

E.L. CROSSLEY SECONDARY SCHOOL
FINAL EXAMINATION

HFA 4M1
Food and Nutrition

TEACHER(S): Ms. Kropac

DATE: June 21st 2013
TIME: 90 minutes

TOTAL MARKS: 80

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Students Name: _____

- INSTRUCTIONS:
1. You will need only a pen, exam booklet, and paper (provided)
No outside materials may be used.
 2. Read and answer all questions carefully. Be sure to leave time
to proofread at the end of exam.
 3. All written answers must be in full sentences.
 4. Part 1-4 will be answered in the space provided in exam
booklet.
 5. Part 5 will be answered separately on paper provided.
 6. Ensure your name is on all pages of exam.

MARK ALLOCATION:

- Part 1 Multiple Choice: 20 marks
- Part 2 Matching: 10 marks
- Part 3 Fill in the Blank: 10 marks
- Part 4 Short Answer: 20 marks
- Part 5 Long Answer: 20 marks

PART 5: Long Answer (20 marks)

Choose to answer ONE of the following TWO questions on the foolscap provided. Be sure to answer only one question. If you answer both, only the first will be marked.

Answers should be in the following format:

Introduction: What is the problem? Other important background information.

First Potential Cause: What is one cause of this nutritional issue? Be sure to discuss in detail how it might affect your topic.

Second Potential Cause: What a second cause of this nutritional issue? Be sure to discuss in detail how it might affect your topic.

Third Potential Cause: What is a final cause of this nutritional issue? Be sure to discuss in detail how it might affect your topic.

Conclusion and Course of Action: Here recap the three potential factors that are contribute to your current nutritional issue. Provide a possible plan for action, and leave a parting thought.

Evaluation:

Content(Evidence and analysis)- 15 marks

Organization (logical order, spelling and grammar)- 5 marks

HFA 4M Final Exam Review

UNIT 1

Food Allergies and Food Intolerances

- What is the difference between an allergy and an intolerance?
- What are some symptoms of an allergic reaction?

Food Safety

- How do you put out a grease fire?

Food Science: The Science of Cinnamon Rolls

- What is gluten and why is it important in baking?
- What is yeast?

The Science of Taste

- What are the five tastes the body can recognize.
- List and describe other factors that affect flavor other than taste

Carbohydrates and The Role of Fibre

- What are the six essential nutrients for the body? Which are considered macronutrients and which are considered micronutrients?
- What is the basic building block of carbohydrates.
- How much energy do carbohydrates contain per gram?
- List the role of carbohydrates in the body.
- Approximately how many carbs should we consume daily?
- Differentiate between simple and complex carbohydrates. Give examples of each.

Fats

- Name three function of fat.
- What is the maximum of fat that should be consumed?
- How much energy does fat contain per gram?

Proteins

- What is the basic building block of proteins?
- What is the main function of proteins?
- How much energy does proteins contain per gram?
- How much protein should you be eating?
- What is the difference between complete and incomplete proteins? Give examples.

Vitamins

- Which vitamins are water soluble? Which are fat soluble.
- Name ONE function for Vitamin A, Vitamin C, Vitamin D, Vitamin E, Vitamin K and all the B complexes covered in class (B1, B3, B12)
- Know ONE deficiency Vitamin A, Vitamin C, Vitamin D and B1
 - Define Beriberi, scurvy, pellagra, night blindness

Minerals

- Identify at least ONE deficiency symptom of sodium, calcium, iron, iodine, and fluoride.

Water

- What is the role of water in the body?
- How much do we need?

Digestion, Absorption, Metabolism

- Where does digestion start?
- What happens in the mouth, stomach, small intestine and large intestine respectively.

UNIT 2

Perspectives on Eating

- What are the historical perspectives on eating (why does history say we eat the things we do?)
- What are the biological perspectives of eating
 - Describe the feedback loop that tells us we are full
 - What is Prader-Willie Syndrome
- What are the psychological perspectives of eating
 - What is wrong with using food as a reward?
 - What is wrong with using food as a punishment?

The cost of healthy eating

- According to the 'Nutritious Food Basket Survey', is it less expensive to eat healthy or eat fast food?

Eating in Childhood/Pregnancy

- What are 3 nutrients you need to ensure you get enough of when pregnant?
- How many extra calories do you need to consume when pregnant?

Eating for Sports

- Why is it important for athletes to maintain a high protein level?
- What type of meal should you eat before the race? What should the primary macronutrient be?
- What type of meal should you eat after the race? What should the primary macronutrient be?

Adolescents/ Males vs Females

- List two micronutrients that teens need to consume extra of. Why?
- List three key differences between teen male and female nutritional requirements.

Obesity/ Junk Food

- List and discuss five health concerns associated with obesity.
- List and discuss at least three causes of obesity.
- What is clinically considered obese? What is clinically overweight? What is clinically underweight? What does BMI stand for and what information do you need to calculate it?

Vegetarian/Vegan

- Define: Vegan, vegetarian, lacto-vegetarian.
- What are some benefits of the vegan/vegetarian diet?
- List four nutrients vegetarians must ensure they get enough of. Be sure to be specific about the purpose of these nutrients, and where you might get these sources from.

Eating for Wellness

- List one example given in class of how food has historically been used as medicine.
- Define phytochemical. Where are phytochemicals found? List 3 benefits of phytochemicals.
- Define and differentiate between:
 - Enriched food, fortified food, functional food, genetically modified food, organic food.
- What are antioxidants? Where are they found? What do they do for the body?

Eating Disorders

- Define anorexia. Define bulimia.
- What are some of the effects of both anorexia and bulimia.
- What might a concern be with the current way that we diagnose eating disorders?
- What is EDNOS?

UNIT 3

Factors Affecting Food Supply Chain: Political and Economic

- What is a food supply chain? Be able to name five parts.

Factors Affecting Food Supply Chain: Environmental and Biotechnology

- Provide three examples of biotechnology in used in foods.

Global Food Crisis

- How many people go to bed hungry at night in the world?
- Name and discuss TEN factors that contribute to the global food crisis

Physical Factors Affecting Food Choice

- How does geographic location affect food choice? Provide an example.
- How does regional growing season affect food choice? Provide an example.
- How does storage space affect food choice? Provide and example.
- How does market availability affect food choice? Provide an example.

Eating Local

- Name and describe five reasons to eat local

Staple Grains & Canadian Foods

- Define staple foods
- List and describe 4 influences on choosing a staple food
- Be able to RECOGNIZE all nine staple grains covered in class
- Be able to DESCRIBE two staple grains in detail (What they are, areas in which they might be eaten, benefits of using that staple grain)

Food Security

- What are the five components of food security?
- What are the three TYPES OF APPROACHES to addressing food security in Canada.

Water Crisis

- How much of Earth's population lacks clean drinking water?
- How much of Earth's water lies in freshwater? How much of this is accessible?

UNIT 4

New Food Trends

- Be able to list and describe five of the current food trends.

Service and Restaurant Trends

- List and discuss four current trends in the service industry. Be able to provide examples.
- List and describe four types of service in restaurants.

Food Packaging

- What are the four functions of packaging?
- List and describe four packaging mediums. Be able to discuss pros and cons.
- Define reusable, recyclable, and biodegradable. Which is better for the environment?

Careers in Foods

- Four categories of careers in the food industry are _____?
 - Provide an example of a job in each

New Food Products

- List and describe 4 new food products introduced based on new technology/ research

Spices/ Herbs

- List the biological function of spices/ herbs in our diet.