

# EGHTING NEIGHT A TOTAL FORCE FITNESS GUIDE

# CONTENTS

4	INTRODUCTION	
5	CHALLENGE 1: ASSESS YOUR HABITS	
	CREATE NEW HABITS TO HELP YOU LOSE WEIGHT	7
	HABITS TRACKER	9
	GET SMART ABOUT SETTING GOALS	10
	SMART GOALS PLANNER	12
	SMART GOALS PLANNER	13
	3 STRATEGIES TO BUILD MOTIVATION FOR LOSING WEIGHT	14
	ADDITIONAL RESOURCES: CHALLENGE 1	17
18	CHALLENGE 2: CREATE A ONE-WEEK MEAL PLAN	
	WHAT IS A "HEALTHY" WEIGHT-LOSS EATING PLAN, ANYWAY?	20
	PROS AND CONS OF POPULAR EATING STYLES	23
	HOW TO USE A HUNGER SCALE FOR HEALTHIER HABITS	26
	POWER PLATE: EAT TO FUEL YOUR PERFORMANCE	28
	FAD DIET RED FLAGS	29
	SAMPLE GROCERY LIST AND WORKSHEET	31
	MY GROCERY LIST	33
	SMART GROCERY SHOPPING ON A BUDGET	34
	SAMPLE 7-DAY MEAL PLAN AND WORKSHEET	35
	7-DAY MEAL PLAN WORKSHEET	36
	MAKE HEALTHY CHOICES, EVEN WHEN YOU'RE DINING WITH OTHERS	37
	ADDITIONAL RESOURCES: CHALLENGE 2	41
<b>42</b>	CHALLENGE 3: GET ENOUGH EXERCISE	
	REGULAR PHYSICAL ACTIVITY IS IMPORTANT FOR HEALTH AND PERFORMANCE	43
	REVIEW YOUR SMART GOALS	45
	SMART GOALS PLANNER	46
	SMART GOALS PLANNER WORKSHEET	47

MILITARY WORKOUT PLANNING FOR BEGINNERS

48

	CARDIO PLANNER	51
	WEIGHT-TRAINING PLANNER	53
	GUIDE TO NUTRIENT TIMING	54
	ADDITIONAL RESOURCES: CHALLENGE 3	55
56	CHECK-IN	
<b>57</b>	CHALLENGE 4: GET 7-9 HOURS OF SLEEP EACH NIGHT	
	THE "WEIGHT" OF POOR SLEEP	58
	SLEEP & PERFORMANCE	60
	10 SLEEP HABITS TO HELP YOU LOSE WEIGHT	63
	DO YOUR EATING HABITS KEEP YOU AWAKE?	65
	COMPLETE A SLEEP DIARY	67
	SLEEP, EXERCISE, AND WEIGHT MANAGEMENT	69
	ADDITIONAL RESOURCES: CHALLENGE 4	70
<b>7</b> 1	CHALLENGE 5: MANAGE YOUR STRESS	
	HOW DOES YOUR STRESS MINDSET AFFECT WEIGHT LOSS?	73
	MAKE STRESS YOUR ALLY	<b>7</b> 5
	RELAXATION RESPONSE: HOW TO DEAL WITH UNHEALTHY STRESS	77
	TRACK YOUR RELAXATION RESPONSE SKILLS	<b>7</b> 9
	MINDFUL EATING FOR WEIGHT LOSS	80
	ADDITIONAL RESOURCES: CHALLENGE 5	82

## INTRODUCTION

If you've ever worried you might not make weight or pass your fitness test, this guide's for you.

What makes this weight-loss guide different from other tools? It encourages you to look at how different aspects of your life contribute to your weight and overall health in ways you might not expect.

For example, eating an apple instead of a piece of cake might seem like an obvious choice when you want to lose weight. But consider other factors beyond diet: What kinds of social settings are you in? Are you feeling more stressed or anxious than usual? Are you getting enough sleep?

#### **HOW IT WORKS**

This guide contains 5 challenges. Start with Challenge 1 so you can set a few things as a baseline. Then feel free to skip around and take on challenges as you like. You might want to improve just one or 2 areas rather than all 5. Or you might prioritize one challenge over another.

There's no specific timeline to complete the challenges, but 3 months is a good place to start. You'll be prompted to set your goals and timelines as you go.

You'll also want to use the "Check-in" section. (It's between Challenges 3 and 4 but meant to be used at whatever point you want. That way you can assess how you're feeling and make adjustments as needed.)

#### **BOTTOM LINE**

Healthy, sustainable weight loss isn't just about diet and exercise or quick fixes. Find out how you can optimize various factors that affect your health, so you can reach peak performance.

Use the links below to visit the Challenges (and the Check-in page) and get on your way to a healthy weight.

**CHALLENGE 1: Assess your habits** 

**CHALLENGE 2: Create a one-week meal plan** 

**CHALLENGE 3: Get enough exercise** 

CHECK-IN

CHALLENGE 4: Get 7–9 hours of sleep each night

**CHALLENGE 5: Manage your stress** 



# CHALLENGE 1: ASSESS YOUR HABITS

Your first challenge, should you choose to accept it, is to assess your current health habits as they relate to sleep, stress, exercise, and diet. The rest of the challenges can be completed in any order, but it's important to start with this one. You'll be able to use this workbook more effectively—and ultimately achieve your weight-loss goals—if you first identify your strengths and areas for improvement and then set a solid goal.

The first part of Challenge 1 is to record your habits for a week. Use the habits tracking sheet in the Tasks section below to record 4 things every day for one week:

- How many hours of sleep did you get last night? (Shoot for 7–9 hours.)
- How much exercise or physical activity did you get today? (Aim for 30+ minutes of moderate exercise.)
- How many fruits and vegetables did you eat today? (Aim for 4–5 servings each day.)
- How would you describe your mood today?



At the end of the week, assess how you did. Compare your results to the recommendations on the tracking sheet. Where did you fall short? What areas can you improve on? In some cases there isn't necessarily a right answer, such as how you felt on a given day.

The goal isn't to be perfect with every habit every day but to be mindful of your health habits and make small adjustments where you can.

Once you've reviewed your habits, set up SMART goals to look for areas of improvement so you're more likely to achieve your weight-loss goals.

**Specific** 

Measurable

Achievable or Actionable

Relevant

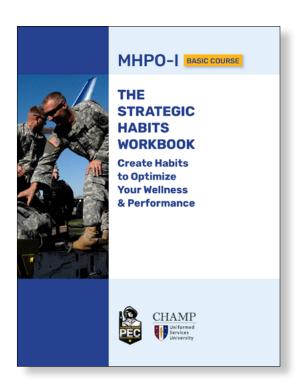
Time sensitive

Rather than just saying "I want to lose weight," SMART goals help you map out how you'll get there. A good SMART goal might sound like, "I will lose 15 pounds in the next 12 weeks by starting to implement healthier choices, because I need to pass my PT test."

You'll set other SMART goals along the way to help you achieve your primary weight-loss goal, but this is a good start. Use the SMART-goal worksheet in the Tasks list below to help you set up your initial weight-loss goal before you get started on the other challenges. This will establish a starting point for any changes—large or small—you want to make to improve your health.

#### **TASKS TO ACHIEVE CHALLENGE 1:**

- Create new habits to help you lose weight.
- Track your habits so you can tailor your weight-loss goals.
- Get smart about setting goals—and reap the rewards.
- Use this worksheet to set your SMART goals for weight loss.
- Learn a few tips to help build your motivation to lose weight.
- Find additional resources to build good weight management habits.
- Use HPRC's Strategic Habits Workbook to help you to develop good habits to optimize your weight loss and fitness goals.



#### CREATE NEW HABITS TO HELP YOU LOSE WEIGHT

The beginning of any new situation—such a new duty station, a birthday, the start of a new year, a new role, *or the start of a weight-loss plan*—is a great time to set new goals. When you **create a habit** to help achieve your goal, your behavior is more likely to stick! For example, if you work really hard to lose 10 pounds, but you don't make healthy eating and exercise a habit, it's likely you'll gain back the weight. Try these 4 strategies to help you develop new habits to reach—and keep—your goals.

1. **Make it simple.** The first mistake you might make when trying to develop a new habit is to think you can rely on willpower. Sometimes you're really motivated, but other days you just want to sit on the couch. Your motivation might change based on your mood, the weather, and other factors. One way to help overcome the shifts in motivation is to break the new habit into smaller, manageable pieces.

For example, say you want to start running every day when you get home. Instead of trying to run for 30 minutes, start with the goal of 5 minutes. When your motivation is low you can push through just 5 minutes of running. When your motivation is higher, you'll likely run longer. The goal is to make it easy to get started. Once you've gotten into the routine of running 5 minutes

each night, it'll be easier to add time, and eventually build up to your goal of running 30 minutes per night.

Try the WOOP—Wish, Outcome, Obstacle, Plan—strategy to help you increase your willpower and generate the energy and motivation you need to achieve your goals.

2. **Set up your environment for success.** Another way to help create a new habit is to set up your environment so it's easier to achieve your goal and harder to do the things that get in your way.

For example, say one of the main obstacles to exercising each day after work is that you normally like to sit and relax on your couch when you get home. One solution: before you leave in the morning, put your running clothes on the couch where you normally sit as a gentle reminder. Or pack your workout gear to bring with you to work to encourage you to exercise before you get home.

3. **Build on routines you already have.** Another part of starting a new habit is remembering to do it. This might seem easy, but the stresses of life can make it hard to remember to work on your new "habit." Setting alarms or making reminders can be effective, but it's even easier if you link the new habit to a routine you already do.





For example, if you want to be more grateful, each night at dinner ask everyone at the table to share 3 things they're grateful for. If you want to lose weight, do 15 squats after each time you brush your teeth. When creating a new habit, try to build your new action into a routine you already have.

4. Enjoy the process. If you can't get yourself to do the new "habit" at first, don't lose hope. Developing habits is often a trial-and error-process. Learn from your mistakes. If one thing doesn't work, try something else. Maybe you can break down the habit to make it simpler or find a different routine to connect it to. And try to enjoy the process! If your desired habit is to eat cookies every day, it's likely you'll succeed in no time, because eating cookies is fun. (But you won't lose much weight!)

Find a way to **make every new habit fun**: Congratulate yourself after each success; don't beat yourself up after each failure.

To learn more ways to accomplish your goals, watch HPRC's video Failing Forward: 6 Ways to Recover from Setbacks.

#### **BOTTOM LINE**

Creating new habits is a great way to set yourself up for long-term success in accomplishing new goals.

These 4 strategies—making the habit simple, setting up your environment for success, building on current routines, and finding ways to enjoy the process—can help you reach your goals more easily.



#### REFERENCES

- Fogg, B. J. (2009). *The behavior grid: 35 years behavior can change*. Paper presented at the Persuasive 2009, 4th International Conference on Persuasive Technology, Claremont, CA.
- Fogg, B. J. (2009). *A behavior model for persuasive design*. Paper presented at the Persuasive 2009, 4th International Conference on Persuasive Technology, Claremont, CA.
- Fogg, B. J., & Hreha, J. (2010). *Behavior wizard: A method for matching target behaviors with solutions*. Paper presented at the Persuasive 2010, International Conference on Persuasive Technology, Copenhagen, Denmark.
- Wood, W., & Rünger, D. (2016). Psychology of habit. *Annual Review of Psychology*, 67(1), 289–314. doi:10.1146/annurev-psych-122414-033417

# **HABITS TRACKER**

Tracking your habits on the worksheet below can help you know where to start when you want to change the way you approach a particular task. Print and use it to get going. Good luck! Use this worksheet to keep track of your sleep, exercise, eating, and mood.

	How many hours of sleep did you get last night? (Aim for 7–9.)	How much exercise and/ or physical activity did you get today? (Aim for 30+ minutes of moderate exercise 4–7 days per week.)	How many fruits and vegetables did you eat today? (Shoot for 4–5 servings of each.)	How would you describe your mood today?
Example:	7 hours (11 p.m6 a.m.)	30-minute run 1-mile walk with the dog Played outside with kids for 25 minutes before dinner	½ grapefruit for breakfast Apple with peanut butter for snack 1 cup broccoli with lunch 1 cup green beans with dinner	Did a mindfulness meditation after breakfast to get focused for the day.  Left work in time to get to my child's recital.  Felt very happy to spend time with the family.
MON				
TUES				
WED				
THURS				
FRI				
SAT				
SUN				

## **GET SMART ABOUT SETTING GOALS**

Goal setting can be a useful tool in many arenas. Nearly 90% of the time, setting specific and challenging goals leads to better performance than "do your best" goals or none at all. Goals can direct attention, mobilize effort, increase persistence, and help you form solid strategies.

Writing down your weight-loss goals can help you to achieve them. In addition, setting goals using a standardized method, such as the one described here, can help you stick with and feel you can accomplish those goals.

Set your weight-loss goals using the "SMART" goals technique (Specific, Measurable, Achievable or Action-oriented, Relevant, Time-sensitive).

#### **SPECIFIC**

Specific goals leave no room for doubt. For example, setting a goal to do better on your fitness tests might feel too large or vague. Instead, break it up into more narrowly focused targets, such as "I want to improve my APFT run time."

#### **MEASURABLE**

Decide how you'll measure whether you've met a specific goal. For example, you might want to shave 40 seconds off your APFT 2-mile run time (5 seconds off each quarter mile). Achievable goals like this serve as great milestones because they fuel motivation to set high goals and commit to them.

#### **ACHIEVABLE OR ACTION-ORIENTED**

Set achievable, action-oriented goals by paying attention to the language you use. Rather than using words such as "I'll try to shave 40 seconds from my time" (you might not) or even "I will shave off 40 seconds" (at some point in the future), say to yourself "I am shaving 40 seconds off my time" (that is, right now).

#### **RELEVANT**

Set goals that are relevant for you. 40 seconds might be impossible if you're already in top shape, or it might not be practical now if you're in poor condition. But it could be just right if you're reasonably fit but have room to improve. It will be easier to stay engaged and feel rewarded in the process when you set goals that fit what is both important and possible for you at the current time.





#### **TIME-SENSITIVE**

Create goals that are time-oriented for your overall goal and for the important sub-goals that can help you reach your larger goal.

**Overall goal:** Some improvements, especially ones related to long-term physical fitness, are dependent on individual factors, so the exact timeline will vary from person to person. For example, you might set a time frame to improve your run time by 40 seconds in 8 weeks, whereas your friend might set the same goal over a 12-week time frame. Quantifying a time frame for the process allows you to set a realistic schedule around your performance goals.

**Sub-goals:** Both performance goals and process goals can serve as sub-goals or benchmarks for monitoring progress toward your overall goals. *Performance goals*, such as shaving 5 seconds per week off your time, allow you to compare your performance between past and present rather than focus on your rank compared to others. *Process goals* are the important steps you take to accomplish your desired performance; they can be a bit more subjective but can still be quantified. For example, you might say, "I'm going to stick to my training schedule over the next 2 weeks. I will run at the designated time each day and follow through with recovery, with only one day I can reschedule." By breaking down a larger goal into specific, smaller goals that can be accomplished in the near future, you're more likely to move toward your larger goal step by step.

A word of caution with SMART goals: Don't let them stifle innovation! If you set goals that are too rigid, you could keep yourself "in the box" rather than allowing yourself to take the risks required for big new ideas to develop. You want to find the right balance.

The examples above are about achieving optimal physical performance, but these tips can help you set SMART goals across all your pursuits! Use the worksheet on the next pages to help you set your SMART goals for weight loss.



#### SMART GOALS PLANNER

Goal setting can be an important performance skill, but make sure you're setting SMART goals. Completing this checklist will help.

#### SPECIFIC.

What exactly is your goal? Be specific about what you wish to accomplish.

#### **MEASURABLE.**

Decide how you will measure whether you have met your goal. Quantify success so that you're able to monitor and enjoy your progress.

## **ACHIEVABLE/ACTION-ORIENTED.**

What language do you use? Think "I am" rather than "I'll try" or "I will." Make sure your goal is something you can achieve in the time frame you set.

#### RELEVANT.

Does this goal make sense for you? Be realistic, but also challenge yourself.

#### **TIME-SENSITIVE.**

What is the time frame? Can you break it down into a long-term overall goal, with subgoals as steps that lead there?

Look at the example for each area and fill in your own statements in the space provided on a blank worksheet.

#### Date 1/31/2020

#### Specific

I want to lose 10 pounds by my next PFT.

#### Measurable

Lose 1 pound per week for the next 10 weeks.

#### Achievable/Action-oriented

I'm going to keep track of my caloric intake and expenditure to make sure I'm at a deficit of at least 500 calories per day.

#### Relevant

I need to do this for my health and military performance.

#### Time-sensitive

(Overall goal)

I am losing 10 pounds in 10 weeks.

(Sub-goal)

I will track my calories and food choices for the next 3 weeks and reassess my progress.

# **SMART GOALS PLANNER**

Date
Specific
Measurable
Achievable/Action-oriented
Relevant
Time-sensitive (Overall goal)
(Sub-goal)
Date
Specific
Measurable
Achievable/Action-oriented
Relevant
Time-sensitive (Overall goal)
(Sub-goal)
Date
Specific
Measurable
Achievable/Action-oriented
Relevant
Time-sensitive (Overall goal) (Sub-goal)

# 3 STRATEGIES TO BUILD MOTIVATION FOR LOSING WEIGHT

Who is the most motivated, passionate person you know or admire, whose dedication inspires you?

What is it that empowers them to be so dedicated? What helps them push through when they're tired? What's the "why" behind their efforts?

Chances are your answer isn't "to lose weight to fit into a new outfit for vacation," or "to get a raise." Motivation based on awards, punishments, or achieving a desired outcome—called extrinsic motivation—can be great in the short term, but it doesn't usually last. When the season changes and the special event is over, or the reward is in hand, the motivation to sustain the behavior drops. That's why it's often hard to stay motivated to lose weight after you meet this type of goal.

More likely, what motivates the person you thought of is "they love what they do," "they want to make a difference in the world," "they're inspired by their faith," or "it's just who they are." These are examples of intrinsic motivation, when you're motivated from within to behave driven by what you enjoy, how you define yourself, or what connects to your values. Unfortunately, many goals, including weight loss, require you to do tasks you're not intrinsically motivated to do. The following strategies can help you increase your long-term motivation to accomplish your goals.

#### **BUILD ON YOUR SELF-IDENTITY**

Do you know someone who—no matter the situation, how much sleep they get, or how bad the weather is—will not miss their 5-mile morning run ... and has an "Eat, Sleep, Run, Repeat" T-shirt? Or do you know someone who loves yoga or CrossFit who describes themselves on social media as a "yogi" or posts their WOD (workout of the day) results? One reason to explain these T-shirts or social media posts relates to increasing motivation. Self-identifying with a particular behavior is an incredibly powerful motivator. The behavior just becomes "what you do." The decision to either go for a run or watch TV is already made...because "I'm a runner!"

If you don't already self-identify with a healthy behavior to reach your goals, you can try to develop one. For example, if you want to start drinking water instead of soda, start saying to yourself when tempted with soda, "I'm a water



drinker," or "I don't drink soda." It might seem odd at first, but the more you say it, and do the desired behavior to back it up, the more likely this will become part of how you see yourself.

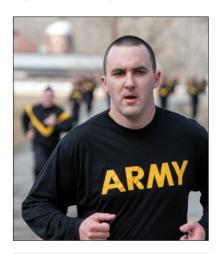
#### **CONNECT TO YOUR VALUES**

If making "water drinker" a part of your identity feels off to you, try another strategy: Connect the behavior to a core value you already have. For example, if you value "being a great parent and role model to my kids," you can leverage that value by reflecting on how a healthy lifestyle helps you live out that value, such as "having more energy helps me be more present," or "living longer will let me be there for my kids longer." When you're challenged to choose water over soda, you can now reflect on how important being a good parent is to you for the push you need.

To help identify your core values, read HPRC's Azimuth check: Are you living your values?

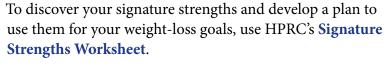
#### **LEARN YOUR SIGNATURE STRENGTHS**

Signature strengths are character traits that make you feel energized, motivated, and true to your self. You feel at your best when you are using your signature strengths. Finding ways to use your signature strengths to act in the ways needed to accomplish your goal will increase your motiva-



tion and performance, and help you to enjoy those behaviors. For example, if one of your signature strengths is curiosity, you could change your morning run to explore different areas. If you're creative and playful, you could come up with different games to play during your run; it could be as simple as how many pigeons you can spot during each run.

By finding a way to use your signature strengths, you're helping to make the desired behavior part of what you do, rather than going against your nature. A simple shift can be a major improvement to your motivation.





#### **MOVING FORWARD**

Once you've reviewed the 3 strategies, choose at least one to try to increase your motivation. Try it for a couple weeks and if it doesn't work, try another. Discovering how to motivate yourself is often a trial-and-error journey. As you learn what really motivates you, you can apply it to many aspects of your life.

#### REFERENCES

- Forest, J., Mageau, G. A., Crevier-Braud, L., Bergeron, É., Dubreuil, P., & Lavigne, G. L. (2012). Harmonious passion as an explanation of the relation between signature strengths' use and well-being at work: Test of an intervention program. *Human Relations*, 65(9), 1233–1252. doi:10.1177/0018726711433134
- Silva, M. N., Markland, D., Minderico, C. S., Vieira, P. N., Castro, M. M., Coutinho, S. R., ... & Teixeira, P. J. (2008). A randomized controlled trial to evaluate self-determination theory for exercise adherence and weight control: rationale and intervention description. *BMC Public Health*, 8(1), 234. doi:10.1186/1471-2458-8-234
- Silva, M. N., Vieira, P. N., Coutinho, S. R., Minderico, C. S., Matos, M. G., Sardinha, L. B., & T eixeira, P. J. (2010). Using self-determination theory to promote physical activity and weight control: a randomized controlled trial in women. *Journal of Behavioral Medicine*, 33(2), 110-122. doi.org/10.1007/s10865-009-9239-y
- Strachan, S. M., Fortier, M. S., Perras, M. G., & Lugg, C. (2013). Understanding variations in exercise-identity strength through identity theory and self-determination theory. *International Journal of Sport and Exercise Psychology*, 11(3), 273-285. doi.org/10.1080/16 12197X.2013.749005
- Vlachopoulos, S. P., Kaperoni, M., & Moustaka, F. C. (2011). The relationship of self-determination theory variables to exercise identity. *Psychology of Sport and Exercise*, 12(3), 265-272. doi.org/10.1016/j.psychsport.2010.11.006





# **ADDITIONAL RESOURCES: CHALLENGE 1**

Find more resources on how to assess your current health habits.

Calculate calories from foods: Calorie Control Council

Estimate nutrient needs: USDA: DRI calculator

Food-diary apps to keep you on track

NIH body weight planner

**USDA:** MyPlate plan



# CHALLENGE 2: CREATE A ONE-WEEK MEAL PLAN

Do you really have time to make healthy meals in your busy life of job and military duties, family obligations, social activities, and trying to sleep 8 hours and exercise regularly? Yes, you do! When you invest some time each week into planning, shopping for, and preparing your meals, you're investing in your health, performance, and readiness.

#### Consider the benefits of cooking at home:

- It leads to a higher-quality diet, which typically leads to better health and weight.
- It costs less than eating out or ordering takeout.
- You can control the ingredients and portions—especially important if you're focusing on weight loss.
- It's a great way to connect with friends and family.
- It can be really fun!

If you share a kitchen with family, friends, or roommates, have them join in your meal-planning efforts. They can help you decide what to cook, pick new ingredients or recipes to try (quinoa or eggplant), or share the cooking or clean-up duties.

Keep in mind that even if you don't plan to cook most of your meals at home, creating a meal plan for the week is a great way to help you achieve your weight goals. If "taco Tuesday" is a meal you like to stop for on your way home from work, look for ways to eat lighter the rest of the day to balance out the extra chips and salsa (and possibly a beer or margarita)! You might also decide to make favorite takeout meals at home so you can have more control over the ingredients and portions.

Remember, most people tend to default to the quickest and easiest options. So, make sure balanced, high-nutrient meals are your default. Planning ahead can decrease stress—and create leftovers for the next day.





#### **TASKS TO ACHIEVE CHALLENGE 2:**

- Find out what makes a "healthy" weight-loss eating plan.
- Consider the pros and cons of popular eating styles.
- How to use a hunger scale for healthier habits.
- Learn how to eat to fuel your performance.
- Learn more about fad diet red flags.
- Read our sample grocery list—then write your own.
- Practice smart grocery shopping on a budget.
- Review our sample 7-day meal plan—then create your own.
- Arm yourself for success with these 6 tips for your wellness mission.
- Get tips on making healthy choices when you're out.
- Read more about how to create and follow solid eating habits.



# WHAT IS A "HEALTHY" WEIGHT-LOSS EATING PLAN, ANYWAY?

With food hype in the media flip-flopping over high carb vs. low carb and high fat vs. low fat, it can be hard to know what is the "right" way to eat. Is it eating like a caveman? Is it giving up carbs to go into ketosis? Or eating only plants? What's the best way to eat for health or performance? What about when you want to lose weight because your health, promotion, or even career depend on it?

Weight loss sounds simple: Take less "energy in" (fuel from food and drinks, measured in calories) and use more "energy out" (calories burned through daily physical activity and exercise). Your body will burn through the stored energy (fat), and you'll lose weight. But it isn't quite that easy, because many other factors are involved in managing your weight; some you can control and others you can't.

One factor you can control (most of the time, anyway) is the type and amount of food you eat. Not every eating style is right for you at every time. (See *Pros and cons of popular eating styles* in this Challenge to learn more.) Travel, deployment, and training might limit your ability to choose the foods you want because the available options are limited or you're on a different schedule. Also, the eating pattern you like might not be appropriate at particular times, such as when the demands of high-intensity training or a mission might mean your weight-loss eating style can result in underfueling, or when injury or health issues have special nutrient demands. Less energy intake (fewer calories) doesn't always mean less food. Choosing different types of foods or eating patterns also can help you succeed in managing your weight.

Your eating pattern or style might change depending on changes in your lifestyle, health, or fitness goals. One style might work better for you during intense training or operations (see **Eat to fuel your performance** in this Challenge), while another might work better during a temporary or transition setting (PCS, deployment), so you might need to adjust. Finding an eating pattern that works might take some trial and error. However, it's important to consider a variety of nutritional and lifestyle factors to help you choose the eating pattern that best fits:

- Your lifestyle and schedule
- Your tastes and food preferences
- Your unique metabolism

"Unique metabolism" refers to the way your body works, including how you metabolize food and how factors such as your activity level, genetics, and environment impact your nutrient needs. Other factors that affect your individual metabolism—a concept called "biochemical individuality"—are still being discovered.

#### **BASICS OF A LIFELONG EATING PLAN**

#### Nutritional considerations

- Eat whole or "true" foods: Choose foods that are minimally processed, close to their original state, or still resemble their original sources.
- Eat mostly plants, such as fruits, vegetables, whole grains, nuts, seeds, and beans.
- **Maximize nutrients:** Choose foods and beverages packed with naturally occurring nutrients, antioxidants, and phytochemicals.
  - → Antioxidants are substances that can prevent or delay cell damage.
  - → Phytochemicals are compounds found in plants that can promote health.
- Avoid empty calories, foods that might fill you up but don't have much (or any) nutritional value.
- Avoid foods with long lists of ingredients on the Nutrition Facts label.
- Don't think of macronutrients
   (carbs, protein, or fat) as "bad."
   Just remember some foods are higher
   in nutritional quality than others.
- Eat enough food to give you the energy (calories) you need to do your job, workouts, home and family responsibilities, etc.
- Eat so you're satisfied: an amount and variety of foods that isn't too restrictive and doesn't leave you feeling hungry all the time. Don't cut out all your favorite foods. Allow yourself a variety of foods. No "diet" will last if you feel hungry or too deprived.
- Eat what works for you (not your neighbor, spouse, or workout buddy): foods that make you feel energized and less fatigued, foods that leave you with fewer cravings, and foods that support your health and performance.

#### LIFESTYLE CONSIDERATIONS

- Your tastes and food preferences: How choosy are you? Are all your favorite foods "forbidden"?
- Your health concerns and family history of diseases.
- Your schedule: travel, work, family, and household.
- Your workouts: duration, intensity, and type.
- Your willingness to plan and devote the energy you need to shop and prepare foods: Are the foods and ingredients ones you can easily find, afford, and prepare?
- Your household schedules, and your family's food preferences and restrictions: Do you cook for or with your spouse, children, roommate, etc.?
- Your level of commitment: This can change over the short term (quick weight loss) or long term.

Once you choose an eating pattern, pay attention to how your body responds. Allow a few weeks to adjust before you assess whether a new eating pattern is truly working for you. Do you feel energized and satisfied? Are you performing well at work, at home, and in workouts? If the answers are "yes," then keep going with that eating pattern. If it's "no," then reassess what isn't working for you and adjust. For help, speak with a Registered Dietitian (RD) who can create an individualized eating plan to meet your needs.

#### **REFERENCES**

- Champagne C.M., Broyles S.T., Moran L.D., et al. (2011). Dietary intakes associated with successful weight loss and maintenance during the Weight Loss Maintenance trial. *Journal of the American Dietetic Association*, 111(12):1826–1835. doi:10.1016/j.jada.2011.09.014
- Katz, D. L., & Meller, S. (2014). Can we say what diet is best for health? *Annual Review of Public Health*, 35(1), 83–103. doi:10.1146/annurev-publhealth-032013-182351
- Sacks F.M., Bray G.A., Carey V.J., et al. (2009). Comparison of weight-loss diets with different compositions of fat, protein, and carbohydrates. *New England Journal of Medicine*, 360(9):859–873. doi:10.1056/NEJMoa0804748



#### PROS AND CONS OF POPULAR EATING STYLES

"Eating plans" are everywhere—online, in the gym, on social media. But how can you decide which one works for you? Learn more below about the pros and cons of some popular eating styles that might help you manage your weight.

#### **MEDITERRANEAN DIET**

A very popular eating pattern that has decades of evidence to suggest it's a nutritious and satisfying approach to eating is the "Mediterranean diet." Following this eating style supports health and longevity and decreases risk of heart disease.

- What it typically includes: Whole grains, fresh fruits, vegetables, legumes (beans, peas, lentils, peanuts), healthy fats (especially olive oil), nuts, herbs and spices; small amounts of protein such as fish and seafood twice a week; and other proteins such as poultry, eggs, dairy (cheese or yogurt) in small portions either daily or a few times per week.
- What it typically limits: Added sugars, desserts, and red meats.
- Risks: Potential for excess calories (no specific amounts or portions are recommended);
   requires meal planning and cooking, which can take more time than you might be used to.
- Where to learn more: The Nutrition Source from Harvard's School of Public Health

#### **DIETARY APPROACHES TO STOP HYPERTENSION (DASH) DIET**

The DASH diet is similar to the Mediterranean diet, but with guidance on the intake of certain electrolytes that can affect cardiac and smooth muscle functions that support healthy blood pressure. This includes eating more foods high in magnesium and potassium and limiting sodium (salt). And it recommends a specific number of servings of foods.

- What it typically includes: Fruits, vegetables, low-fat milk, whole grains, fish, poultry, beans, and nuts.
- What it typically limits: Salt, added sugars, and red meats.
- Risks: Limiting salt isn't necessary if your blood pressure is healthy, and it isn't advisable
  if you're very active or if you work or live in a hot or humid environment. This plan also
  requires meal planning and cooking.
- Where to learn more: The National Heart, Lung, and Blood Institute

#### **PALEO DIET**

A Paleo or "caveman" diet includes foods that were eaten during the Paleolithic era more than 10,000 to 3 million years ago. The focus is on eating fresh foods that Paleolithic (Stone-Age)

humans would have hunted, fished, or gathered. Overall, this eating plan is high in protein, moderate in fat, and low to moderate in carbohydrates.

- What it typically includes: Foods "allowed" vary, but the general focus is on lean meats, fish, eggs, low-glycemic fruits, vegetables, nuts, seeds, olive oil, and coconut oil.
- What it typically excludes: Whole grains, cereals, dairy products, legumes (beans, peas, lentils, peanuts), white potatoes, alcohol, coffee, salt, canola oil, and most processed foods.
- Risks: Requires meal planning and preparation of fresh foods; higher cost for recommended meats (such as grass-fed beef); excludes popular and common foods or food groups (grains, dairy); high red-meat intake might adversely affect health; potentially low intake of certain vitamins and minerals (vitamin D, B vitamins, calcium).
- Where to learn more: Harvard's Diet review: Paleo diet for weight loss

#### **PLANT-BASED, VEGAN, VEGETARIAN**

Plant-based diets can range from having no animal products (vegan) to no animal meat (vegetarian) to those with limited animal products (plant-based or "flexitarian"). These diets are increasingly popular for their health benefits and lower impact on the environment.

- What it typically includes: Fruits, vegetables, grains, legumes (beans, peas, lentils, peanuts), nuts, seeds, fats; some include dairy, fish, eggs, or small amounts of meat or poultry, or all these.
- What it typically excludes: Some or all animal products, such as meat, fish, poultry, eggs, dairy (cheese, yogurt), milk, and honey.
- **Risks:** Can be low in protein or certain other nutrients (vitamin B12, vitamin D, iron) if not well planned. Vegan or vegetarian foods can still include processed foods.
- Where to learn more: American Heart Association's How does plant-forward (plant-based) eating benefit your health?
- Read HPRC's article on Plant-forward eating ideas to fuel your day.

#### **KETOGENIC ("KETO") DIET**

A ketogenic diet focuses on high-fat foods with moderate protein and low carbohydrate intake. Ketogenic diets have been used for years under medical supervision to treat specific medical conditions (such as epilepsy). The goal of "keto" is to limit glucose (by limiting carbs) and thus cause the body to use "ketones" from stored fat as fuel instead. Once stored glucose is depleted (usually after 3–4 days), the body begins to use ketones from fat as fuel.

• What it typically includes: Guidance varies, but generally 70–80% of calories come from fat, 10–20% from protein, and 5–10% from carbs (usually < 50 grams per day). Recommended foods include high-fat foods such as avocado, coconut, certain nuts, and seeds; some dairy foods (butter, hard cheeses), grass-fed beef, free-range poultry, bacon, pork, wild-caught fish, eggs, tofu, non-starchy vegetables (such as leafy greens, cauliflower, broccoli, peppers, onions, garlic, cucumbers, celery, mushrooms, summer squash), certain fruits in small portions (berries), dark chocolate, unsweetened coffee and tea, herbs, spices.

- What it typically excludes: Grains (whole and refined), added and natural sugars in foods and drinks, starchy vegetables (potatoes, corn, winter squash), most fruits, all fruit juices, legumes (beans, peas, lentils, peanuts).
- **Risks:** Can be difficult to maintain, especially long term or when training or on a mission; symptoms of very-low carb intake such as hunger, fatigue, irritability, constipation, headaches, and brain "fog"; limited variety can make dining out socially difficult; concerns that long-term use increases risk of kidney stones and osteoporosis; concerns about nutrient deficiencies if close attention isn't paid to include a variety of food choices.
- Where to learn more: Harvard's Diet review: Ketogenic diet for weight loss

#### **REFERENCES**

Hopkins, T., & Deshmukh, E. What you should know about today's popular diets. Retrieved 21 November 2019 from https://www.sutterhealth.org/pdf/incentive-content/diet-comparison-guide.pdf

Katz, D. L., & Meller, S. (2014). Can we say what diet is best for health? *Annual Review of Public Health*, 35(1), 83–103. doi:10.1146/annurev-publhealth-032013-182351

The best diet: Quality counts. *The Nutrition Source*. Retrieved 21 November 2019 from https://www.hsph.harvard.edu/nutritionsource/healthy-weight/best-diet-quality-counts/



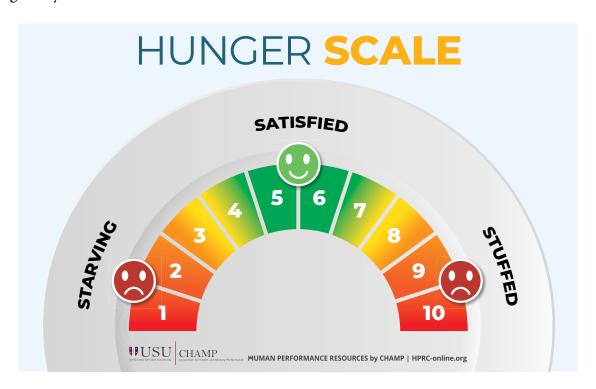


# HOW TO USE A HUNGER SCALE FOR HEALTHIER HABITS

People eat when they're hungry and stop when they're full, right? Not always. It's easy to eat when you're stressed, happy, or sad. Outside influences can affect your eating choices too. Something tastes good or smells good, so you keep eating.

Certain eating behaviors—such as eating too fast or ignoring fullness cues—are linked to failing military body composition standards. Eating while distracted and experiencing extreme hunger prior to meals is linked to failing military physical fitness standards as well. Learn how to recognize your hunger and fullness cues to help meet your weight, performance, and fitness goals.

It takes **practice** to recognize your signs of hunger, satisfaction, and fullness. How tuned in to your hunger are you?



#### Ask yourself the following questions and use the Hunger Scale to rate your answers from 1 to 10.

- How do you know when you're hungry (cranky, stomach grumbling, headache, etc.)?
- How can you tell when you're satisfied? Is it an internal feeling or external (empty plate, carton, bag, etc.)?
- What's your hunger at right now?
- Do you ever eat until you're at a 9 or 10? If so, how do you feel?
- What happens when you wait to eat—and you're at a 1, 2, or 3?

#### TAKE HPRC'S HUNGER CHALLENGE FOR 7 DAYS!

Before and after each meal (or snack), check in to see where you are on the Hunger Scale.



**TIP** 

Use an app or paper diary to track your results.

At the end of the week, ask yourself:

- What did you learn about your eating patterns?
- When did you notice your own cues for hunger and fullness?
- How can you change your eating habits to balance hunger and fullness?

#### **REFERENCES**

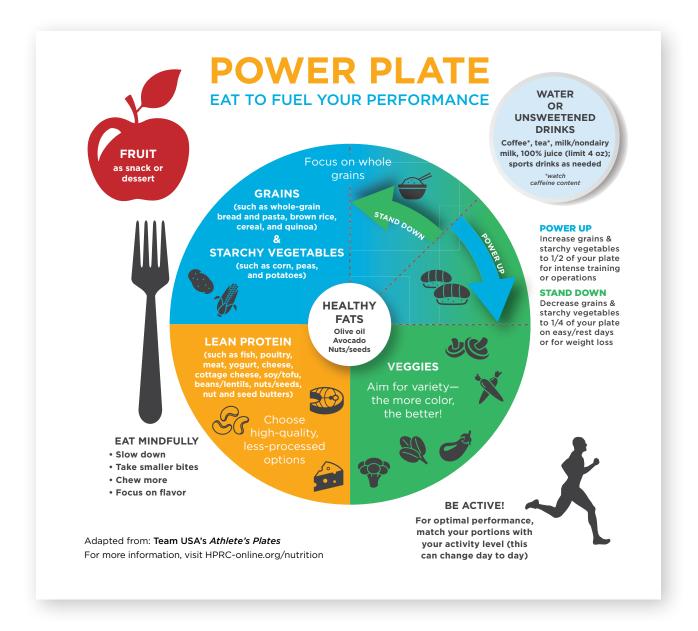
Gibbons, C., Hopkins, M., Beaulieu, K., Oustric, P., & Blundell, J. E. (2019). Issues in measuring and interpreting human appetite (satiety/satiation) and its contribution to obesity. *Current Obesity Reports*, 8(2), 77–97. doi:10.1007/s13679-019-00340-6

Jayne, J., Karl, J. P., McGraw, S., O'Conner, K., DiChiara, A., Armstrong, N., . . . Cole, R. (2019). Eating behaviors are associated with body composition and physical fitness standards failure among U.S. Army Soldiers (P21-042-19). *Current Developments in Nutrition*, 3(Supplement\_1). doi:10.1093/cdn/nzz041.P21-042-19



# POWER PLATE: EAT TO FUEL YOUR PERFORMANCE

Eating for optimal performance requires the right balance of **macronutrients** from the foods you eat. An easy way to plan your meals is to picture a plate and build from there. Keep in mind, your nutrition needs might change daily depending on your activity, training, and fitness goals. For more information on specific nutrient needs, visit the *Warfighter Nutrition Guide*.



#### **FAD DIET RED FLAGS**

How can you tell which diets and weight-loss programs on the market are safe? There are a number of red flags you can watch out for to help you know which diets or programs might be unhealthy, hurt your performance, or even harm your military career.

# **RED FLAG #1:** Pills, powders, and patches

- Use caution with any **dietary supplement** that targets weight loss, fat burning, or suppressing appetite, as they might contain harmful ingredients.
- Claims about products you wear or put on your body to cause weight loss are generally false.
   Instead: Learn more about dietary supplements at Operation Supplement Safety (OPSS).

# RED FLAG #2: Non-reputable sources

- Avoid sources that make claims not backed by a reputable body of science.
- Blogs, social media sites, and dot-com websites might not be qualified to provide nutrition or health information.
  - **Instead:** Look for trusted sites, such as those with addresses that end in .gov, .edu, or .org and are written and reviewed by qualified professionals.

# RED FLAG #3: Claims based on questionable information or stories, not science

- Don't take one person's story as scientific evidence.
- Be wary of terms such as "university tested" or "clinically proven."
   Instead: Focus on facts and comprehensive research, not opinions, questionable statements, or stories.

# **RED FLAG #4:** Miracle cures

• Promises of dramatic weight loss, "miracle cures" without exercising or watching what you eat, or gaining muscle or increasing your performance overnight are often unreliable and might be unsafe.





• Not everyone's health, nutrition, or performance is the same, so be suspicious of universal claims that a program or product "works for everyone" or is "guaranteed to work."

Instead: Remember it takes time to reach nutrition, health, and performance goals.

# RED FLAG #5: Fads and ads

- Check to see if the website or ad is trying to sell you a product or pay to join a diet or workout program. If so, it's probably biased.
- Look out for phony "review" sites that have all positive reviews ("5 stars!") or general reviews that lack detail ("I lost so much weight quickly!").

Instead: Focus on websites with information based on facts and not covered in ads or trying to sell you something.

# **RED FLAG #6:** Diets that recommend avoiding entire food groups

- Restrictive eating plans or programs that don't provide a variety of foods from different food groups might cause you to miss out on valuable nutrients you need for optimal health and performance.
- Avoiding certain foods or food groups might not be appropriate for your current training or health conditions. For example, eliminating all carbs might cause your performance to suffer because carbs are your body's preferred fuel for exercise.

**Instead:** Follow a well-balanced eating plan to meet your weight and fitness goals.

# **RED FLAG #7:** Simple conclusion, complex science

- Given the nature of food and people, information about nutrition is always complex. If it sounds too good to be true, it probably is!
- If you read a headline with a bold conclusion, be aware it might be a simple conclusion about a complex scientific question.

**Instead:** Vet the information and science through reliable sources, including healthcare professionals such as a Registered Dietitian (RD).

For more information, read HPRC's "What is a 'healthy' weight-loss eating plan, anyway?" and the Federal Trade Commission's The Truth Behind Weight Loss Ads.

#### REFERENCES

Dietitians of Canada. (2014). Guidelines for Choosing a Weight Loss Program. Retrieved 21 November 2019 from https://www.dietitians.ca/getattachment/ed3f9bba-1bb9-47cd-b23cda256467eb94/FACTSHEET-Guidelines-for-Choosing-Weight-Loss-Program.pdf.aspx

Gut check: A reference guide for media on spotting false weight loss claims. (2014). Retrieved 21 November 2019 from https://www.ftc.gov/tips-advice/business-center/guidance/gut-checkreference-guide-media-spotting-false-weight-loss

# SAMPLE GROCERY LIST AND WORKSHEET

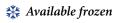
Choosing what to eat when you want to lose weight begins with getting the right foods to make meals and snacks that are healthy and taste good. Try the following grocery list, based on the popular "Mediterranean diet," to add delicious, nutritious choices to your home menu. (Once you've read the grocery list, print the worksheet here to create your own list.)

# PRODUCE: Fruits and Veggies | Fresh or frozen without added salt, sugar, or sauces

Leafy greens: salad mix, romaine lettuce,	Bananas, apples, pears, grapes, kiwi		
spinach, kale	Strawberries, blueberries, raspberries, peaches,		
Root vegetables: potatoes (sweet, white, red-skin), carrots, onions, beets	pineapple, mango		
	Dried fruit—no added sugar  Canned roasted red peppers, artichokes, tomatoes		
☆ Broccoli, cauliflower, mushrooms, bell peppers, green beans, zucchini, yellow squash, corn, peas			
Tomatoes, cucumbers, eggplant	Broccoli, cauliflower, zucchini—"noodles," "riced," or slaw		
Winter squash: spaghetti, acorn, butternut	Avocado		
Citrus: oranges, clementines, grapefruit, lemons, limes	Avocado		

# PROTEIN: Beans, Nuts, Fish, Poultry, Meat | Fresh or frozen

Rotisserie chicken	Nut or seed butter: any variety—all-natural	
Skinless chicken or turkey breast	Nuts: almonds, peanuts, pecans, walnuts, cashews, pistachios	
Lean cuts of meat: sirloin tip, top round,		
eye of round, tenderloin	Seeds: sunflower, pumpkin, chia, ground	
Lean ground beef, turkey, chicken	flaxseed	
Fish or seafood: salmon, halibut, trout, mackerel, shrimp	Tofu, tempeh, edamame	
	* Veggie or bean burgers	
Canned salmon or tuna	Eggs	
Beans: black, garbanzo (chickpea), kidney, pinto—dried or canned, low or no added salt	<b>☼</b> Fish	



#### **GRAINS**

100% whole-wheat bread, tortillas, wraps, pita ( $\geq$ 3 g fiber)	Whole-grain cereal or granola (≥3 g fiber, low sugar)
Brown or wild rice	₩ Whole-grain waffles, pizza crust
Whole-wheat pasta or couscous	100% whole-grain crackers (≥ 3g fiber)
Quinoa, farro, barley	Plain popcorn
Old-fashioned oatmeal	
DAIRY	
Plain or naturally flavored Greek yogurt	Milk
Cottage cheese	Cheese: Parmesan, brie, feta, mozzarella
BEVERAGE	
Seltzer or sparkling water—plain or flavored	Unsweetened tea
Coffee	
CONDIMENTS, SEASONINGS, SAUCES, OILS	
Oils: olive, canola, grapeseed	Tomato sauce, tomato paste
Olives	Mustard
Herbs and spices—dried, fresh, frozen	Vegetable or chicken broth
Salsa	Pesto
Hummus or other bean-based dip	Garlic
Vinegars: white or red wine, balsamic, etc.	** Available frozen

#### **REFERENCES**

McManus, K. D. (2019). A practical guide to the Mediterranean diet. Retrieved 19 December 2019 from https://www.health.harvard.edu/blog/a-practical-guide-to-the-mediterranean-diet-2019032116194

Mediterranean Foods Alliance. (2009). 7-day Mediterranean menu. Retrieved 19 December 2019 from https://oldwayspt.org/system/files/atoms/files/7dayAUTUMNFINAL\_0.pdf

# **MY GROCERY LIST**

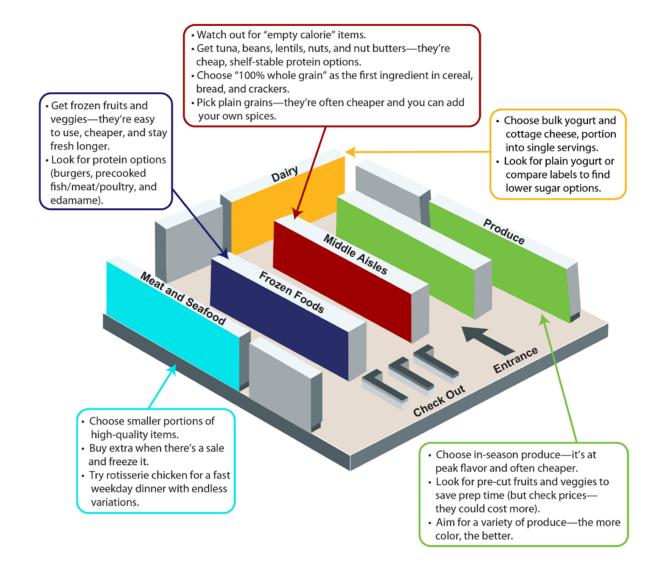
PRODUCE: Fruits and Veggies   Fresh or frozen without added salt, sugar, or sauces			
PROTEIN: Beans, Nuts, Fish, Poultry, Meat   Fresh or frozen			
GRAINS			
BEVERAGES			
CONDIMENTS, SEASONINGS, SAUCES, OILS			

# **SMART GROCERY SHOPPING ON A BUDGET**

Want to save time, money, and brain power on deciding what to buy at the grocery store?

- Make a shopping list and stick to it!
- Focus on whole foods—limit packaged items with many or hard-to-pronounce ingredients.
- Avoid artificial ingredients, flavors, and colors.
- Don't shop when you're hungry.
- Visit <a href="https://commissaries.com">https://commissaries.com</a> for recipes and money-saving tips.

Whether you're watching your weight or wallet—or working to improve your health and performance—these shopping tips can help.



## SAMPLE 7-DAY MEAL PLAN AND WORKSHEET

When you plan meals ahead, you can stick to healthy choices more easily, save money, and feel less stressed. You can also have a ready answer when someone asks, "What's for dinner?" Print this sample plan for ideas and the worksheet on the next page for your own meal plans.

	BREAKFAST	LUNCH	DINNER	SNACK
SUNDAY	Oatmeal with berries and slivered almonds	Tomato soup, grilled cheese with spinach on whole-wheat bread, and 2 clementines	Rotisserie chicken, sautéed spinach, and quinoa salad	Whole-grain tortilla chips and guacamole
MONDAY	Plain Greek yogurt with sliced fruit and chopped nuts	Quinoa salad (leftover) with shrimp; apple	Ratatouille, brown rice, and crusty whole-grain bread	Carrots or cucumber and hummus
TUESDAY	Scrambled eggs on 100% whole-wheat English muffin topped with sliced tomato; sliced pear	Ratatouille (leftover) in whole wheat wrap with lettuce, piece of cheese; 2 clementines	Shredded rotisserie chicken (leftover), chopped lettuce, tomatoes, onions, salsa on corn tortillas	Greek yogurt and fruit
WEDNESDAY	Homemade smoothie with berries, almond butter, and milk	Tuna salad with chopped celery, carrots, and olive oil on top of lettuce, whole-grain crackers	Turkey meatballs, whole-wheat pasta and parmesan cheese; green salad with chopped veg- gies and olive oil-based dressing	Handful of mixed nuts and raisins
THURSDAY	Egg frittata with spinach, onions, and tomatoes	Chopped green salad (leftover) with tuna and black beans; apple	Minestrone soup and crusty whole-grain bread; Greek salad with greens, cucumbers, carrots, feta, and lemon vinaigrette	Banana with almond butter
FRIDAY	100% whole-grain toast with mashed avocado, sliced apple	Veggie pita with sliced veggies, hummus, and avocado in a whole- wheat pita, grapes	Baked salmon, asparagus, and mashed cauliflower	Whole-wheat crackers and cheese
SATURDAY	Breakfast burrito (whole- wheat tortilla, black bean, sautéed broccoli, salsa), and fruit salad	Leftover salmon, brown rice, and sautéed veggies; pear	Spicy black-bean burger, roasted zucchini, and baked sweet potato fries	Cherry tomatoes, olives, and feta cheese

# **7-DAY MEAL PLAN WORKSHEET**

	BREAKFAST	LUNCH	DINNER	SNACK
SUNDAY				
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

# MAKE HEALTHY CHOICES, EVEN WHEN YOU'RE DINING WITH OTHERS

You need discipline to stick to a healthy meal plan, especially when you're trying to lose weight and reach your fitness goals. It can be tough enough to fight your own cravings and busy schedule, but it can be even harder when you throw family, friends, and social outings into the mix. So how can you stick to your meal plan, even when you're not dining alone? The key is planning ahead, asking for support, and taking it one step at a time.

## **NAVIGATE FAMILY MEALS**

If you're a parent, you want your family to eat healthy. But on those busy nights when you're shuffling straight from work to after-school activities, it's hard enough to find the time to cook, let alone make sure you're choosing the right foods. (Hint: The key is planning!) Make healthy meals more manageable with these strategies and tips.

- Assess and plan. Before you begin meal planning, review your schedule for the week. Ask yourself: How many nights does at least one person in the family have an activity that goes until dinnertime or later? How much time is there, realistically, to prepare a meal between getting home and bedtime? Is there any time during the week when you could spend a little more time to prepare ingredients or meals in advance? Add up the number of nights you won't have more time to make dinner and you'll need quick meals.
- Write it out. Then with pen and paper, your favorite app, or using the 7-day meal plan worksheet on the page above, lay out your plan. Pull out some favorite recipes to help you decide which meals will work with your schedule and which ingredients you'll need to buy. This will help you be prepared for the busy week ahead and resolve any decision dilemmas when you're in a rush. Once you create your grocery list, stick to it!
- **Get ahead**. Prepare ingredients in advance—wash and chop vegetables and fruit, mix marinades and sauces, boil eggs, and cook whole grains (such as rice and quinoa)— and toss them in the fridge or freezer to use later in the week. Also, choose items where the work is done for you (frozen veggies that are washed and chopped, frozen whole grains that heat up quickly. Use a slow cooker to create one-pot meals in advance so you can come home to a ready meal.
- Make it a family goal. Get older kids involved with cooking or other dinnertime tasks such as boiling water, cutting vegetables, etc. Younger children can help set and clear the table. Bonus: Involving kids with meal prep builds positive life skills and relationships and teaches them responsibility.

## SUCCEED AT SOCIAL GATHERINGS

Healthy (and unhealthy) eating habits are contagious. When those around you make good (or not-so-good) food choices, you're more likely to do the same. It can also be tough to stick to your goals when you're out at a restaurant, at a party, or eating at someone else's place. Your eating plan can be vulnerable to social influences, even if you don't always realize it. To stay ahead of obstacles, when you're looking at your weekly meal plan, be sure to note when you'll be eating with others. Then, use these tips to stay on track.

- Have a buddy for support. Whether it's a spouse or someone close to you, having someone support you in your healthy choices can help you stay on track. If you're going to be influenced by those around you, better that it's by someone who's on the same page.
- Communicate ahead of time. If you have special dietary needs, allergies, or preferences (vegan, vegetarian, gluten-free, etc.) consider telling the host ahead of time or offer to bring something that fits your dietary needs. By getting ahead of the situation, the host will have a chance to prepare—and you'll help avoid an uncomfortable conversation in front of other guests.
- **Get your confidence up**. If you're trying to stick to healthy choices, don't cave to peer pressure. If it's your day to indulge, have that extra cookie with your head held high! Just try to stay aware of what your body wants and when you're full. Learn more about mindful eating in Challenge 5.
- Track your eating—not everyone else's. Many people underestimate how much they've actually eaten when those around them are eating larger quantities. Keep a close eye on your intake as you normally would rather than look at how much you've eaten compared to others.
- Take control of your plate. If the situation allows it, serve yourself the portions you'd like rather than having a host or fellow guest fill your plate. If you can't serve yourself, politely ask for the portion sizes or food choices you'd prefer.

# 6 TIPS FOR YOUR WELLNESS **MISSION**

It can be hard to make good choices, especially in tricky social situations.

Whether you're eating healthier, quitting smoking, or drinking less, load up your mental rucksack with these tips to help stick to your goals.

## RECOGNIZE

Ask yourself: Who? Where? What? When? How? Before you go out, evaluate possible stumbling blocks and make a plan to battle those risks.

## REHEARSE

Practice saying "no." Practice might not make perfect, but it can make things easier.



#### REPEAT

Sometimes people might ask again or insist. Keep saying "no," and use direct eye contact to be more assertive.



#### REINFORCE

Recruit a battle buddy to support your mission. Ask her or him to help run interference if others get pushy. Or consider leaving an event together if your urges to give in are getting too strong.







#### **REPLACE**

Replace less healthy actions with healthy ones. Try going to a movie instead of a bar or inviting friends over for a healthy meal instead of eating out. Or swap beer or soda for water.



## RETREAT

Even with the best intentions, there are times when it will be hard to say "no." Give yourself permission to retreat when necessary, so you can prepare and attack your goal even better next time.

#### REFERENCES

- Ball, K., Jeffery, R. W., Abbott, G., McNaughton, S. A., & Crawford, D. (2010). Is healthy behavior contagious: Associations of social norms with physical activity and healthy eating. *International Journal of Behavioral Nutrition and Physical Activity*, 7(1). doi:10.1186/1479-5868-7-86
- Foulk, T., Woolum, A., & Erez, A. (2016). Catching rudeness is like catching a cold: The contagion effects of low-intensity negative behaviors. *Journal of Applied Psychology*, 101(1), 50–67. doi:10.1037/apl0000037
- Gump, B. B., & Kulik, J. A. (1997). Stress, affiliation, and emotional contagion. *Journal of Personality and Social Psychology*, 72(2), 305–319. doi:10.1037/0022-3514.72.2.305
- Hennessy, E., Dwyer, L., Oh, A., & Patrick, H. (2015). Promoting family meals: A review of existing interventions and opportunities for future research. *Adolescent Health, Medicine and Therapeutics*. doi:10.2147/ahmt.S37316
- Herman, C. P., Roth, D. A., & Polivy, J. (2003). Effects of the presence of others on food intake: A normative interpretation. *Psychological Bulletin*, 129(6), 873–886. doi:10.1037/0033-2909.129.6.873
- Higgs, S. (2015). Social norms and their influence on eating behaviours. *Appetite*, 86, 38–44. doi:10.1016/j.appet.2014.10.021

## **ADDITIONAL RESOURCES: CHALLENGE 2**

Find more resources on how to plan meals and make healthy choices.

5 reasons to toss your take-out menus

6 tips to support your family's nutritional wellness

Disordered eating: A growing problem in the military

Help your partner lose weight

Quick and easy meal and snack ideas

Raise healthy eaters: Age-specific tips

Taking dietary supplements? Eat real food instead

Weight-loss supplements: What you should know





# CHALLENGE 3: GET ENOUGH EXERCISE

Now that you've tracked your habits in Challenge 1, it's time to get moving! For this challenge, aim to do 150 minutes of moderate-intensity activity per week, 75 minutes of vigorous activity per week, or a combination. Start with writing out your exercise-related SMART goals.

Then, you'll want to read about what counts as physical activity—if you're not getting your heart rate up enough, it won't count toward your activity minutes. See the article on physical activity on the next page to learn more.

Finally, build your workout plan. Making progress every day and week is hard if you have no real plan. Learn about habit-building strategies to make working out part of your routine so you stick with it.

Remember to log your workout using the cardio and workout planner worksheets. You can't progress if you don't remember what you did last week.

## **TASKS TO ACHIEVE CHALLENGE 3:**

- Understand why regular physical activity is important for health and performance.
- Review your SMART goals for weight loss—and tweak them or add more.
- Military workout planning for beginners.
- Use this worksheet to plan your cardio workouts.
- Plan your weight-training workouts with this worksheet.
- Learn how nutrient timing can help you improve your performance—and weight loss.
- Read more about the importance of exercise in weight management.

# REGULAR PHYSICAL ACTIVITY IS IMPORTANT FOR HEALTH AND PERFORMANCE

Do you get enough exercise? Do you perform 150 minutes of moderate-intensity physical activity every week? Or do you work out for at least 30 minutes 5 times each week? You've probably seen one of these questions, or some variation, on your annual personal health assessment. Why is that?

This question gets asked frequently because it gives you an idea of your long-term physical health. Those who get at least 150 minutes of moderate-intensity physical activity every week have a much lower risk of obesity, diabetes, cancer, and heart disease—top killers of Americans every year. Inactive people who spend a lot of their day sitting also have a much higher risk of early death from these conditions. The good news is that you can reduce your risk by moving more. Simply sitting less during the day won't help much, so **the real health benefit comes from being more active**.

## **GUIDELINES**

Aim for 150 minutes of moderate-intensity physical activity, 75 minutes of vigorous-intensity activity, or a combination of the two each week.



#### **TIP**

One minute of vigorous-intensity physical activity counts as 2 minutes of moderate-intensity activity.

*Moderate-intensity* physical activity should be fairly strenuous. On a scale of 1–10, it's a 5 or 6. And it should be hard for you to talk during exercise. Moderate-intensity activities include:

- Fast walking (3–4 mph)
- Swimming
- Biking (slower than 10 mph)
- Dancing
- Yard work or housework

*Vigorous-intensity* physical activity is even harder. On a scale of 1–10, it's a 7 or higher, and you shouldn't be able to hold a conversation during exercise. Vigorous-intensity activities include:

- Running or jogging
- Swimming laps
- Fast biking
- Hiking
- High-intensity interval training

You might notice that strength-training activities aren't listed above. While muscular strength is important and offers some benefits that aerobic training can't provide, you might not do it at a high enough intensity to count as moderate- or vigorous-intensity activity.

## **BENEFITS**

Regular exercise works for more than just keeping you alive longer; it helps you *feel* alive too. It reduces your risk for cardiovascular disease, diabetes, and cancer. Physical activity also helps prevent depression and anxiety, and it can help you manage related symptoms. In short, exercise helps make you more resilient, able to tolerate high stressors, recover, and grow from them. When staying active can touch just about every aspect of your physical and mental health, it starts to make sense why many experts say, "Exercise is medicine."

## **REFERENCES**

- Ekelund, U., Steene-Johannessen, J., Brown, W. J., Fagerland, M. W., Owen, N., Powell, K. E., . . . . Lee, I. M. (2016). Does physical activity attenuate, or even eliminate, the detrimental association of sitting time with mortality? A harmonised meta-analysis of data from more than 1 million men and women. *The Lancet*, 388(10051), 1302–1310. doi:10.1016/s0140-6736(16)30370-1
- Hower, I. M., Harper, S. A., & Buford, T. W. (2018). Circadian rhythms, exercise, and cardiovascular health. *Journal of Circadian Rhythms*, 16(1). doi:10.5334/jcr.164
- Khanzada, F. J., Soomro, N., & Khan, S. Z. (2015). Association of physical exercise on anxiety and depression amongst adults. *Journal of the College of Physicians and Surgeons Pakistan*, 25(7), 546–548.
- Schuch, F. B., Vancampfort, D., Richards, J., Rosenbaum, S., Ward, P. B., & Stubbs, B. (2016). Exercise as a treatment for depression: A meta-analysis adjusting for publication bias. *Journal of Psychiatric Research*, 77, 42–51. doi:10.1016/j.jpsychires.2016.02.023
- U.S. Department of Health and Human Services. (2018). Physical activity guidelines for Americans. Washington, DC: U.S. Department of Health and Human Services. Retrieved 19
  November 2019 from https://health.gov/paguidelines/second-edition/pdf/Physical\_Activity Guidelines 2nd edition.pdf

## **REVIEW YOUR SMART GOALS**

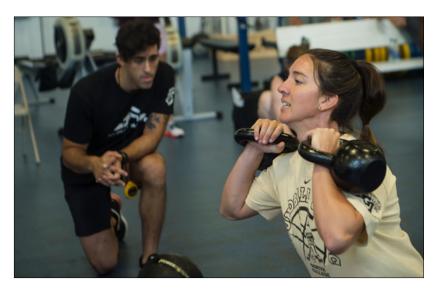
Before you start building your workout plan, you'll want to review your SMART goals. If you haven't already written out some fitness-based goals, **now's the time**. If you have, it will still be helpful to rewrite them on a new worksheet below.

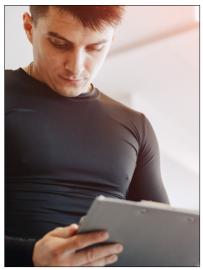
Remember, your goals should be Specific, Measurable, Achievable or Action-oriented, Relevant, and Time-sensitive. So, after finding your baseline exercise time in Challenge 1, set your goal to increase that time. For example:

This week, I will increase my moderate-intensity physical activity from 30 minutes (measured in Challenge 1) to 100 minutes, by going for a brisk 20-minute walk Monday through Friday.

Next week, I will get the recommended 150 minutes of physical activity by going for a brisk 30-minute walk every day, Monday through Friday.

Be sure to set both short- and long-term goals to cover your weekly workout plans. You can also meet bigger goals by planning your workout using block periodization, as described in the next article of this Challenge.





## SMART GOALS PLANNER

Goal setting can be an important performance skill, but make sure you're setting SMART goals. Completing this checklist will help.

**SPECIFIC.** What exactly is your goal? Be specific about what you wish to accomplish.

**MEASURABLE.** Decide how you will measure whether you have met your goal. Quantify success so that you're able to monitor and enjoy your progress.

**ACHIEVABLE/ACTION-ORIENTED.** What language do you use? Think "I am" rather than "I'll try" or "I will." Make sure your goal is something you can achieve in the time frame you set.

**RELEVANT.** Does this goal make sense for you? Be realistic, but also challenge yourself.

**TIME-SENSITIVE.** What is the time frame? Can you break it down into a long-term overall goal, with subgoals as steps that lead there?

Look at the example for each area and fill in your own statements in the space provided on a blank worksheet.

#### Date 1/31/2020

## **Specific**

I want to lose 10 pounds by my next PFT.

#### Measurable

Lose 1 pound per week for the next 10 weeks.

#### Achievable/Action-oriented

I'm going to keep track of my caloric intake and expenditure to make sure I'm at a deficit of at least 500 calories per day.

#### Relevant

I need to do this for my health and military performance.

#### Time-sensitive

## (Overall goal)

I am losing 10 pounds in 10 weeks.

#### (Sub-goal)

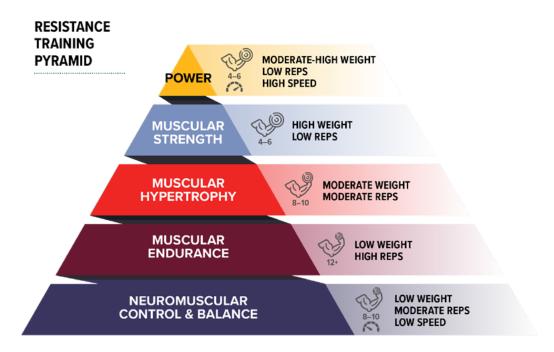
I will track my calories and food choices for the next 3 weeks and reassess my progress.

## **SMART GOALS PLANNER WORKSHEET**

Date
Specific
Measurable
Achievable/Action-oriented
Relevant
Time-sensitive
(Overall goal)
(Sub-goal)
Date
Specific
Measurable
Achievable/Action-oriented
Relevant
Time-sensitive
(Overall goal)
(Sub-goal)
Date
Specific
Measurable
Achievable/Action-oriented
Relevant
Time-sensitive
(Overall goal)
(Sub-goal)

## MILITARY WORKOUT PLANNING FOR BEGINNERS

Planning your workouts can be challenging if you're new to working out on your own. Here are some basics to get started.



## UNDERSTAND THE RESISTANCE TRAINING PYRAMID

The resistance training pyramid describes a general progression to follow when planning your workouts over a period of weeks or months. It keeps you from focusing too much on one area and helps give variety to your workout to keep you engaged. Following the pyramid design uses a type of workout programming called linear periodization. It's somewhat similar to **block periodization** where you have periods of time dedicated to working on specific components of fitness. But rather than having a specific component of fitness that you're training to improve (like you do in a block-periodized program), you'll have a gradual change in volume and intensity over time. Linear periodization is a smoother transition between levels of the pyramid over time.

## **NEUROMUSCULAR CONTROL AND BALANCE**

At the base of the pyramid is neuromuscular control and balance, also known as stabilization. This section of the pyramid is what will be most helpful for injury prevention. A stabilization workout focuses on performing low-weight exercises correctly. You do them slow and controlled to improve **how well you move** during the exercise. Beginners should spend 2–3 weeks focusing on stabilization exercises to improve neuromuscular control and balance, and to familiarize yourself on how to do the lifts with weights. After those 2–3 weeks, you can continue to incorpo-

rate stabilization exercises as a dynamic warm-up before your workout, and some other exercises as part of a core workout. Unlike the other levels of the pyramid, this "base level" should be incorporated in all workouts as time goes on.

## **MUSCULAR ENDURANCE**

The next level up the pyramid is muscular endurance. Beginners should focus on endurance before the other components of the pyramid because you'll use lower weights. This allows you to get even better at the lifts so you can perform them safely with higher weights. About 4–6 weeks is a good amount of time to spend working on **muscular endurance** so you can see improvements. After the first 2–3 weeks you spent on stabilization, your progress can seem to slow down—and that's normal because it's how your body starts to adapt to the resistance training you've been doing.

## **MUSCULAR HYPERTROPHY**

Muscular hypertrophy, or building muscle mass, is the middle level of the pyramid. When you look at the ranges of volume and intensity for muscular endurance, hypertrophy, and strength, hypertrophy is the middle ground. You'll use moderate loads (67–85% of your **1RM**) for moderate reps (6–12). Since muscle strength is associated with muscle size, it makes sense to train to **increase hypertrophy** before maximal strength training. It generally takes 4–6 weeks to start to see muscle growth, and closer to 8 weeks to really get visibly noticeable results.

Some people might be concerned that they'll "get too big" and have goals of being physically strong, but not enormously muscular. There a few important things to note here: 1) If you're new to resistance training, you'll start to put on muscle mass. That will happen even if you aren't specifically training for muscular hypertrophy. 2) As you build muscle mass, you'll start to lose body fat. Muscles are hungry and will burn more calories to maintain their size. For men, this often means losing a bit off the beer gut. For women, it means you might start to look more muscular. That has to do with where men and women carry most of their body fat. Men tend to carry it viscerally, meaning attached to muscles and internal organs—so that's why overweight men are more "apple shaped." Women tend to carry their body fat subcutaneously, meaning under their skin and over their muscles. As women lose body fat, it starts to expose the muscles underneath the fat, giving that muscular appearance. It isn't so much that you're "getting huge"—you're just able to see your muscles better.

Some people might want to skip the hypertrophy level of the pyramid. That's OK. You can still get stronger without dedicating a period of time to increasing muscle size. Just know that you'll still increase your muscle size when strength training, but it won't be as efficient as if you dedicated a training period to it.

## **MUSCULAR STRENGTH**

After hypertrophy comes muscular strength. As you've been progressing to this point, the amount of weight you lift for each level has slowly gone up, and the number of repetitions has gone down. Again, you'll want to spend 4–6 weeks working to specifically improve **muscular strength**, gradually increasing weight and decreasing reps, until you're only doing 4–6 per set.

## **MUSCULAR POWER**

The final, top-most level of the resistance training pyramid is developing power, or the ability to move objects quickly. You don't always need to get this far up the pyramid, especially if you have a less physically demanding job. Even if you don't need to have power, these types of lifting are the most fun for some people because you're usually lifting weights overhead and doing explosive movements. The weight you use can range from moderate to heavy, and you generally will perform the movements quickly so your muscles have a new stimulus to adapt to. A power phase is almost always done after building strength because higher levels of muscular strength are very important to **generating power**.

As you plan your long-term workouts, you don't need to choose specific exercises for the phase that's several months out. But following the pyramid structure gives you some guidance about how to progress over time, as opposed to just week-to-week. If you're just beginning a resistance training program, use the early two phases to experiment a bit. Find specific exercises that you like and don't like, and take the time to get good at them. Then by the time you need to start really adding on the weight, you are an expert in those lifts and can do them safely.

## **REFERENCES**

- Grgic, J., Mikulic, P., Podnar, H., & Pedisic, Z. (2017). Effects of linear and daily undulating periodized resistance training programs on measures of muscle hypertrophy: A systematic review and meta-analysis. PeerJ, 5. doi:10.7717/peerj.3695
- Harries, S. K., Lubans, D. R., & Callister, R. (2015). Systematic review and meta-analysis of linear and undulating periodized resistance training programs on muscular strength. Journal of Strength and Conditioning Research, 29(4), 1113–1125. doi:10.1519/jsc.0000000000000012
- National Academy of Sports Medicine. Optimum Performance Training Model. Retrieved February 9, 2021 from https://www.nasm.org/certified-personal-trainer/the-opt-model
- Ratamess, N. A. (2017). Development of resistance training programs. In B. A. Alvar, K. Sell, & P. A. Deuster (Eds.), NSCA's Essentials of Tactical Strength and Conditioning (pp. 173). Champaign, IL: Human Kinetics.

## **CARDIO PLANNER**

Use the workout planner below to keep track of your cardio training. Print a copy of the worksheet, and enter the date, time of day, type of each cardio workout you complete, length of your workout in the "Time" column, and the distance you covered (when applicable), in either miles or kilometers, in column 5. Your average pace, when applicable, is your distance divided by your time in column 6. Remember: Take notes on how your workout went!

(This worksheet also is available in Excel format, which automatically makes the calculations for you. If you would like the Excel version, please send your request to us using HPRC's **Ask the Expert** feature, and we'll email the file to you.)

Date 6/15/2018	Time of Day 1500	Workout Run	Time (h:mm:ss) 2:35:15	Distance (mi or km) 13.1 mi*	Average Pace (h:mm:ss) 0:11:51/mi*	
How was y	our workout?					

\*If you prefer, substitute kilometers (km) rather than miles (mi) but be sure you use the same unit of distance in all cases.

Date	Time of Day	Workout	Time (h:mm:ss)	Distance (mi or km)	Average Pace (h:mm:ss)	
How was y	our workout?					
Date	Time of Day	Workout	Time (h:m- m:ss)	Distance (mi or km)	Average Pace (h:m-m:ss)	
How was y	our workout?					
How was y	our workout?					
How was y	our workout?					

Date	Time of Day	Workout	Time	Distance	Average Pace
			(h:mm:ss)	(mi or km)	(h:mm:ss)
How was y	our workout?				
Date	Time of Day	Workout	Time	Distance	Average Pace
Dute	Time of Duy	Workout	(h:mm:ss)	(mi or km)	(h:mm:ss)
How was y	our workout?				
Date	Time of Day	Workout	Time	Distance	Average Pace
			(h:mm:ss)	(mi or km)	(h:mm:ss)
Ном мас у	our workout?				
110W Was y	our workout:				
Date	Time of Day	Workout	Time	Distance	Average Pace
			(h:mm:ss)	(mi or km)	(h:mm:ss)
How was y	our workout?				

## **WEIGHT-TRAINING PLANNER**

Use this workout planner to keep track of your weight training. Print it out and enter specific exercises in the first column, and then add your workout dates across the top as you go.

Exercise	Date	1/31/20				
Overhead	Weight	100				
Press	Reps	10				
	Sets	3				
Lat	Weight	150				
Pull-down	Reps	12				
	Sets	4				
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					
	Weight					
	Reps					
	Sets					

## **GUIDE TO NUTRIENT TIMING**

*When* you eat is just as important as *what* you eat for optimal performance. Fueling with the right types of food and fluids before, during, and after activity can mean the difference between mission success and failure. Follow these tips on what and when to eat to perform at your best.

		WHAT	WHEN	EXAMPLES
_	For activity < 1 hour	A carb-rich meal or snack of 200–300 calories Avoid high-fat or high-fiber foods for easier digestion	30–60 minutes	Bread with jam     Cereal and milk     Banana or apple with nut butter
PRE-WORKOUT	For activity > 1 hour	1-4 carbs/kg (0.5–1.8 g carb/lb) Adjust timing and amount to match your schedule and activity	1–4 hours	Examples for 185-lb person fueling 1g/kg:              Medium banana and 2 packets instant apple-cinnamon oatmeal             Orange juice and whole-wheat bagel with jelly             Waffles with syrup and berries
	Fluid	16 fl oz	2–4 hours	Water
	Caffeine (optional)	200 mg	30–60 minutes	16 oz coffee or 2 pieces caffeinated gum or mints
KOUT	For activity > 1 hour	30–60 g carbs	Every hour	At least 1–2 options (~25 g carb each)  1 sports gel 3 sports chews 20 mini-pretzels  1/4 cup raisins 18 gummy bears/25 jelly beans 2 squeezable fruit pouches 16 oz sports drink
WOR	For activity > 3 hours	Up to 90 g carbs	Every hour	Up to 3.5 options from examples above (~25 g carb each)
DURING WORKOUT	Fluid and electrolytes	16–32 fl oz; adjust to environment and sweat rate Limit to 48 fl oz per hour Replenish electrolytes with food, sports drinks, or both	Every hour	<ul> <li>Water and /or sports drink</li> <li>16 fl oz water bottle</li> <li>½ 1-qt canteen</li> <li>100 oz hydration pack (finish in 4–5 hours)</li> </ul>
	Caffeine (optional)	200 mg	Every 3–4 hours as needed	16 oz coffee or 2 pieces caffeinated gum or mints  Don't exceed 600 mg in 24 hours or 800 mg for sustained operations
POST-WORKOUT	Meal or snack	High in carbs (at least 50 g) with 15–30 g protein Include salty foods	Within 2 hours	<ul> <li>Turkey and cheddar cheese on whole-wheat bread with an apple</li> <li>Peanut butter and jelly on whole-wheat bread with chocolate milk</li> <li>Low-fat Greek yogurt with trail mix and fruit</li> </ul>
POST-V	Fluid	16 oz for every lb lost during exercise or until urine is pale yellow	Begin immedi- ately after workout	Water and/or sports drink

## **ADDITIONAL RESOURCES: CHALLENGE 3**

Find more resources on how you can make sure you're getting enough exercise and fueling properly.

Benefits of group exercise

**Creatine: Just the facts** 

Find your fitness battle buddy

**Pre-workouts: What to look out for** 

How to fuel your post-workout recovery

Physical fitness training series: Army Combat Fitness Test

Physical fitness training series: Air Force Physical Fitness Assessment

Physical fitness training series: USCG Physical Fitness Test

Physical fitness training series: Navy Physical Readiness Test

Physical fitness training series: USMC Physical Fitness Test & Combat Fitness Test

Stay active and maintain military fitness through cold, snowy winters



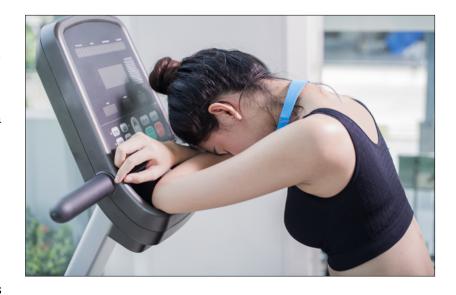
## **CHECK-IN**

Sticking to a new routine can be challenging. To avoid feeling overwhelmed as you're building on the challenges in this workbook, review your goals and progress using the following questions:

- Feeling stressed? Check out Challenge 5 to learn more about stress-management tools. Stress plays a major role in weight management. Getting it under control can help you reach your goals faster.
- Feeling overwhelmed or frustrated? If you're not seeing the results you were hoping for or you're having trouble achieving your goals, review the SMART goals worksheet you filled out from Challenge 1. Are your goals still realistic? Do they still fit into your daily life? Feel free to adjust your goals along the way to fit into your life and make them more achievable.
- Need extra support? There's no need to go this alone. Find a battle buddy who has
  similar goals, or share your goals with loved ones; they can help keep you accountable. Social support plays an important part in helping you achieve your goals.
  Whether it's sharing on social media or finding a group to work out with, find what
  works for you to stay on track.
- Feeling bored? If you haven't already, add another challenge to your routine! If you feel you're doing all the right things, try modifying one of the challenges to fit your

lifestyle. For example, add another day of exercise, schedule 30 minutes a day of mindful meditation, or just focus on keeping up with all these tasks on a long-term basis.

Weight loss and weight management are ongoing processes. There might be times when it seems like everything is going well, and other times when you need to refocus on a particular challenge, such as getting enough sleep or meal



planning during a busy week. That's okay! The important thing is to be mindful of where you are in the process and not let yourself slip back into old habits. *Check back here as often as you need to assess your progress and how you're feeling.* 

## CHALLENGE 4: GET 7-9 HOURS OF SLEEP EACH NIGHT

Regular exercise and healthy eating are habits you probably already know are important to achieve your weight-loss goals. But did you know getting sleep is also very important?

When you get less than 7–9 hours of sleep, your efforts to "eat healthy" and exercise can make your body less effective at burning fat and building muscle. Also, sleep deprivation makes you hungrier, feel less full after a meal, more likely to give in to eating the treats you're trying to avoid, and less likely to maintain your workout routine. Sleep is critical to your health, well-being, and weight loss!

When you're getting ready to work out, the idea of sleeping in bed might seem easy (or even a fantasy). In reality getting 8 hours a night can be harder than it seems. Many active-duty Warfighters report getting only 6 or less hours of sleep a night. **This challenge will help you monitor your sleep to determine if you're getting enough sleep—and if not, what you can do to improve.** To begin, ask yourself these questions:

- Are you productive, healthy, and happy on 7 hours of sleep? Or does it take you more hours of quality sleep to get you into high gear?
- Are you experiencing sleep problems?
- Do you depend on caffeine to get you through the day?
- Do you feel sleepy when driving?

Next, learn about more ways sleep can impact your performance and get tips to help you sleep better. Take a deeper dive by learning about 10 sleep habits to help you lose weight, how sleep affects performance, foods can help or harm sleep, and the impact of exercise on sleep and weight loss.

After building your sleep knowledge, begin tracking your sleep using the sleep diary. This will help you notice sleep-related habits that might help or get in the way of getting restful sleep. Then, try to apply your newly learned strategies to get 7–9 hours of restful sleep each night.

#### **TASKS TO ACHIEVE CHALLENGE 4:**

- What's the "weight" of poor sleep?
- Find out how sleep impacts your performance.
- Learn "10 sleep habits to help you lose weight."
- Do your eating habits keep you awake?
- Complete a 10-day sleep diary.
- Understand the connections between sleep, exercise, and weight.
- See some additional sleep resources.

## THE "WEIGHT" OF POOR SLEEP

You might be familiar with the impact of poor sleep on your daily routine—feeling drowsy on your drive to work, trouble concentrating or focusing on tasks, or limited patience for your family when you come home. But what about your weight? Sleep plays a role in metabolism, appetite, and even your food choices. Ultimately, sleep impacts your weight and your chance of becoming overweight or obese. When you're in the military, your career can be affected if you're overweight or obese.

Sleep is vital to restore your body and mind. Your circadian clock is in charge of your 24-hour sleep/wake cycle. When you don't sleep well or enough, your circadian clock is off, impacting how you metabolize and digest food.

## WHAT'S SLEEP GOT TO DO WITH IT?

Less than optimal (under 7 hours) sleep is strongly linked to weight gain and obesity. Poor sleep can lead you to crave and eat "energy-rich" foods such as fats and simple carbohydrates, eat less vegetables, and have irregular eating patterns. The relationship is complex, but possible factors include:

- Increased food cravings and appetite changes → eating more food, especially high-calorie foods and snacks
- Longer time awake → more time and opportunities to eat, especially carbohydrateand calorie-rich snacks
- Poor timing of eating → eating later in the evening when your body doesn't metabolize and digest as efficiently
- Feeling more tired → less likely to exercise
- Changes in hunger and fullness hormones → increased hunger

#### **BOTTOM LINE**

What you eat can impact your sleep, but sleep can impact what and how much you eat, adding on the pounds. If you need another reason to get a good night's sleep, here it is: Lack of sleep can increase your risk for being overweight, negatively affect your health, and possibly even your military life. Follow these **sleep strategies** to optimize sleep and reach your weight and fitness goals.



## **REFERENCES**

Dashti, H. S., Scheer, F. A. J. L., Jacques, P. F., Lamon-Fava, S., & Ordovás, J. M. (2015). Short sleep duration and dietary intake: Epidemiologic evidence, mechanisms, and health implications. *Advances in Nutrition*, 6(6), 648–659. doi:10.3945/an.115.008623

Noorwali, E., Hardie, L., & Cade, J. (2019). Bridging the reciprocal gap between sleep and fruit and vegetable consumption: A review of the evidence, potential mechanisms, implications, and directions for future work. *Nutrients*, 11(6). doi:10.3390/nu11061382

Peuhkuri, K., Sihvola, N., & Korpela, R. (2012). Diet promotes sleep duration and quality. *Nutrition Research*, 32(5), 309–319. doi:10.1016/j.nutres.2012.03.009



## **SLEEP & PERFORMANCE**

You know that feeling: When you're dragging from not getting enough sleep. But do you know how many ways **lack of sleep** can affect how well you think, do your job, choose your meals, remember details, and relate to your friends and family? Use this list to learn how **sleep can impact your performance** and learn the best strategies to overcome a sleep debt.

The amount and quality of **sleep you get impacts your performance** at school, home, work, and if you're a Warfighter, during missions. Learn the facts about sleep to help you manage "sleep debt," and set yourself up for success, day and night.

	0	SLEEP NEED	Most people, including Warfighters, need 7–9 hours of sleep to function optimally. Less sleep equals decreased performance quality.
	<u> </u>	DEPLOYED WARFIGHTERS	Military Service Members away from home report getting only about 5–6 hours of sleep per 24 hours due to night operations and poor sleep environments.
		BRAIN	In order to recover and perform complex mental operations needed for successful military operations, sleep is essential.
		SLEEP DEBT	If you don't get 7–9 hours of sleep every 24 hours, you build up a sleep debt. The more debt you have, the more sleep it will take to pay it off.
		PERFORMANCE	Mental performance—such as planning ahead, solving problems, managing change, assessing risk, acting appropriately and decisively under pressure, and staying motivated—relies heavily on sleep.
		MEMORY	When you sleep, your brain merges new information into our memory. A good night's sleep can help improve test scores.
	<b>(1)</b>	SLEEP LOSS	Sleep loss reduces mental sharpness and agility. In some cases, it's similar to the effects of alcohol.
ı	J.M.	ACCIDENTS	Drowsy driving can lead to motor-vehicle accidents and related injuries and fatalities.
		NUTRITION	Lack of sleep causes changes to the brain and body that can lead to unwanted weight gain.
	<b>6</b>	RELATIONSHIPS	Sleep loss can make it harder to understand others and accurately interpret emotions.
		AFTER DEPLOYMENT	Some Warfighters report problems sleeping when they return home.

## **BEST STRATEGIES**

**	WAKE UP	Wake up at the same time every day, even on your days off.
	LIGHT VIEW- ING IN THE MORNING	<b>Direct exposure to a source of very bright light</b> , preferably sunlight, promotes wakefulness, improves alertness, and helps with circadian clock regulation to promote better sleep.
	ENVIRONMENT	Reduce noise and light, keep a comfortable temperature, and avoid cell phones and other devices at bedtime.
	PRE-SLEEP ROUTINE	Unwind with a book or <b>gratitude practice</b> about 1 hour before bed.
<b>*</b>	MINDFULNESS TECHNIQUES	Relieve physical symptoms of stress and anxiety with progressive muscle relaxation or mindfulness meditation.

## **NEXT BEST**

Zz	STRATEGIC NAPS	As long as you actually sleep during a nap, you can pay off your sleep debt. You can benefit from naps of any duration. Short naps are an excellent strategy to improve alertness when fatigue starts to build up. Longer naps can help you bank sleep hours before periods of sleep deprivation or pay off sleep debt. In general, you should avoid napping close to your bedtime if you plan to get a full night's sleep. But napping is a versatile tool, and learning when and how long you should nap can help you avoid sleep debt and optimize your performance."
		Naps at any time of the day or night are good—but it's easiest to fall (and stay) asleep for a nap:  • Around your normal bedtime  • Around your normal wake-up time  • In the early afternoon

## **IN A PINCH**



#### **CAFFEINE**

Although it does not replace sleep, caffeine is an effective tool to temporarily maintain mental performance when you can't get enough sleep. Caffeine gum can reduce grogginess and can be used to maintain some aspects of cognitive performance during sleep deprivation. During night shifts and sustained operations, consuming **200 mg of caffeine** every 3–4 hours is a safe way to boost mental and physical performance.

## **AVOID THESE**



## **ALCOHOL**

Drinking alcohol before bedtime might make you feel drowsy, but it actually impairs sleep—and increases sleep debt.



EXCESS CAFFINE

Consuming too much caffeine keeps you awake and disrupts sleep. Avoid drinks with caffeine at least 6 hours before bedtime. Caffeine does not replace sleep.



**SLEEP AIDS** 

Check with your doctor before using any over-the-counter sleep aids. Most of these pills can help you fall asleep, but they can also reduce sleep quality

## 10 SLEEP HABITS TO HELP YOU LOSE WEIGHT

Sleep is vital for weight loss as well as overall health, performance, and well-being—and the better the sleep, the greater its benefits. That's why proper sleep practices that promote optimal sleep length and quality are important, especially when you're trying to lose weight.

If you're struggling to get quality sleep, try these 10 tips from the U.S. Army Performance Triad to help build healthier sleep habits:

- 1. Create a quiet, dark, comfortable sleeping environment. Cover windows with darkening drapes or shades (dark trash bags work too), or wear a sleep mask to block light. Minimize disturbance from environmental noises with foam earplugs or use a room fan to muffle noise. If you can, adjust the room temperature. If you can't, use extra blankets to stay warm or a fan to keep you cool.
- 2. Use the bedroom only for sleep and sex. Remove the smartphone, TV, computer, laptop, etc., from your bedroom. Don't eat or drink in bed. Keep discussions, especially arguments, out of the bedroom.
- 3. **Stop caffeine at least 6 hours before bedtime.** Caffeine promotes wakefulness and disrupts sleep.
- 4. Don't drink alcohol before bed. Alcohol makes you feel sleepy at first, but it disrupts and lightens your sleep several hours later. In short, alcohol reduces the healing value of sleep. (Nicotine—and withdrawal from nicotine in the middle of the night—also disrupts sleep.) If you need help to quit drinking or using nicotine products, talk to your healthcare provider for options.
- 5. **Get your exercise in by early evening. Exercise** is great—just be sure to finish at least 3 hours before bedtime so you have plenty of time to wind down.
- 6. **Don't go to bed hungry.** A light bedtime snack (for example, milk, and crackers) can be helpful, but don't eat a large meal close to bedtime. And empty your bladder just before you go to bed so the urge to use the bathroom doesn't disrupt your sleep.





The last 4 habits are especially important if you're having sleep problems:

- 7. **Keep a regular routine that starts with a fixed wake-up time and getting light exposure.** Set a fixed time each day to wake up, get out of bed, and get light exposure. Pick a time you can maintain during the week and on weekends. Then adjust your bedtime so you target 7–9 hours of sleep.
- 8. **Get out of bed if you can't sleep.** Only go to bed (and stay in bed) when you feel sleepy. Don't try to force yourself to fall asleep—it will tend to make you more awake, making the problem worse. If you wake up in the middle of the night, give yourself about 20 minutes to get back to sleep. If you don't fall asleep within 20 minutes, get out of bed and do something relaxing. Don't return to bed until you feel sleepy.
- 9. Nap wisely but sparingly. Napping can be a good way to make up for poor or reduced night-time sleep. But naps also can cause problems falling asleep or staying asleep at night, especially if they're longer than 1 hour or taken late in the day (after 1500 hours). If you need to nap for safe-ty reasons (for example, driving), try to take a short 30–60 minute nap in the late morning or early afternoon (for example, right after lunch), just enough to take the edge off your sleepiness.
- 10. **Move the bedroom clock so you can't see it.** If you tend to check the clock 2 or more times during the night, and if you worry that you're not getting enough sleep, cover the clock face or turn it around so you can't see it—or remove the clock from your bedroom entirely.

Warfighters lead demanding lives, and sleep deficits can lead to serious losses in **Total Force Fitness performance**. Improving your sleep habits can help lead the way to healthier sleep and successful weight loss. For more information on sleep, read HPRC's 20 Holistic Sleep-Optimization Tips for Better Performance, Mental Health, and Resilience.

## **REFERENCES**

- Belenky, G., Wesensten, N. J., Thorne, D. R., Thomas, M. L., Sing, H. C., Redmond, D. P., . . . Balkin, T. J. (2003). Patterns of performance degradation and restoration during sleep restriction and subsequent recovery: A sleep dose-response study. *Journal of Sleep Research*, 12(1), 1–12. doi:10.1046/j.1365-2869.2003.00337.x
- Mah, C. D., Mah, K. E., Kezirian, E. J., & Dement, W. C. (2011). The effects of sleep extension on the athletic performance of collegiate basketball players. *Sleep*, 34(7), 943–950. doi:10.5665/sleep.1132
- Rupp, T. L., Wesensten, N. J., Bliese, P. D., & Balkin, T. J. (2009). Banking sleep: Realization of benefits during subsequent sleep restriction and recovery. *Sleep*, 32(3), 311–321. doi:10.1093/sleep/32.3.311
- Xi, B., He, D., Zhang, M., Xue, J., & Zhou, D. (2014). Short sleep duration predicts risk of metabolic syndrome: A systematic review and meta-analysis. *Sleep Medicine Reviews*, 18(4), 293–297. doi:10.1016/j.smrv.2013.06.001
- Xie, L., Kang, H., Xu, Q., Chen, M. J., Liao, Y., Thiyagarajan, M., . . . Nedergaard, M. (2013). Sleep drives metabolite clearance from the adult brain. *Science*, 342(6156), 373–377. doi:10.1126/science.1241224

## DO YOUR EATING HABITS KEEP YOU AWAKE?

Only 25–35% of Military Service Members report getting the recommended 7–9 hours of sleep per night. With your military and family commitments, devoting the time you need for restful sleep can be tough. Small steps—such as thinking about what you eat or drink before bed—can help getting a good night's sleep be more than just a dream.

## How foods and drinks can interfere with sleep

• **Feeling too full or too hungry:** One extreme or the other might interfere with sleep by waking you up. A too-full stomach might also cause pain, nausea, or bloating.



#### TID

Eat a small, light snack, such as cereal with milk or whole-wheat crackers with cheese, before bed if you're feeling hungry. Avoid heavy meals, spicy, or fried foods 3 hours before bed.

• Alcohol: Initially, you might fall asleep faster, but then alcohol keeps your body from getting into the deep sleep cycles that provide restorative sleep. Even 1–2 servings of alcohol can impact your sleep.



## TIP

Limit alcohol, especially before bed, to maximize deep sleep.

• Caffeine: That morning coffee does exactly what you want it to do: It boosts your energy and alertness. But caffeine and other stimulants can disrupt sleep when taken too close to bedtime.



#### TIP

Stop drinking caffeine at least 6 hours before bed.

#### **CAN CERTAIN FOODS REALLY HELP YOU SLEEP?**

Some foods have naturally occurring ingredients, such as tryptophan and melatonin, believed to aid sleep. Although there's not enough evidence to show a direct link between foods with melatonin and tryptophan that can impact sleep, some studies suggest certain foods can contribute to better sleep. There's little harm in eating them if you enjoy them.

- **Melatonin** is a hormone that regulates your sleep-wake cycle. Melatonin production increases when it gets dark, signaling your body it's time to sleep. Nuts, eggs, fish, cherries, milk, and mushrooms naturally contain melatonin.
- **Tryptophan** is an amino acid (a building block of protein) needed to produce serotonin, a brain chemical important for sleep and mood. Turkey, chicken, beef, cheese,

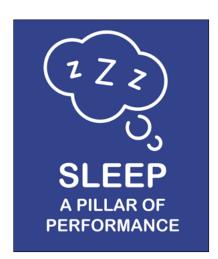
- yogurt, and fish naturally contain tryptophan. Carbohydrates also help boost tryptophan in the brain.
- **B vitamins** are also needed for your body to produce serotonin.

For restful sleep, be mindful of how much and what time you have caffeine, alcohol, and your last meal of the day.

## **REFERENCES**

- Clark, I., & Landolt, H. P. (2017). Coffee, caffeine, and sleep: A systematic review of epidemiological studies and randomized controlled trials. *Sleep Medicine Reviews*, 31, 70–78. doi:10.1016/j.smrv.2016.01.006
- Doherty, R., Madigan, S., Warrington, G., & Ellis, J. (2019). Sleep and nutrition interactions: Implications for athletes. *Nutrients*, 11(4). doi:10.3390/nu11040822
- Ebrahim, I. O., Shapiro, C. M., Williams, A. J., & Fenwick, P. B. (2013). Alcohol and sleep I: Effects on normal sleep. *Alcoholism: Clinical and Experimental Research*, 37(4), 539–549. doi:10.1111/acer.12006
- Halson, S. L. (2014). Sleep in elite athletes and nutritional interventions to enhance sleep. *Sports Medicine*, 44(S1), 13–23. doi:10.1007/s40279-014-0147-0
- National Sleep Foundation. How Food and Drink Affect Your Sleep. Retrieved 19 November 2019 from https://www.sleepfoundation.org/bedroom-environment/taste/how-food-and-drink-affect-your-sleep
- Peuhkuri, K., Sihvola, N., & Korpela, R. (2012). Diet promotes sleep duration and quality. *Nutrition Research*, 32(5), 309–319. doi:10.1016/j.nutres.2012.03.009
- Roehrs, T., & Roth, T. Sleep, sleepiness and alcohol use. Retrieved 2 October 2019 from https://pubs.niaaa.nih.gov/publications/arh25-2/101-109.htm
- Troxel W. M., Shih R. A., Pedersen E. R., et al. Sleep in the Military: Promoting healthy sleep among U.S. Service members. *Rand Health Quarterly*. 2015;5(2):19.
- U.S. Department of Health and Human Services; National Institute of Health; National Heart, Lung, and Blood Institute. (2011). Your guide to healthy sleep. Retrieved from https://www.nhlbi.nih.gov/files/docs/public/sleep/healthy\_sleep.pdf

## **COMPLETE A SLEEP DIARY**



## **KEY**

- A: Drank alcohol
- C: Had caffeine
- **D:** Took any dietary supplement
- E: Exercised
- **M:** Took any medicine
- **S:** Slept at night or took
- 1 1
  - nap during the day
- **X:** Went to bed for the night

When it comes to getting restful sleep, it's important to understand what works for you. What keeps you up at night? What helps you feel rested in the morning? When's the best time for you to go to bed and wake up? Is it helpful for you to nap?

The goal of sleep is to feel rested and energized the next day. The exact sleep recipe to get those results might be different for each of us. Use the worksheet below to help you track your sleep, the different factors that might aid or detract from a restful sleep, and any habits you might want to continue or avoid.

**Instructions:** Write the date, day of the week, and type of day: Work, School, or Off. Follow the key to add the appropriate letter in each box. Rate in the last column how energized you felt the next morning: 5—extremely energized, 4—very energized, 3—moderately energized, 2—slightly energized, 1—not at all energized.

Sample entry (on the next page): On Monday, I jogged on my lunch break at 1 p.m., drank a glass of wine with dinner at 6 p.m., fell asleep watching TV from 7–9 p.m., went to bed at 10:30 p.m., fell asleep around midnight, woke up at 4 a.m., slept from 5–7 a.m., and had coffee, a multivitamin, and medicine at 7 a.m. I felt moderately energized.

	Sample	10-DAY SLEEP DIARY							
Today's date	I/3I/20								
Day of week	Mon								
Type of day	Work								
Noon									
1 p.m.	Е								
2 p.m.									
3 p.m.									
4 p.m.									
5 p.m.									
6 p.m.	A								
7 p.m.	S								
8 p.m.									
9 p.m.									
10 p.m.	X								
11 p.m.									
Midnight	S								
1 a.m.	s								
2 a.m.	s								
3 a.m.	s								
4 a.m.									
5 a.m.	s								
6 a.m.	s								
7 a.m.	C, D, M								
8 a.m.									
9 a.m.									
10 a.m.									
11 a.m.									
Energy level	3								

## SLEEP, EXERCISE, AND WEIGHT MANAGEMENT

Sleep, exercise, and weight management are all interconnected. Regular exercise helps control circadian rhythms, or your "sleep-wake cycle." This can help you fall asleep more easily at night, get a better night's rest, and be more alert during the day—all of which can improve weight management. On the flip side, major disruptions to your circadian rhythm over time can lead to increased risk of cardiovascular disease, diabetes, and cancer.

Getting enough regular, restful sleep is another key to maintaining a high level of physical performance and recovering from exercise, particularly for endurance activities. Sleep restriction



decreases the total work athletes are able to perform. For example, in an endurance event such as a physical fitness test, not getting enough sleep can decrease your performance. As you get more restful sleep and are able to maintain a high level of exercise, your risk for cardiovascular disease and diabetes goes down as your fitness improves.

Sleep is especially important when you're trying to lose weight because it helps maintain your resting metabolic rate (RMR), the amount of energy you burn at rest. One of the main factors that drives your RMR is how much lean body mass you have. Limiting sleep can affect lean body mass, which would reduce your RMR. Bottom line: Getting the recommended 7–9 hours of sleep each night plays a significant role when you're trying to lose weight—and keep it off.

#### **REFERENCES**

Hower, I. M., Harper, S. A., & Buford, T. W. (2018). Circadian rhythms, exercise, and cardiovascular health. *Journal of Circadian Rhythms*, 16(1). doi:10.5334/jcr.164

Potter, G. D. M., Skene, D. J., Arendt, J., Cade, J. E., Grant, P. J., & Hardie, L. J. (2016). Circadian rhythm and sleep disruption: Causes, metabolic consequences, and countermeasures. *Endocrine Reviews*, 37(6), 584–608. doi:10.1210/er.2016-1083

Reid, K. J., Baron, K. G., Lu, B., Naylor, E., Wolfe, L., & Zee, P. C. (2010). Aerobic exercise improves self-reported sleep and quality of life in older adults with insomnia. *Sleep Medicine*, 11(9), 934–940. doi:10.1016/j.sleep.2010.04.014

Savis, J. C. (1994). Sleep and athletic performance: Overview and implications for sport psychology. *The Sport Psychologist*, 8(2), 111–125. doi:10.1123/tsp.8.2.111

## **ADDITIONAL RESOURCES: CHALLENGE 4**

Find more resources on how to optimize your sleep.

Bed partners, sleep habits, and the path to sweet dreams

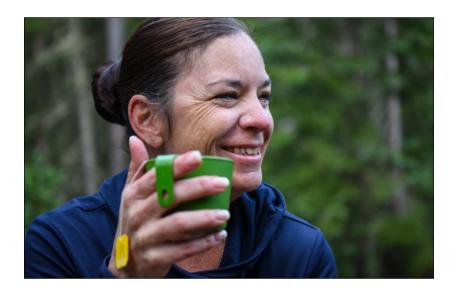
Caffeine for performance

**Caffeine facts** 

How can naps improve my performance?

Make sleep-bank "deposits"

Shifts happen: Managing your sleep with irregular work schedules



# **CHALLENGE 5:** MANAGE YOUR STRESS

Most people believe stress is bad for them. But did you know stress can be a valuable tool to help you lose weight or accomplish any meaningful goal? Stress is the response of your body and brain when you believe something you care about is at stake. That means you can use stress as a human performance optimization tool to help you perform better.

Think about it... Can you name any truly meaningful goal you've accomplished that wasn't somehow stressful? Or one meaningful relationship you have that doesn't cause you stress from time to time?

Stress can even help you live your true values. You know that feeling in your gut when you're about to stray from who you want to be? That's your stress response.

If this weight loss goal is meaningful to you, then it's vital you learn how to optimize stress rather than simply try to escape it. Because when something is meaningful to you, stress is how your body and brain give you the energy you need to succeed.

## If stress is so important, then what's with all the bad press?

For starters stress often feels horrible. And if you believe stress is bad for you, you might try to escape it.

Think about it... Have you ever felt stressed and just wanted to escape so you started eating even though you weren't hungry. Or have you chosen to eat something unhealthy over something healthy to get that short-term relief?

Or have you ever planned to work out, but felt stressed so instead you watched TV or went on social media?

Now think about the outcomes when you try to escape the stress related to meaningful relationships or living true to your values.

The first part of this challenge is to learn how to see stress as your ally rather than your enemy. This is known as your **stress mindset**. This can not only help you embrace your stress response as a tool to help you to follow through on your goals, but it can literally change the hormones your body produces when you're stressed to make you healthier. For example, when your heart starts pumping harder from a stressor, your blood vessels relax, inflammation decreases, and the pumping mimics exercise, which can help boost cardiovascular health.

## What about when stress becomes a problem?

Although stress is an important tool to help you reach your weight-loss goals, sometimes we misinterpret events and our stress response gets overactivated for the task at hand. You don't want the stress you need to thrive in combatives when you're trying to have a meaningful conversation

at dinner! Also, chronic, uncontrollable stress can undermine your efforts to eat healthy, exercise, sleep, and develop healthy habits. Chronic stress can also slow your metabolism and make it

harder to burn fat, particularly belly fat. Most people have had stress mess with their sleep from time to time too. To optimize stress for weight loss, you need tools to put on the brakes when your stress response is in overdrive.

The second part of this challenge is to learn how to activate your body's relaxation response system to cope with unhealthy stress. Once you learn about different relaxation skills, choose one to practice every day for at least a week.



Like any skill, you'll get better with practice. So it's important to practice these skills even when they aren't needed "to calm you down" in the same way you wouldn't want to only practice your marksmanship skills during a firefight.

Finally, learn how to reduce your stress while eating—and avoid overeating while distracted—by practicing mindful eating.

## **TASKS TO ACHIEVE CHALLENGE 5:**

Understand how your stress mindset affects weight loss.

Learn how to make stress your ally.

Find out how to deal with unhealthy stress.

Use this worksheet to practice your relaxation response skills.

Practice mindful eating to help you lose weight.

#### **ADDITIONAL RESOURCES: CHALLENGE 5**

Find more resources to help you successfully manage your stress.

Develop strategies to make stress good for you!

Discover what is your stress mindset

HPRC's "Create a 'Stress helps me' Mindset" worksheet

How to choose what you want most

Mindfulness in military environments

Psychological Health Center of Excellence Combat and Operational Stress Control (COSC)

# HOW DOES YOUR STRESS MINDSET AFFECT WEIGHT LOSS?

While most people believe stress is seriously harmful to their health, it turns out that your stress mindset—or how you think about stress—influences whether your psychological and physiological reaction to stress impacts you positively or negatively. Some evidence suggests those who experience lots of stress and feel that it negatively affects their health have a nearly 50% increased risk of premature death. However, those who experience lots of stress but don't believe it's all bad tend to have a much lower risk of death.

It isn't realistic to suggest that life could ever be stress-free, especially for Warfighters and their families. You might be convinced all stress is bad, but it actually can be good for you. Healthy levels of stress are important to help you accomplish your weight-loss goals. Stress can help you take action, motivate you to get to the gym, eat right, or even help you get out of bed in the morning when you hear your alarm. The key to making stress helpful is to have the right stress mindset!

### **STRESS BASICS**

The human body's natural stress response helps keep you safe from threats and danger by signaling you to either stand your ground and fight or flee to safety. This "fight-or-flight" response is valuable when activated for short periods because your body mobilizes physiological and psychological resources to help you deal effectively with threats. For example, your heart speeds up to pump more blood to your muscles, and your attention narrows so you can hone in on the threat. Your body mobilizes stress hormones such as adrenaline and cortisol to energize you and dampen fear.

### "STRESS IS THE ENEMY" MINDSET

Even though your body's stress response helps enhance your natural physical defenses and



sharpen your mental state to keep you safe from harm, you still might believe stress is the enemy. You might think, "Stress is bad for me and I should avoid it at all costs" or "Stress makes me weak." You might associate the physical and psychological sensations that come with the stress response as harmful. In some cases, the nervous emotions and physical sensations that come with stress actually

become stressors themselves. If you believe stress is bad and harmful, you're more likely to turn inward and isolate yourself or avoid all challenges, depriving yourself of opportunities to learn or do the things you need to do to lose weight. This mindset also can impact your physiology. For example, when your heart starts pumping harder, it'll likely cause more constriction and inflammation in your blood vessels.

### "STRESS IS AN ALLY" MINDSET

Another set of beliefs suggests stress can be your ally. You might think, "Stress is good for me and I should embrace it. Stress makes me stronger. Maybe it can even help me lose weight." Seeing the stress response this way enables you to use stress to build competence, strengthen social connections, and integrate lessons learned so you can be better prepared for the future. When your mindset befriends stress, the physiological impact is different too. For example, when your heart starts pumping harder, there likely is relaxation in your blood vessels, less inflammation, and pumping that mimics exercise, which can help strengthen and boost cardiovascular health.

### **DEBRIEF**

How you think about stress—your stress mindset—can affect whether it helps or harms your health and well-being. When you think about stress as your ally rather than your enemy, you can train yourself to experience more of the positive effects of the stress response. Chronic, uncontrollable stress can damage your physical and mental well-being. But for most other kinds of stress, your mindset matters. So, what's your stress mindset regarding your current weight-loss journey?

### **REFERENCES**

- Awadalla, P., Dusek, J. A., Otu, H. H., Wohlhueter, A. L., Bhasin, M., Zerbini, L. F., Libermann, T. A. (2008). Genomic counter-stress changes induced by the relaxation response. PLoS ONE, 3(7). doi:10.1371/journal.pone.0002576
- Bai, Y., Bhasin, M. K., Dusek, J. A., Chang, B.-H., Joseph, M. G., Denninger, J. W., Libermann, T. A. (2013). Relaxation response induces temporal transcriptome changes in energy metabolism, insulin secretion, and inflammatory pathways. PLoS ONE, 8(5). doi:10.1371/journal. pone.0062817
- Chang, B.-H., Dusek, J. A., & Benson, H. (2011). Psychobiological changes from relaxation response elicitation: Long-term practitioners vs. novices. Psychosomatics, 52(6), 550–559. doi:10.1016/j.psym.2011.05.001
- Chrousos, G. P., & Kino, T. (2009). Glucocorticoid signaling in the cell. Annals of the New York Academy of Sciences, 1179(1), 153–166. doi:10.1111/j.1749-6632.2009.04988.x
- Sephton, S. E., Lush, E., Dedert, E. A., Floyd, A. R., Rebholz, W. N., Dhabhar, F. S., Salmon, P. (2013). Diurnal cortisol rhythm as a predictor of lung cancer survival. Brain, Behavior, and Immunity, 30, S163–S170. doi:10.1016/j.bbi.2012.07.019

# MAKE STRESS YOUR ALLY

Stress is unavoidable, especially when working hard to lose weight. Alleviating or overcoming your stress is one way to cope, but you also can learn to embrace it and make it your ally.

You might believe that stress is out of your control, and the only way to cope is to avoid it. The good news is there are many ways you can respond to stress. Try the following strategies to turn stress from enemy to ally.

### REFRAME THREATS TO CHALLENGES

Next time you're in a stressful situation, you can choose how to interpret it. Is it a true threat? Is this something that will bring you down? Or you might view the threat as a challenge and think, "This is an opportunity to learn something." It's your chance to prove that you have the resources to deal effectively with this situation. Shifting the lens from threat to challenge—from adversity to opportunity—can open up your perception.

### **EMBRACE ANXIETY**

Nervousness can feel unpleasant, and the emotion and physical embodiment of anxiety often becomes a source of stress. Many have been taught to "relax away the symptoms" when they're feeling stressed. However, research shows trying to calm down can negatively impact your performance, so reinterpret your anxiety as excitement. Tell yourself that the sensations you feel are helping your mind and body prepare—rather than a sign that you can't handle what's going on—to help boost your performance and enable you to feel more confident and composed.

### **CONNECT TO BIGGER-THAN-SELF GOALS**

It can be a challenge to find meaning in day-to-day hassles like the ones you experience at work and home. When you're feeling burned out, turn your self-focused goals into "bigger-than-self" ones by connecting to those values and greater life aspirations that matter most. What's driving you to lose weight? How will a healthier lifestyle contribute to the world and those around you? What kind of positive impact can you make? Is it honorably serving your nation? Focus on something larger than yourself.

### **EXERCISE MORE**

The energy you feel when overly stressed can be overwhelming. As you notice the effects of stress on your body, such as your heart rate increasing, you might feel even more stressed. Put that energy to use by exercising more. Exercise can help you calm your nerves, distract from your stressful thoughts, and lose weight.

### **HELP OTHERS**

When you're feeling overwhelmed, it might seem counterintuitive to invest time in helping others. In addition to the fight-or-flight response, there's "tend-and-befriend," which can encour-

age you to reach out, protect others, and strengthen social bonds. Caring for others creates hope and courage, and buffers against the harmful effects of severe traumas and life-threatening stress. When you reach out to reduce suffering in others, you create meaning and connection. You build resilience too.

Stress management isn't "one size fits all," so it's important to know what works for you. Take the opportunity to learn new strategies when you can. HPRC offers many resources to help you and your family cope with stress. You can also learn more how your stress mindset can influence its physiological and psychological impact on your well-being. Remember: You don't have to go it alone. Lean on friends, family, or the Military and Family Life Counseling Program.

### **REFERENCES**

- Crum, A. J., Salovey, P., & Achor, S. (2013). Rethinking stress: The role of mindsets in determining the stress response. *Journal of Personality and Social Psychology*, 104(4), 716–733. doi:10.1037/a0031201
- Jamieson, J. P., Nock, M. K., & Mendes, W. B. (2012). Mind over matter: Reappraising arousal improves cardiovascular and cognitive responses to stress. *Journal of Experimental Psychology General*, 141(3), 417–422. doi:10.1037/a0025719
- Keller, A., Litzelman, K., Wisk, L. E., Maddox, T., Cheng, E. R., Creswell, P. D., & Witt, W. P. (2012). Does the perception that stress affects health matter? The association with health and mortality. *Health Psychology*, 31(5), 677–684. doi:10.1037/a0026743
- McGonigal, K. (2015). *The Upside of Stress: Why Stress Is Good for You, and How to Get Good at It.* New York, NY: Penguin Random House.



# RELAXATION RESPONSE: HOW TO DEAL WITH UNHEALTHY STRESS

Unhealthy stress—when you're stressed too often or for too long—can have a negative impact on your health and weight-loss goals. When your stress response is on overdrive, your metabolism can slow down and you might find it harder to burn fat through exercise. You might also find it harder to maintain your exercise and healthy-eating plans.

Luckily, your body has a relaxation response system you can learn to use to balance out your unhealthy stress. Even better, there are relaxation response skills you can master to pump the brakes on your stress when it becomes unhealthy.

Following is an overview of several **relaxation response skills** and resources you can use. As a part of this weight-loss challenge, pick at least one of these skills and try it each day for a week. If you don't like one after you try it, try another one next week. The goal is to find one or two relaxation response skills you can practice regularly. Regular practice will help you become an expert, so you can effectively calm down when needed. Each of these skills also provides many other health and performance benefits that come with regular practice.

**Deep-breathing exercises** can slow your breathing by using steady, full breaths and longer exhales. Doing this activates your relaxation response, which in turn relaxes your muscles and sends feedback to your brain that all is well. Regular practice can help reduce symptoms associated with anxiety, insomnia, post-traumatic stress disorder, and depression. To learn more, read HPRC's explanation of how **deep breathing works** and watch HPRC's **videos of deep-breathing exercises**.

**Progressive muscle relaxation (PMR)** is a practice in which you tighten and relax various muscles throughout your body. You can start with your feet and work your way up your body as you tighten each muscle group for 5 seconds and then relax for 20–30 seconds. Do at least 2 or 3 reps for each muscle group—or more if you still notice tension. Regular practice can help relieve the physical symptoms of stress, including lower blood pressure, less fatigue, and relief for tense, aching muscles. To learn more, listen to HPRC's audio guide for progressive muscle relaxation.

Mindfulness meditation is the practice of focusing your awareness on the present moment without judgment. In other words, it is simply being aware of what you are experiencing in the present moment rather than thinking about the past or the future. A common approach is to focus on a physical experience such as your breathing, noticing where and when your attention wanders, and gently guide your attention back to your breath. Regular practice can help increase your memory and ability to concentrate, lower your perception of stress and anxiety, and improve your health. To learn more, read HPRC's overview of mindfulness and listen to HPRC's audio guide to practice a mindfulness meditation.

**Yoga** is a practice that combines stretching exercises, breathing techniques, and meditation. There are many different types of yoga that you can do at home or by joining a yoga studio. Regular

practice can help relieve stress, improve sleep, relieve pain, and improve health. Learn more about **different types of yoga** and watch these **videos of yoga exercises** you can practice at home.

After you review each of these relaxation response skills, choose one to try for a week, and track your results using the relaxation skills tracker worksheet in the next section.

### REFERENCES

- Bhasin, M. K., Dusek, J. A., Chang, B.-H., Joseph, M. G., Denninger, J. W., . . . Libermann, T. A. (2013). Relaxation response induces temporal transcriptome changes in energy metabolism, insulin secretion and inflammatory pathways. *PLoS ONE*, 8(5), e62817. doi:10.1371/journal.pone.0062817
- Jha, A. P., Morrison, A. B., Parker, S. C., & Stanley, E. A. (2017). Practice is protective: Mindfulness training promotes cognitive resilience in high-stress cohorts. *Mindfulness*, 8(1), 46-58. doi: 10.1007/s12671-015-0465-9
- Philippot, P., Chapelle, G., & Blairy, S. (2002). Respiratory feedback in the generation of emotion. *Cognition & Emotion*, 16(5), 605–627. doi:10.1080/02699930143000392
- Seppälä, E. M., Nitschke, J. B., Tudorascu, D. L., Hayes, A., Goldstein, M. R., Nguyen, D. T. H., . . . Davidson, R. J. (2014). Breathing-based meditation decreases posttraumatic stress disorder symptoms in U.S. military Veterans: A randomized controlled longitudinal study. *Journal of Traumatic Stress*, 27(4), 397–405. doi:10.1002/jts.21936
- Stanley, E. A., Schaldach, J. M., Kiyonaga, A., & Jha, A. P. (2011). Mindfulness-based mind fitness training: A case study of a high-stress predeployment military cohort. *Cognitive and Behavioral Practice*, 18(4), 566-576. doi: 10.1016/j.cbpra.2010.08.002
- Wielgosz, J., Schuyler, B. S., Lutz, A. & Davidson, R. J. (2016). Long-term mindfulness training is associated with reliable differences in resting respiration rate. *Scientific Reports*, 6, 1-6. doi:10.1038/srep27533
- Yackle, K., Schwarz, L. A., Kam, K., Sorokin, J. M., Huguenard, J. R., Feldman, J. L., . . . Krasnow, M. A. (2017). Breathing control center neurons that promote arousal in mice. *Science*, 355(6332), 1411–1415. doi:10.1126/science. aai7984



# TRACK YOUR RELAXATION RESPONSE SKILLS

This worksheet is designed to help you track your relaxation skills. Use it to reflect on how they're working for you and what changes you notice over time. For most relaxation response skills you might notice some benefits the first few times you practice, but it usually takes regular practice before you begin to see more results.

Date	Which relaxation skill(s) did you practice?	How long did you practice?	Which elements of this practice did you find easy, difficult, or surprising?	How did you feel after the practice?	Overall, how have your stress levels been today? Have you noticed any changes?

# MINDFUL EATING FOR WEIGHT LOSS

Food is about so much more than just meeting nutritional needs, performance requirements, or weight goals. Sure, we eat because we're hungry. But we also eat when we're tired, stressed, or happy and rewarding ourselves. We eat to celebrate and to gather with friends and family. Sometimes we eat because we're guests and it feels rude not to. We might eat past feeling satisfied or full because the food just tastes so good.

So, when you decide to lose weight, start by acknowledging that sometimes you eat based on social, cultural, or life circumstances. When you begin to think more about your eating habits, being more mindful about when, where, why, and how you eat can help you meet your weightloss goals. Mindful eating is an increasingly popular weight-loss strategy that can help you identify hunger and fullness cues, emotional eating, and other roadblocks to healthy eating.

Mindless eating happens for most of us on a daily basis. It usually involves eating while:

- distracted (reading, texting, watching TV, etc.)
- on auto-pilot (eating out of the entire bag/box)
- bombarded by options (buffet, potlucks, parties, office food)

Don't believe you have auto-pilot behaviors? Have you ever driven somewhere and not remembered part of the drive? Have you ever opened a bag of cookies or chips and then realized you'd eaten more than you'd planned? Most of us go into auto-pilot around food at least sometimes.

**Mindful eating** is the opposite of mindless eating and focuses on being fully aware of your eating experience, including your:

- Senses—how food looks, smells, tastes, and feels
- Stomach—how hungry or full you feel
- Mind—whether you like or dislike a particular food/flavor; noticing food cravings
- Surroundings—how comfortable or uncomfortable you are in your eating environment (or aware of it at all)

### **READY TO PRACTICE?**

To try mindful eating for yourself, follow along with these recordings:

**TOPIC:** Introduction to mindful eating

**TITLE:** Mindful Eating Raisins (audio)

**TIME:** 6 minutes, 13 seconds

A classic exercise to try mindful eating is to eat raisins very slowly. It might seem goofy to take 2 minutes to eat a teeny raisin, or maybe you don't even like raisins. That's okay. Try to focus on how the recording guides you to use all your senses and really notice your food. Use 2 small pieces of chocolate instead of raisins if you prefer!

**TOPIC:** Mindfully eating a meal

**TITLE: Mindful Eating** (audio)

TIME: 5 minutes, 42 seconds

This recording, which takes place in a military dining facility, guides you through mindfully eating a meal start to finish. It gives you reminders for checking in with your senses before, during, and after bites.

### TRYING MINDFUL EATING

Use the guidance in the recordings to practice eating foods mindfully. For a day, begin each of your meals and snacks with a few very slow, mindful bites. Try holding the food in your mouth without chewing immediately. It can feel awkward at first, but new habits often feel uncomfortable. Don't let that stop you. Also, be proud of yourself for trying something new! There's no "wrong" way to eat mindfully; like any skill, it takes practice.

You can also use the following prompts as reminders of what to pay attention to when you eat:

- Appearance: What do you notice about the food?
- Smell: What does the food smell like?
- Flavor: Is it sweet, sour, salty, or some combination?
- Feeling or texture: Is the food crunchy, smooth, sticky, or soft?
- Satisfaction: Do you feel good about what you just ate?
- Preference: Do you like the particular food?

### IS IT WORKING?

Notice if you enjoy your food more or less when you eat mindfully.

- Did you notice any new flavors in an old familiar food?
- Did you learn of a flavor or texture that you didn't realize previously liking or disliking?
- Did you eat less?
- Did you eat the rest of your meal more slowly than usual?
- Did this exercise change your experience of the entire meal, even once you started eating at a more normal pace, or did it only affect those few slow bites?

For more information on mindful eating, read The Center for Mindful Eating's Why Mindful Eating?

### REFERENCES

Fuentes, A. R., Staub, K., Aldakak, L., Eppenberger, P., Rühli, F., & Bender, N. (2019). Mindful eating and common diet programs lower body weight similarly: Systematic review and meta-analysis. *Obesity Reviews*, 20(11), 1619–1627. doi:10.1111/obr.12918

Nelson, J. B. (2017). Mindful eating: The art of presence while you eat. *Diabetes Spectrum*, 30(3), 171–174. doi:10.2337/ds17-0015

The Center for Mindful Eating. (2013). The principles of mindful eating. Retrieved 19 November 2019 from https://thecenterformindfuleating.org/Principles-Mindful-Eating

# **ADDITIONAL RESOURCES: CHALLENGE 5**

Find more resources to help you successfully manage your stress.

Develop strategies to make stress good for you!

Discover what is your stress mindset

How to choose what you want most

HPRC's "Create a 'Stress helps me' Mindset" worksheet

Mindfulness in military environments

Psychological Health Center of Excellence Combat and Operational Stress Control (COSC)



# **NOTES**



Main phone number

Headquarters 6720A Rockledge Drive Bethesda, MD 20817