

NUTRIENTS – POWERFUL HEALTH BENEFITS COURSE LEARNING WORKBOOK



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Note: External Links: Regarding Advertisements

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NUTRIENTS – POWERFUL HEALTH BENEFITS—COURSE WORK BOOK **ACTIVITY QUESTIONS AND ASSIGNMENTS**

This course includes **“50 numbered activity questions”** designed to help you **present your results**. We recommend completing the questions as you go through the course. The questions will guide you through each lesson, help reinforce and check your understanding of the material, and prepare you for the final exam.

Additional Assignments

— In addition to the **“50 numbered” activity questions”** there are **external video/article/audio links (∞) that also have questions. These questions are not on the exam.**

— Some of the **external** webinar/**video/article/audio links** will have advertisements.

— The main purpose of the external webinar/video/article links is to watch and/or read them and increase student engagement.

— The webinars/videos also offer you the flexibility to pause, rewind, or skip parts if you would like to. With the articles, you can re-read them as many times as you like.

The external links are more for you to write, draw, and discuss what you have learned.

There are a number of things you can do to process and learn from the external links to help you learn the information. For example, write down keywords that you learn on index cards or in your notes. Then review this and any other notes you took.

— Also, draw pictures to help you recall keywords. [Research](#) says drawing pictures may help you remember better boost memory and challenge students to explore the materials in different ways.

— You might find that some of the external links are similar in what they provide in learning. This will help retention and reinforce the material more.

— Take your time through the videos/articles - pausing as often as you like - to engage more with the content and enhance learning processes.

— Discuss what else you learned. Discussion helps you think about what you learned more.

Again, while there are some “Additional Assignment Questions” provided below - these questions are not on the exam. They are to help reinforce the material.

External Link Assignments Quick Steps

- Click on the external webinar/video/article links (∞) below.
- Key Points: Identify core sections.
- Webinars/Videos: Pause, rewind, and rewatch.
- Take notes.
- In addition to any questions below, write and discuss what you have learned from each external link.

+++++ LESSON 1—NUTRITION AND HISTORY

Fill in the blanks for questions 1-13 (famous people in the history of nutrition).

1. _____ became known as the father of chemistry and the father of nutrition.
2. _____ found that foods are not digested separately and sequentially, but rather all the time and at different rates.
3. A biochemist named _____ coined the term “vital animes,” which paved the way for the current descriptive word, “vitamins.”
4. Edwin B. Hart discovered that trace amounts of _____ are essential for iron absorption.
5. Adolf Otto Reinhold Windaus synthesized _____, for which he won the Nobel Prize in Chemistry.
6. Albert Szent-Györgyi proved that it was _____ that prevented scurvy.
7. William Cumming Rose identified _____ which the body cannot synthesize, but which are necessary protein components.
8. Eric John Underwood and Hedley Marston discovered the necessity of _____.
9. Eugene Floyd Dubois demonstrated that school and work performance are linked to _____.
10. Erhard Fernholz discovered the structure of _____.
11. Linus Pauling coined the term _____ nutrition.
12. The Department of Agriculture (USA) set-up the _____.
13. Researchers found that the _____ (respiratory infections) is a cause of obesity, as well as bad nutrition.

Explain for questions 14-15 (famous people in the history of nutrition).

14. Explain what researchers from Deakin University, Burwood, Australia, found with children who ate salty foods.
15. Explain nutrition and why nutrition is important.

Below are several slide presentations. Go to each of the external links and review each one. Then list at least 3 or more things that you learned about each.

∞ [Learn More > Click here for an extensive 36 slide presentation on the History of Parenteral and Enteral Nutrition.](#)

From the external link slide presentation, what did you learn?

∞ [Learn More - Click here for an 11 slide presentation on a Dietitian and Nutritionist.](#)
From the external link slide presentation, what did you learn?

∞ [Learn More - Click here for a 20 slide presentation on what a Dietitian does.](#)
From the external link slide presentation, what did you learn?

LESSON 2—MAJOR NUTRIENTS
List or explain for questions 16-23.

16. What are carbohydrates?

17. What are proteins?

18. What are fats?

19. What is fiber?

20. What are micronutrients?

21. What are macronutrients?

22. List the 16 key minerals.

23. Explain the difference between water soluble vitamins and fat soluble vitamins.

Fill in the blanks for questions 24-38 — key minerals.

24. Potassium

What It Does. _____

Deficiency. _____

Excess. _____

[More about Potassium](#) > From the link, what else did you learn about potassium?

25. Chloride

What It Does. _____

Deficiency. _____

Excess. _____

[More about Chloride](#) > From the link, what else did you learn about chloride?

26. Sodium

What It Does. _____

Deficiency. _____

Excess. _____

[More about Sodium](#) > From the link article, what else did you learn about sodium?

27. Calcium

What It Does. _____

Deficiency. _____

Excess. _____

[More about Calcium](#) > From the article, what else did you learn about calcium?

28. Phosphorus

What It Does. _____

Deficiency. _____

Excess. _____

[More about Phosphorus](#) > From the article, what else did you learn about phosphorus?

29. Magnesium

What It Does. _____

Deficiency. _____

Excess. _____

[More about Magnesium](#) > From the article, what else did you learn about magnesium?

30. Zinc

What It Does. _____

Deficiency. _____

Excess. _____

From the article, what else did you learn about zinc?

31. Iron

What It Does. _____

Deficiency. _____

Excess. _____

[More about Iron](#) > From the article, what else did you learn about iron?

32. Manganese

What It Does. _____

Deficiency. _____

Excess. _____

[More about Manganese](#) > From the article, what else did you learn about manganese?

33. Copper

What It Does. _____

Deficiency. _____

Excess. _____

[More about Copper](#) > From the article, what else did you learn about copper?

34. Iodine

What It Does. _____

Deficiency. _____

Excess. _____

[More about Iodine](#) > From the article, what else did you learn about iodine?

35. Selenium

What It Does. _____

Deficiency. _____

Excess. _____

[More about Selenium](#) > From the article, what else did you learn about selenium?

36. Molybdenum

What It Does. _____

Deficiency. _____

Excess. _____

[More about Molybdenum](#) > From the article, what else did you learn about molybdenum?

37. Fluoride

What It Does. _____

Deficiency. _____

Excess. _____

[More about Fluoride](#) > From the article, what else did you learn about fluoride?

38. Chromium

What It Does. _____

Deficiency. _____

Excess. _____

[More about Chromium](#) > From the article, what else did you learn about chromium?

Fill in the blanks for questions 39-51 — key vitamins.

39. Vitamin A

chemical name: _____

Solubility: _____

Deficiency Disease: _____

Overdose Disease: _____

[More about Vitamin A](#) > From the article, what else did you learn about vitamin A?

40. Vitamin B₁

chemical name: _____

Solubility: _____

Deficiency Disease: _____

Overdose Disease: _____

[More about Vitamin B₁](#) > What else did you learn about Vitamin B₁?

41. Vitamin B₂

chemical name: _____

Solubility: _____

Deficiency Disease: _____
Overdose Disease: _____
[More about Vitamin B₂](#) > What else did you learn about Vitamin B₂?

42. Vitamin B₃
chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____
[More about Vitamin B₃](#) > What else did you learn about Vitamin B₃?

43. Vitamin B₅
chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____
[More about Vitamin B₅](#) > What else did you learn about Vitamin B₅?

44. Vitamin B₆
chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____
[More about Vitamin B₆](#) > What else did you learn about Vitamin B₆?

45. Vitamin B₇
chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____
[More about Vitamin B₇](#) > What else did you learn about Vitamin B₇?

46. Vitamin B₉
chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____
[More about Vitamin B₉](#) > What else did you learn about Vitamin B₉?

47. Vitamin B₁₂
chemical name: _____

Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____

[More about Vitamin B₁₂](#) > What else did you learn about Vitamin B₁₂?

48. Vitamin C

chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____

[More about Vitamin C](#) > What else did you learn about Vitamin C?

49. Vitamin D

chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____

[More about Vitamin D](#) > What else did you learn about Vitamin D?

50. Vitamin E

chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____

[More about Vitamin E](#) > What else did you learn about Vitamin E?

51. Vitamin K

chemical name: _____
Solubility: _____
Deficiency Disease: _____
Overdose Disease: _____

[More about Vitamin K](#) > What else did you learn about Vitamin K?

Below are several slide presentations. Go to each of the external links and review each one. Then list at least 3 or more things that you learned about each.

∞ [Learn More > Click here for an 11 slide presentation on a summary of nutrients.](#)

From the external link slide presentation, what did you learn?

∞ [Learn More 1 > Click here for a 9 slide presentation about vitamins and what they do.](#)
From the external link slide presentation, what did you learn?

∞ [Learn More 2 > Click here for a 21 slide presentation about vitamins and what they do.](#)
From the external link slide presentation, what did you learn?

LESSON 3: NUTRIENTS – POWERFUL HEALTH BENEFITS WEBINARS, VIDEOS, AND ARTICLES

EXTERNAL WEBINAR LINKS

Note: These videos are suggested for individuals over 21 years of age.

∞ [Let Food Be Thy Medicine](#) - 1 hour and 20 minutes

* At minute 15, the discussion in the video is how to buy organic and save money. What other ways can you save money, buy organic food, and prepare your own food?

* At minute 18, the discussion in the video is how food is important. And that the process of digestion is very important too. How can you improve your digestion?

* Discuss the six tastes of food synergy.

* What can you replace processed foods with?

* What is epigenetics?

* What is atrazine?

* What else did you learn in this webinar?

∞ [Blocks of Health: How To Boost Your Metabolism Naturally - LuckyVitamin Happy Wellness Webinar - 50 minutes](#)

Note: This video is not recommended for individuals under 21 years old.

- What happens with you metabolism when you do not get enough hours of sleep?

* What is leptin?

* What is ghrelin?

* Do you sleep enough?

* What happens when insulin spikes?

* What kind of meals keep your blood sugar the most stable?

* How much water do you need?

* When are the advantages of drinking water in the morning?

* Can caffeine elevate cortisol?

Note: There is some discussion on alcohol in this video. Minute 22:30-25:50 everyone under 21 years old should skip this part.

Water is the smartest choice to always drink. Healthy teas are a great option as well. This is the ABSOLUTE best fluid choice always for your body and your health.

* What kind of exercise do you do?

* What else did you learn in this webinar?

∞ [Flora: How To Fuel For Athletic Performance - LuckyVitamin Happy Wellness Webinar - 47 minutes](#)

Note: This video has a focus on athletic performance - so the macronutrient percentage focus puts an emphasis on intaking more carbohydrates.

* What nutrient dense foods are part of your meal plan?

* Why is it best to shop the perimeter of the store?

* What are specific needs for endurance athletes?

* What are some good fats?

* What is the role of iron?

* What is the importance of calcium?

* What else did you learn in this webinar?

EXTERNAL VIDEO LINKS

Note: These videos are suggested for individuals under 21 years of age, but are also suitable for those over 21 years of age.

∞ [What is Nutrition](#) - 2:18 minutes

Note: Regarding the 1 cheat meal a week (at minute 1:40) - according to [healthline.com](https://www.healthline.com) - "There is no specific guideline for when or how frequently your cheat meal or day should occur. Often people will include one cheat per week, but this can change depending on what the person's health or weight loss goals are."

* How does good nutrition support your body?

* How can you optimize your day to support an optimal nutrition plan for you?

* What did you learn in this video?

∞ [Nutrition for a Healthy Life](#) - 4:25 minutes

* What did you learn in this video?

∞ [What's the Best Diet? Healthy Eating 101](#) - 15:13 minutes

Note: Research says that saturated fat - like coconut and avocado oil are healthy options.

* What did you learn in this video?

∞ [Nudging our kids and families towards better eating](#) - 8:32 minutes

* What do you eat on an average day?

* Do you have protein and fiber n the morning? What is it?

* Do you pack a lunch? What is it?

* Why do you want to eat nutritional food each day?

* What else did you learn in this video?

∞ [What is the single best drink for your health?](#) - 4:09 minutes

* What did you learn in this video?

∞ [Fit Facts | Food and Nutrition](#) - 48 seconds

* What did you learn in this video?

∞ [A healthy diet, a healthier world](#) - 1:39

* In this video what foods does the World Health Organization say are leading to unhealthy diets?

* In this video what does the World Health Organization say is important to eat much less of?

* What will you do to make positive healthy eating changes?

∞ [All About NUTRITION](#) - 6:43 minutes

* What did you learn in this video?

∞ [The 5 Fabulous Food Groups](#) - 4:31 minutes

* Where does energy come from?

* What are the 5 food groups?

* List foods you can put into each of the 5 food groups?

* What else did you learn in this video?

∞ [What's the Difference Between Fruits and Vegetables?](#) - 4:08 minutes

* How do plants start?

* What are edible plant parts called?

* What part of the carrot grows in the ground.

* What does every fruit start with?

* Do fruits have seeds in it?

* Is a cucumber a fruit or a vegetable?

* What else did you learn in this video?

* What else did you learn in this video?

∞ [Like Fruit? Thank a Bee!](#) - 3:46 minutes

* What are the parts of the flower?

* What is pollen need for fruit?

* What do bees do to help in the growth of fruit?

* Explain the process of pollination?

* What else also pollinates the flowers?

* What else did you learn in this video?

∞ [Why Are Foods Many Colors?](#) - 5:48 minutes

* What do fruits have in common?

* List some fruits that

* What is the function of leaves?

* What happens when animals eat a fruit?

* What do plants need to grow?

* What else did you learn in this video?

∞ [Healthy Aging with Nutrition - 5:43 minutes](#)

* What are essential nutrients?

* How many classes of essential nutrients are there?

* Define each class of essential nutrient.

* How many essential vitamin are there?

* What are some benefits if minerals?

* What does water do in the body?

* What are some bioactives?

* Does natural always mean safe?

* What else did you learn in this video?

∞ [HealthyLiving MyPlate Dietary Guidelines](#) - 20:44 minutes

* What did you learn in this video?

∞ [Nutrition, Food Pyramid, Healthy Eating, Educational Videos](#) -12:07 minutes

Nutrition, Food Pyramid Play along with the video.

Note: Milk instead of chocolate milk is a better fluid choice.

Note: Water instead of orange juice is a better fluid choice.

* What are the 5 food groups?

* List foods you can put into each of the 5 food groups?

* What are good healthy snack choices?

* What would be a healthy lunch?

* What else did you learn in this video?

External Article Link Assignment

Click on the links below to learn more about nutrients. Then write and discuss what you have learned from each one.

∞ [Carrots & the Heart](#)

∞ [Benefits of Green Onions](#)

∞ [Is Red Onion Good for You?](#)

∞ [What Does an Avocado Do for Your Body?](#)

∞ [What Does the Meat Food Group Do for Your Body?](#)

∞ [How Much Protein Does Milk Have?](#)

∞ [What Does Your Body Do to Excess Vitamin B or C That You Might Consume?](#)

∞ [Three Functions of Fat in the Body](#)

∞ 5 Main Food Groups

∞ 6 Primary Functions of Proteins

