WJEC FOOD SCIENCE AND NUTRITION LEVEL 3 PRACTICE TEST (SAMPLE)

STUDY GUIDE

SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://wjecfoodsciencenutritionlvl3.examzify.com

Table of Contents

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. How many calories are in one gram of fat?

A. 3.75 kcal

B. 4 kcal

C. 9 kcal

D. 2 kcal

2. What is the hot holding temperature for cooked foods?

A. 63°C

B. 70°C

C. 60°C

D. 50°C

3. Which diet is defined by no pork or beef and notes that some Hindus are vegetarians?

A. Hindus diet

B. Muslim diet

C. Jewish diet

D. Pescatarian

4. What term describes fatty acids with one or more double bonds between carbon atoms and are not fully saturated with hydrogen?

A. Saturated fatty acids

B. Unsaturated fatty acids

C. Trans fatty acids

D. Polyunsaturated fatty acids

5. Which of the following is listed as a function of fat?

A. Thermal insulation

B. Energy provision as the only source

C. Contributes to zero body fat

D. Inhibits vitamin absorption

6. Which of the following is a disaccharide?

A. Sucrose

B. Glucose

C. Fructose

D. Galactose

7. Which dietary change is recommended to reduce cardiovascular disease risk?

A. Eat less sugar and fat

B. Increase salt intake

C. Eat more red meat

D. Skip vegetables

8. Which practice helps preserve vitamins by using a particular form of vegetables?

A. Use frozen vegetables (frozen soon after picking)

B. Use canned vegetables

C. Use fresh vegetables only

D. Use dried vegetables

9. Which vitamin is primarily associated with eyesight in dim light and skin structure?

A. Vitamin B2

B. Vitamin A

C. Vitamin C

D. Vitamin D

10. Egg yolks coagulate at approximately which temperature?

A. 52°C

B. 66°C

C. 72°C

D. 78°C

Answers

1. C
2. A
3. A
4. B
5. A
6. A
7. A
8. A
9. B
10. B

Explanations

1. How many calories are in one gram of fat?

A. 3.75 kcal

B. 4 kcal

C. 9 kcal

D. 2 kcal

Fats store the most energy per gram among the main nutrients. Their chemical structure holds a lot of energy in the carbon–hydrogen bonds, and fat contains relatively little oxygen, so when it's metabolized a large amount of energy is released. The standard energy yield used in nutrition is about 9 kilocalories per gram for fat. In comparison, carbohydrates and proteins provide roughly 4 kcal per gram, and alcohol about 7 kcal per gram. So the correct value is 9 kcal per gram.

2. What is the hot holding temperature for cooked foods?

A. 63°C

B. 70°C

C. 60°C

D. 50°C

Hot holding means keeping cooked foods hot during service to prevent bacteria from multiplying. Bacteria grow rapidly in the danger zone, roughly 5°C to 63°C, so the safe minimum hot holding temperature is 63°C. Keeping foods at 63°C or higher prevents growth and reduces toxin risk. The other options are below that minimum (60°C and 50°C), which would allow bacteria to multiply, while 70°C is also safe but not the minimum the question targets, so 63°C is the best answer.

3. Which diet is defined by no pork or beef and notes that some Hindus are vegetarians?

A. Hindus diet

B. Muslim diet

C. Jewish diet

D. Pescatarian

Dietary choices often reflect beliefs about sacred animals and acceptable foods. In Hinduism, cows are revered, so beef is commonly avoided, and many followers also choose vegetarian meals. This combination—no beef and often no meat at all—fits the Hindu diet description best. The other diets are defined by different rules: Muslims avoid pork entirely (beef can be eaten if halal), Jewish dietary laws forbid pork and require kosher preparation for beef, and a pescatarian diet centers on including fish while excluding other meats, but isn't defined by Hindu beliefs.

4. What term describes fatty acids with one or more double bonds between carbon atoms and are not fully saturated with hydrogen?

A. Saturated fatty acids

B. Unsaturated fatty acids

C. Trans fatty acids

D. Polyunsaturated fatty acids

Think of how fatty acids are built from carbon chains with hydrogen atoms attached. If there are no double bonds, the chain is fully saturated with hydrogen. When there is one or more double bonds between carbon atoms, the chain cannot hold all possible hydrogens, so it is not fully saturated. That situation describes unsaturated fatty acids. Within unsaturated fats, one double bond means monounsaturated, while more than one double bond means polyunsaturated. Trans fatty acids are a subset of unsaturated fats where the hydrogen arrangement around the double bond is trans, but the key idea for this item is the presence of one or more double bonds, not full hydrogen saturation.

5. Which of the following is listed as a function of fat?

A. Thermal insulation

B. Energy provision as the only source

C. Contributes to zero body fat

D. Inhibits vitamin absorption

Fat serves as an insulating layer under the skin, trapping air and slowing heat loss from the body. This helps keep body temperature stable in cooler conditions. While fat is a major energy store, it isn't the only energy source—carbohydrates and proteins also provide energy, so it isn't correct to say it's the only source. We don't aim for zero body fat; some fat is necessary for health, cushioning, and hormonal balance. And far from inhibiting vitamin absorption, fat actually aids the absorption of fat-soluble vitamins A, D, E, and K.

6. Which of the following is a disaccharide?

A. Sucrose

B. Glucose

C. Fructose

D. Galactose

Disaccharides are sugars formed when two monosaccharide units join together through a glycosidic bond. This creates a single molecule made of two sugar units. Sucrose is the disaccharide here because it is composed of two monosaccharides—glucose and fructose—linked together. The bond involves both of their anomeric carbons, which is why sucrose is non-reducing. The other options are individual monosaccharides: glucose, fructose, and galactose are each a single sugar unit, not two joined together.

7. Which dietary change is recommended to reduce cardiovascular disease risk?

A. Eat less sugar and fat

B. Increase salt intake

C. Eat more red meat

D. Skip vegetables

Lowering cardiovascular disease risk through diet hinges on reducing elements that raise risk factors, especially added sugars and saturated fats. Eating less sugar helps prevent excess weight, improves how the body handles blood sugar and triglycerides, and supports a healthier metabolic profile. Cutting saturated fat lowers LDL cholesterol, which is a major contributor to fatty deposits in arteries. Together, these changes promote a better lipid profile, aid weight management, and support healthier blood pressure and glucose levels. Dietary guidance also encourages replacing sugary and high-saturated-fat foods with fiber-rich, plant-based options and healthier fats. Increasing salt intake would raise blood pressure, more red meat can raise saturated fat and cholesterol, and skipping vegetables reduces fiber and protective nutrients, so they don't help reduce cardiovascular risk.

8. Which practice helps preserve vitamins by using a particular form of vegetables?

A. Use frozen vegetables (frozen soon after picking)

B. Use canned vegetables

C. Use fresh vegetables only

D. Use dried vegetables

Fruits and vegetables lose vitamins mainly from heat, air, and time. Freezing slows or stops many of these processes, so vitamins stay in the food longer. When vegetables are frozen soon after harvest, they're cooled quickly and stored at very low temperatures, which keeps the vitamin content intact. Often blanching before freezing inactivates enzymes that would otherwise break down vitamins during storage, further protecting nutrients. Canned vegetables undergo heat processing, which can reduce heat-sensitive vitamins like vitamin C and some B vitamins. Fresh vegetables, even though they're high in vitamins, can lose nutrients during storage and transport before they're eaten. Dried vegetables involve heat and exposure that can also degrade vitamins sensitive to drying. So using frozen vegetables, especially ones frozen soon after picking, best preserves vitamins by minimizing the losses that occur with other forms.

9. Which vitamin is primarily associated with eyesight in dim light and skin structure?

A. Vitamin B2

B. Vitamin A

C. Vitamin C

D. Vitamin D

The main idea tested is how vitamin A supports both vision in dim light and the health of skin. In the eye, vitamin A is converted into retinal, which combines with opsin to form rhodopsin, the light-sensitive pigment in rod cells. When light exposure occurs, rhodopsin breaks down and triggers a signal to the brain; regenerating rhodopsin requires vitamin A, so a deficiency impairs low-light vision, causing night blindness. For the skin, vitamin A helps maintain healthy epithelial tissues by regulating cell growth and differentiation, supporting the integrity of the skin and mucous membranes. Other vitamins don't play this specific dual role as directly, so vitamin A best fits both functions.

10. Egg yolks coagulate at approximately which temperature?

A. 52°C

B. 66°C

C. 72°C

D. 78°C

When heat is applied, the proteins in the egg yolk unfold and link together to form a network that thickens the liquid. This coagulation begins around the mid-60s Celsius, roughly 65°C, and progresses toward firmer set as the temperature rises. A value of about 66°C sits right in that onset range, representing the soft-setting point of the yolk. If the temperature were significantly lower, coagulation wouldn't occur yet and the yolk would stay runny. If it were much higher, the yolk would become clearly firm or solid, which is beyond the initial coagulation stage.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://wjecfoodsciencenutritionlvl3.examzify.com

We wish you the very best on your exam journey. You've got this!