University of British Columbia

Course Name Course Code	Sports Nutrition Student Directed Seminars FNH 497B
Section	111
Term	1, 2004W (Sep – Dec 2004)
Time	Tuesdays, 1-4 pm
Facilitator	Sinead Feeney
Email	feeney@interchange.ubc.ca
Availability Hours	12-1pm and 4-4:30pm (or by appointment)
Sponsor Professor	Ryna Levy Milne
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Purpose: The primary objective of this course is to develop critical thought, independence and creativity through research evaluation in relation to how nutrition and exercise can impact exercise performance and health.

Learning Outcomes:

By the end of this course, students should have:

- 1. The ability to collect, analyse and organise information and ideas and to convey those ideas clearly and fluently, in both written and spoken forms.
- 2. The ability to evaluate and express opinions on topics related to nutrition, make decisions and be able to explain the reasoning for these decisions.
- 3. A definition of the role of a Sports Nutritionist or Dietitian in assisting a client
- 4. The ability to look critically at an issue in performance nutrition, examine the research surrounding the particular issue and use a variety of concrete and valid resources for developing an argument for or against the issue
- 5. A knowledge base on a variety of sports nutrition topics including appropriate supplement use amongst athletes, macro- and micro-nutrient needs, pre-, during and post-exercise fuel and hydration needs for enhancing performance, how nutrition and exercise impacts health and disease, the pros and cons to using ergogenic aids.
- 6. The ability to present information in a concise and interesting way to a specific target group, highlighting the important information the individuals will need and developing appropriate handouts for their reference.
- 7. The ability to assess the key problems in a case study and develop a plan for the appropriate intervention.

Course Format:

FNH 497B will be using a combination of participatory seminars, videos, guest presentations, debates, student presentations, discussions and Problem Based Learning (PBL) formats. Between classes all students (including myself) will be responsible for reading the handouts provided and researching the particular discussion questions for the following session. Students should be prepared for sharing their research and discussing the questions and literature in each class.

The facilitator's role:

The student-coordinator is not an instructor. The coordinator's role is that of a facilitator. She is responsible for organizing many of the learning resources, such as guest lectures, reading materials, and films, to be used in the class, and sets the parameters of course content, structure, and evaluation procedures.

The Students role:

To research the assigned topics, participate in discussion and critically analyze the literature.

Assignments:

Participation: 10% Debate Handout: 15% PBL case report: 20% Presentation: 15% Essay: 40%

Suggested Essay Topics:

Topics for the essay and presentation should be chosen by the third week of the course. If you have another topic that you wish to research don't hesitate to come and speak with me about it.

- 1. Explain and discuss the merits of consuming glycerol prior to a bout of prolonged exercise
- 2. Consider whether Chromium picolinate supplementation increases lean body mass
- 3. Review the current issues related to the current daily recommended intakes of amino acid and protein by athletes
- 4. What are the negative aspects of weight control in athletes (discuss endocrine, effects on RMR, performance, psychological)
- 5. Discuss whether or not athletes should increase their antioxidant intake.
- 6. What are ergogenic aids and do they have scientific support for their use with athletes?
- 7. What is the impact of caffeine, coffee and ephedrine on exercise performance and metabolism?
- 8. What is the effectiveness of exercise in weight control?
- 9. What are the benefits of exercise to reducing incidence of disease?
- 10. What are nutritional strategies to enhance fat oxidation during aerobic exercise?
- 11. Vegan/Vegetarian athlete
- 12. The child athlete
- 13. The traveling sports team and how to eat for performance away from home
- 14. What are the differences in nutritional requirements between Marathon runners, soccer, football, swimming?
- 15. Plan a pre-event and post-event meal for an athlete
- 16. What are special nutritional recommendations for athletes with celiac disease? Diabetes? Heart disease?
- 17. Consider whether post-exercise glycogen resynthesis is enhanced when protein is combined with carbohydrate in the post exercise meal.
- 18. Explain how type II diabetes can develop and how exercise combined with diet can help improve insulin sensitivity and glucose homeostasis.
- 19. Explain how diet and Exercise influence the blood lipid profile
- 20. Consider whether fat loss is over-stated for individuals who carry more than the recommended levels of body fat.
- 21. What are safe recommendations for gaining weight or losing weight for competition?