



FOUNDATIONS OF **FITNESS NUTRITION**

COURSE WORKBOOK



Welcome to Bodybuilding.com's Foundations of Fitness Nutrition

We created this course to help you become a more well-informed, critical consumer when it comes to navigating the complicated worlds of nutrition and supplementation. The course doesn't advocate a certain way of eating, supplementing, or training, but rather, is designed to help you get better results from whatever dietary system or approach you choose.

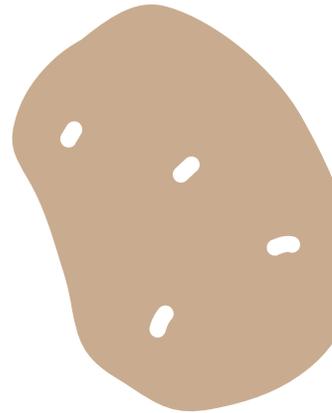
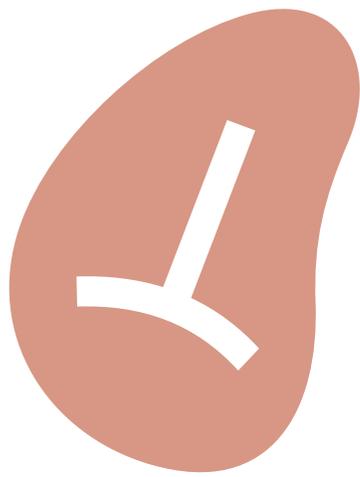
This printable workbook is meant to accompany the nine videos in the Foundations of Fitness Nutrition course and help you remember the most important ideas. While you watch the videos, or after watching them, answer the questions in the matching workbook chapter. In the future, you can use this workbook to refresh your memory of the lessons from the course.

There is also "Notes" section at the back of the workbook, as well as a food log that you can print, copy, and use to track your nutrition after integrating the lessons from the course.

Thank you for choosing to follow this course and take a more active role in your nutrition and health!

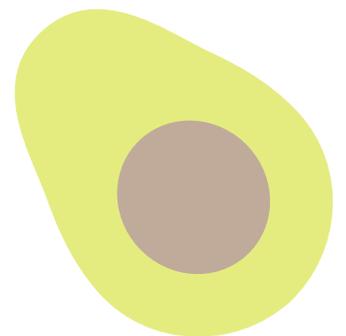
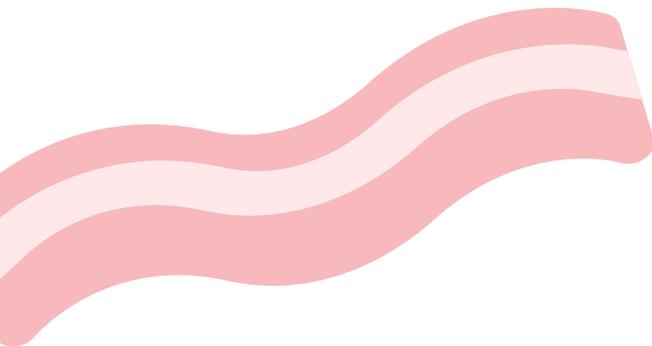
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NUTRITION

BEYOND GOOD AND BAD FOR YOU



1. A plate of food is the result of a number of influences beyond health: your surroundings, culture, finances, and tastes, among many others. Use the diagram to list the factors that influence the way you eat.



2. Which of these influences has the biggest impact on your current nutritional choices? What challenges or benefits does it create when it comes to your health, training, and physical goals?

3. Fill in the blanks:

Nutrition is giving your body what it _____ to survive and _____ your activity.

4. **Macronutrients are essential substances that provide energy and can be measured in calories. List the four macronutrients below.**

- | | |
|----|----|
| 1. | 3. |
| 2. | 4. |

5. **The second class of nutrients includes vitamins, minerals, phytochemicals, and other non-caloric substances that help to facilitate countless processes but are not used as fuel like macronutrients. What are these substances called?**

- A. Supplemental nutrients
- B. Micronutrients
- C. Non-essential nutrients
- D. Facilitator nutrients

6. **While there is no single perfect diet, healthy diets do usually have a couple common characteristics. List some of the keys to a healthy diet below.**

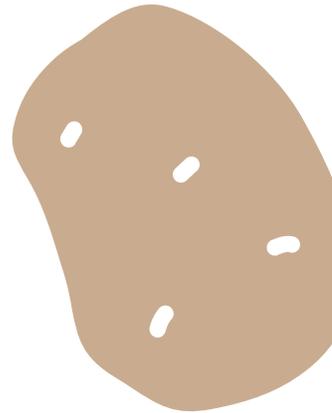
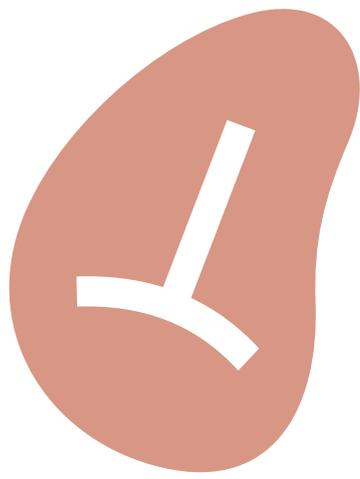
- 1.
- 2.
- 3.
- 4.
- 5.

7. **An easy way to begin building a healthy diet is by following this seven-word mantra. Fill in the blanks below.**

Not too _____, not too many _____.

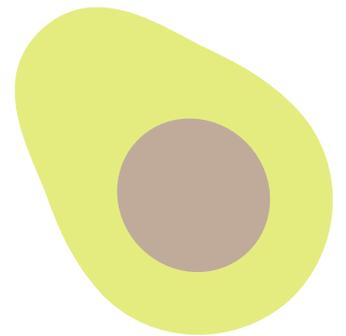
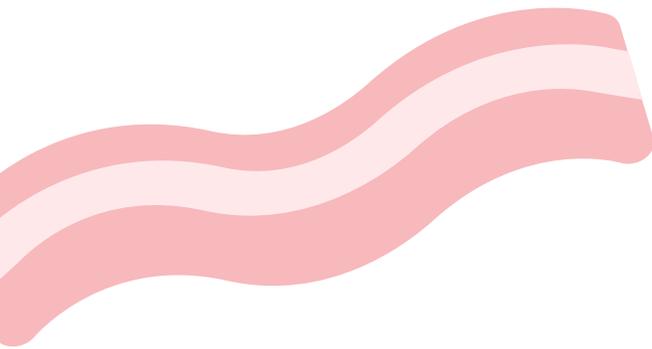
8. How would attempting to follow that rule change how you eat now?
What challenges or opportunities do you think it would create?

BONUS: If you'd like to start tracking your food to get a baseline of your current nutrition habits, use the weekly food tracker sheet located on page 34 of the workbook!



ALL YOU NEED TO KNOW

ABOUT CALORIES AND FOOD LABELS



1. Calories are not actually the official way of measuring energy according to the international system of units. What other units are used just as extensively around the world?

1.

2.

2. List some of the advantages and limitations of a calorie based system.

Advantages

Limitations

1.

1.

2.

2.

3. What are some ways you can get the benefits of counting calories without having to obsess over them? Fill in the blanks.

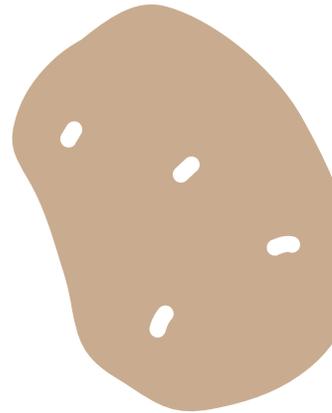
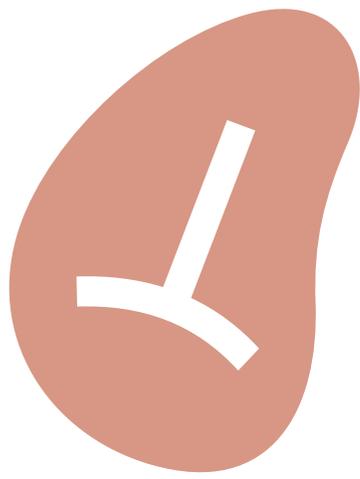
- 1. Don't just _____ to burn calories
- 2. Think _____ more than numbers
- 3. Don't disregard everything on the _____

4. The amount of calories in it is you all you really need to know about a food.

True

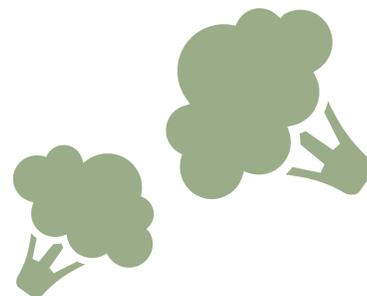
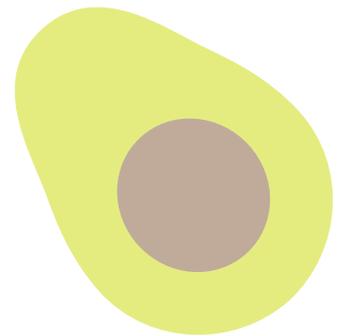
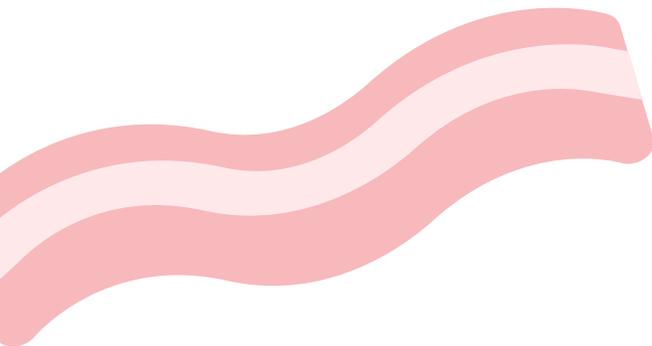
False

5. Do you currently count calories? How has it worked for you? Take a minute to reflect on your current calorie counting habits and think about whether or not you want to continue counting calories after having watched this video. Have your opinions changed? If so, how?



— PROTEIN —

HOW MUCH, WHEN, AND FROM WHERE?



1. Protein should be a high nutritional priority especially if you are. . .
(Circle all that apply)

- A. Training hard
- B. Trying to lose weight
- C. Trying to gain muscle
- D. All of the above

2. Protein factors into numerous crucial bodily processes. What are the five major ones mentioned in the video?

- 1.
- 2.
- 3.
- 4.
- 5.

3. Fill in the blanks

*Proteins are made up of different _____ of
around 20 _____ acids.*

4. A food containing all nine essential amino acids is considered a . . .

- A. Premium protein
- B. Complete protein
- C. Full protein
- D. Better protein

5. True or False: Essential amino acids can't be produced by the human body?

True

False

6. The Recommended Daily Allowance for protein defined by the FDA is currently 0.8 g/kg of body weight or 0.36g/lb of body weight. Use the equation below to calculate the minimum amount of protein you should consume daily according to the FDA.

$$\underline{\hspace{2cm}} \text{ lbs. X } 0.36 = \underline{\hspace{2cm}} \text{ g of protein per day}$$

7. A more research-supported guideline for protein is a minimum of 1.2-2.0 g/kg of body weight or 0.6 g/lb. Use the equation below to calculate the minimum amount of protein you should consume daily according to this rule.

$$\underline{\hspace{2cm}} \text{ lbs. X } 0.6 = \underline{\hspace{2cm}} \text{ g of protein per day}$$

8. Timing-related considerations should be a _____ priority than the right amount of total calories and total protein throughout the day.

- A. Lower
- B. Higher

9. About how many grams of protein should you aim to consume per meal?

- A. 20-40
- B. 0-10
- C. 40-60
- D. 60-80

10. The protein in a whey protein shake isn't higher quality than the protein you get from meat or eggs, but there are other benefits to consuming whey. Circle the benefits that apply to whey protein below.

- A. Convenience
- B. Delicious flavor
- C. Extra hydration
- D. Fewer calories per gram

E. Low volume, so you can eat again soon

11. Meat, eggs, and whey aren't the only quality sources of protein. Plant-based foods also contain protein in varying degrees. Since plants don't contain all nine essential amino acids, it can be helpful to combine them strategically to create complete proteins, especially if you are a vegetarian. Match the plant proteins in column A to their complimentary protein in column B.

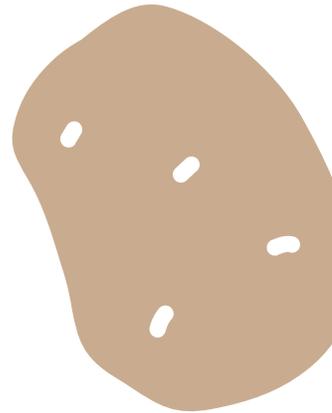
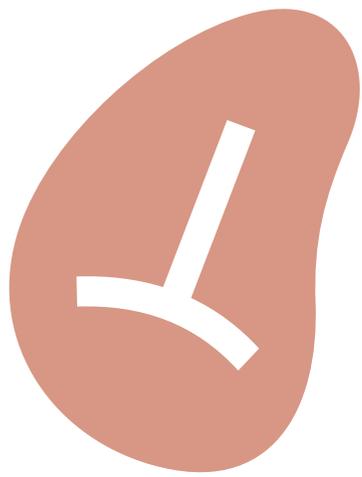
Column A	Column B
Beans	Lentil
Rice	Peas
Wheat Crackers	Bread
Chickpeas	Corn
Wheat Pasta	Beans
Peanuts	Tahini

12. When protein intake and overall portions are about the same in various diets, the fat-loss and body composition changes have been shown in studies to be nearly identical. True or false?

True

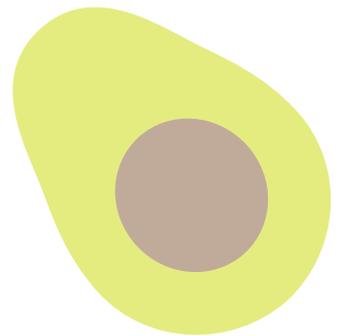
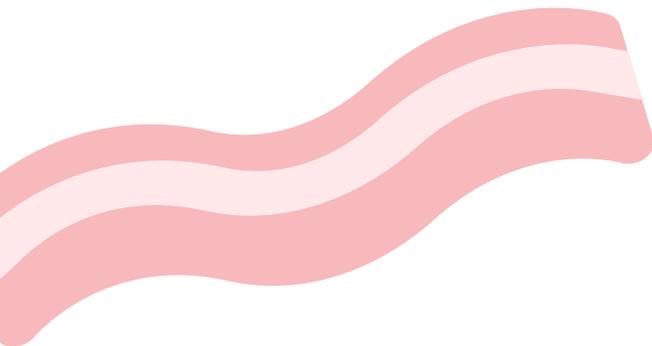
False

13. When you have a consistent, solid approach to nutritional and training strategies, there's probably no downside to consuming a little extra protein each day. Do you think you are currently consuming enough protein? If not, what are some ways you could incorporate more protein into your diet?



CARBS

FITNESS FRIEND OR FOE?



1. The major benefit of carbs is the _____ they provide.

- A. Energy
- B. Calories
- C. Fiber
- D. Vitamins

2. There is a world of difference between sugary carbs and those that come from nutrient-dense sources, referred to in the video as “brown carbs” or “high-fiber carbs.” List three high-fiber carbs that you eat regularly or would be willing to try.

- 1.
- 2.
- 3.

3. Fill in the blanks.

The_____ in carbs is crucial to maintaining _____ health.

4. The carbs used in sports drinks, goos, and gels can help boost performance when engaging in when engaging in long workouts or endurance activities because. . .

- A. They also contain protein
- B. They are extremely nutrient dense
- C. They are quickly absorbed
- D. They keep you hydrated

5. Unlike fats, your body can only store a limited amount of carbohydrates. What are the two major places where carbs are stored in the body?
6. The amount of carbohydrates you need to consume in a day varies widely based on factors such as your activity level, training style, and goals. According to the video, what is the recommended carbohydrate intake for each of the following scenarios?

Endurance Athlete	Sedentary Person

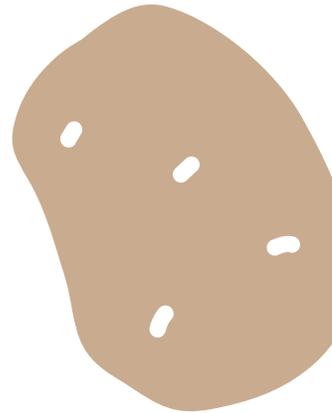
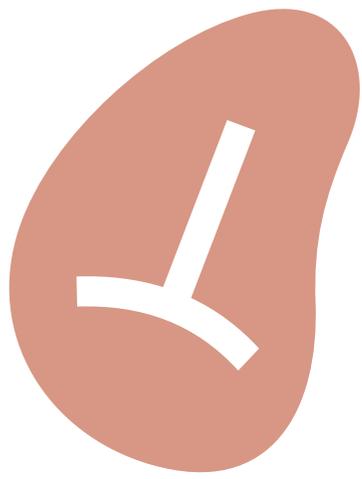
7. When removing carbs from your diet in order to lose fat, it's important that you do not remove which of the following carb sources?

- A. Desserts
- B. Vegetables
- C. Sports drinks, gels, and goos
- D. Starchy carbs (potatoes, pasta, rice)

8. If you are considering going low-carb, there are a few rules you can follow to ensure you're consuming a proper amount of nutrients and calories. Fill in the blanks below.

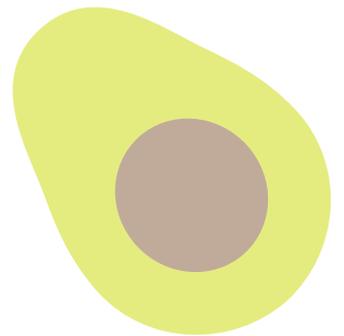
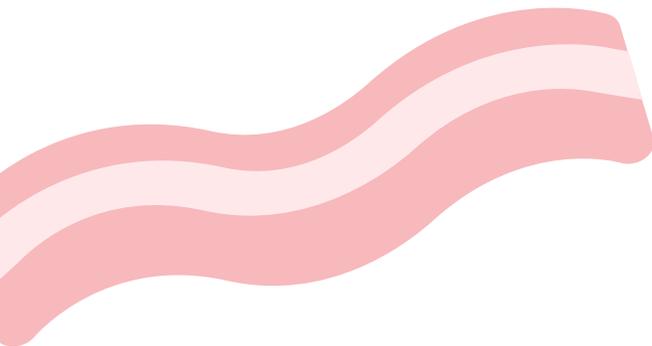
- 1. Give carbs a _____ chance.
- 2. Keep eating _____ when not eating carbs.
- 3. Expect a _____ in performance.
- 4. Go in with your _____ open.

9. Have you considered going low-carb or trying a ketogenic diet? What do you hope to achieve with it? How is it different from the way you've approached carbs in the past? If you're currently low-carb, what steps do you take to ensure that you're getting adequate nutrients in your diet?



FATS

SEEING THROUGH MIXED MESSAGES



1. Fats are not just part of your diet, they're a major part of who you are. Even the leanest person has plenty of stored body fat. For example, the average man has about how many stored calories of fat?

- A. 10,000
- B. 1,000
- C. 100,000
- D. 1,000,000

2. Fill in the blanks

Fat helps to _____ and protect vital organs, and acts as your primary _____ source at rest and during _____-energy exercise.

3. Dietary fats come in many forms including saturated fats and unsaturated fats. List two examples of each form of fat below.

Saturated	Unsaturated

4. Trace amounts of trans fats occur naturally in many foods, but artificial trans fats should be avoided as much as possible. They have been linked to major health issues including. . .

- 1.
- 2.

5. Omega-6 and Omega-3 fatty acids are two types of _____ fatty acids that we need to get from our diet because our body can't produce them on its own.

- A. Accessory
- B. Optimal
- C. Supplemental
- D. Essential

6. Many people eat Omega-6 and Omega-3 fatty acids in a ratio of 10:1. What's a healthier standard to aim for?

_____ *Omega-6* : _____ *Omega-3*

7. What is the ideal ratio of saturated to unsaturated fats that you should be consuming?

_____ *saturated* : _____ *unsaturated*

8. True or false, it does not matter where you get your fats from as long as you're not consuming too much.

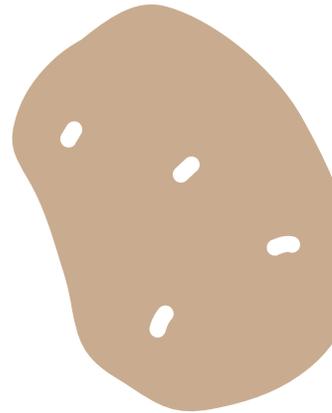
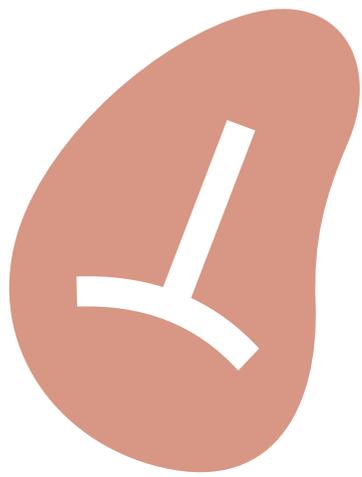
True

False

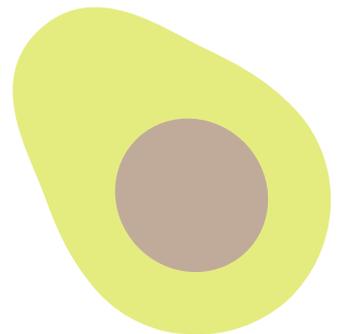
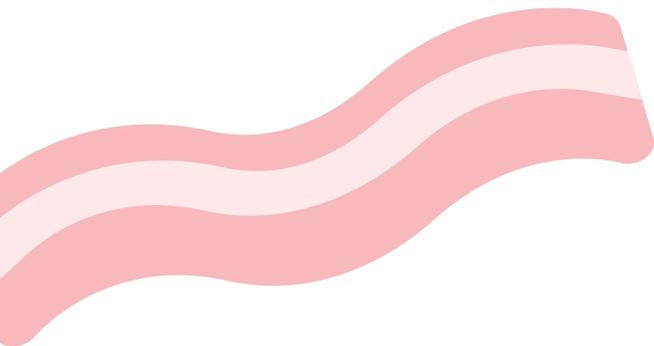
9. Fill in the blanks

Get most fat from _____ sources and have some at _____ meals.

10. "Sugary fats" and "fatty proteins" are two classes of foods that are easy to overeat, and hard to control when it comes to ingredients. What are some of these foods that are currently in your diet, or that you know you have a weakness for?



HOW TO EAT
**TO LOSE
WEIGHT**



1. **Weight loss is a fundamental part of how many of us think about overall health, exercise, and the very definition of fitness. What has your experience been with weight loss and how has it impacted your nutritional choices? Take a minute to reflect before continuing the video.**

2. **“Calories in, calories out,” or burning more calories than you consume, is all you really need to worry about for long-term weight control. True or False?**

True

False

3. **One of the first things that Dr. Susan Hewlings suggests when looking to lose weight is to look at what you’re drinking to see how many extra calories you might be consuming without even thinking about it. What do you typically drink in a day and how does that affect your overall calorie intake?**

4. Part of thinking before you eat is planning. The world will always present you with questionable food choices if you haven't thought ahead about what you're going to eat. At what point during the day is your nutritional approach most vulnerable to getting sabotaged? Circle all that apply.

- A. Breakfast
- B. Lunch
- C. Dinner
- D. Snacking
- E. Pre/post-workout
- F. Other _____

5. Often, fixing just one thing about your eating habits, like a certain "problem meal," can make a huge difference in your health and weight. What's a way you could change your approach to one of your selections from question 4?

6. Eating out is often a struggle when trying to lose weight because different restaurants have very different ideas about what an acceptable portion looks like. A good rule of thumb to follow is this (fill in the blanks):

If you're at a restaurant, only eat _____ of your meal and _____ the rest for _____.

7. When eating at home, Dr. Hewlings suggests always using a plate to eat from rather than eating out of the pot or pan that you cooked in. What is her reasoning for this?

- A. The color of your plate influences how much you eat
- B. You'll take smaller bites using a fork and plate than with a ladle and pot
- C. It allows you to objectively judge what, and how much, you're about to eat
- D. Eating from the pot or pan is unsanitary

8. What is the average amount of weight you can expect to lose per week while still maintaining a healthy diet and lifestyle over the long term?

- A. 0-0.5lbs
- B. 1.0-2.0 lbs
- C. 4.0-6.0 lbs
- D. 5.0-8.0 lbs

9. The scale isn't the only way to tell if your weight loss plan is working. What are some other indicators of success that don't involve body weight changes?

- 1.
- 2.
- 3.

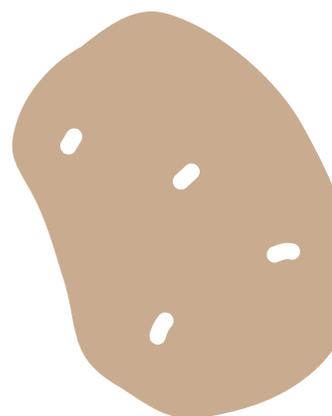
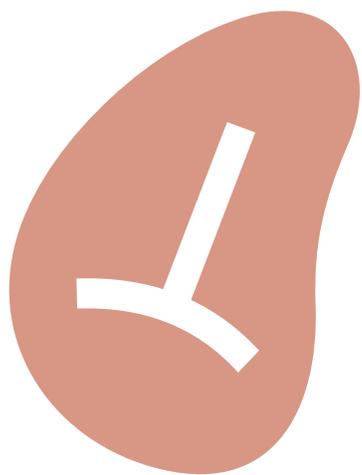
10. When you're trying to lose weight, exercise is a great way to burn extra calories but even if you're training like crazy, you burn less calories than you might think. Instead of exercising with calorie burn as your goal, focus on these for long-term weight control. Circle all that apply.

- A. Building muscle
- B. Endurance
- C. Cardiovascular strength
- D. Staying hydrated

11. No matter how hard your workouts are, they're still a small part of your daily routine. This means it's also important to fill your life with more physical activity, also known as non-exercise activity thermogenesis, or NEAT. What are some examples of NEAT activities that you do now, or could easily fit into your life?

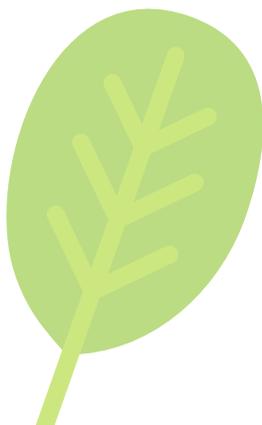
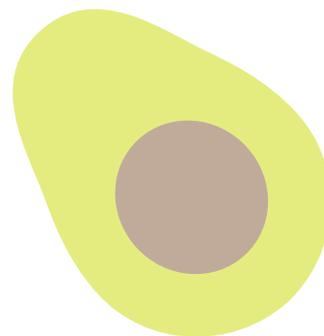
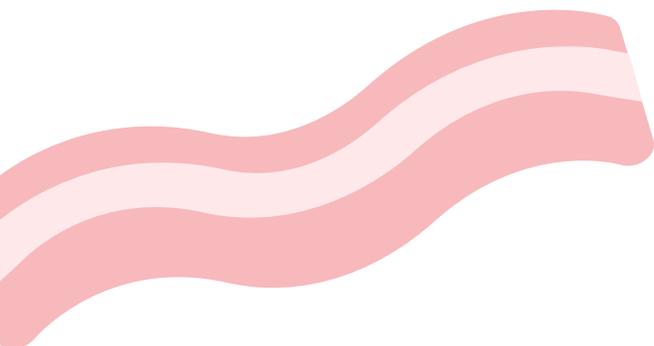
12. Fill in the blanks

As long as _____ and _____ are _____ the weight-loss results from various diets are about _____ .



HOW TO EAT

TO GAIN WEIGHT



1. When trying to gain quality weight, it is actually _____ important to count calories than when trying to lose fat.

- A. More
- B. Equally
- C. Less

2. According to Dr. Kalman, what is the first step you need to take in order to begin eating for quality weight gain?

- A. Double your current protein intake
- B. Get more calories from fast food and junk food
- C. Log your current calorie intake for one week to develop a baseline
- D. Drink a protein shake with every meal

3. Your **BMR** refers to how many calories you burn each day without doing any type of physical activity. What does **BMR** stand for?

*B*_____ *M*_____ *R*_____

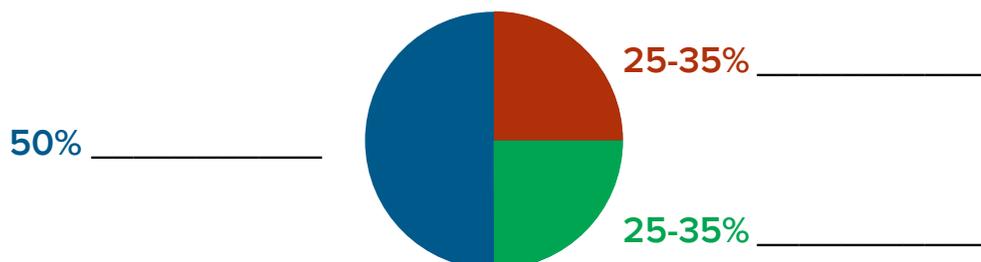
4. Once you calculate your **BMR**, you can then begin adding extra calories to your diet in order to start gaining weight. How many calories does Dr. Kalman recommend you add each day to begin with?

- A. 1000
- B. 250
- C. 1500
- D. 500

5. Fill in the blanks.

To gain quality weight, focus on eating _____ and nutritionally _____ meals every _____ hours.

6. Dr. Kalman suggests increasing your healthy fat intake to increase calories, rather than simply boosting carbs and sugars. Fill in the pie chart below to show the recommended macro breakdown from the video.



7. List a few healthy fat sources from the video that you think you could incorporate into your diet if you're trying to gain weight.

_____	_____
_____	_____
_____	_____

8. When trying to gain weight, which macronutrient is the most important to measure precisely in order to make sure you're consuming an adequate amount?

- A. Protein
- B. Carbohydrates
- C. Fat
- D. Alcohol

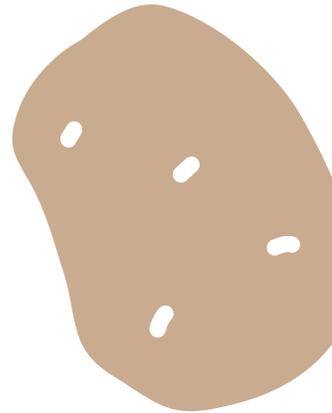
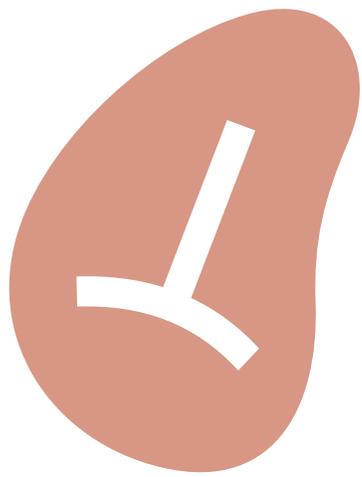
9. True or false: When you're bulking it's ok to eat foods with a lot of added sugar because you need the extra calories anyway.

True

False

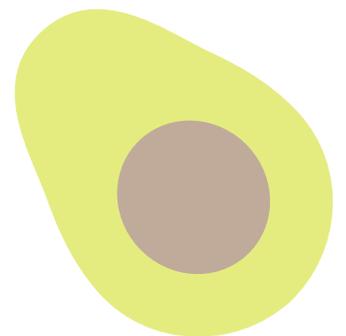
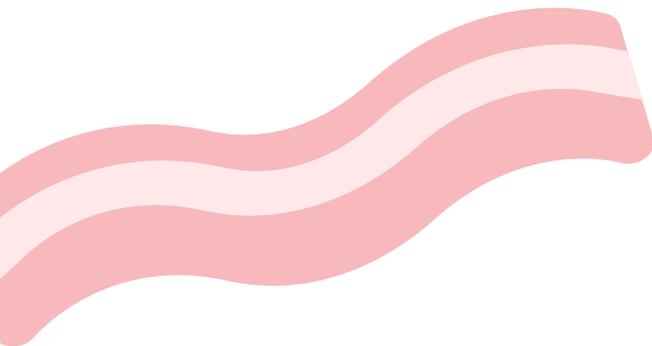
10. Fill in the blanks. A simple rule to follow when trying to gain weight is. . .

Eat the same _____ stuff, only _____.



EXERCISE AND NUTRITION

FINE-TUNING A GOOD THING



1. Fill in the blanks.

Athletes are most at risk of sabotaging their performance and results through two behaviors: not eating _____, and getting their calories through _____.

2. True or false: An athlete with a lower body fat percentage is almost always a better athlete than one with a higher body fat percentage.

True

False

3. Which of the following does an athlete probably NOT need to consume more of compared to a sedentary person?

- A. Protein
- B. Fats
- C. Carbohydrates
- D. Water

4. Many people believe that training fasted (on an empty stomach) will force their body to use fat for fuel. This is a common misconception, because research shows you're actually at risk of. . .

- A. Ruining what could otherwise be a great workout
- B. Dehydration
- C. Using muscle mass as fuel
- D. A & C

5. True or false: The needs of vegetarians for fueling their exercise are far different than the needs of meat eaters.

True

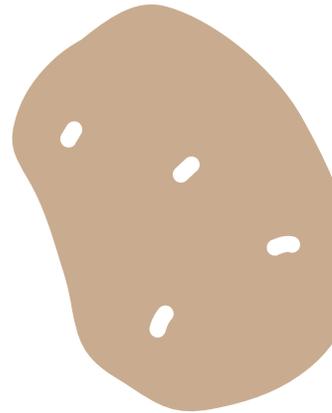
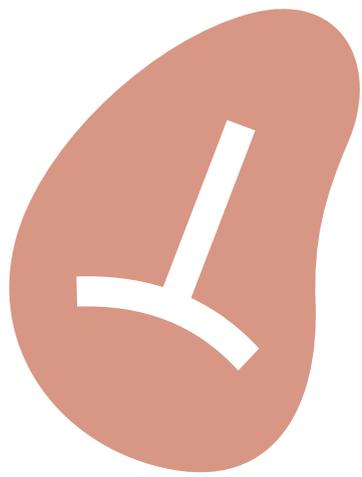
False

11. After a long or intense workout or match, it's a good idea to consume about how much protein and carbs?

- A. 20-30 g each
- B. 20 g of protein, no carbs
- C. 50 g of protein, 100 g of carbs
- D. At least 50 g of each

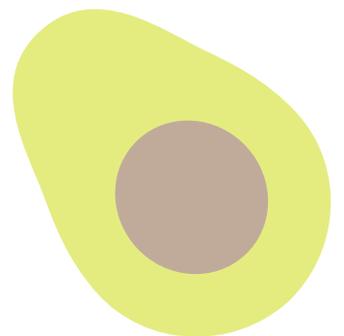
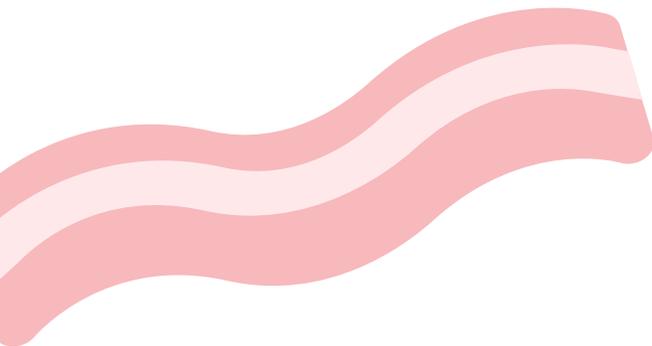
12. Whether you're a bodybuilder, runner, fighter, or just someone looking to get healthy, there are a few simple rules that we should all be following to fuel our performance. Fill in the blanks below.

1. Prioritize _____.
2. Fill up on _____.
3. Eat _____.
4. Drink plenty of _____.



SUPPLEMENTS

WHERE THEY FIT AND A FEW TO CONSIDER



1. Supplements are regulated . . .

- A. Not at all
- B. The same as prescribed and over the counter drugs
- C. Differently than prescribed and over the counter drugs

2. What is an easy way to help ensure a supplement contains what it says, and doesn't contain substances you don't want to take?

- A. Only take supplements with really cool-sounding names
- B. Only take supplements that make wild claims about their results
- C. Look for third-party purity verifications on the label
- D. Only buy generic supplements from drugstore chains

3. There are a few supplements with a robust body of evidence showing that they are safe, effective, and don't require unreasonable doses in order to provide you a with benefit. List them below.

4. Creatine is one supplement that has both a solid reputation among lifters and athletes, and also a strong scientific backing as being the most effective performance boosting supplement out there. Which of the following is NOT a benefit of creatine.

- A. Increased muscle mass and strength
- B. Enhanced workout recovery
- C. Better appetite control
- D. Increased work capacity

5. What are the times Dr. Kalman says protein and similar “supplements of convenience” can be particularly helpful? Circle all that apply.
- A. When the alternative is having no protein or food at all after training
 - B. If you’d otherwise miss a meal entirely
 - C. When you’re trying to gain or lose weight and are struggling to meet your daily protein benchmark
 - D. If you’re vegetarian and can’t always match up complementary proteins in your meals
6. Most people don’t think of caffeine as a supplement, but caffeine has been studied extensively and it is clear that it has value to a wide range of athletes and people in general. Which of these are benefits of caffeine?
- A. Boosts endurance
 - B. Increases strength
 - C. Increases pain threshold
 - D. Helps alertness and focus
 - E. All of the above
7. Unlike creatine, protein powder, and caffeine which have a wide range of uses, the amino acid beta-alanine is purely a workout performance enhancer. What does beta-alanine do?
- A. Increases metabolism temporarily
 - B. Increases endurance permanently
 - C. Increases strength permanently
 - D. Increases endurance temporarily
8. There are many other popular supplements that are not included in this video. A good rule of thumb when choosing and taking any kind of supplement is this (fill in the blanks)

When it comes to supplements, do the _____, prioritize _____, and _____ for yourself.

DAILY FOOD LOG

DAY: _____

MEAL	FOOD CONSUMED	CALORIE & MACRO TOTALS
MEAL 1		
MEAL 2		
MEAL 3		
MEAL 4		
MEAL 5		
MEAL 6		
DAILY TOTAL:		

NOTES: (Use this space to reflect on how you felt throughout the day. Were you hungry or full all day? How did your workouts feel? Did you notice any energy highs or lows?)

ANSWER KEY

Nutrition: Beyond Good And Bad For You

1. Environment, Culture, Traditions, Family, Finances, Tastes
2. Personalized Answer
3. Needs, Fuel
4. Protein, Carbohydrates, Fats, Alcohol
5. B
6. Variety, Balance, Maximum Nutrient Density, Moderation, Sustainable
7. Processed, Ingredients
8. Personalized Answer

All You Need To Know About Calories And Food Labels

1. Joules, Kilojoules
2. Advantages:
 1. Objectively compare different meals
 2. Measure overall portion sizeDisadvantages:
 1. Calorie counts aren't always accurate
 2. People often cut calories too low
3. Exercise, Portions, Label
4. False
5. Personalized Answer

Protein: How Much, When, & From Where?

1. C
2. Immune System Support, Muscle Growth/Maintenance, Blood Clotting, Hormone Production, Nutrient Transportation
3. Combinations, Amino
4. B
5. True
6. Personalized Answer
7. Personalized Answer
8. A
9. A
10. A, C, E
11. Beans + Corn

- Rice + Lentil
Wheat Crackers + Peas
Chickpeas + Tahini
Wheat Pasta + Beans
Peanuts + Bread
12. True
 13. Personalized Answer

Carbs: Fitness Friend Or Foe

1. A
2. Answers Vary
3. Fiber, Gut
4. C
5. Liver, Muscles
6. Endurance Athlete:
7-10g/kg of body weight
Sedentary Person:
3-4g/kg of body weight
7. B
8. Real, Vegetables, Decline, Eyes
9. Personalized Answer

Fats: Seeing Through Mixed Messages

1. C
2. Insulate, Energy, Low
3. Answers Vary
4. Heart Disease, Inflammation
5. D
6. 4:1
7. 2:1
8. False
9. Non-meat, Most
10. Personalized Answer

ANSWER KEY

How To Eat To Lose Weight

1. Personalized Answer
2. False
3. Personalized Answer
4. Personalized Answer
5. Personalized Answer
6. Half, Save, Later
7. C
8. B
9. How you feel, How your clothes fit, Training progress
10. A, C
11. Personalized Answer
12. Protein, Calories, Consistent, The Same

How To Eat To Gain Weight

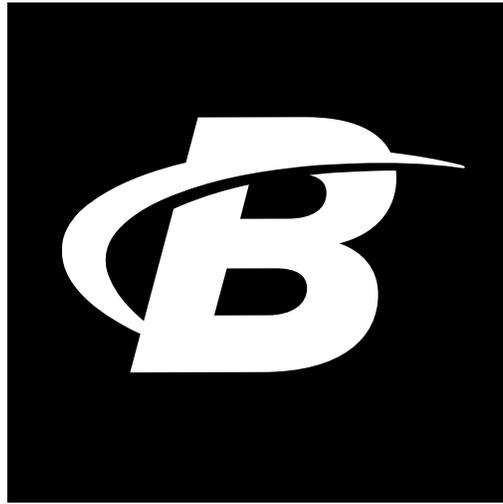
1. A
2. C
3. Basal Metabolic Rate
4. D
5. Small, Dense, Few
6. 50% Protein, 25-35% Carbs, 25-35% Fats
7. Answers Vary
8. A
9. False
10. Good, More

Exercise And Nutrition: Fine-Tuning A Good Thing

1. Enough, Junk
2. False
3. B
4. C
5. False
6. E
7. C
8. B
9. False
10. D
11. A
12. Protein, Veggies, Enough, Water

Supplements: Where They Fit And A Few To Consider

1. C
2. Creatine, Protein, Caffeine, Beta-Alanine
3. C
4. A, B, C, D
5. E
6. D
7. Research, Quality, Decide



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