

SUBJECT OUTLINE



Subject Name:

Weight Management in Health and Disease

Subject Code:

NMDW221

SECTION 1 – GENERAL INFORMATION

Award/s:

Bachelor of Health Science (Nutritional and Dietetic Medicine)

Bachelor of Health Science (Naturopathy)

Total course credit points:

96

128

Level:

Core

Elective

2nd Year

4th Year

Duration: 1 Semester

Subject Coordinator: Karen Latter (Sydney Campus)

Subject is: Core or Elective as noted

Subject Credit Points: 2

Student Workload:

No. timetabled hours per week:

3

No. personal study hours per week:

2

Total hours per week:

5

Delivery Mode:

Face to face

2 hours lecture

1 hour practical

Intensive Delivery

Details:

Summer School - contact hours are delivered over 5 weeks with 2 x 4 hour days delivered per week.

Assessment: Practical Participation for intensive delivery is assessed in class.

Mid Semester case-based and practical exams for the intensive are completed in an additional session at the end of week 3 of the Summer School period.

Final case-based exam for the intensive is conducted in Week 6 of the Summer School period.

Full Time

Part Time

Pre-requisites: N MDF121, N MDM121, BIOC211

Co-requisites: BIOS222, BIOE221

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This subject addresses the multifactorial issues that contribute to obesity and underweight issues. Students learn to assess weight morbidity and risk factors as well as learning various strategies for weight management that incorporate lifestyle change, exercise and diet. Change management and coaching is addressed to assist clients with successfully implementing lifestyle change required to gain or lose weight.

Learning Outcomes

1. Conduct a dietary consultation and provide a nutrition plan for weight management.
2. Assess anthropometric measurements in relation to an individual dietary plan.
3. Access and critique current weight management research.
4. Apply appropriately current public health support tools.
5. Identify psychosocial factors related to weight management and appropriately manage/refer.

Assessment Tasks				
Type	Learning Outcomes Assessed	Week Content Delivered	Week Due	Weighting
Practical tutorial participation	1-5	1-13	1-13	15%
Case-based Mid Semester Exam (1 hour)	1, 3, 5	1-5	6	20%
Practical Mid Semester Exam (30 minutes)	1,2,4,	4	7	10%
Evidence Based Practice Independent Literature Search and Appraisal (500 – 700 words)	3	5,6	10	15%
Case-based Final Exam (2 hours)	1-5	1-13	Final Exam Period	40%

Prescribed readings:

- Baur, L. A., Twigg, S. M., & Magnusson, R. S. (Eds.). (2012). *A modern epidemic: Expert perspectives on obesity and diabetes*. Sydney, NSW: Sydney University Press.
 [open access <http://purl.library.usyd.edu.au/sup/9781920899851>]

Recommended readings:

- Egger, G., & Swinburn, B. (2010). *Planet obesity: How we're eating ourselves and the planet to death*. Crows Nest, NSW: Allen & Unwin. [ebook available]
- Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2015). *Health behaviour and health education: Theory, research and practice* (5th ed.). Hoboken, NJ: Wiley. [ebook available]
- Kazaks, A. G., & Stern J. S. (2013). *Nutrition and obesity, assessment management and prevention*. Burlington, MA: Jones and Barlett Learning. [ebook available]
- Kopelman, P. G., Caterson, I. D., & Dietz, W. H., (Eds.). (2010). *Clinical obesity in adults and children* (3rd ed.). Oxford, England: Wiley-Blackwell. [ebook available]
- Sainsbury-Salis, A. (2011). *Don't go hungry for life*. Sydney, NSW: Bantam Books. [ebook available]
- Stewart, L., & Thompson, J. (Eds.). (2015). *Early years nutrition and healthy weight*. West Sussex, England: Wiley Blackwell. [ebook available]
- Waters, E., Swinburn, B., Seidell, J., & Uauy, R. (Eds.). (2010). *Preventing childhood obesity: Evidence policy and practice*. Hoboken, NJ: Wiley. [ebook available]
- Watson, R., Zuckerman, M., & Zuckerman, E. (Eds.). (2014). *Nutrition in the prevention and treatment of abdominal obesity*. Amsterdam, Netherlands: Elsevier Academic Press. [ebook available]

Resources:

- National Health and Medical Research Council. (2014). *Obesity and overweight*. Retrieved from <http://www.nhmrc.gov.au/your-health/obesity-and-overweight>
- University of Sydney. (2014). *Charles Perkins Centre*. Retrieved from <http://sydney.edu.au/perkins/>
- Deakin University Faculty of Health. (2014). *WHO Collaborating Centre for Obesity Prevention*. Retrieved from <http://www.deakin.edu.au/health/who-obesity/>

Subject Content		
Week	Lecture	Practical
1.	Subject Introduction Introduction to weight management science <ul style="list-style-type: none"> Epidemiology, definition and classification of underweight and obesity Energy balance and body weight homeostasis Energy requirements and expenditure Health consequences of obesity in adults and children 	Activity: <ul style="list-style-type: none"> Calculate own energy needs
2.	Biology of obesity Part 1 <ul style="list-style-type: none"> Genes and obesity Metabolomics Microbiome Foetal and infant origins of obesity Adipocyte biology Eating behaviour 	Activity: <ul style="list-style-type: none"> Review literature on efficacy of different approaches Group discussion: <ul style="list-style-type: none"> Discuss ethics and limitations
3.	Biology of obesity Part 2 <ul style="list-style-type: none"> Metabolic fuels and obesity Carbohydrates Proteins Lipids 	Activity: <ul style="list-style-type: none"> Case study Calculate individual needs for these and construct a diet plan
4.	Measuring body composition in adults and children <ul style="list-style-type: none"> Measurement guidelines for different ethnic groups, Australian indigenous people and children Anthropometrics Bio Impedance Assessment Imaging Techniques Densitometry Relevance to weight management 	Practical: <ul style="list-style-type: none"> Students perform BMI and anthropometric assessment Group discussion: <ul style="list-style-type: none"> Challenges associated with various anthropometric assessments in practice and strategies to overcome these.
5.	Management of weight loss in Adults and Children <ul style="list-style-type: none"> Five steps of evidence based practice Evidence appraisal Evidence of efficacy of different weight loss diets and programs 	Group discussion: <ul style="list-style-type: none"> A clinical scenario is used to illustrate the five steps of EBP, including integration of evidence and outcome evaluation.
6.	Supplements <ul style="list-style-type: none"> Nutraceuticals for weight loss Weight loss supplements Review of commercial weight loss programs 	Activity: <ul style="list-style-type: none"> Find popular supplement online and critique ingredients. Group discussion: <ul style="list-style-type: none"> Utility of meal replacement supplements in weight loss.
7.	Mid-semester exam (1 hour) Medications and surgery	Practical mid-semester exam: <ul style="list-style-type: none"> Anthropometric assessment of your partner

	<ul style="list-style-type: none"> • Medications • Surgery 	
NON-TEACHING WEEK (note that any make up classes may be scheduled in this week) Semester 1 - This aligns with the week after Easter so it may fall between weeks 6 to 8. Semester 2 - The break week falls between Weeks 7 and 8.		
8.	Dietary analysis software <ul style="list-style-type: none"> • Analyse macro and micronutrient status • Create individualised dietary goals Tracking in weight management <ul style="list-style-type: none"> • Food diaries • Habit trackers • Apps 	Case study: <ul style="list-style-type: none"> • Complicated case
9.	Diet strategies for healthy weight gain <ul style="list-style-type: none"> • Macronutrients • Beverages • Extra nutrition supplements 	Case study: <ul style="list-style-type: none"> • Develop a weight gain program for two separate cases
10.	Psychology in weight management <ul style="list-style-type: none"> • Psychosocial factors • Stress • Abuse • Poverty • Social stigma of weight management 	Activity: <ul style="list-style-type: none"> • Case study review and discussion • Stress • Abuse • Poverty
11.	Counselling in weight management <ul style="list-style-type: none"> • Cognitive behavioural therapy • Motivational Interviewing • Addressing barriers • Setting goals • Client centred counselling • Dealing with relapse and failure 	Case study: <ul style="list-style-type: none"> • Counselling approaches to case studies • Stress • Abuse • Poverty
12.	Exercise for weight management <ul style="list-style-type: none"> • Types • Timing • Amount • Overcoming barriers to exercise 	Case study: <ul style="list-style-type: none"> • Make lifestyle and exercise guidelines for two different cases.
13.	Facilitating weight loss programs in groups <ul style="list-style-type: none"> • How to develop a weight loss program • Facilitating weight loss groups 	Case study: <ul style="list-style-type: none"> • Develop a weight loss program Group discussion: <ul style="list-style-type: none"> • Share with group
14.	Non-Teaching Week/Practical Exam Week. Note that make-up classes may be scheduled in this week.	
15.	Non-Teaching Week/Practical Exam Week. Note that make-up classes may be scheduled in this week.	
16-17.	Final Exam Weeks 1 & 2 Please refer to the Exam Timetable for your local campus for the exact day and time of exam.	