

INFLAMMATION – PROTECT YOUR BODY COURSE LEARNING WORKBOOK



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Note: External Links: Regarding Advertisements

There are links provided in this Course Learning Workbook. There may also be some links on the GMP Fitness Learning Platform. These links, which may also provide advertisements, are for informational purposes only. These links are for informational purposes only; they do not constitute an endorsement or approval by GMP Fitness® of any of the products by these companies.

INFLAMMATION – PROTECT YOUR BODY—COURSE WORKBOOK

ACTIVITY QUESTIONS AND ASSIGNMENTS

This course includes over “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.

LESSON 1

1. What is inflammation?

2. What is infection caused by?

3. What does the word inflammation come from?

4. What is the first stage of inflammation?

5. What is suppuration?

6. What is the granulation stage?

7. What is innate immunity?

8. Explain the whooping cough vaccine immunity example.

9. What is acute inflammation?

10. List 10 examples of diseases, conditions and situations which can result in acute inflammation.

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11. Explain the milder inflammation response that occurs after normal workouts.

12. What is delayed-onset muscle soreness?

13. How do you limit post-workout inflammation?

14. What is chronic inflammation?

15. What can result from chronic inflammation?

16. List 8 examples of diseases, conditions and situations which can result in chronic inflammation.

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17. Explain the 3 main processes occur before and during acute inflammation.

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18. What is edema?

19. What are the five cardinal signs of acute inflammation?

20. What are the five classic signs of acute inflammation?

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21. What are the causative agents for acute inflammation?

22. What are the major cells involved for acute inflammation?

23. What is the duration for acute inflammation?

24. What are the outcomes for acute inflammation?

25. What are the causative agents for chronic inflammation?

26. What are the major cells involved for chronic inflammation?

27. What is the duration for chronic inflammation?

28. What are the outcomes for chronic inflammation?

29. What did the scientists at Emory University School of Medicine discover regarding poor sleep quality and inflammation?

LESSON 2

30. What happens when someone has inflammation?

31. What nociceptive pain?

32. What somatic pain?

33. What visceral pain?

34. Why are you at much greater risk for inflammation if you are obese?

35. What is Ankylosing Spondylitis?

36. What is Crohn's Disease?

37. What is Graves' Disease?

38. What is Idiopathic Pulmonary Fibrosis?

39. What is Lupus?

40. What is Addison's disease?

41. What is Vasculitis?

42. What is Type 1 Diabetes?

43. What does NSAIDs stand for?

44. Why do people take NSAIDs?

45. What are examples of NSAIDs?

46. List 10 foods that cause inflammation?

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47. List 10 foods that combat inflammation?

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48. What is Harpagophytum Procumbens?

49. What is ginger and turmeric?

50. Explain five more things you can do to combat inflammation.

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ADDITIONAL EXTERNAL LINKS - VIDEOS/WEBINARS/ARTICLES/AUDIO **MORE COURSE ACTIVITY QUESTIONS**

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.

EXTERNAL VIDEO LINKS (about 4 Hours)

∞ [Inflammation Part 1](#) - Rabiul Haque 35:41 minutes
Assignment: Watch and/or listen to the video.

— What is the definition of inflammation?

— Where does inflammation happen?

— When does inflammation become harmful?

— What are the two major components of inflammation?

— What are the 2 major goals of inflammation?

— What happens if there is no inflammation?

— When was inflammation first described?

— What are the cardinal signs of inflammation?

— What are the major causes of inflammation?

— What is acute inflammation?

— What is chronic inflammation?

— What are the three major components of acute inflammation?

— What is edema?

— Write and discuss what else you have learned?

∞ [Inflammation Part 2](#) - Rabiul Haqus 46:25 minutes

Assignment: Watch and/or listen to the video.

— What is leukocyte recruitment?

— What are the major leukocytes?

— What are the steps of leukocyte recruitment?

— What is axial blood flow?

— What is margination?

— What is the mechanism of the rolling phase?

— Explain what you learned about the rolling phase.

— Explain what you learned about adhesion.

— Explain what you learned about chemotaxis and what happens to the leukocytes here.

— What is phagocytosis, what else is it called, and what are the steps?

— Explain shared properties of mediators.

— Write and discuss what else you have learned?

∞ [Acute Inflammation | Immunology](#) - 24:18

Assignment: Watch and/or listen to the video.

— What is inflammation?

— What is the cause of inflammation?

— What is the inflammation response?

— What are the clinical factors of inflammation?

— What is the process of inflammation?

— Explain the 3 lines of defense in the human body?

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— What are the goals for the lines of defense in the human body?

— Write and discuss what else you have learned?

∞ [Histology- Acute vs Chronic Inflammation - 4:47 minutes](#)

Assignment: Watch and/or listen to the video.

— How do you tell acute vs chronic Inflammation cells apart?

— In which cells are the neutrophils?

— Write and discuss what else you have learned?

∞ [Inflammation Medical Animation - YouTube - 4 minutes](#)

Assignment: Watch and/or listen to the video.

— What happens after injury?

— What does increased capillary permeability allow?

— Write and discuss what else you have learned?

∞ [Immunology | Inflammation: Vascular Events: Part 1](#) - 33:58 minutes

Assignment: Watch and/or listen to the video.

— Main Question: What is the sequence of events in an inflammatory reaction - starting with a gram-negative bacteria?

— What does an antigen need to be and why?

— What are antigens?

— Write and discuss what else you have learned?

∞ [Immunology | Inflammation: Cellular Events: Part 2](#) - 20:42 minutes

Assignment: Watch and/or listen to the video.

— What is happening with the white blood cells?

— What is happening with the neutrophils?

— What is inside the phagosome?

— What is inside the lysosome?

— What is a phagolysosome?

— What are antigen-presenting cells.

— What is inside the phagosome lysosome fusion?

— What do the neutrophils do?

— What is exocytosis?

— Do a complete review of the inflammatory response.

— Write and discuss what else you have learned?

∞ [Inflammation - YouTube - 42 minutes](#)

Assignment: Watch and/or listen to the video.

There are 3 lines of defense to help prevent infection discussed in the video.

— What do each one of them do?

— What happens when bacteria gets into your system?

— Reinforcement question: What is acute inflammation?

— Reinforcement question What is chronic inflammation?

Note: at minute 32:50 there is a pause and you will need to forward about 30 seconds.

— What is resolution and repair?

— What does scar tissue get replaced by?

— What is the primary role of wound healing?

— What are the wound healing phases?

— Write and discuss what else you have learned?

The videos below are very good for young adults.

∞ [Inflammation - causes, symptoms, diagnosis, treatment, pathology](#) - 8:27 minutes

Assignment: Watch and/or listen to the video.

— Why do your muscles feel sore after a workout?

— What are external factors that trigger inflammation?

— What are internal factors that trigger inflammation?

— Write and discuss what else you have learned?

[Understanding the Immune System in One Video](#) -15:16 minutes

Assignment: Watch and/or listen to the video.

— What is the initial immune response?

— What are the macrophages?

— What is phagocytosis?

— Write and discuss what else you have learned?

∞ [Search Acute Inflammation vs Chronic Inflammation \(Clear Comparison \) - 3:17 minutes](#)

Assignment: Watch and/or listen to the video.

— Compare acute inflammation versus chronic inflammation.

∞ [How Does Inflammation Work in Your Body?](#) - 5 minute Reinforcement Video

— Write and discuss what you have learned?

∞ [Sugar and Your Heart with Dr. Stephen Sinatra](#) - 36 minutes

Dr. Hotze and Dr. Sinatra on inflammation and the heart. Dr. Sinatra says that heart disease is an inflammatory disorder.

Assignment: Watch and/or listen to the video.

— What does Dr. Sinatra say about satins?

— Why did Dr. Sinatra not use satins with older men?

— What does Dr. Sinatra say helps maintain good cardiovascular health?

— What causes the inflammation of coronary arteries?

— What is the number one factor that causes inflammation?

— What does olive oil do?

— Write and discuss what else you have learned?

EXTERNAL ARTICLE LINKS (8)

— Click on the external article links below to learn more about inflammation.

— Read each article.

— Answer the 1 question on each and then describe at least 3 things you have learned from each article.

∞ [Chronic inflammation and your joints - Harvard Health](#)

According to this article, what in the joints with chronic inflammation?

- 1.
- 2.
- 3.

∞ [Ways Inflammation Can Affect Your Health](#)

According to this article, how does inflammation affect your health?

- 1.
- 2.
- 3.

∞ [7 Ways to Curb Inflammation With Food](#)

According to this article, ways you can curb inflammation?

- 1.
- 2.
- 3.

∞ [12 Foods You Should Include in an Anti-Inflammation Diet](#)

According to this article, what are some inflammation-fighting foods?

- 1.
- 2.
- 3.

∞ [The ABCs of Inflammation](#)

According to this article, what are some causes of inflammation?

- 1.
- 2.

3.

∞ [How Stress Causes Inflammation in Your Body](#)

According to this article, what steps can you take to prevent inflammation?

- 1.
- 2.
- 3.

∞ [How Can You Ease Back-to-School Anxiety and Stress?](#)

What are some creative strategies you can implement to help stress and anxiety?

- 1.
- 2.
- 3.

∞ [External Resource Link Downloads](#)

Eat Healthy: Pregnancy or Breastfeeding [PDF](#)

Eat Healthy: Birth to Age 2 [PDF](#)

Eat Healthy: Kids & Teens [PDF](#)

Eat Healthy: Older Adults [PDF](#)

Make Healthy Drink Choices [PDF](#)

Cut Down on Added Sugars [PDF](#)

Cut Down on Saturated Fat [PDF](#)

Cut Down on Sodium [PDF](#)

Nutrition Conversation Starters [PDF](#)

Build a Healthy Eating Routine [PDF](#)

