
<tr>
<td>1 Loaf Whole Wheat Bread</td>
<td>$1.70</td>
<td>12 (2 slices)</td>
<td>Medium Onion Rings</td>
<td>$2.09</td>
<td>1</td>
</tr>
<tr>
<td>1 gallon 1% Milk</td>
<td>$2.39</td>
<td>16 (8 oz)</td>
<td>1 Milk (12oz)</td>
<td>$1.89</td>
<td>1</td>
</tr>
<tr>
<td>6 Apples (2 lb bag) or 9 Bananas (3 lb)</td>
<td>$2.40</td>
<td>6-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8.58</strong></td>
<td><strong>9 Servings</strong></td>
<td><strong>Total (value price)</strong></td>
<td><strong>$6.89</strong></td>
<td><strong>1 meal</strong></td>
</tr>
</tbody>
</table>
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.
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.
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.
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.
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.
The United States Department of Agriculture website www.choosemyplate.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.
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.

Additional Resources

http://www.public.navy.mil/bupers-npc/support/physical/
Questions?