



UNSW
AUSTRALIA

Medical Sciences
Medicine

Exercise Physiology Program

HESC3581

Physical Activity and Special Populations

Semester 2, 2015
Course Outline

CRICOS Provider Code 00098G

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Please read this outline in conjunction with the following pages on the

[School of Medical Sciences website:](#)

- [Advice for Students](#)
- [Learning Resources](#)

(or see "STUDENTS" tab at medicallsciences.med.unsw.edu.au)

Course Staff

Lecture/problem based scenario: Tuesday 9.00 am - 12.00 pm, Civ Eng 101

Instructors: Steve Boutcher and Yati Boutcher

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Office hours: Monday 2.00-3.00 pm or by appointment

Course Details

Course Description

Physical Activity for Special Populations (HESC3581) is a 3rd year Exercise Physiology elective course worth six Units of Credit (6 UOC). The course is part of study for the degree of Bachelor of Science or Bachelor of Exercise Physiology.

The course will build on the information you have gained in Physical Activity and Health (HESC3504) as well as Exercise Physiology (HESC2501). Concepts gained in courses such as anatomy, human physiology, biomechanics, and behavioural science will contribute to your learning in this course.

Objectives

This course examines the effect of physical activity on special populations. The impact of physical activity on a range of special populations are summarised (e.g., type 2 diabetes, pregnancy, obesity). The course also covers lifestyle prescription for these special populations. The course will be particularly suited to students involved with lifestyle prescription focused on physical activity.

It is intended that at the end of the course you will be able to:

- describe the effects of physical activity on a range of special populations
- be able to prescribe lifestyle change programs for a range of special populations
- demonstrate an understanding of the major findings of meta-analyses conducted in the special populations area

Course Structure and Teaching Strategies

This is a 6 unit course and consists of:

- 3 lectures/case studies per week

Students are expected to attend all scheduled activities for their full duration. Students are reminded that UNSW recommends that a 6 units-of-credit course should involve about 150-180 hours of study and learning activities. The formal learning activities are approximately 36 hours throughout the semester and students are expected (and strongly recommended) to do double the number of hours of additional study. The time spent reading the articles provided and designing lifestyle change programs will add to this time commitment.

Lectures will provide you with the concepts and theory essential for understanding how physical activity impacts on the health of special populations. In the lectures the aetiology of lifestyle diseases will be outlined and a description of the effects of exercise on risk factors will be given. Lectures will examine the current research regarding exercise and a variety of diseases and special populations.

To assist in the development of prescriptive skill, problem-based learning sessions (case studies) will be held. These sessions will allow students to engage in a more interactive form of learning than is possible in the lectures. The skills you will learn in your involvement in planning and implementing a lifestyle change program are relevant to your development as a professional exercise physiologist.

Approach to Learning and Teaching

The learning and teaching philosophy underpinning this course is centred on student learning and aims to create an environment which interests, challenges, and enthralls students. The teaching is designed to be relevant and engaging in order to prepare students for future careers as Exercise Physiologists.

Although the primary source of information for this course is the lecture material, effective learning can be enhanced through self-directed use of other resources such as textbooks and Web based sources. It is up to you to ensure you perform well in each part of the course; preparing for classes; completing assignments; studying for exams, and seeking assistance to clarify your understanding.

Student Learning Outcomes

HESC3581 will develop the following graduate attributes. These include skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

Graduate Attributes

- A. Research, inquiry, and analytical thinking abilities
- B. The capability and motivation for intellectual development
- C. Ethical, social, and professional understanding
- D. Effective communication
- E. Teamwork, collaborative, and management skills
- F. Information literacy – the skills to locate, evaluate, and use relevant information.

On completion of this course students should be able to:

1. describe the effects of regular physical activity on a variety of diseases
2. describe the effects of regular physical activity on a variety of special populations
3. demonstrate a basic knowledge of lifestyle diseases
4. demonstrate ability to design lifestyle programs for a range of special populations

Course Evaluation and Development

Each year feedback is sought from students about the courses offered in HESC and continual improvements are made based on this feedback. The Course and Teaching Evaluation and Improvement [CATEI] Process of the UNSW is the way in which student feedback is evaluated and significant changes to the course will be communicated to subsequent cohorts of students.

Texts

- Boutcher, S.H. (2014). *20X3: Eliminate your belly fat in an hour per week*. Nero, Australia
- Skinner, J. (2006). *Exercise Testing and Exercise Prescription for Special Cases*. Lea & Febiger, USA.
- Williamson, P. (2010). *Exercise for Special Populations*. Wolters Kluwer, USA.
- Ehrman, J.K., Gordon, P.M., Visich, P.S., Keteyian, S.J. (2003). *Clinical Exercise Physiology*. Human Kinetics, USA
- LeMura, L.M., von Duvillard, S.P. (2003). *Clinical Exercise Physiology*. Lippincott, Williams & Williams, USA
- Bouchard, C., Blair, S.N., & Haskell, W.L. (2007). *Physical Activity and Health*. Human Kinetics, USA

Manuals available on Moodle

- Cardiac Rehabilitation Guidelines
- Case Study Prescription Portfolio
- Drug and Exercise Fact File Manual
- Food for Health Dietary Guidelines
- Lifestyle Manual
- Psychological Inventory Directory
- Smoking Manual

General Information

Exercise Physiology is part of the School of Medical Sciences and is within the Faculty of Medicine. Steve and Yati's offices are located at 4 Arthur Street. General inquiries can be made at MESO Reception, located on the ground floor of the new wing of the Wallace Wurth Building (office hours are 9.00 am - 5:00 pm).

Attendance Requirements

For every lecture class attendance will be recorded. Students will sign a class role. If students attend less than **eighty percent** of their lectures and problem based learning session they will be refused final project assessment. Thus, their final project (50% of marks) will not be assessed.

Handwriting

Students whose writing is difficult to understand will disadvantage themselves in their written assessment. Make every effort to write clearly and legibly. Do not use your own abbreviations. You are advised to hand in word processed assignments.

Missed Exams

If in any circumstances you unavoidably miss an examination, you must inform the Registrar and also contact the relevant Course Office immediately. Normally, if you miss an exam (without medical reasons) you will be given an absent fail. If you arrive late for an exam no time extension will be granted. It is your responsibility to check timetables and ensure that you arrive with sufficient time.

PLEASE NOTE that if you miss any examinations for medical reasons you must lodge a medical certificate with New South Q within **3 DAYS** (refer to UNSW Student Gateway @ student.unsw.edu.au for further details). Your request for consideration will be assessed and a deferred exam may be granted. You cannot assume you will be granted supplementary assessment. The deferred exam may include an oral element.

Medical Certificates

Students who miss lectures due to illness or for other reasons must submit a copy of medical certificates or other acceptable documentation to the course coordinator **Dr. Steve Boutcher at 4 Arthur Street.**

Certificates should be lodged no more than seven (7) days after an absence. Certificates lodged after seven days will not be accepted. The following details must be attached: Name, Subject number, Group number, Date of the class, Name of class/es missed.

Assessment Procedures

1. Full prescription write-ups (50% of course grade).

Three prescription write-ups will be required. There will be a maximum of 10 pages for each prescription. Scenario 1 is compulsory and then one scenario from the remaining four is to be chosen. The third and final scenario to be created by the student but must be a special population within the course content of HESC3581. Prescriptions have to be sent to Steve two weeks after the last day of class. Examples for writing up are included in a Case Study Portfolio that can be accessed through Moodle. See marking criteria (page 5) and description of special population write-ups (page 8).

2. Meta-analysis summary report (15% of course grade).

Fifteen sets of answers for fifteen meta-analysis and review articles will be required. Answers have to be filled in and the completed Meta-analysis Report (**MetaAnalReport**) sent to Steve one week after the last day of class. Answering the questions before each lecture is important and will prepare the student for the lecture content. See listing of meta-analysis and reviews (page 7). The **MetaAnalReport** file is available on Moodle.

3. Drug and exercise fact file (15% of grade).

A one-page fact file in the form of a brochure that will consist of one side of A4 paper submitted by email to Steve in PDF format. The fact file will describe one drug that is used by humans. Areas of information to include: usage information, dosage guidelines, side effects, precautions, and interactions (especially exercise). Drug fact files have to be sent to Steve one week before the last day of class. Students will have access to these fact files at the end of the course.

4. Case study report (20% of grade).

Eight sets of case study questions are required. Answers have to be filled in and the completed Case Study Report (**CaseStudyReport**) sent to Steve before the last day of class. Answering the questions before each case study is important and will prepare the student for active discussion. See description of case studies (page 9). The **CaseStudyReport** file is available on Moodle.

Marking criteria for the prescription write-ups

Criteria	High Distinction	Distinction	Credit	Pass
Introduction	Contains all points mentioned under Credit.	Contains most but not all points mentioned under Credit.	Contains a weak introduction. No background, no description of unique characteristics, no mention of special problems.	No introduction
Individual assessment stage	Outstanding individual assessment covering medical, physiological, psychological, and lifestyle.	Good individual assessment covering medical, physiological, psychological, and lifestyle.	Adequate individual assessment covering medical, physiological, psychological, and lifestyle.	Insufficient individual assessment.
Conceptual and education stage	Outstanding conceptual and educational program containing goals, concepts, and education.	Good conceptual and educational program containing goals, concepts, and education.	Adequate conceptual and educational program containing goals, concepts, and education.	Insufficient conceptual and educational program.
The program	An outstanding program containing daily diaries describing the chosen components of the program (e.g., aerobic, strength, flexibility). Containing specific details and appropriate exercises.	A good program containing daily diaries describing the chosen components of the program (e.g., aerobic, strength, flexibility). Containing specific details, and some inappropriate (or missing) exercises, however.	An adequate program containing daily diaries describing the chosen components of the program (e.g., aerobic, strength, flexibility). Generally lacking specific details, and some inappropriate (or missing) exercises, however.	A brief and superficial program.
Presentation	Excellent use of tables and outstanding presentation.	Good tables and good presentation.	Some tables and reasonable presentation.	No tables and poor presentation.

Lecture Outline

Tuesday (9.00 am – 12.00 pm; three lectures weeks 1, 2, and 12)

Week 1 (4th August) <i>Lecture</i> Introduction (SB); <i>Lecture</i> Lifestyle Change Model (SB) <i>Lecture</i> Case study (SB)
Week 2 (11th August) <i>Lecture</i> Drugs & exercise (SB); <i>Lecture</i> Drugs & exercise (SB) <i>Lecture</i> Depression & exercise (SB)
Week 3 (18th August) <i>Lecture</i> Obesity [#] (SB); <i>Lecture</i> Fat loss, diet, exercise (SB); [#] Case Study Joan
Week 4 (25th August) <i>Lecture</i> Interval sprinting & health (SB); <i>Lecture</i> ISE & spec populations [#] (SB); [#] Case study Harry
Week 5 (1st September) <i>Lecture</i> Nutrients & health (SB); <i>Lecture</i> Cholesterol [#] (SB); [#] Case study David
Week 6 (8th September) <i>Lecture</i> Postprandial lipemia [#] (SB); <i>Lecture</i> Non-responders (SB); [#] Case study John
Week 7 (16th September) <i>Lecture</i> Resistance exercise & health [#] (SB); <i>Lecture</i> Type 2 diabetes* (SB); [#] Case study Ivan
Week 8 (22nd September) <i>Lecture</i> Hypertension & exercise (YB); <i>Lecture</i> Chronic fatigue [#] (SB); [#] Case study Tracey
(28th September – 2nd October) <i>Semester break- no lectures</i>
Week 9 (6th October) <i>Lecture</i> Menopause & exercise [#] (SB); <i>Lecture</i> Vascular disease* (YB) [#] Case study Mary
Week 10 (13th October) <i>Lecture</i> Pregnancy [#] (YB); <i>Lecture</i> Dementia & exercise (SB); [#] Case study Susie
Week 11 (20th October) <i>Lecture</i> Corporate health* (SB); <i>Lecture</i> Smoking & exercise* (SB);
Week 12 (27th October) <i>Lecture</i> Stress & exercise (SB); <i>Lecture</i> Sleep & exercise* (SB) <i>Lecture</i> Physical activity and special populations summary (SB)

* Three Lifestyle Prescription write-ups (see description on page 8)

[#] Case Study Lecture: eight case studies with a set of tables to be filled in before each case study lecture and the report (**CaseStudyReport**) sent to Steve one week before the last day of class (see page 9).

Lecturers: **SB** Steve Boutcher; **YB** Yati Boutcher.

Weekly Readings

Week 2 - DRUGS, EXERCISE: Culver et al. (2012). *Arch of Int Med*, 172(2), 144-152. **(StatinPostMenoCulver.pdf)**. Salpeter et al. (2008). *Am J Med*, 121, 149-157. **(MetDiabSalpeter.pdf)**.

DEPRESSION: Mead et al. (2009). *Coch Database of Sys Rev*. **(DepExMeadMeta.pdf)**.

Week 3 - FAT LOSS: Wu et al. (2009). *Obesity Reviews*, 10, 313-323. **(ExDietWeightWu.pdf)**.

Clarke (2015). *J of Diab & Metab Disorders*. **(ExerDietFatLossClark.pdf)**.

Week 4 – INTERVAL SPRINTING EXERCISE: Boutcher (2011). *Journal of Obesity* **(BoutRevJO.pdf)**. Boutcher (2014). *20X3: eliminate your belly fat in an hour per week*.

Week 5 - NUTRIENTS&HEALTH: Mente et al. (2009). *Archives of Internal Medicine*, 169, 659-669. **(MenteCVDDiet.pdf)**. Vartanian et al. (2007). *Am J of Public Health*, 97, 667-675. **(SoftMet.pdf)**. **CHOLESTEROL:** Mann et al. (2014). *Sports Medicine*, 44, 211-221. **(CholestExerReview.pdf)**.

Week 6 - LIPEMIA: Bravo et al. (2010). *The Open Translational Medical Journal*, 2, 1-13. **(PostPrandBravo.pdf)**. **NON-RESPONDERS:** Boutcher (2012). *Book Chapter*. **(BoutcherChap.pdf)**.

Week 7 - RESISTANCE EXERCISE: Braith & Stewart (2006). *Circulation*, 113, 2642-50. **(ResistHealthBraith.pdf)**. Snowling et al. (2006). *Diab Care*, 29, 2518-2527. **(DiabExSnowling.pdf)**. **TYPE 2 DIABETES:** Grundy (2007). *Journal Clin Endo & Met*, 92, 399-404. **(MetSynGrundy.pdf)**. Olivera et al. (2012). *Diabetes Res Clin Prac*, 98(2), 187-198. **(DiabExOlive.pdf)**. Gordon et al. (2009). *Diabetes Res Clin Prac*, 83, 157-175. **(DiabRtExGordon.pdf)**.

Week 8 - HYPERTENSION: Cornelisson et al. (2011). *Hypertension*, 58, 950-958. **(HyperRTCornelissen.pdf)**. Cornelisson et al. (2005). *Hypertension*, 46, 667-675. **(HyperExCorn.pdf)**. **CHRONIC FATIGUE:** Norheim et al. (2011). *Rheumatology*, 50, 1009-1018. **(FatigueNorheim.pdf)**.

Week 9 - MENOPAUSE: Souza et al. (2013). *Aging & Disease*, 6, 320-328. **(MenoReviewSouza.pdf)**. **VASCULAR DISEASE:** Regensteiner et al. (2002). *Am J Med*, 112, 49-57. **(PeriVasDisRevRegen.pdf)**.

Week 10 - PREGNANCY: Kraemer et al. (2008). *Coch Database of Sys Rev, Issue 4*. **(PregExCoch.pdf)**. **DEMENTIA:** Heyn et al. (2004). *Arch Phys Med Rehabil*, 85, 1694-704. **(DementHeyn.pdf)**.

Week 11 - SMOKING: Ussher et al. (2004). *Coch Database of Sys Rev, Issue 2*. **(SmokExerUsher.pdf)**.

Week 12 - STRESS: Treiber et al. (2003). *Psychosomatic Medicine*, 65, 46-62. **(CardReacTreiber.pdf)**. **SLEEP:** Atkinson et al. (2007). *Physiology and Behavior*, 90, 229-235 **(SleepHealthAtkin.pdf)**.

* Each of these fifteen meta-analysis and reviews highlighted in **RED** have 15 sets of questions that have to be answered in the **MetaAnalReport**.

Special population prescription write-ups

- choose scenario 1, and one other from the four remaining scenarios;
- the third and final scenario to be created by the student;
- thus in total there will be 3 scenarios: PDF to Steve 2 weeks after last lecture

Scenario 1 - Corporate Health (must be chosen)

A small company based in Sydney CBD is interested in lowering its health costs and improving the health and work efficiency of its workforce. The company has a small gym (6 m by 6 m) and all staff have email and internet facilities. The company has allocated 1.5 EP positions to the development of a wellness program and \$60,000 for initial equipment set up. The running cost budget for the first year is \$3,000. Currently, there is no exercise equipment. There are 60 staff who will be a part of the new wellness program. Design an exercise-based lifestyle change program for this company. What equipment would you purchase, what programs would you initiate, and what data would you collect to justify your existence at the end of the first year?

Scenario 2 - Fatigue and diabetes

An overweight female (42 years) is constantly fatigued and sleeps poorly. She is also a type 2 diabetic and is on metformin (700 mg, three times per day). She has dyslipidemia and is on a statin (Lipitor; 60 mg nightly). She has two children and two part-time jobs. Recently, she has increased her body fat and feels she has lost a lot of muscle mass. She has a poor diet with too many calories from processed foods. Her weekly physical activity involves 6 minutes of walking to the shop four times per week. Her weight is 80 kilos with 37% body fat. Write up a lifestyle prescription for this case study focusing on strategies to relieve fatigue and help with her insulin resistance, high blood cholesterol levels, and poor quality sleep.

Scenario 3 - Smoking

An overweight male of 34 years comes to you for specific advice about the kind of exercise he can do to help give up smoking. He has been smoking for 16 years and has not been successful in giving it up. He is taking blood thinning medication (warfarin; 5 mg once per day). He feels his health has deteriorated and feels unfit and weak. He is inactive and has a poor diet. His weight is 76 kilos with 28% body fat. Write up a lifestyle prescription for this case study focusing on strategies to help him give up smoking and improve his health.

Scenario 4 - Peripheral vascular disease

An overweight inactive man of 65 years comes to you for specific advice about the kind of exercise he can do to relieve the pain of intermittent claudication. Over the last 10 years he has increased his body fat. He has no weekly physical activity. His weight is 88 kilos with 34% body fat. He suffers from hypertension and is on an ACE inhibitor (Captopril; 20 mg, twice per day). He is also taking anticoagulants and anti-platelet drugs to prevent blood clots from developing. His intermittent claudication medication is cilostazol. Write up a lifestyle prescription for this case study focusing on strategies to help relieve the pain of intermittent claudication.

Scenario 5 - Sleep

An inactive woman (33 years) comes to you for advice about the kind of exercise she can do after recently experiencing poor quality sleep. She has elevated cholesterol levels (6.8 mmol/L) and suffers from hypertension and is on an ACE inhibitor (Captopril; 20 mg, twice per day), a beta blocker (propranolol 50 mg twice per day), and a diuretic (bendrofluazide; 5 mg once per day). Her quality of sleep has been dramatically reduced. She has no weekly physical activity apart from house chores. Her weight is 80 kilos (37% body fat). Write up a lifestyle prescription focusing on strategies to increase quality of sleep and to improve cholesterol levels and fitness.

Remember: Include an introduction describing the disease or condition. Use the Lifestyle Change Model to develop your case study. Describe what aspects of assessment you would carry out. Describe how you would educate your client about their disease or condition, and so forth. Be specific about the components of the lifestyle program.

Case studies - problem based learning scenarios

Eight sets of questions in the Case Study Report to be sent to Steve one week before the last day of class.

Case study 1 Joan - Obesity

An overweight inactive women of 43 years comes to you for specific advice about the kind of exercise she can do to lose weight. She has dieted frequently in the past but has never been successful in keeping the weight off. Over the last 10 years she has increased her body fat and is keen to reduce her weight. She now suffers from dyslipidemia and is on a statin (Lipitor; 20 mg nightly). She also possesses high blood pressure and is on a daily calcium channel blocker (Verapamil; 80 mg, three times per day). She also takes anti postprandial medication in the form of orlistat (120 mg, three times per day), acarbose (an alpha-glucosidase enzyme inhibitor, 25 mg three times per day), and white kidney bean extract (an alpha-amylase enzyme inhibitor, 500 mg three times per day). She has no weekly physical activity apart from house chores on weekends. The only supplement she is taking is daily fish oil capsules (1.8 g per day). She has metabolic syndrome and has significant stress in her life and does not sleep well. Her weight is 80 kilos with 34% body fat and she has a poor diet. Research this case study and fill in the tables provided so you can discuss the scenario in class.

Case study 2 Harry - COPD

An inactive man of 48 years comes to you for specific advice about the kind of exercise he can do to improve his chronic obstructive pulmonary disease (COPD). Over the last 12 years he has had increased breathing problems when walking. He has no weekly physical activity. His weight is 82 kilos with 18% body fat. He takes a daily selective beta₂-adrenoreceptor agonist which relaxes bronchial smooth muscle), aminophylline (a bronchodilator), and a thiazide diuretic (controls fluid retention). Research this case study and fill in the tables provided so you can discuss the scenario in class.

Case study 3 David - Cholesterol

An overweight inactive man of 53 years comes to you for help with feeling lethargic and putting on weight. He suffers from dyslipidemia and has just been put on a statin (Lipitor, 10 mg once per day). He also takes soluble fibre before each meal in the form of beta glucans to reduce postprandial lipemia. Over the last 10 years he has increased his body fat and is keen to reduce his weight. He has no weekly physical activity apart from garden chores on weekends. He has high inflammatory (IL-6, C-Reactive protein) and fasting insulin levels. A dietary assessment reveals that he is constantly consuming processed sugar (soda, candy, etc) throughout the day. However, he enjoys his diet and feels it does not impact negatively on his health. His weight is 92 kilos with 30% body fat. How can this client change his lifestyle and increase his metabolic health? Research this case study and fill in the tables provided so you can discuss the scenario in class.

Case study 4 John - Lipemia

A moderately overweight, inactive man of 43 years comes to you for specific advice about the kind of exercise he can do to get fit, lower his belly fat levels, and reduce his postprandial lipemia. His blood cholesterol levels are 6.2 mmol/L and his doctor has advised him to start an exercise program and to change his diet. His LDL is 3.0 mmol/L, HDL is 1.2 mmol/L, and triglycerides 2.2 mmol/L. Since his cholesterol levels have been elevated he feels chronically tired and believes he has lost some muscle mass. He has no weekly physical activity and has a high processed diet with little fruit and vegetables. His weight is 80 kilos with 30% body fat. Research this case study and answer the questions provided so you can discuss the scenario in class.

Case study 5 Ivan - Resistance exercise

An inactive man of 66 years comes to you for specific advice about the kind of exercise he can do to improve his functionality and quality of life. He takes warfarin (10 mg, once per day), a statin (Lipitor, 40 mg once per day), and Lisinopril, 20 mg per day. Over the last 10 years he has decreased his body weight, however, he has put on abdominal fat, has reduced subcutaneous fat, but has lost muscle mass. He has no weekly physical activity. His weight is 68 kilos with 25% body fat. His physician has suggested that he consult with an EP so a resistance exercise program can be designed for him. Research this case study and fill in the tables provided so you can discuss the scenario in class.

Case study 6 Tracey - Chronic fatigue

An overweight female (42 years) is constantly fatigued and sleeps poorly. She is also a type 2 diabetic and is on metformin (700 mg, three times per day). She has dyslipidemia and is on a statin (Lipitor; 60 mg nightly). She has two children and two part-time jobs. Recently, she has increased her body fat and feels she has lost significant muscle mass. She has a poor diet with too many calories from processed foods. Her weekly physical activity involves 6 minutes of walking to the shop four times per week. Her weight is 80 kilos with 37% body fat. Write up a lifestyle prescription for this case study focusing on strategies to relieve fatigue and help with her insulin resistance and high blood cholesterol levels.

Case study 7 Mary - Postmenopause

A female, aged 51 years, has just experienced menopause and is troubled by the growing amount of visceral fat that is accumulating in her abdominal area. She is also experiencing a number of postmenopausal symptoms such as hot flushes, mood change, and fatigue. She is keen to incorporate regular exercise into her life but doesn't know much about exercise. Over the last couple of years she has increased her body fat and feels she has lost a lot of her muscle mass. Her weekly physical activity involves 5 minutes of walking to the shop daily. Her weight is 78 kilos with 28% body fat. She is also interested in finding out the potential advantages and disadvantages of ingesting coffee, green tea, and wine. Research this case study and answer the questions provided so you can discuss the scenario in class.

Case study 8 Susie - Pregnancy

A pregnant, untrained, relatively inactive woman of 33 years comes to you for specific advice about the kind of exercise she can do whilst pregnant. She is concerned about the type of exercise she can carry out without negatively affecting the health of her baby. Over the last couple of years she has increased her body fat and is keen to reduce her weight after giving birth. Her weekly physical activity involves walking her dog three times per week for 30 minutes. Her weight is 70 kilos with 35% body fat. She is interested in taking folic acid and fish oil as a supplement. She is keen to find out the type of exercise she can do without harming the foetus. She is also interested in finding out the potential dangers of smoking and ingesting caffeine, alcohol, vitamin B₁₂, iron, calcium, and vitamin D during pregnancy. What advice would you give her? Research this case study and answer the questions provided so you can discuss the scenario in class.

Remember: Be prepared. Do some research into the area of the client. Think about the Lifestyle Change Model to develop your case study. Plan what aspects of assessment you would carry out. Think how you would educate your client about their disease or condition, and so forth. Fill in the tables for each Case Study using the Case Study Form.