My Personal Nutrition Plan

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HEA 254: Nutrition and Fitness

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March 19, 2021

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When it comes to nutrition, figuring out the best way to tackle it can be challenging. Our bodies have so many different functions and needs that it can feel overwhelming to determine how to give it what it needs to perform well. Nutrition plans are a helpful tool that can break down the details and give someone a big picture look at their nutritional lifestyle. While it does take some time to get a nutrition plan established, it makes life much easier going forward when it comes to planning meals, eating out, and staying healthy. I will be using myself as an example throughout this paper to demonstrate how to develop a successful nutrition plan for an athlete. This essay will focus primarily on whole food sources that support healthy weight maintenance and overall athletic ability.

Essential Basic Information

Before you can understand the dietary needs of your body, you first have to gather information about your physical self and establish your goals. Without this information, it is impossible to determine how much food you should be consuming and what foods will best support your goals. The first thing I did before starting my nutrition plan was gather basic information regarding age height, and weight. Then I compared current daily weekly activity to my desired fitness goals. My basic information is that I am a 25-year-old female who is 5'0" tall and weighs 118 pounds (or 53 kilograms).

Fitness and Goals

I am currently performing strength training exercises three times a week with aerobic exercise incorporated at least five days a week ranging from light to high intensity. I alternate my strength days based on regions of the body, so I have a leg day, triceps and biceps day, and a shoulders, back, and chest day. I perform strength training exercises for 20 minutes, and then will do 10 minutes of stretching afterwards. I walk my dog at least 1 mile 5 days a week and will incorporate usually 2 days of aerobic exercise such as jogging or stationary cycling.

My goal is to build more muscle and maintain my current weight, save for some fluctuations in gained muscle mass. I would like to achieve greater strength and a more toned look. I am also seeking to maintain functionality, which is why I practice stretching and functional movements after each workout session. I feel that currently my dietary intake has not supported more vigorous and lengthy exercise sessions, which is likely why I have not seen the results I am looking for with my current workout routine. I would like to be able to work back up to 45-minute to hour long sessions of strength training so that I can achieve greater strength. To do this, I am willing to modify my current food intake and alter how often I am eating.

My REE and Total Caloric Needs

In order to develop a successful nutrition plan, it is essential to understand how much energy your body uses at rest. This will establish a baseline for caloric intake, and additional calories can be added to account for exercise based on intensity and frequency. Resting Energy Expenditure, or REE, is a formula that can be used to calculate caloric needs at rest, which is as follows: REE = (14.7 x BW) + 496 (Fink & Mikesky, 2018). BW stands for body weight and should be calculated using kilograms. With my body weight at 53 kilograms, the equation becomes REE = (14.7 x 53) + 496, so my REE = 1,275 calories per day.

Now that we have established my baseline, I need to look at my activity level and add in the calories being burned during exercise. My current activity level puts my in the activity factor of 1.6-2.4, so I need to multiply the highest and lowest numbers in this range to determine my caloric intake range each day (Fink & Mikesky, 2018). The equations used are $1.6 \times 1,275 = 2,040$ and $2.4 \times 1,275 = 3,060$. In conclusion, I need to consume between 2,040 and 3,060 calories on my training days in order to support both resting energy requirements and active energy needs.

My Ideal Diet

Every person is different when it comes to what they like to eat, when they get hungry, and what goals they have. I personally follow a vegan diet for ethical and health reasons, so my ideal diet eliminates dairy and meat. I am very conscious of the food going into my body, so I also prefer to prepare my own food so I can control the amount of salt, sugar, and oil going into my food. While eating out can be convenient, I have found it to be more a detriment because of the unnecessary additives and how sick it makes me sometimes. I work two part-time jobs and go to school full-time, so I like to find meals that take about 30 minutes to prepare that will allow me to have leftovers for 1-2 days. This helps me maximize my time doing other things while still being able to manage my meals the way I like.

I don't find that I have huge cravings like I used to, though I do like to have something sweet after dinner and usually crave a crunchy, salty snack while watching TV. I want to have a diet that can incorporate a small dessert as well as an evening snack. My go-to is usually lightly salted chips or chickpea puffs, which are relatively low in sodium and have benefits like small

amounts of protein and essential vitamins and minerals. I'd like to continue to enjoy these snacks in my daily diet.

Unfortunately, my anxiety impacts my hunger levels sometimes. I don't always feel like eating even though I know I should, so some days I go until dinnertime before eating anything. Additionally, since I switched to whole foods, I have been having smaller portions overall even on days when I do have a regular appetite. Ideally, I would like to have the equivalent of three meals a day with a few snacks in between. I am not always hungry in the morning, but I'd like to have a quick and easy breakfast that I can take to work with me. I have found that my energy levels are too low to maintain the exercise routine I had before cutting out fast food and other junk, likely due to consuming less food overall.

With regards to exercise, I would like to see an increase in overall strength and endurance. I know that I need to consume enough food to support this goal, and I sometimes worry that I am falling short of this. I would like to be eating enough throughout the day to properly support my exercise routine, which right now I don't feel I am. Ideally, I'd like to be able to implement my previous workout routine from a year ago, which was as follows: upper body strength training for 30 minutes twice a week, lower body strength training for 30 minutes once a week, cardio for at least 20 minutes three times a week (this can overlap strength training days), 10 minutes of stretching/yoga on workout days, and two days of rest. Exercise sessions would be between 30 minutes and 1 hour total, at a moderate to high level of intensity. In order to return to this type of exercise routine my diet needs to account for calories lost, so my ideal diet would have enough macronutrients to support this.

Diet History

Before I can properly develop a nutrition plan for an athlete, I have to gauge what their current eating lifestyle is. Drastic changes are not only overwhelming but almost always impossible to properly execute especially for an extended period of time. In order to understand an athlete's current diet, I will need to see a brief breakdown of what they eat on a regular basis. A 3-Day Food Log will help give me a peek at an average day of eating and give me the ability to make recommendations and suggestions based on that data.

My Food Log

I completed a 3-Day Food Log for myself as an example of what kind of information is essential to collect and how it can be used to modify a current diet. I wrote down what I ate throughout the day and then at the end of the day I collected data from the packaging about calories and nutritional content so I could get a snapshot of what my macronutrients looked like each day. The food log is broken down by each day below. The meals listed have been totaled with the nutritional content of the ingredients used in the meal.

THURSDAY				
Breakfast				
Food	Calories	Carbs	Fat	Protein
Bagel	270	51	3	12
Cream Cheese	70	2	6	2
TOTAL	340	53	9	14
Lunch				
Food	Calories	Carbs	Fat	Protein
Boca Chicken Sandwich	235	44	11.5	17
Chips	140	36	14	4
TOTAL	375	80	25.5	21
Dinner				
Food	Calories	Carbs	Fat	Protein

Chik'n Burrito	500	71	8.5	32
TOTAL	500	71	8.5	32
Snacks				
Food	Calories	Carbs	Fat	Protein
Banana	110	28	0	1
Chips	140	36	14	4
TOTAL	250	64	14	5
Water				
Amount	24oz			
TOTAL FOR	Calories	Carbs	Fat	Protein
THURSDAY	1,465	268	57	72

FRIDAY				
Breakfast				
Food	Calories	Carbs	Fat	Protein
Oatmeal	300	54	6	10
Berry Mix	80	19	0.5	1
TOTAL	380	73	6.5	11
	Lunch			
Food	Calories	Carbs	Fat	Protein
Gardein Soup	200	27	4	13
Buttered Toast	150	20	5.5	5
TOTAL	350	47	9.5	18
	Dinner			
Food	Calories	Carbs	Fat	Protein
Meatless beef tacos	350	45	11.5	10.5
TOTAL	350	45	11.5	10.5
	Snacks			
Food	Calories	Carbs	Fat	Protein
Chips	280	36	14	4
Oreos	160	25	7	1
TOTAL	440	61	21	5
Water				
Amount	36oz			
TOTAL FOR	Calories	Carbs	Fat	Protein
FRIDAY	1,520	226	48.5	44.5

SATURDAY				
Breakfast				
Food	Calories	Carbs	Fat	Protein
Oatmeal	300	54	6	10
Berry Mix	80	19	0.5	1
TOTAL	380	73	6.5	11
Lu	ınch			
Food	Calories	Carbs	Fat	Protein
PB & Banana Sandwich	440	56	18.5	13
TOTAL	440	56	18.5	13
Di	nner			
Food	Calories	Carbs	Fat	Protein
Beyond Burger	365	36	25.5	26
French Fries	120	18	4	2
TOTAL	485	54	29.5	28
Snacks				
Food	Calories	Carbs	Fat	Protein
Hippeas	260	34	10	8
Oatmeal Hunk	110	15	5	1
TOTAL	370	49	15	9
Water				
Amount	28oz			
TOTAL FOR	Calories	Carbs	Fat	Protein
SATURDAY	1,675	232	69.5	61

Food Log Analysis

By taking the time to monitor my average daily diet, I can now determine if I am consuming enough calories, carbohydrates, protein, and fat to support my daily needs and exercise. A food log is not an end-all be-all since there is a lot of variety in people's diet and many factors that contribute to their choices; however, this information is essential to provide at least a foundation for analysis. Without this, it would be impossible to know what a person is eating on any given day. Building a meal plan would be a lot of guesswork and likely would not

be easy to implement without a basic understanding of the person's habits. In my case, the food log shows what an average day of eating is like for me.

Daily Breakdown

Day 1: Thursday. I work on Thursdays, so I try to find something quick and easy to bring to work with me for breakfast. I used to skip breakfast often, but I have been trying to get in more calories because I was noticing that I was not able to complete my exercise routine as effectively. I began incorporating a small breakfast to help support my energy levels and ensure that I could workout later in the day without experiencing low blood sugar and early onset of fatigue. I also brought a banana to work to have as a snack in case I got hungry, which I had in the middle of the day.

I made a quick lunch using microwaveable Boca chicken patties, Dave's Killer bread, and some lettuce and vegan mayonnaise. This plus some chips satisfied me enough to take my dog for a jog around the neighborhood and do 15 minutes of upper body weights. With some stretching, my total workout was about 40 minutes and at moderate intensity.

For dinner I used soy chicken alternative, refried black beans, brown rice, peppers and onions all wrapped in a soft flour tortilla to make the chik'n burrito. This meal is extremely satisfying and helps fill me up after working out. I often find I am really hungry about two hours after working out, so I made sure to cook shortly after exercising so I didn't experience any low blood sugar or lightheadedness.

The final snack I usually have for the day is some Ruffles Lightly Salted while watching TV. This is typically a few hours before I go to bed and is a way to satisfy a little late-night

craving. This may be mindless eating at times since I am watching TV, but I try to be mindful of how much I am consuming.

I have a water bottle at work and another one at home. I try to drink one full bottle at work during my day and then two during my time at home. I sometimes fall short at work because I get distracted, but at home I find I drink a lot of water, likely due to exercising and to make up for lack of adequate hydration throughout the day.

Day 2: Friday. I don't work on Fridays so I have more time in the morning to dedicate to making a more filling breakfast. I use Quaker 1-minute oats and a frozen berry mix of raspberries, blueberries, and blackberries. I add a little brown sugar and cinnamon for taste. This is exceptionally filling and also satisfying because it is sweet and easy to digest.

Because of my bigger breakfast, I didn't have a big lunch. I had a can of Gardein soup, which has soy chicken alternative, wild rice, carrots, and celery. It is a little high in sodium, but after having a sweet breakfast with no salt I felt this balanced out. I had a little toast with butter on the side to get in some additional carbs so I could workout. Later when I was ready to work out, I started to feel a little nauseous, possibly due to insufficient food intake. I decided to take my dog for a walk and do some stretching and felt better afterward.

For dinner I made meatless beef tacos using Lightlife meatless Mexican beef crumbles, brown rice, refried pinto beans, lettuce, tomato and salsa, all in a small white corn tortilla. I made three of them since I was feeling like I had not eaten enough for the day. After dinner I was still feeling hungry, so I had some tortilla chips and then a couple Oreos later in the evening.

I had more water than the day before because I was home and not distracted as much. I stayed better hydrated especially with the exercise inducing some of my thirst.

Day 3: Saturday. I don't work on Saturdays so again I had time to make my berry oatmeal. For lunch I decided to have something with more carbohydrates in it than the lunch the day before. I made a peanut butter and banana sandwich but felt a little sore from the weight training I did Thursday. I decided to take a rest from exercising to allow my body to recover. I took my dog for a short walk and then decided to catch up on some school and work from home. I took a break in the middle of the day to have some Hippeas.

For dinner I made burgers using Beyond Burger patties, Dave's Killer bread burger buns, lettuce, tomato, pickles, white onion, and a little mayo, ketchup, and mustard. I made some Alaffia lightly salted French fries to go with. I felt very satisfied with the meal and later in the evening had an Oatmeal Hunk as a small dessert.

I didn't drink as much water as I usually do on my days off, but I attributed this to lack of exercise. I usually drink a lot more water on days I work out, so it makes sense that I didn't consume as much as I did on Friday.

Caloric Intake Analysis

On Day 1, the total calories consumed were 1,465. This was quite shocking to see especially after calculating my caloric needs for active days. Even at moderate levels I should be consuming at least 2,060 calories to support daily needs and exercise. I am falling short about 600 calories, even with the addition of breakfast. It is easy to see why I was unable to perform my usual exercise routine without breakfast considering how much smaller my other meals have become. I used to work out very intensely every day, but during that time in my life I was eating huge meals typically from fast food or sit-down restaurants. While the nutritional content was not great, it is evident to me now that the increased portion size was likely helping me perform

my workouts efficiently. After analyzing this, it is clear to me that I need to increase my total caloric intake on days I am working out.

On Day 3, the total calories consumed were 1,520. My rest days call for a caloric intake of 1,275. Since I had a very light day of exercise, this caloric intake was likely appropriate. Since I had initially planned on working out on Friday, I can now see why I did not feel I had enough energy to actually follow through with my desired workout routine. What I ate fueled me enough for a walk and some yoga, but anything at a higher intensity likely would have induced fatigue and may have even triggered a low blood sugar episode. I need to be more aware of my caloric intake on days I want to exercise, and I need to account for exercise intensity to ensure I am appropriately fueling my body.

On Day 3, the total calories consumed was 1,675. This was a rest day for me, not intentionally but due to soreness and need to complete unfinished work. My resting needs are 1,275, so for a rest day I was over my total calories by 400 calories. Considering I have been undereating overall I don't feel this is cause for alarm, though it does force me to realize how little I am tracking calories with regards to energy expenditure. I am not someone that advocates calorie counting because I feel it breeds restrictive dieting and doesn't acknowledge nutritional content; however, this exercise of tracking calories consumed has proved to me that I am unintentionally creating a deficit in my diet that is not supporting my exercise goals.

Carbohydrate Intake Analysis

Carbohydrates are the primary fuel source for the body, so it is important to understand how much is essential to consume to support the body and physical activity. The recommended amount of carbohydrates is 6-10 grams per kilogram of bodyweight, which equates to 45-65% of

total calories (Fink & Mikesky, 2018). Based on my weight, my carb intake should fall between 318-530 grams per day. I work out at moderate intensity about 4 times a week, so the lower end of this range is likely sufficient. My carb intake over the three tracked days is as follows: Day 1= 268 grams, Day 2= 226 grams, Day 3= 232 grams. Even at the low end, each day falls below the ideal amount of carbs. While total calories are important to understand, the insufficient amount of carbohydrates is likely the main culprit when considering my early fatigue during exercise.

Fat Intake Analysis

Fat supports energy needs in the body and protects the organs. Fat has been mislabeled as the enemy in many diets throughout history, but it plays an essential role in overall functioning. Athletes are encouraged to have 20-35% of total calories come from fat (Fink & Mikesky, 2018). It is important to note that ideally this fat should be almost exclusively unsaturated with minimal saturated fat and no trans-fat. Unsaturated fat supports the body's functions while saturated and trans-fats have been linked to disease and are not safe to consume in even low to moderate amounts (Fink & Mikesky, 2018). My fat intake for the three tracked days is as follows: Day 1= 57 grams or 35% of total calories, Day 2= 48.5 grams or 28% of total calories, Day 3= 69.5 grams or 37% of total calories. Overall, my fat intake is falling within or close to the desired range, though it is on the high side.

Protein Intake Analysis

Protein is essential for recovery and growth in the body. Ideally, active people should be consuming between 1.2-2 grams per kilogram of bodyweight, which equates to 15-35% of total daily calories (Fink & Mikesky, 2018). My protein intake should be somewhere between 63.6-

106 grams every day. My protein intake over the three tracked days is as follows: Day 1= 72 grams, Day 2= 44.5 grams, Day 3= 61 grams. Day 1 and Day 3 I was either at or above the recommend protein intake, with Day 2 falling very short. It is important that I track this better to ensure I am getting in enough protein every day.

Nutrition Plan

After analyzing my current caloric and macronutrient intake, it is clear I need to make adjustments to my current diet. The changes are primarily to afford the calories to support exercise and ensure I can maintain a regular workout routine. Since I am looking to maintain my weight, I will not be adjusting calories to lose or gain weight. Rather, I will be adding calories and adjusting carbs, protein, and fat accordingly to ensure I have enough fuel to provide energy during exercise. The additional calories will only be added on days I am planning to exercise since I am regularly meeting my resting metabolic needs for rest days.

I realized that there are more opportunities for me to eat throughout my workday and I need to take more food with me to work. I am planning to bring a few snacks in addition to a breakfast of some sort. I plan to bring snacks that I can keep on hand at work for convenience in case I am running behind or forget to grab enough food for the day. There is a grocery store in the parking lot by my work, so I can always go there to buy food to eat at the office. I have been hesitant to do this too often because it is more expensive than where I shop, but my health comes first, so I need to plan well enough to keep my body and budget happy.

Additionally, I can add snacks before and after a workout instead of just relying on meals to fuel my workouts. Before a workout I want to include a snack that has more carbs so I can get

through my workouts without fatiguing early. Ideally, I would like to have a snack with more protein after my workout, preferably from whole foods. If I find I am short on time, I have plant-based protein drinks that have veggies and fruits in them that can serve as a quick way to get in some calories post-workout for recovery.

I also realized that my water intake is much too low. On average I am consuming between 24 and 36oz of water. Based on my weight, my water intake should actually fall somewhere between 60 and 117oz (Fink & Mikesky, 2018). My water intake on average should be about three times what it currently is, so I really need to make a conscious effort to drink more water, especially when I am at work. I am planning to set timers to refill my water bottle at least twice during the day so that I do not become dehydrated. I am also going to try to drink water before my snacks at work to help me remember to drink water. Additionally, I will be filling two bottles at home to drink by the end of the day. Again, I will be planning to drink more water with my meals to keep water intake more top of mind when I am at home. This should bring my water intake from its current level to a more appropriate amount. On active days, I am losing even more water and need to replenish this loss of fluids. As mentioned before, I often drink more water on days I work out, but this is clearly still not close to where it needs to be considering the loss occurring from sweat during exercise. I am planning to take water breaks in between sets as part of my rest to account for this loss and maintain adequate fluid levels.

My exercise goals are still the same: add strength and improve endurance. In order to do this, I need to properly fuel my body and consume enough protein to support muscle recovery from intense strength training sessions. I feel that since I am typically falling within my ideal protein intake range, I do not need to add an excessive amount of protein to reach this goal. By adjusting according to caloric intake and accounting for exercise needs, I believe my protein will

continue to be at the right amount. Endurance comes from longer durations of exercise, so carbohydrates will be essential to provide the necessary energy to exercise for extended periods of time. I will definitely be adjusting my overall carbohydrate intake because it was under the ideal range every day that I tracked it. This will primarily be added through snacks throughout the day, although I am planning to include additional foods at mealtimes to increase total calories and carbs during lunch and dinner.

I have developed an adjusted meal plan to account for necessary added calories and macronutrients on active days. My food log eating habits works well for rest days, so I plan to refer back to this for those days. In my adjusted meal plan, I have added designated snacks to ensure I am being purposeful with my added calories. I have also increased total water intake to an average amount of 75oz to account for fluid loss during exercise. This may still be a little short, but since I am consuming about half of that on a daily basis, I figured this would be a realistic place to start when it comes to increasing overall water consumption. I have maintained the same meals since these have been working really well for me, although I did recently purchase some vegan cookbooks to explore new meals. I think these will be a great way to learn about new ways to add more essential macronutrients to my meals. The following food log is a representation of an ideal meal plan for me on an active day.

SATURDAY				
Breakfast				
Food	Calories	Carbs	Fat	Protein
Oatmeal	300	54	6	10
Berry Mix	80	19	0.5	1
TOTAL	380	73	6.5	11
Morning Snack				
Food	Calories	Carbs	Fat	Protein
Bagel	270	51	3	12
Cream Cheese	70	2	6	2

TOTAL	340	53	9	14	
	Lunch				
Food	Calories	Carbs	Fat	Protein	
Boca Chicken Sandwich	235	44	11.5	17	
Carrots	25	6	0	0.5	
Grapes	100	27	0	1	
Chips	140	36	14	4	
TOTAL	500	113	25.5	22.5	
Post-W	orkout Snac	ck			
Food	Calories	Carbs	Fat	Protein	
PB & Banana Sandwich	440	56	18.5	13	
TOTAL	440	56	18.5	13	
L	Dinner				
Food	Calories	Carbs	Fat	Protein	
Chik'n Burrito	500	71	8.5	32	
Sweet Potato Chips	150	15	10	1	
TOTAL	650	86	18.5	33	
Evening Snacks					
Food	Calories	Carbs	Fat	Protein	
Hippeas	260	34	10	8	
Oatmeal Hunk	110	15	5	1	
TOTAL	370	49	15	9	
Water					
Amount	75oz				
IDEAL TOTAL	Calories	Carbs	Fat	Protein	
FOR ACTIVE DAYS	2,680	430	93	102.5	

Conclusion

As much as I love being healthy and learning about proper nutrition, applying these concepts can always come with its challenges. I want to incorporate these new adjustments into my daily routine, and I know in order to be successful I will be to plan ahead a little more than I do now. My current living and work situation is perfect for making sure I have healthy, nutrient-dense foods around at all times. The grocery store by my work is a great and convenient place for me to go if I run out of snacks at work or don't have time to make breakfast one morning, so

I need to utilize this more. I often have avoided shopping here regularly because of the price, so I will still need to add some time into my week to plan ahead and buy what I need to ensure my budget does not become impacted by shopping too much at the store by my work. However, it is important that I do not starve myself for the sake of saving a few dollars, so I will be working on this mindfulness to ensure I make the right decisions for my health and my body going forward.

My current living situation and routine has allowed for a great deal of cooking, which I plan to continue to do. I have purchased some vegan cookbooks to learn new methods for food preparation and find great new recipes. One of the cookbooks is directed toward athletes and meal planning and comes with insight about the amount of calories, macronutrients, and micronutrients in each meal. I am so excited to learn more about cooking delicious whole foods and am hopeful that I can learn to make more of my own meat alternatives to better control what is going into my food. I have really enjoyed what I have learned so far in cooking, so I think this will continue to be a great way for me to manage my food intake and stay healthy.

As for my exercise routine, I have a home gym with strength and cardio equipment. I have everything I need to return to my desired workout routine, which I plan to implement as soon as I have my eating routine better managed. It is always a challenge to correct this because the added calories in my meal plan equate to more food than I usually eat. I may not be hungry enough for the additional food, but I know I need it in order to get through my workout. It is a catch-22 because I know I will have an increased appetite after I exercise, but if I don't eat enough food before my workout, I will become fatigued and unable to complete my routine. In order to implement this effectively, I will need to slowly increase the calories consumed and exercise time to ensure I am not feeling overly full nor becoming too fatigued during exercise. Over time I will eventually be able to fully implement the adjusted nutrition plan and complete

my desired workouts. I have the tools, and now simply need to apply my new plan in order to be successful in my fitness goals.

This course has been overwhelmingly insightful and incredibly helpful for my own life as well as my coaching career. I have gained a much stronger understanding of ideal recommendations for macronutrients and micronutrients. I have learned about certain myths and misconceptions, which will be helpful when working with clients. I also feel more confident in calculating ideal amounts for potential clients and am also comfortable explaining the role and importance of these essential nutrients. I can already see the ways I can use these concepts to help others achieve their goals. Applying the techniques to my own life will make me a much better nutrition coach when I finally can start working with people, so I am happy to have this practice with myself to enhance my knowledge. Overall, the insight I have gained in this class is invaluable and I am eager to put it into practice with my own coaching business.

References:

Fink, H. & Mikesky, M. (2018). *Practical Applications in Sports Nutrition (5th ed)*. Jones and Bartlett Learning.