NUTR 4001

CLINICAL NUTRITIONAL SCIENCE A

March Semester 2008

Unit of Study Description

This book belongs to .................................................................

If found please return to the Academic Support Office, Level 4, Biochemistry Building G08, Cnr Butlin Ave and Maze Crescent
1.1 DESIGN PHILOSOPHY

When designing NUTR 4001 - Clinical Nutritional Science A we have incorporated opinions from a wide cross-section of the dietetic profession. Input was sought from recent graduates of Sydney University to dietitians with fifteen years and more experience. We have tried to transcend all areas of dietetic practice and, utilising DAA current workforce trends, predicted possible future areas of employment for the profession and the necessary skills required to ensure excellence in practice by the graduates entering the profession. A considerable number of the dietitians have assisted with the development of appropriate learning outcomes for our students who, at the end of their professional training, will be well prepared to tackle their professional challenges in an ever-changing environment. They will be entry-level generalist dietitians who have had the opportunity, within their Electives, to study two areas of Dietetics Practice with dietitians well experienced in the particular field.

Our graduates need to be prepared to be part of a fluid health care system. Clinical dietetics is no longer housed within the walls of the hospital; research is not confined to the laboratory; an increasing percentage of the profession are not employed in the public sector; and our clients have access to many sources of nutrition information independent of dietitians. It is relatively easy to keep extending the training of our students to match the increasing database of knowledge today and to ensure their preparedness for the profession of dietetics however, in doing this we are continuing to separate the theory and the practice of dietetics – a practice defying all educational theory and would no doubt be to the detriment of student performance. It is best practice to instil in the student what is evidence based practice and affords them the opportunity to practice that skill at the time of their theory acquisition.

Already placement supervisors are complaining of the burden of student placements because of the paucity of counselling skills on their arrival at the institution as well as the need for the students to revise their clinical theory before commencing placement. The Human Nutrition Unit is committed to quality improvement procedures in Education and to this end we have developed an educational program that ensures the practice of theory during the academic program. The students will under the guidance of a supervisor develop their assessment, interviewing, counselling and education skills during the academic semester using both Standardised and “real” patients.

The development of an excellent Standardised Patient Program, as it has with other health care professional training around the globe, will afford the student the opportunity to practise essential counselling skills prior to practical placement in second semester. The exposure to cases, level of complexity of cases, and the ability to view back every experience will maximise the students’ learning. The University Based Clinics using Standardised Patients will allow another valuable source of feedback for the both the student and the supervisor as the “Patient” will be trained to give feedback on the process.

It is envisaged that the students will, by the end of the semester attain a level of competence in counselling equivalent to a level attained previously by students following 3-5 weeks of the traditional placement program. Participation in the University Based Teaching Clinics should enable the students to attain entry-level competence before the traditional 12 weeks of clinical placement is complete.

Previously the focus for clinical dietetics has been disease driven and the normal nutritional needs of the individual have been considered secondary. However, consistent with the move away from treatment in the clinical setting, Clinical Nutritional Science A will be focussing on the nutritional needs of the client at their particular stage in life and the nutritional support required to ensure the impact of the disease on their health is minimal.
Additionally, rather than separating the elderly and children as stand alone units of study their nutritional wellbeing is being discussed throughout Clinical Nutritional Science A. This reinforces the concept of continuum of care throughout life. With support and encouragement from the paediatric specialists of the dietetic profession we identified the core knowledge needed and for those students wishing to undertake further studies there will be a Paediatric Elective.

Feedback from recent graduates and supervising dietitians in hospital departments supported the concern that students were so intent on the nutritional intervention required for a particular disease that they would overlook that the client had other nutritional concerns, such as, low calcium intake. The slight change in focus for this unit of study should address the concerns of the profession and reinforce the importance of the nutritional needs of the individual and not just the prevailing disease.

There was considerable consensus on the direction we should be taking with our clinical training and we believe we have managed to address all the concerns. With the clinical trend of increasing ambulatory care and having the hospital bound patient requiring significant nutritional support we have altered the traditional weighting of clinical topics and spent considerable time on nutritional support areas and nutritional assessment and review. The clinicians reviewing their client load and considering the changes that are and have been occurring in their workplaces over recent years determined the weighting of clinical topics

The style of teaching has been reviewed to reflect the team management of some conditions. paediatric nutrition, which has been notably separated from the rest of clinical nutrition training, has been repositioned back into clinical dietetics. The nutritional management of individuals with diabetes, coeliac disease, cystic fibrosis and renal disease, to isolate a few conditions, has the same evidence based practice whether the client is a child or an adult, and any other changes in nutritional management are only due to the aging of the client. It is not appropriate to continue to isolate the nutritional management of the client to a particular stage of their lifecycle. There are increasingly few specialist paediatric dietetic positions and dietitians away from these institutions will care for these children and these same dietitians will continue to do so as this child becomes an adult.

All other facets of the student’s program – management, research, food service management, dietetic practice – have been developed with the same philosophy and attention to educational experiences to maximise skill development in the soon to be newest members of profession of dietetics.

Consistent with the DAA’s “Philosophy of Education for Dietitians” the Honours Program incorporates successful and innovative educational practices, supports generalist training and introduces Electives for the students. This should take them beyond entry-level competence in their selected area of study and better prepare them for nutrition related roles in the changing workplace.

Beth Rohrlach
BSc (Syd) Dip Nutr.Diet (Syd) APD

Jennifer McArthur
BSc (Syd) Dip Nutr.Diet (Syd) MHPEd (NSW) APD

Campbell Thompson
BSc(Med), MBBS, MSc, FRACP, MD, DPhil(Oxford)
1.2 ABOUT THIS UNIT OF STUDY

Nutritional Science 4001- Clinical Nutritional Science A is a 24 credit point unit of study offered in semester 1 of the Honours year of the Bachelor of Science (Nutrition) degree program. The subject assumes knowledge and skills gained in NUTR 2901, 2902, 3901 and 3902. These subjects together with NUTR 4001 prepare students for NUTR 4002 in semester 2.

Successful completion of all of these subjects meets the DAA National Competency Standards for entry-level dietitians (DAA 1993). See Appendix 4.2.

Areas of study will include:

- Clinical Nutrition and Medicine for Dietitians
- Food Service Management
- Communication Skills for Dietitians
- Basic Research Methodology
- Dietetic Practice
- Introduction to Management

Experienced Dietitians from the profession and medical staff significantly contribute to the teaching during this unit of study.

1.3 GENERIC ATTRIBUTES OF GRADUATES

*The Academic Policy of the University of Sydney outlines the generic attributes of graduates of the University. Graduates of any faculty should:

1. Knowledge skills
   (a) have a body of knowledge in the field(s) studied;
   (b) be able to apply theory to practice in familiar and unfamiliar situations;
   (c) be able to identify, access, organise and communicate knowledge in both written and oral English;
   (d) have an appreciation of the requirements and characteristics of scholarship and research; and
   (e) have the ability to use appropriate technologies in furthering all of the above

2. Thinking skills
   (a) be able to exercise critical judgement;
   (b) be capable of rigorous and independent thinking;
   (c) be able to account for their decisions;
   (d) be realistic self evaluators;
   (e) adopt a problem solving approach; and
   (f) be creative and imaginative thinkers.
3. **Personal skills**
   (a) have the capacity for and a commitment to life-long learning;
   (b) have the ability to plan and achieve goals in both the personal and the professional sphere; and
   (c) have the ability to work with others.

4. **Personal attributes**
   (a) strive for tolerance and integrity; and
   (b) acknowledge their personal responsibility for
      (i) their own value judgements; and
      (ii) their ethical behaviour towards others.

5. **Practical skills**
   (a) be able to use information technology for professional and personal development; and, where appropriate, be able to;
   (b) collect, correlate, display, analyse and report observations;
   (c) apply experimentally-obtain results to new situations;
   (d) test hypotheses experimentally; and
   (e) apply technical skills appropriate to their discipline.
1.4. INDIVIDUAL RESPONSIBILITIES OF STUDENTS

Attendance
The statutes of the University requires that students attend at least 80% of classes. A roll is provided in practical and tutorial classes in order that you will be able to substantiate your attendance at those classes.

Participation in Group Activities (including kitchens, teaching clinics and tutorial classes)
It is your responsibility to prepare for group activities and to act responsibly in them. Failure to participate fully in a group not only diminishes the return to yourself but affects your colleagues as well. They should not have to suffer because of your lack of preparation. Students will be advised in advance when they will be working in groups and who will be in the groups.

This method of teaching designed for students who have some knowledge of the material obtained from lecture notes, the notes for the class and from background reading of the appropriate textbooks. Some classes may require specialised equipment and particular procedures. For these it is imperative to read the instructional notes and necessary pre-reading.

Students have a right to:
- Be informed of the policy of the university, the faculty, and the department with respect to plagiarism, co-operation and group work.
- Gain easy access to plain English printed information on these issues via handbooks, course guides etc that must be available to every student.
- Be provided with clear guidelines on academic styles required in each department/subject.
- Expect consistent application of policies and practices both at a faculty and department level.
- Receive practical comments that assist them to review their work.
- Expect early notification or fair warning in the case where an academic believes a student or group of students may be at risk of breaching guidelines relating to plagiarism, group work and co-operation.
- Participate in appropriate skills development, in order to improve their competency in writing and study skills.
- Expect a consistent definition of plagiarism and consistent application of policy for dealing with suspected plagiarism across the university.
- Expect explicit referencing styles within each department and consistency across tasks. (NB some departments may sanction only one referencing style/convention, others may sanction several referencing styles/conventions).
- Expect clear guidelines relating to all aspects of group work.
- Expect clear assessment information in each course outline, especially concerning which components are individual and which are collective.
- Expect clear procedures for monitoring group work by academic staff, to ensure fair assessment.
- Expect clear written instructions on the level of co-operation permitted within each assessment component.
- Participate in skills based programs offered within the university such as training in team skills, communication, conflict resolution, delegation, negotiation and co-operation.
1.5 STAFF

Course coordinator:
Ms Beth Rohrlach  
b.rohrlach@mmb.usyd.edu.au  
Associate Lecturer  
Room 477 Human Nutrition Unit  
tel: 9351 6021

Academic Staff:
Ms Soumela Amanatidis  
s.amanatidis@mmb.usyd.edu.au  
Lecturer, Community Nutrition  
Level 4, Human Nutrition Unit  
Tel: 9351 3816

Professor Jennie Brand-Miller  
J.Brandmiller@mmb.usyd.edu.au  
Room 472, Human Nutrition Unit  
Tel: 9351 3759

Professor Ian Caterson  
Boden Professor of Human Nutrition  
Head of IONE  
Tel: 9351 3757

Ms Margaret Nicholson  
M.Nicholson@mmb.usyd.edu.au  
Clinical Placement Coordinator  
Level 4, Human Nutrition Unit  
Tel: 9351 6020

Associate Professor Samir Samman  
S.Samman@mmb.usyd.edu.au  
Human Nutrition Unit  
Room 476, Human Nutrition Unit  
Tel: 9351 2476

General/Technical Staff:
Ms Amy Holmes  
studentsupport@mmb.usyd.edu.au  
Course Administrator  
Level 4, Student Support Office  
Tel: 9351 13757

Ms Jenny Phuyal  
j.phuyal@mmb.usyd.edu.au  
Technical Officer  
Room 451, Human Nutrition Unit  
Tel: 9036 6217

Academic staff are available for consultation outside normal classes. However, teaching, research and other commitments may prevent them from seeing you if you arrive without prior arrangement. To avoid any difficulties, it is preferable to arrange a mutually convenient time with the person concerned beforehand.

Discuss problems with your colleagues before consulting staff. Such discussions can be a very effective way to increase your understanding of the subject. If problems cannot be resolved in this way, then consult a staff member. If it is appropriate, consultations in small groups can be arranged.
1.6 INSTRUCTIONS FOR GROUP ACTIVITIES

Kitchens, Teaching Clinics and Tutorials

• Group Activities help to increase your understanding of nutrition and food science and assist in the development of skills appropriate in your future career.

• Group Activities, demonstrations, films, tutorials and self directed learning activities are all essential integral parts of the course.

• **Food Preparation Classes** will be held at Crows Nest TAFE. There is a TAFE handbook available. There are equipment, uniform and textbook requirements. See TAFE Handbook.

• **Teaching Clinics** will be held at on Fridays

• A handbook will be provided for the Teaching Clinics

• In the Teaching Clinic it is expected students dress appropriately for the role of Dietitian who will be assessing and counselling patients in a professional setting.

• Work will be carried out either individually or in groups. You will be allocated to groups at the beginning of each class and may not change without the permission of a member of staff. You should identify the members of your group and discuss any preparation necessary before commencing the experiment.

• A class roll will be available during each class and must be signed personally by every student present in the class.

• Food materials are provided in bulk. You will need to measure what you need for each recipe. Be economical in your use of the foods and return the bulk supplies to the cupboard or store when finished.

• Written reports of activities should be submitted as required. Format of reports will be provided.

• Classes often begin with a short discussion or videotaped presentation. Please be punctual so that these can begin without delay.
1.7 ASSESSMENT

There will be two forms of assessment - summative assessment and formative assessment. The first summates, summaries and gives a final estimation of your learning. An example is an end of semester examination. The second forms part of your learning that you undertake voluntarily. For example, you may test your knowledge using multiple-choice questions based upon past exam papers.

NB All of the assessment tasks for NUTR4001 are COMPULSORY. Failure to submit any of the tasks listed on the next page will result in a grade of AF (Absent Fail) for the student. Each assessment area must be passed for you to progress to NUTR4002 – Clinical Nutritional Science B (professional training).

### ASSESSMENT

<table>
<thead>
<tr>
<th>NUTR 4001 Component</th>
<th>Assessment Type</th>
<th>% Ind</th>
<th>Grp</th>
<th>Semester</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Nutrition and Medicine for Dietitians</td>
<td>Examination</td>
<td>✓</td>
<td></td>
<td>50</td>
<td>Semester End</td>
</tr>
<tr>
<td>Communications Teaching Clinic Performance</td>
<td>Satisfactory / Unsatisfactory</td>
<td>✓</td>
<td></td>
<td>0</td>
<td>During Clinic</td>
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<tr>
<td>Communications Teaching Clinic Document Kit</td>
<td>Workbook</td>
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<td>2.5</td>
<td>Clinic End</td>
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<tr>
<td>Communications Teaching Clinic Case Study</td>
<td>Assignment</td>
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<td>7.5</td>
<td>Clinic End</td>
</tr>
<tr>
<td>Communications IPL</td>
<td>Assignment</td>
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<td></td>
<td>5</td>
<td>Clinic End</td>
</tr>
<tr>
<td>Communications Small Group Education</td>
<td>Workbook</td>
<td>✓</td>
<td></td>
<td>15</td>
<td>Semester End</td>
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<tr>
<td></td>
<td>Assignment</td>
<td>✓</td>
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<tr>
<td>Food Service Management Placement Project</td>
<td>Assignment</td>
<td>✓</td>
<td></td>
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<td>Semester End</td>
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<tr>
<td>Food Service Management TAFE</td>
<td>Participation and Production</td>
<td>✓</td>
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<td>10</td>
<td>During TAFE</td>
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<tr>
<td>Food Service Management TAFE</td>
<td>Assignment</td>
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Details of each assessment task will be explained at the commencement of the relevant NUTR 4001 Component.

There are no past examination papers available for the NUTR 4001 topics. However, the Library does hold previous papers for the Masters Program. The format of the papers and level of difficulty of the questions are similar.
LATE PENALTIES
Assignments not submitted by the due dates will have marks deducted at a rate of 5% per day, or 20% per week that they are late. In cases of certified illness or misadventure, students may apply for Special Consideration to avoid penalties for late assignments.

SPECIAL CONSIDERATIONS
Please refer to MMB Website

The length of an extension of due date will not exceed the length of time for which you were affected by your illness or misadventure.
1.8 PLAGIARISM

Plagiarism occurs when you present someone else’s words or ideas as your own by presenting, copying or reproducing them without acknowledging the source. Plagiarism is a kind of stealing, and is dishonest and unacceptable. The University has very clear and strict guidelines about responding to plagiarism and the penalties for this are quite severe, and range from not receiving any marks for the specific piece of work to expulsion from the University in extremely serious cases. Thus, it is very important that you avoid plagiarism.

The most recent University policy on plagiarism can be found here:

It is extremely important that you read and are familiar with this policy, as you will be required to sign and submit a statement of compliance with every piece of assessment you submit (in this course this applies to the two assignments), certifying that no part of your piece of work breaches the policy. The Compliance Statements you will need for the two assignments for this course are on the coversheets you will attach to the front of your assignments. These are available at:
http://www.mmb.usyd.edu.au/current_students/

Please note, specific and detailed collaboration with other students on assignments not specifically designated as “Group Assignments”, or “Joint Work” is also considered plagiarism. The policy defines “Legitimate Cooperation”, explaining the ways in which students are permitted to work together, without plagiarising each other’s work.

Group Work
Group work is defined as a formally established project to be done by a number of students in common, resulting in a single report/essay or a number of associated reports/essays.

There is a growing emphasis in the university on assessment tasks involving group assignments and projects. This has resulted from the recognition of the value of group skills as a vital component of university-based professional training.

Legitimate Co-operation
Legitimate co-operation can be defined as any constructive educational and intellectual practice that aims to facilitate optimal learning outcomes through interaction between students. Typical examples of these practices may include the researching and writing of joint projects/essays/tutorial papers; discussion of general themes and concepts; interpretation of assessment criteria; informal study/discussion groups; strengthening and development of academic writing skills through peer assistance.

Legitimate co-operation is based on the principle that producing the work remains the independent responsibility of the student (or group of students where a joint project is undertaken), while recognising the educational value of interaction between students.
2.1 LIBRARY RESOURCES FOR NUTRITION STUDENTS

For general information about the library resources available at the University of Sydney refer to the University of Sydney library home page: http://www.library.usyd.edu.au/

This site contains comprehensive information about all aspects of the library and its collections.

Information about food and nutrition can be found in a number of the branch libraries on the University campus. Please see the librarian.


This library houses a comprehensive collection of books and journals on the subject of nutrition. The Nutrition collection has been built up over a number of years and is considered one of the best collections of its kind in the country.

**Relevant library web sites:**

University of Sydney Library Homepage:
http://www.library.usyd.edu.au/

Burkitt-Ford Library Homepage:
http://www.library.usyd.edu.au/libraries/burkittford/

Nutrition Subject Guide (includes links to relevant databases):
http://www.library.usyd.edu.au/subjects/nutrition/

**The Library Catalogue**

Use the University of Sydney Library Catalogue to:

- find the location of books, videos and serial titles
- renew books you currently have on loan
- place a hold on an item checked out to another borrower

**Finding information in the library**

If you require articles on a particular topic you will need to do a database search. Databases allow you to find journal articles, conference papers, and patents on your specific subject. Most databases are available from the database link on the library’s homepage. Some networked databases also allow you to connect and perform searches from your computer at home. Please see the relevant database page for details about remote access.

**Relevant databases for nutrition include:**

Medline, Heaps, Cinahl, Agricola, Embase, PsychINFO, AUSTHealth AMI, APAIS-Health, RURAL, and ATSIHealth.

For a full list of databases available please use the database link from the library homepage.

**Library Classes**

The Library provides information, training courses and seminars about its resources and services, throughout the University. You can view details of the courses offered here:
http://www.library.usyd.edu.au/skills/classes.html

Of particular interest will be the courses in Endnote, Science and Health Sciences.
2.2 INTERNET RESOURCES

Some useful websites (with an emphasis on food and nutrition)

Australian nutrition/health organisations

Aust Council for Health Physical Education & Recreation (ACHPER)  
www.achper.org.au

Anti-Cancer Council of Victoria  
www.accv.org.au

Aust. Society for the Study of Obesity  
www.asso.org.au

Aust. Institute of Food Science & Technology  
www.aifst.asn.au

Coeliac Society  
www.coeliac.org.au

Diabetes Australia  
www.diabetesaustralia.com.au

Dietitians Association of Australia  
www.daa.asn.au

Glycaemic Index  
www.glycemicindex.com

Gut Foundation  
www.gut.nsw.edu.au

Health Communication Network  
www.hcn.net.au

International Diabetes Institute  
www idi.org.au

Monash University, nutrition site  
www.healthyeating.org

National Heart Foundation  
www.heartfoundation.com.au

Westmead Children’s Hospital  
www.chw.edu.au

NSW School Canteen Association  
www.schoolcanteens.org.au

Nutrition Australia  
www.nutritionaustralia.org

Nutrition Society of Australia  
www.nsa.asn.au

Sports Dietitians Association  
www.sportsdietitians.com.au

University of Sydney home page  
www.usyd.edu.au

Uni of Wollongong, Smart Foods Centre  
www.uow.edu.au/health/smartsfood
International nutrition/health organisations

American Dietetics Association  www.eatright.org
American Heart Association  www.americanheart.org
American Society for Nutrition  www.asnutrition.org
American Diabetes Association  www.diabetes.org
British Dietetics Association  www.bda.uk.com
British Nutrition Foundation  www.nutrition.org.uk
FDA  www.fda.gov
Food and Nutrition Information Centre  www.nal.usda.gov/fnic
International Life Sciences Institute  www.ilsi.org
Nutrition Society of UK  www.nutsoc.org.uk
Tufts University  www.tufts.edu/nutrition
United States Department of Agriculture  www.usda.gov
World Health Organisation  www.who.org

Australian Government
Australian Bureau of Statistics (ABS)  www.abs.gov.au
Food Standards, Australia/New Zealand  http://www.foodstandards.gov.au
Australian Institute of Health and Welfare  www.aihw.gov.au
Commonwealth Dept Health and Ageing  www.health.gov.au
NSW Health  www.health.nsw.gov.au
### Journals

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<tbody>
<tr>
<td>British Medical Journal</td>
<td><a href="www.bmj.com">www.bmj.com</a></td>
</tr>
<tr>
<td>Gastroenterology</td>
<td><a href="www.gastrojournal.org">www.gastrojournal.org</a></td>
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<tr>
<td>Journal of the American Dietetic Association</td>
<td><a href="www.adajournal.org">www.adajournal.org</a></td>
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<tr>
<td>The Journal of Nutrition Online</td>
<td><a href="www.nutrition.org">www.nutrition.org</a></td>
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### Search and Research

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<td>Cochrane Collaboration</td>
<td><a href="www.cochrane.org">www.cochrane.org</a></td>
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<tr>
<td>Ovid Technologies</td>
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<td>Reuters Health</td>
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### Consumer

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<td>Health Finder</td>
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<tr>
<td>Quackwatch</td>
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Food Industry
Asian Food Information Centre
Australian Dairy Corporation
Australian Food and Grocery Council
Bread Research Institute
Canned Foods Information Services
Food Info Australia
Goodman Fielder
Kellogg (Aust)
Meat and Livestock Australia
Nestle
Sanitarium
World Sugar Research Organisation
Woolworths

Other
FoodWorks
Serve
The Diet Channel

www.afic.org
www.dairy.com.au
www.afgc.org.au
www.bri.com.au
www.cannedfood.org
www.goodmanfielder.com.au
www.kellogg.com.au
www.mla.com.au
www.nestle.com.au
www.sanitarium.com.au
www.wsro.org
www.woolworths.com.au

www.xyris.com.au
www.serve.com.au
www.thedietchannel.com
2.3 LEARNING CENTRE

The Learning Centre offers a wide range of workshops and other activities for students to help develop the learning and language skills needed for academic study. The Centre’s workshops are available free of charge to all enrolled students of the University throughout the calendar year.

You can choose to participate in a range of workshops, varying in length from 3 to 12 hours, some of them being repeated many times throughout the year. During semester times, workshops usually meet once a week for 2 or 3 hours per session, over several weeks. During vacation, workshops usually meet over 1 to 4 days. The purpose of the workshops is both to teach particular skills and to provide an opportunity for practising those skills in a systematic way. There are also independent learning resources including some specially designed resources for practising reading, writing, speaking and listening skills.

Some examples of courses offered are:

Workshops on essay and assignment writing
- Reading and note taking for written assignments (12 hours)
- Researching your essay (6 hours)
- Writing your essay (12 hours)
- Writing a laboratory report (12 hours)
- Using evidence in writing: paraphrasing and summarising (12 hours)
- Writing in an academic style (10 hours)
- Writing clearly (10 hours)
- Grammar for academic writing (10 hours)

Workshops on oral communication skills
- Participating in tutorials (12 hours)
- Making oral presentations (10 hours)
- Introduction to pronunciation (7 hours)
- Note taking in lectures (10 hours)

Workshops on studying at university
- Orientations to university study (3-6 hours)
- Managing time (3 hours)
- Learning skills (3 hours)
- Preparing for exams (3 hours)
- Practice for multiple-choice questions (3 hours)
- Practice for short answer exams (3 hours)
- Practice for essay answer exams (3 hours)

Workshops on conducting research
- Preparing for research (6 hours)
- Writing a thesis proposal (9 hours)
- Writing a literature review (12 hours)
- Writing a thesis (12 hours)
- Writing for publication (12 hours)

For information and registration for any course contact the Centre: tel 9351 3853.
Location: Education building, level 7, A35, next to Manning House.
2.4 TEXTBOOKS AND REFERENCE MATERIALS

- English R & Lewis J, Nutritional values of Australian Foods, AGPS, Canberra. ISBN: 0644138718
- Frayn, Metabolic Regulation, Portland Press. ISBN: 1855780488

Recommended Texts

- Shils at al Modern Nutrition in Health and Disease Lea & Ferberger ISBN 068330-769
3.1 OVERVIEW

Clinical Nutrition and Medicine For Dietitians

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<th>Area</th>
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<tbody>
<tr>
<td>Nutritional Assessment And Clinical Application</td>
<td></td>
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<tr>
<td>RDI And Clinical Interpretation To Diet History</td>
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Communication Skills For Dietitians

| Theory Application - University Clinical Teaching Clinics/ Other     |                                                                 |
| Small Group Education skills                                        |                                                                 |

Dietetic Practice

| History Of Dietetics                                               |                                                                 |
| Invited Speakers – Differing Roles Of Dietitians                  |                                                                 |
| Introduction To The Workplace                                      |                                                                 |
| The DAA Competencies                                               |                                                                 |
| Professional Ethics                                                |                                                                 |
| Introduction To Placement                                          |                                                                 |
| DAA Presentation                                                    |                                                                 |
Food Service Management

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Introduction To Management

| Health Services                            |
| Leadership                                 |
| Industrial Relations                       |
| Time Management                            |
| Performance Management                     |
| Quality Assurance – Quality Insurance      |
| Private Practice - Managing A Practice     |
| Working Overseas                           |
| Applying for a Job                         |

Basic Research Methodology

| Introduction To Research Exercise          |
| Case Study research report (2nd semester)  |
3.2 LEARNING OUTCOMES, PREPARATION & RESOURCES

3.2.1 CLINICAL NUTRITION AND MEDICINE FOR DIETITIANS

Coordinator  Beth Rohrlach

Nutritional Assessment And Clinical Application

Learning Outcomes

By the end of the session students will

• be able to identify the components of the Nutritional Assessment Process
• understand the nutritional assessment process
• be able to correctly interpret anthropometric and biochemical results, clinical signs and symptoms, dietary intake, fluid status, exercise levels and energy expenditure
• be able to identify the components of a diet history
• be aware of the nutritional assessment methods – SGA, mini nutritional assessment etc
• be able to estimate energy and nutritional requirements
• be aware of the equipment for the measurement and assessment of energy requirements
• be aware of the equipment required for the assessment of energy requirements
• be aware of the incidence and prevalence of malnutrition
• be familiar with the screening tools used for detection and assessment of malnutrition
• understand how to monitor status of a malnourished client
• be able to assess paediatric growth

Preparation

• Review Dietary Methodology Year 3

Resources Required

• A listing of the computer analysis packages available
• Review Year 3 – Growth and Nutritional Assessment Of Infants And Children

Diet History Taking

Learning Outcomes

By the end of the session students will

• be able to identify the components of a diet history
• be able to accurately document a “clinical” diet history
• be aware of the different documentation styles for dietetic practices

RDI And Clinical Interpretation To Diet History

Learning Outcomes

By the end of the session students will

• be able to evaluate the nutritional adequacy of the diet to individuals using Healthy Eating Guidelines such as, RDIs and Core Food Groups along with other appropriately validated tools and resources
• be able to apply the nutritional assessment to a paediatric case
• be able to calculate the nutritional requirements including fluid and energy for individuals
• be able to compare an individual’s nutritional status against appropriate reference guidelines, formulae etc
• understand the difference between qualitative and qualitative analysis
• be able to describe the signs and symptoms of the nutritional anaemias and their diagnosis
• be able to identify the nutritional issues for anaemic patients
• be able to describe the nutritional requirements for patients with anaemia
• be able to perform a nutritional assessment on a patient with anaemia
• be able to design appropriate nutritional management programs for use in the treatment of nutritional anaemias

**Preparation**

• Review RDIs, Core Food Groups, Vitamins and Minerals from Year 2
• Revise Bomb Calorimetry
• Revise the Use of Growth Charts for Infants

**Class Activity**

• Will cover this area by using one case study where analysis and comparisons are made using a variety of tools with increasing complexity and accuracy

**Ready Reckoners And Their Development**

**Learning Outcomes**

By the end of the session students will

• understand the term ready reckoner
• be able to list the different types of reckoners
• be able to describe the applications of ready reckoners
• appreciate the advantages and disadvantages of using ready reckoners
• using appropriate resources, be able to develop a ready reckoner for both general and therapeutic use
• be able to determine the appropriateness of using a reckoner instead of or as an adjunct to computer analysis
• assess their own diet using an appropriate reckoner

**Preparation**

• Review Food and Nutrition Policies and Guidelines Year 3
• Revise Nutrition I Chronic Illnesses Year 3

**Resources Required**

• Food Composition Tables for both 100g portions and common serving sizes
• Calculator

**Introduction To Complementary Medicine**

**Learning Outcomes**

By the end of the session students will

• be able to describe the underlying concepts of complementary medicine
• appreciate why complementary medicine is a growing aspect of health care
• understand the concept of individualisation when we are all physiologically the same
• be able to describe the terminology used in complementary therapies
• be able to describe the evidence base for complementary medicine
• be able to describe a specific number of complementary therapies in detail

**Resources Required**

• Journal – Current Therapeutics
• Relevant Websites

**The Supermarket What's Available?**
Learning Outcomes
By the end of the session students will
- be able to evaluate the product label information
- be aware of cultural foods available in stores
- understand marketing of products in supermarkets
- understand product terminology – low fat, light etc
- be familiar with the local take away options
- be able to distinguish between a valid claim and a marketing scheme
- understand the surveillance of products and their availability continues throughout dietetic practice
- understand the relevance of the supermarket to Clinical Practice

Preparation
- Food colloquialisms for diet history taking
- Nutrition panels on products
- Health claims and nutritional controversies

Resources Required
- Listing of company websites for product information
- Food Additives and Code Breaker
- Each student will develop a portfolio of what constitutes a meal

The Medical Record

Learning Outcomes
By the end of the session students will
- understand medical record structure and purpose
- appreciate the variety of models and formats of the medical record
- understand hospital policies, legal expectations and ethics.
- be familiar with the legal requirements surrounding entries in Medical Record files
- have an awareness of documentation style for dietetic practices
- be able to interpret doctor’s admission notes
- understand basic rules of Medical Terminology
- understand the principles of Biochemistry And Clinical Interpretation of Medical Entries
- be familiar with the normal ranges for Biochemical and Clinical Results
- understand Drug Terminology

Preparation
- Review previous lectures on Diet History Taking for details concerning entries made by Dietitians into the Medical Files

Resources Required
- Medical dictionary
- Listing of commonly used medical abbreviations
FOR ALL CLINICAL AREAS FOLLOWING

Overall Learning Outcomes
By the end of the clinical sessions students will
• be familiar with the impact of diseases on biochemistry and organ function
• demonstrate a thorough knowledge of the theory of human nutrition and dietetics to a level that supports safe practice
• understand the principles of clinical dietetics
• understand the role of modified diets in the treatment of disease

Preparation

Revision of both Year 2 and Year 3 notes covering ……:
• role and function of the major body systems
• role and function of vitamins and minerals
• metabolism of proximate nutrients
• impact of nutrition on physical performance and well being

Revision of the Principles of Medical Terminology

Resources Required

• Important resources such as professional literature, policy documents, journals, texts, popular literature and internet sites

Cardiovascular Medicine

The following cardiovascular conditions will be covered:

i. Hyperlipidaemia
ii. Introduction To Metabolic Syndrome
iii. Coronary Artery Disease
iv. Thrombosis Endothelium
v. Carotid Artery Blockage
vi. Peripheral Vascular Disease
vii. CCF, Myopathy
viii. Hypertension

Learning Outcomes
By the end of the session students will
• be able to describe the transport of lipid in the blood and the classifications of hyperlipidaemia
• be able to define ATP 111 classification of LDL-C; total cholesterol, HDL-C and triglycerides
• be able to define the Metabolic Syndrome
• be able to describe the pathophysiology of diseases of the heart and blood vessels
• be able to list the risk factors for coronary heart disease
• be able to describe the effects of obesity and physical activity on heart disease
• understand the effects of homocysteine and folate on artery disease
• understand the general procedures of coronary artery bypass surgery and percutaneous translational coronary angioplasty
• be able to describe the strategies of a cardiac rehabilitation program
• describe the causes and management of Peripheral Vascular Disease
• understand the prognosis of congestive cardiac failure
• describe the management of patients with heart failure
• be able to describe the pathophysiology of hypertension
• have an understanding of the complementary medicines used by this client group
Preparation

• Revise the role and function of the Cardiovascular system

Resources Required

Lecturers will provide prior to presentation:

• Specific Medical terminology and abbreviations for cardiovascular conditions
• Biomedical parameters and diagnostic tests and how these change with disease progression
• Common Medications treating Cardiovascular Conditions

Cardiovascular Dietetics

Learning Outcomes

By the end of the session students will

• be able to describe the effects of dietary fats on heart disease and blood lipids (saturated fatty acids, n-6 polyunsaturated fatty acids; n-3 polyunsaturated fatty acids, monounsaturated fatty acids, trans fatty acids, dietary cholesterol)
• be able to describe the modification of other dietary constituents important in the prevention and treatment of heart disease i.e. fibre, coffee, tea, nuts, arginine, vegetarian diet garlic, antioxidants, flavonoids, sterols, alcohol, carbohydrate, soy protein, sodium, potassium, calcium and magnesium*
• be able to define the NHF and ATP (adult treatment panel) recommendations for the dietary treatment of heart disease/hyperlipidaemia
• be aware of the two step diet approach in the treatment of coronary heart disease
• be able to describe the effects of diet on thrombosis and the endothelium
• understand the dietary management for Heart Failure and cardiomyopathy
• understand DASH (Dietary Approaches to Stop HT) – combination diet, sodium control
• be able to describe the modifications of energy, sodium, potassium, calcium, magnesium, fatty acid, alcohol and liquorice which may lower blood pressure
• be able to discuss the controversies – high polyunsaturated fat diet, high monounsaturated fat diet, low fat/high carbohydrate diet

Resources Required

• NHF Guidelines
• National Heart, Lung Institute’s Guidelines for Cholesterol
• American Heart Foundation Guidelines

Obesity - Medical

Learning Outcomes

By the end of the session students will

• be able to describe the biochemistry and pathophysiology of obesity
• be able to describe the complications of obesity
• be able to describe the team approach to the management of obesity including behavioural therapy and exercise
• be aware of medication available to treat weight loss
• be aware of the non diet approaches to weight loss.
• be able to define Metabolic Syndrome
• be aware of the complementary medicines used by this client group
• be able to understand the aetiology and medical management of childhood obesity

Preparation

• Review relevant biochemistry and physiology
Resources Required
Lecturers will provide prior to presentation:

- Specific medical terminology used for this client group
- Common medications used for weight loss and maintenance

Obesity – Dietetic

Learning Outcomes
By the end of the session students will

- have an awareness of different approaches to the nutritional management of weight loss (evidence based practice)
- understand the differences between weight loss guidelines and prescriptions
- understand physiological adaptation to dieting
- understand the nutritional influences on satiety
- understand clinical assessment prescription vs client education
- plan appropriate, realistic and acceptable weight reduction diets
- understand the role of behavioural therapy and exercise from a dietitian’s perspective
- understand the influence of popular literature on dieting
- appreciate successful outcomes are not easy to achieve and require frequent follow-up
- be able to understand the aetiology and dietetic management of childhood obesity

Preparation

- Review Obesity Lectures from Year Three

Eating Disorders - Medical

Learning Outcomes
By the end of the session students will

- be able to describe the psychological events which give rise to anorexia and bulimia nervosa
- be able to describe the clinical manifestations of anorexia nervosa and bulimia nervosa
- be able to define DSM-IV diagnoses for anorexia nervosa, bulimia nervosa, eating disorder not otherwise specified, and binge eating disorder
- be able to describe the complications of anorexia and bulimia nervosa
- have an appreciation of the treatment that is necessary for refeeding syndrome (This will be fully covered in “Nutritional Support – Tube Feeding”)
- be aware of the Complementary medicines used by this client group

Resources Required
Lecturers will provide prior to presentation:

- Specific medical terminology and abbreviations for eating disorders
- Biomedical parameters and diagnostic tests and how these change with disease progression
- Common medications associated with eating disorders

Eating Disorders - Dietetic

Learning Outcomes
By the end of the session students will

- be able to plan appropriate nutritional therapy for patients with anorexia or bulimia nervosa
- be able to outline the aspects of a general assessment for clients with anorexia nervosa and bulimia nervosa (diet history, dietary rules, levels of exercise, laxative and diuretic use, induced vomiting, number and type of binge eating – subjective or objective – weight history)
- be able to discuss the evidence base practice of the nutritional counselling of clients with eating disorders
- have an appreciation of the treatment that is necessary for refeeding syndrome (This will be fully covered in “Nutritional Support – Tube Feeding”)
- understand disordered eating eg. pica
Diabetes - Medical

Learning Outcomes
By the end of the session students will

- be able to describe the diagnosis criteria for Diabetes
- be able to describe the biochemical dysfunction of insulin resistance and diabetes
- be able to describe the signs, symptoms and complications for Type I & Type II and IGT (impaired glucose tolerance)
- understand the differences between Type I and II
- understand metabolic syndrome and its management
- be able to describe the use of insulins and oral hypoglycaemics to treat diabetes
- understand insulin pump therapy and its impact on management
- have an awareness of social / psychological factors which may affect diabetes management
- be aware of diabetes co-morbidities
- will be aware of the complementary medicines used by this client group

Preparation

- Revise the role and function of the endocrine system

Resources Required
The Lecturer will provide prior to presentation:

- Medical terminology and abbreviations for diabetes
- Biomedical parameters and diagnostic tests and how these change with disease progression
- Medications associated with diabetes
- It could be of value to purchase a copy of the manual produced by the Diabetes Centre at The New Children’s Hospital Westmead for Managing Children with Diabetes.

Diabetes - Dietetic

Learning Outcomes
By the end of the session students will

- be able to design the modifications of energy, protein, fat, carbohydrate, fibre and alcohol and plan individual meal plans necessary in the treatment of Type 1, 2, gestational diabetes and IGT
- be able to adjust an individual’s diet to incorporate dietary recommendations appropriately to allow for prevailing comorbidities
- appreciate the differences in dietary management for Type 1 when insulin pump therapy is used
- be able to describe the dietary plan to accommodate exercise, hypoglycaemia, illness, travel and pregnancy for those with diabetes mellitus
- be able to describe high and low glycaemic index (GI) foods and how these may be used in the dietary management of diabetes mellitus
- understand the limitations of GI system of dietary management

Preparation

- Review of the metabolism of protein, fat and carbohydrate
- Familiar with the food sources of protein, fat and carbohydrate
- Ready reckoners for protein, fat and carbohydrate
- Review year 3 Dietary Methodology
- Traffic Light Guide developed by the Diabetes Education and Assessment Program at RNS
- Kit of Diabetes Australia Documents and publications
Renal – Medicine

Learning Outcomes
By the end of the session students will

• be able to describe the causes of both acute, chronic and endstage renal failure
• be able to describe the pathophysiology of acute, chronic and endstage renal failure
• be able to describe the signs and symptoms of acute, chronic and endstage renal failure
• understand wasting/malnutrition in relation to mortality, morbidity & quality of life in Renal Failure
• be able to interpret the biochemical & haematology results with respect to altered renal function
• be able to describe renal replacement therapy i.e. Haemodialysis (HD), continuous ambulatory peritoneal dialysis (CAPD), Automated Peritoneal Dialysis (APD), Continuous Cyclic Peritoneal Dialysis (CCPD) and renal transplantation
• be able to describe the potential complications of haemodialysis, CAPD and transplantation
• understand the medical management of ARF, CRF, Endstage Renal failure including dialysis and transplantation
• be aware of the complementary medicines used by this client group

Preparation

• Revise the role and function of the renal system

Resources Required

Lecturer to provide prior to presentation:

• Specific medical terminology and abbreviations for renal conditions
• Biomedical parameters, medications and diagnostic tests and how these change with disease progression

Renal Disease – Dietetic

Learning Outcomes
By the end of the session students will

• be able to identify the nutritional issues and potential complications for patients with renal failure.
• be able to describe the nutritional requirements of all stages of renal failure
• be able to perform a nutritional assessment on a patient with renal disease
• be able to design appropriate nutritional management programs with the modifications of energy, protein, sodium, potassium, phosphorus, lipids, vitamin & minerals and fluid for use in the treatment of acute, chronic and endstage renal failure including dialysis and transplantation

Preparation

• Revise nutritional sources of sodium, potassium and fluid in the diet
• Revise Nutritional Assessment

Resources Required

• Renal Ready Reckoner developed in earlier session
Gastroenterology – Medical

Learning Outcomes
By the end of the session students will
• be able to describe the pathophysiology of disease of the oesophagus, stomach, duodenum, intestine and colon
• be able to describe the nutrition-related complications arising from oesophageal, gastric and bowel resections
• be able to describe the pathophysiology of liver disease and complications of ascites, oesophageal varices and encephalopathy, fatty liver, hepatitis, cirrhosis
• be able to describe the pathophysiology of cholelithiasis and pancreatitis
• be able to describe the pathophysiology of coeliac disease
• be aware of the complementary medicines used by this client group

Preparation
• Revise the role and function of the gastrointestinal system

Resources Required
The lecturer will provide prior to presentation:
• Medical terminology and abbreviations relevant to gastroenterology
• Biomedical parameters and diagnostic tests and how these change with disease progression
• Common medications relevant to therapy eg pancreatic enzyme replacements, steroids for Inflammatory Bowel Disease (IBD) etc

Gastroenterology - Dietetics

Learning Outcomes
By the end of the session students will
• be able to describe the nutritional issues and potential complications for patients with gastrointestinal dysfunction
• be able to design appropriate nutritional management programs for use in the treatment of gastrointestinal dysfunction
• be able to design dietary modifications necessary for individuals with Oesophageal Strictures And Varices
  Hiatus Hernia
  Reflux
  Gastric And Duodenal Ulcers
  Irritable Bowel Syndrome
  Diverticular Disease
  Constipation
  Hepatic Diseases
  Cholelithiasis
  Crohns Disease
  Inflammatory Bowel Disease
  Ulcerative Colitis
  Radiation Enteritis
• be able to describe the requirements for special formulae of peptides, amino acids, medium chain triglycerides and lactose-free in short bowel syndrome, pancreatitis
• be able to plan gluten-free diets for use in coeliac disease
• be able to describe the dietary modifications indicted for oesophageal , gastric & bowel resection
• be able to describe the dietary considerations for transplants - liver, pancreatic and other
Preparation

• Revise the absorption, metabolism and excretion of nutrients in the gastrointestinal tract
• Review (for Coeliac Disease) NUTR 3901 Anthropometric Reference Studies for Children

Nutritional Support – In General

Learning Outcomes
By the end of the session students will
• be able to identify the nutritional issues and potential complications for patients with various critical illnesses
• be able to perform a nutritional assessment on a patient in critical care
• be able to design appropriate nutritional management programs for patients in critical care that require either hyperalimentation, enteral or oral nutritional support

Preparation

• Revise physiology of gastrointestinal tract
• Revise the body’s response to starvation and stress

Nutritional Support - Tube Feeding

Learning Outcomes
By the end of the session students will
• be able to describe the surgical procedure and delivery systems for total parenteral nutrition and enteral nutrition
• be able to describe the disease states likely to necessitate the provision of nutritional support
• be able to describe The Refeeding Syndrome and its management.
• be able to describe the composition of solutions used for parenteral nutrition and their indications for use
• be able to describe the types of enteral nutrition formulae and plan an appropriate feeding regime
• understand the management of the following feeding regimes - PEG, NGT and NJ
• be able to calculate the nutritional requirements for differing medical conditions
• understand the nutritional management of refeeding syndrome
• have an appreciation of the issues with transitional, weaning and home enteral feeding
• be aware of the role of dietitian in the nutrition support team

Resources Required

• Company Product Profiles
• Sample Feeds

Nutritional Support - Oncology - Medical

Learning Outcomes
By the end of the session students will
• describe the role of diet in the aetiology of various cancers
• describe the aetiology and clinical presentation of altered nutritional status in cancer
• describe the treatment modalities for cancer and their side effects which alter nutrition
• be aware of the complementary medicines used by this client group

Resources Required
The lecturer will provide prior to the presentation:
• Medical terminology and abbreviations for these conditions
• Biomedical parameters & diagnostic tests & how these change with disease progression
• Medications for cancer treatment
**Nutritional Support - Oncology - Dietetic**

**Learning Outcomes**
By the end of the session students will
- be able to prescribe coherent dietary recommendations for cancer prevention
- be able to identify the nutritional issues and potential complications for patients with cancer
- be able to describe the nutritional requirements for patients with cancer
- be able to perform a nutritional assessment on a patient with cancer
- be able to design appropriate nutritional management programs for the prevention and treatment of cancer cachexia
- be able to design appropriate nutritional management programs for the management of nutrition related side effects of cancer treatments
- understand the potential effects of non conventional diets may have on nutritional status

**Nutritional Support - HIV - Medical**

**Learning Outcomes**
By the end of the session students will
- understand the differences between and the medical management of HIV and its stages of progression
- be aware of the opportunistic infections and their nutritional impact
- be able to describe the prevalence of HIV and the factors involved in HIV related malnutrition
- be aware of the complementary medicines used by this client group

**Resources Required**
The lecturer will provide prior to presentation:
- Medical terminology and abbreviations for HIV
- Biomedical parameters and diagnostic tests and how these change with disease progression
- Medications associated with the treatment of HIV

**Nutritional Support - HIV - Dietetics**

**Learning Outcomes**
By the end of the session students will
- be able to identify the nutritional issues and potential complications for individuals with HIV
- be able to describe the nutritional requirements for individuals with HIV
- be able to perform a nutritional assessment on an individual with HIV
- be able to design appropriate nutritional management programs for use in the treatment of HIV
- have an appreciation of the alternative diets commonly used by patients with HIV
- understand the nutritional strategies for managing elevated lipids, diabetes, and lipodystrophy

**Nutritional Support - Neurology – Medical**

**Learning Outcomes**
By the end of the session students will
- be able to describe the neurological disorders which give rise to dysphagia
- be able to describe the assessment of dysphagia
- be able to describe nutritionally relevant stroke risk factors
- be aware of the complementary medicines used by this client group

**Preparation**
- Revise the role and function of the relevant body systems
Resources Required
The lecturer will provide prior to presentation:
- Medical terminology and abbreviations for these conditions
- Biomedical parameters and diagnostic tests and how these change with disease progression
- Medications associated with these conditions

Nutritional Support - Neurology – Dietetic

Learning Outcomes
By the end of the session students will
- be able to identify the nutritional issues and potential complications for patients with Stroke and Parkinson’s Disease
- have an awareness of the nutritional issues for patients with Motor Neurone Disease, Huntington’s Disease and Multiple Sclerosis
- be able to describe the nutritional requirements for patients who have had a stroke
- be able to perform a nutritional assessment on a patient who has had a stroke
- be able to design appropriate nutritional management programs for use in neurological disease
- be able to design nutrition assessment relevant for neurological disease eg nutrition related ADLs, cognition deficits

Nutritional Support - Dysphagia – Dietetic

Learning Outcomes
By the end of the session students will
- be able to identify the nutritional issues and potential complications for patients with dysphagia
- be able to describe the nutritional requirements for patients with dysphagia
- be able to perform a nutritional assessment on a patient with varying degrees of dysphagia
- be able to design nutritional management programs with texture modifications that are appropriate for patients with varying degrees of dysphagia

Nutritional Support - Respiratory Disease

Learning Outcomes
By the end of the session students will
- be able to describe the pathophysiology of pulmonary disease and asthma
- be aware of the complementary medicines used by this client group
- be able to identify the nutritional issues and potential at risk nutrients for patients with Chronic Obstructive Pulmonary Disease (COPD)
- be able to describe the nutritional requirements for patients with COPD
- be able to design appropriate nutrition support for a patient with COPD
- be able to identify the nutritional issues for patients with asthma
- be able to perform a nutritional assessment on a patient with asthma
- be able to describe diets which may be used in the treatment of asthma

Resources Required
The lecturer will provide prior to presentation:
- Medical terminology and abbreviations for respiratory conditions
- Biomedical parameters and diagnostic tests and how these change with disease progression
- Medications associated with respiratory conditions
**Nutritional Support - Cystic Fibrosis – Medical**

**Learning Outcomes**
By the end of the session students will
• be able to describe the genetic and physiological defects of cystic fibrosis
• be familiar with the medical management of client with Cystic Fibrosis from childhood through to adulthood
• be able to describe the pathophysiology of childhood gastroenteritis and secondary malabsorption
• be aware of the complementary medicines used by this client group

**Preparation**
• Revise the role and function of the relevant body systems

**Resources Required**
The Lecturer will provide prior to presentation:
• Medical terminology and abbreviations for cystic fibrosis
• Biomedical parameters and diagnostic tests and how these change with disease progression
• Medications associated with cystic fibrosis

**Nutritional Support - Cystic Fibrosis – Dietetics**

**Learning Outcomes**
By the end of the session students will
• be able to identify the nutritional issues and potential complications for children and adults with cystic fibrosis
• be able to describe the nutritional requirements for children and adults with cystic fibrosis
• be able to perform a nutritional assessment on children and adults with cystic fibrosis
• be able to design appropriate nutritional management programs for use in the management of cystic fibrosis
• appreciate the balance that needs to be maintained between diet and enzyme replacement therapy

**Nutritional Support - Burns – Medical**

**Learning Outcomes**
By the end of the session students will
• be able to describe the physiological and biochemical changes induced by different degrees of burns
• understand both the medical vs surgical treatments and their effect on nutritional needs

**Preparation**
• Revise hypermetabolic states

**Resources Required**
The lecturer will provide prior to presentation:
• Medical terminology and abbreviations for burns patients
• Biomedical parameters and diagnostic tests and how these change with recovery
• Medications associated the treatment of severe burns
Nutritional Support - Burns – Dietetic

**Learning Outcomes**
By the end of the session students will

- be able to describe the nutritional issues, nutritional support required and potential complications for patients with burns
- understand the major barriers to providing nutritional support in burns patients
- be able to perform a nutritional assessment on a patient with burns
- be able to design appropriate nutritional management programs as part of the treatment of patients with burns

**Nutritional Support - Surgery**

**Learning Outcomes**
By the end of the session students will

- be able to describe the impact of various forms of surgery on food consumption and nutritional status
- be able to perform a nutritional assessment on a pre and post surgical patient
- be able to design appropriate nutritional management programs for both pre and post surgical patients

**Preparation**
- Revise the role and function of the relevant body systems

**Resources Required**
The Lecturer will provide prior to presentation:

- Medical terminology and abbreviations for these conditions
- Biomedical parameters and diagnostic tests and how these change with recovery
- Medications associated surgery

**Food & Immunology – Medical**

**Learning Outcomes**
By the end of the session students will

- be aware of the range of tests available for determination of an allergy and their reliability
- be familiar with the medical assessment / determination of food allergy
- be able to differentiate between food allergy and food sensitivity
- be aware of the management of people with immunological problems

**Resources Required**
The Lecturer will provide prior to the presentation

- Medical terminology and abbreviations for these conditions
- Biomedical parameters and diagnostic tests and how these change with management
- Medications associated with these conditions

**Food Sensitivity – Dietetic**

**Learning Outcomes**
By the end of the session students will

- be able to identify the nutritional issues and potential complications for patients with food sensitivities
- be able to perform a nutritional assessment on a patient with food sensitivities
- be able to describe nutritional management programs and challenges which are used to diagnose and treat food sensitivities
Musculoskeletal Medical and Dietetic

Learning Outcomes
By the end of the session students will
- be able to describe the major bone and joint disorders such as arthritis and gout
- be familiar with the medical and nutritional management for arthritis and gout
- be aware of the complementary medicines and regimes used by this client group

Resources Required
The Lecturer will provide prior to the presentation
- Medical terminology and abbreviations for these conditions
- Biomedical parameters and diagnostic tests and how these change with management
- Medications associated with these conditions

The Older Person

Learning Outcomes
By the end of the session students will
- be able to apply the nutritional assessment process to the elderly client using appropriate reference ranges
- be familiar with the limitations of the reference ranges when applying to the elderly client
- be able to understand the nutritional management of the chronically ill elderly patient
- be aware of the nutritional complications that may occur during the management of the elderly patient
- to be aware of the additional care necessary when managing an elderly client because of the changes in their physiological responses to both medical and nutritional interventions

Preparation
- Revise Nutrition Through the Lifecycle NUTR 3902
- Review the physiological aspects of aging and its effects on nutritional status
- Clinical Assessment lectures

Infant Formulae

Learning Outcomes
By the end of the session students will
- be able to evaluate the suitability of a proposed formula for infant feeding
- be familiar with the components of infant formulae and the method of manufacture of the formulae
- be aware of the different formulae available to infants in Australia
- be familiar with the advantages and disadvantages for use of the range of formulae available to infants in Australia
- be able to determine the formulae options and in turn the most suitable formula for a particular infant
- be able to determine the correct quantity of feed required to meet the nutritional needs of a particular infant
- understand the manufacturer’s instructions for the preparation and delivery of the infant formulae
- be aware of the purchase options for parents requiring the infant formulae
- be aware of any preparation difficulties for the more commonly used feeds
- be aware of the storage and handling restrictions of the more commonly used feeds
- be aware of the cost of the more commonly used feeds and any financial assistance available to parents for the more specialised expensive feeds

Preparation
- Revise NUTR 3902 – Nutrition Through the Lifecycle ie Nutrition in Early Childhood, During Pregnancy and Lactation; and Breastfeeding
Resources Required

- Manufacturer’s information
- Listing of Feeds available in Australia

Children And Their Growth

Learning Outcomes

By the end of the session students will

- understand the term Failure to Thrive and the conditions resulting in this diagnosis
- be familiar with the interventions required for infants / children who have a condition resulting in poor growth
- be able to plan suitable nutritional support for a child with poor growth
- be aware of the monitoring processes necessary for infants / children with poor growth
- be able to correctly interpret the information gained from recording an infant / child’s growth over a period of time
- be able to determine a plan of nutritional intervention to minimise any nutritional concerns for a child’s growth promote normal growth
- be able to determine the nutritional intervention, if any, that should be undertaken to promote normalised growth in an infant / young child.
- be aware of the daily influences on a child’s eating behaviour and the impact this may have on a child with a medical condition
- be able to identify some strategies that can be employed to minimise the negative impact of the environment on children’s eating behaviour

Preparation

- Revise the use/interpretation of Growth Charts
- Revise NUTR 3901 – Anthropometry – Body Composition and Reference Standards for Children
- Revise NUTR 3902 - Nutrition Through the Lifecycle ie Nutrition in Early Childhood

The Health Conscious Individual

Learning Outcomes

By the end of the session students will

- appreciate the issues that concern the health conscious public
- be aware of the possible client’s sources of information
- understand the importance of recognising the clients concern while correcting any nutritional misunderstandings
- have an appreciation of how to manage an session where no dietary intervention is required
- have an understanding of how to manage a session when the client has considerable misinformation from a client trusted source

Preparation

- Breast Feeding Revision Year 3
- Introduction to Solids
- Revision of nutritional assessment and growth of children
- Nutritional assessment of adults
- Revision of RDIs
- Popular press recent health issues
- Review the nutritional concerns for each age group

Resources Required

The lecturer will provide

- List of useful Government and Non-Government Resources available
Drug-Nutrient Interactions

Learning Outcomes
By the end of the session students will
• be aware of the range of drugs commonly used in Australia
• be able to describe how these drugs may affect the metabolism of a nutrient and vice versa.

Preparation
• Revise medical terminology
• Revise NUTR 3902 - Nutrition throughout the lifecycle

The Exercise Prescription – Medical and Dietetic

Learning Outcomes
By the end of the session students will
• be able to explain the benefit of exercise in the management of hypertension, diabetes, metabolic fitness, transplant, rehabilitation, depression and nitrogen retention
• be able to explain exercise in the management of muscle wasting, conditioning and sarcopenia
• understand exercise physiology and terminology eg VO2 max, VO2 peak, lactate threshold etc
• understand energy balance – both the principles and the application

Preparation
• Revise Exercise Epidemiology
• Revise the Biological Basis of the Epidemiological findings- exercise and lipids; glucose control; insulin; obesity and diabetes; bone formation and maintenance; and the prevention of osteoporosis
• Attendance at both Medical and Dietetic presentations addressing the management of chronic illnesses.

Resources Required
The lecturer will provide
• A listing of relevant definitions, abbreviations used and terminology
3.2.2 COMMUNICATION SKILLS FOR DIETITIANS

Coordinator  Beth Rohrlach (University Teaching clinics)  
Soumela Amanatidis and Jennifer McArthur (Small group education)

Communication Skills for Dietitians gives the student the opportunity to practice their interviewing, assessment and counselling skills. Most of the Theory of Communication was addressed in Year 3, in Year 4 this is revisited briefly before commencing the application of the Theory in the Teaching Clinics.

A. Communication Theory

INTRODUCTION

Learning Outcomes
By the end of the session students will
• have an appreciation of the many different theories of counselling and communication – their strengths and weaknesses

Preparation
• Review NUTR 3902 – Conducting an Interview
Review NUTR 3901 – Effective Communication, Theories of Communication, Factors that Enhance Effective Communication, Barriers to Effective Communication and Principles of Effective Interviewing

BEHAVIOURAL CHANGE

Learning Outcomes
By the end of the session students will
• be able to describe the theories of behaviour change
• be familiar with a range of behaviour modification and education strategies
• be familiar with the principles of counselling parents and older children

B. Theory Application - University Clinical Teaching Clinics
- non complicated cardiovascular, weight management or diabetic management cases

Learning Outcomes
Under the direction of the Clinical Supervisor, students will by the end of the clinics
• apply theories of communication to the practice of counselling
• be able to design a resource suitable for patient education
• understand the roles of hospital staff who have either patient care or support roles, and when it is appropriate to make referrals to them
• have observed and prepared a report on the team roles in a medical team
• present a patient case study that integrates the social, psychological, medical, and dietary aspects of the case
• understand how to use an interpreter in the assessment and education of a patient
• appreciate how client education can be affected by cultural differences
• be familiar with the language of children
• have planned and presented a clinical group education session
• demonstrate a critical approach to patient care and strives for best practice
• have completed a nutritional assessment of a non complicated case using relevant information contained in either the existing medical record or the referral letter and appropriate information collected during the client counselling interview.
• be able to accurately document relevant client information onto Nutritional Assessment Forms, Patient Decision Forms or their equivalent and main body of Medical File
• become familiar with the medical terminology, relevant biochemistry, medications used for the conditions seen in the teaching clinic. This means researching appropriate resource books and documenting findings on either the Patient Decision Making Forms or their equivalent.
• be able to select educational resources suited to each client and record their use in either the Patient Decision Making Forms or equivalent forms
• be able to identify areas of concern from the nutritional assessment and, together with information gained from the diet, social and medical histories, set patient goals and priorities
• be able to discuss the nutritional concerns, priorities and goals with the Clinical Supervisor and document them appropriately
• understands the process of education and counselling and can explain the diet – disease relationship to the patient. The student may be able to complete the entire interview including education, evaluation, closure and arrange follow-up on patients with non-complicated medical conditions
• document the education component of the session appropriately
• be able to write an appropriate letter to the referring medical officer
• be accustomed to debriefing with the Clinical Supervisor during each clinic
• have demonstrated an improvement in the performance of the relevant skills determined by DAA necessary for an entry level dietitian during a counselling session.

All documentation is to be countersigned by the Clinical Supervisor

Preparation
• Review relevant lectures from “Clinical Nutrition and Medicine for Dietitians.

Resources Required
• The Observation / Assessment Tools used while on Workplace Placement will be used during the Teaching Clinics as the Clinics have been developed in such a fashion to allow the students to develop their professional skills as they would during NUTR 4002. See Appendix 4.5

C. Small group education skills

Learning outcomes
By the end of this course you will be able to:
• Apply small group education techniques, using the theories of small group behaviour, to nutrition education sessions
• Discuss, within nutrition education framework, the application of the principles of teaching and learning
• Identify strategies for assessing learning needs of client groups
• Identify effective strategies for teaching and evaluating learning for small group education
• Plan, implement and evaluate a small group education session for a specific target population
• Describe the process for evaluating and developing nutrition education resources

Lectures
Each week there will be a presentation from the lecturer on differing aspects of small group education and a combination of activities involving both groups and individuals to be completed in class. To prepare for the activities there will be pre-reading and on occasions preparatory activities.

Non preparedness for the class will adversely affect your performance in class and ultimately affect your mark for this component of NUTR 4001. The workbook (practical book) that you will be completing each week will significantly contribute to your final mark
Assessment

**Assignment**  Each student will prepare an education session for a small group.
The details of this assignment (which is closely linked to your class activities) will be covered in the first class of the year and contained in your workbook - 50%

**Workbook and Activities** - 50%

*Although marked out of 100 this mark comprises 15% of the total mark for NUTR 4001*

**Recommended Texts**


3.2.3 DIETETIC PRACTICE

Coordinator  Beth Rohrlach

History Of Dietetics

Learning Outcomes
By the end of the session students will

• have developed an appreciation of the history of Dietetic Practice in Australia

Invited Speakers – Differing Roles Of Dietitians

Learning Outcomes
By the end of the session students will

• be aware of the scope and current areas of dietetic practice

Introduction To The Workplace

Learning Outcomes
By the end of the session students will

• have gained an insight into the clinical, community workplaces and industry
• have an appreciation of the organisational structure of both hospital and community workplaces and industry
• understand the roles of the various members of the health care and industry teams

The DAA Competencies

Learning Outcomes
By the end of the session students will

• have been introduced to concept of competency based learning and what this means for them
• have an appreciation of the process used to derive the current DAA competencies
• have been introduced to the DAA competencies

Resources Required

• Individual copies of the DAA Competencies (See Appendix 4.2 for an abridged list).

Professional Ethics

Learning Outcomes
By the end of the session students will

• appreciate the importance and necessity for professional ethics
• be familiar with the DAA Code of Professional Conduct and their meaning to the individual’s practice
• Will be aware of the role of the professional body in Australia – The Dietitians Association of Australia

Resources Required

• A copy of the DAA Code of Professional Conduct (Available on the DAA website)
Introduction To Placement

Learning Outcomes
By the end of the session students will

- understand the role of the practical placement as part of University Study
- be aware of the competencies being addressed during the placement program
- understand the components of the program
- understand the responsibilities of the student, university and placement supervisors
- be aware of any options available to the student as part of the placement program
3.2.4 FOOD SERVICE MANAGEMENT

Coordinators  Beth Rohrlach, Assisted by Carmel Lazarus and Jacquie Krassie (Food Service Dietitians), and Ann Dooley (Crows Nest TAFE).

A combination of lectures, site visits, TAFE and Food Service Placement Project.

Accreditation and Standards

Learning Outcomes
By the end of this session students will..

• be able to define Food Service Management
• be able to state the goals and objectives of Food Service Management
• understand the key differences between large and domestic scale food services
• be aware of the trends in both institutional and other types of food service provision
• understand how Dietitians are involved with the setting and monitoring of standards in differing environments
• understand the role of the Australian Council of Hospital Standards and its role in the measuring of Health Care Standards
• appreciate other standards exist, such as, ISO 9001 (International Standards Organisation)
• know where and how to access Standards for use
• have an awareness of the career opportunities for dietitians specialising in Food Service
• understand the management structure in the Food Service section of a large organisation

Resources Required

• Listing of Websites giving access to Standards

Food Service Systems

Learning Outcomes
By the end of this session students will..

• understand the definitions of food sources eg cook fresh, convenience food
• understand production systems
• understand distribution systems
• be able to distinguish between the different types of cook chill systems available
• be able to state the advantages and disadvantages of different production systems
• be able to state the advantages and disadvantages of different distribution systems
• be able to logically recommend (Group Activity) the most appropriate system for a given outcome
• have gained insight into the applications of different food systems (SITE VISITS)

Resources Required

• Brochures of different systems

Nutrient Losses in Food Service

Learning Outcomes
By the end of this session students will …..

• understand how different cooking and preparation methods affect the nutrient content of foods

Preparation

• Review water and fat soluble vitamins lectures
• Nutrient content of foods
• Food service pre-reading from texts.
• Read various studies on nutrient losses with graphs

**Resources Required**

• Tables Various Studies of Nutrient Losses

**Food Safety**

**Learning Outcomes**
By the end of this session students will …..

• be aware of current food regulations
• understand the importance of the food regulations
• be aware of changes in the national food safety standard FSANZ (food standards Australia & NZ.
• be aware of the NSW Dept of Health Guidelines
• understand the difference between a Regulation and a Health Dept Guideline
• understand why there are increasing food safety issues today
• understand the impact safety issues have on food service delivery systems and menu planning.
• be able to review food safety at an assigned project site
• understand the background to and the principles of HACCP based Food Safety Programs
• understand the process of HACCP based Food Safety Programs

**Preparation**

• Review the Principles of Microbiology

**Resources Required**

• Excerpts from the food safety standards

**Food Preparation (Conducted by Crows Nest TAFE)**

**Learning Outcomes**
By the end of these sessions students will...

• understand the basic principles of food preparation
• be able to prepare foods / recipes using cooking methods available to food preparers in Australia
• be able to modify for renal, differing textures, NAS and cardiovascular diets and note differences
• appreciate the differences between the different fats and if using low fat for food preparation
• be able to read and interpret recipe instructions
• understand how to approach recipe modification (recipe writing)
• be able to determine the food cost of a recipe

**Resources Required**

• See TAFE Handbook for a Listing of Uniform and Equipment Requirements

**Commercial Cookery (Conducted by Crows Nest TAFE)**

**Learning Outcomes**
By the end of this session students will

• be aware of the different categories within commercial cookery and how this affects meal presentation, and servings and is affected by the clients and their expectations
• understand why there are differences between domestic and commercial food preparation
• be aware of the differences between domestic and commercial food preparation
• understand the considerations necessary when converting a domestic recipe for commercial preparation
• be able to identify the core commercial equipment used in institutions
• be aware of the range of commercial equipment available and how to source information about the equipment
• be aware of the advantages and limitations of using this core commercial equipment
• understand the principles of portion control
• appreciate the need for portion control in commercial food service provision
• be aware of the frequently used equipment sizes in institutions
• understand the impact equipment size has on food preparation and successful recipe outcome.
• be familiar with the principles of recipe standardisation

Resources Required
• Listing of Commercial Equipment and equipment sizes most commonly used in Hospitals, Childcare Facilities and Nursing Homes

General Menu Planning

Learning Outcomes
By the end of this session students will..

• understand the principles of menu planning taking into account individual food item costs and food safety issues
• be able to apply the relevant nutrition guidelines to general hospital menus
• be aware of available menu assessment tools
• be able to apply an appropriate menu assessment tool when evaluating a menu
• be able to assess and improve upon an existing menu assessment tool
• be able to develop a menu assessment tool for a given situation and will apply this tool to assess a menu.
• understand key menu planning issues of special groups eg meals on wheels recipients, hostel residents, worksite cafeterias, sports facilities, boarding schools, school canteens, hostels, childcare facilities etc
• be able to identify the necessary difference between childcare and paediatric hospital menu planning
• be able to plan an appropriate menu for a given scenario
• be able to design a menu to meet a specific environment and client

Preparation
• Review the Dietary Guidelines
• Review food patterns and food habits of Australians
• Revise Weight losses during food preparation
• Appreciate which food items, when combined, constitute a meal
• Awareness of the limitations when dealing with total weight of recipes

Health Promotion and Menu Planning

Learning Outcomes
By the end of this session students will..

• be able to develop a menu that both promotes good health and is commercially viable
• appreciate the definition of a “healthy Menu” within a specific context
• appreciate the quantity and type of food choices included in a menu that influence the determination of the a “healthy menu”
• understand the concept of marketing healthy options on a menu
• aware of issues such as sponsorship in Bistros and Worksite cafeterias can influence the foods offered
• understand how ‘healthy foods’ are developed.
• understand how nutrition policies for worksite food service are developed.
• be able to utilise the resources offered by food producers for marketing health promotion and to encourage healthy eating
• be able to apply the appropriate health promotion principles to menu planning
Preparation

- Australian Guide to Healthy Eating and other such tools e.g. core food groups etc
- Nutrition Policies

Therapeutic Menu Planning

Learning Outcomes
By the end of this session students will
- understand equity of choice is essential when planning a menu despite the physical / medical limitations of the client.
- using their therapeutic knowledge, be able to modify general menus for particular clinical areas.
- gain an appreciation of food service limitations in therapeutic menu planning eg. texture modification needing to be more nutrient dense. Focus on food service practicalities.
- be able to integrate the diet menu with the general menu.

Preparation

- Relevant clinical knowledge

Evaluation Of New Products

Learning Outcomes
By the end of this session students will
- gain an awareness of issues when evaluating new products for particular areas.
- be able to source appropriate information for checklist development.
- be able to develop a checklist for a new product for a specific market including cost and shelf life.
- be able to develop an evaluation tool for new products by sourcing appropriate information.
- be able to make appropriate recommendations based on the above

Quality Insurance

Learning Outcomes
By the end of this session students will

- understand what is Q1 and why it is conducted.
- be able to suggest appropriate activities to evaluate food services in particular areas.
  (component of Major Project)

Occupational Health and Safety

Learning Outcomes
By the end of this session students will

- be aware of the OH&S Act.
- understand the issues related to food services in complying with the OH&S Act.
- Site projects look at design aspects and the operation of the site.

Resources Required

- Plain English version of OH&S Act
Staffing Classification and Basic Rosters

Learning Outcomes
By the end of this session students will
- be able to determine ‘award’ and related terminology
- be aware of staffing classifications established and levels of supervision
- be aware of the staffing needs for service provision in food services.
- be aware of staffing options available in meeting food service provision.

Preparation
- Pre-read definitions, awards and classifications.

Budget Awareness

Learning Outcomes
By the end of this session students will
- be able to list the key components of the budget – salaries, goods and services, food, RMR.
- be able to interpret a budget.
- be able to define ‘budget’
- understand financial controls and the reporting systems in place.
- understand the importance of budget control in all aspects of food service management.

Computers in Food Service

Learning Outcomes
By the end of this session students will
- be aware where computing is used in food service management.
- know the advantages and disadvantages of using computers in food service.
- be aware of the systems available in Australia.
- be aware of future trends in Food Service computing.

Preparation
- Recipe writing skills

Major Projects – this forms part of your Food Service Practical Placement.

Learning Outcomes
By the end of this session students will…
- review a site based on all topics covered under ‘Food Service Management’ - particularly involving food safety, menu planning, and food service systems.
- be able to comparing the site with available standards, making recommendations, developing a checklist, prioritising recommendation; and assessing the menu using another evaluation tool besides that already used by the site.

Preparation
- Food Service Management Lectures and Activities

ESSENTIAL TEXT REQUIRED FOR TAFE CLASSES
RECOMMENDED FOOD SERVICE TEXTBOOKS (For reference only – not required to be purchased).


Food Service Standards

3. NSW Health Department. Reference Code for a Conventional Cook Chill Food System.

References

20. NSW Health Department. Food and Nutrition – Directions for NSW. Healthier Choices for Hospitals. State Health Publication No. (HP) 96-0195
22. NSW Health Department. Food and Nutrition – Directions for NSW. Healthier Food Choices for Child Care Centres. State Health Publications No. (HP) 96-0196.

Food Safety References


Computers in Food Services References

   JADA 90: 1067 – 1071.
   the 16th National Conference of the Dietitians Association of Australia, p:62
   Nov. 97: 25.

Articles

2. Coote D and Williams P. “The nutritional implications of introducing a continental breakfast in

Resources – QI

Standards

   a. Pure Food Act (1908) NSW and amendments / additions 1985
   b. Occupational Health and Safety Act (NSW) 1983
   c. NSW State Government contract requirements for food specifications
   e. Pending “ANZFA Food Hygiene Standards”

Bibliography

   a. R. Schiller and V. Behm “Auditing Dietetic Services in Hospitals” Hospitals
      53 (8): 122 – 127, 1979
      53 (9): 105 – 114
      53 (10): 118 – 124
      53 (12): 113 – 118
   
   b. “Quality Assurance Program Implementation” An Introductory Manual for Health Care Staff
   c. ME Turner and PB Manning “Quality Control in Food Service” AVI Publishing Co.,
      Westport, 1983.
   d. Berwich, Donald “Continuous Improvement as an Ideal in Health Care”, New England Journal
   e. Imai, Masaaki, Kaizen – The Key to Japan’s Competitive Success New York: Random
      House Business Division, 1986.
   f. James, Brent, Quality Management for Health Care Delivery Chicago: Hospital Research
      and Educational Trust of the AHA, 1989.
   h. DeLuco D, Cremer M, “Consumers’ perceptions of hospital food and dietary services.”


3.2.5 INTRODUCTION TO MANAGEMENT

Coordinator Margaret Nicholson and Beth Rohrlach

Health Services

Learning Outcomes
By the end of this session students will

- have an understanding of the structure of the Health system in NSW
- be aware of the hospital organisational structure including the area and community structures
- be able to identify the position of the dietitian within the hospital / area health context
- understand the term allied health
- have an appreciation of how services are costed
- have an awareness of the political environment surrounding health services
- be able to describe the organisational framework of a Nutrition and Dietetics Department
- be able to list the issues involved in working in a multidisciplinary team
- be able to describe the goals and objectives of a Dietetics Department
- understand how a job description is formulated for department personnel
- understand the rational behind a department’s Policy and Procedure Manual
- be able to identify the information necessary for inclusion in a department’s Policy and Procedure Manual
- be aware of current trends in NSW Health

Leadership

Learning Outcomes
By the end of this session students will

- be aware of the different management theories
- be able to define management
- be able to describe the role of management in the workplace
- be able to define both leadership and motivation theories
- be able to describe the role of leadership and motivation in the workplace
- understand the processes involved with planning, problem solving and decision making
- understand how the processes of planning, problem solving and decision making are applied in the workplace

Time Management

Learning Outcomes
By the end of this session students will

- understand the importance of record keeping including a diary
- understand the importance of planning work
- be aware of methods used to manage multiple priorities
- understand the delegation process – reasons for and how to
Performance Management

Learning Outcomes
By the end of this session students will

• be able to use a job description to self monitor performance and achievements
• understand the mentoring process
• be able to distinguish between mentoring and professional supervision
• be able to outline the procedures used for staff selection and appraisal
• be familiar with the methods employed to resolve disputes and for discipline staff
• be able to list the documentation that must be kept for staff members

Sole Practitioner - Particularly With A Country Perspective

Learning Outcomes
By the end of this session students will

• understand the importance of developing and maintaining a business plan
• be able to list the components of a business plan
• appreciate the importance of the APD program offered by DAA
• be able to list activities that can be undertaken In order to keep up to date with current dietetic practice
• be aware of the professional and community expectations of a sole practitioner
• have an appreciation of the typical week for a rural practitioner
• be aware of methods to assist the sole practitioner with the management of their workload
• be aware of the responsibilities of being a Head of Department / Sole Practitioner eg Business Plans
• be aware of some ways used to find opportunities for the Dietitian’s services in the community

Quality Assurance – Quality Insurance

Learning Outcomes
By the end of this session students will

• recognise the reasons for conducting Quality Assurance programs within a hospital and a dietetics department
• be familiar with the methods used in Quality Assurance programs
• be able to outline the hospital accreditation process including EQUIP
• be aware of the role of Quality Assurance in maintaining hospital accreditation

Private Practice - Managing A Practice

Learning Outcomes
By the end of this session students will

• appreciate the physical and professional resources required to establish a Practice
• appreciate what needs to be done to maintain a practice including the marketing of the practice
• be aware of the differing “models” of Practice – the Rates and Contracts – and the impact on each of the stakeholders -Health Funds, the Client and yourself.
• be aware of the documentation necessary
• be aware of any legal requirements eg child protection regulations etc
• appreciate the need for insurances and professional indemnity and where to organise.
• be aware of the resources that are most useful in a private practice and their source
• understand what is good business practice as defined by the DAA Code of Professional Conduct
Industrial Relations

Learning Outcomes
By the end of this session students will

• be able to outline the legislation covering employment, including conditions and salaries
• be able to outline the structure of the union
• be able to outline the activities of HREA
• be able to outline the meaning of EEO and how it applies both in employment practices and daily work
• be able to list the activities of the workplace and vocational branches
• have been exposed to examples of regulations pertaining to conditions and salary entitlements eg flexible work practices
• be able to outline how and where to seek further assistance in matters relating to workplace conditions and salaries
3.2.6 BASIC RESEARCH METHODOLOGY

Coordinators  Beth Rohrlach, Fiona Simpson and Associate Professor Samir Samman

Preparation

Review NUTR 3901- 
• Statistics and Epidemiology for Nutrition 
• Nutritional Epidemiology – critical appraisal of selected journal articles 
• Survey and Questionnaire design

Review NUTR 3902 – 
• Program Planning – Needs Assessment 
• Program Planning – Goals, Objectives and Strategies 
• Program Planning – Evaluation

Research topic assigned at the end of semester 1 and completed in semester 2

Introduction To Research Exercise

Learning Outcomes

By the end of this session students will
• be able to differentiate between qualitative and quantitative research methods 
• be familiar with the Code of Ethics as described in NH and MRC proposals 
• be able to identify parametric and non-parametric statistical tests 
• understand what is meant by parametric and non-parametric statistical tests 
• be familiar with the theory of epidemiology 
• have formatted a research submission and proposal 
• be able to establish a hypothesis 
• be able to pose a research question 
• be able to develop a research plan 
• be able to apply research and evaluation methods to address nutritional problems. 
• be able to understand and apply basic statistics to nutritional data. 
• appreciate the need to keep records in a fashion that could be evaluated 
• be aware of the different styles of record keeping – their advantages and disadvantages 
• be able to identify the components that contribute to the cost of implementation of research findings 
• be able to estimate the cost of incorporating findings from a research project 
• appreciate the importance of self assessment 
• be able to identify the elements to be assessed when reviewing research findings 
• be familiar with the assessment process options for evaluating methodology and findings of own and others’ research 
• have undertaken a self assessment of their research project

The research project will take the format of a written case study with research rationale evidence based and application.
4.1 NATIONAL COMPETENCY STANDARDS FOR ENTRY -LEVEL DIETITIANS

(DAA,1994, AMENDED 2005)

Unit 1. Demonstrates knowledge sufficient to ensure safe practice

• Demonstrates a thorough knowledge of the theory of human nutrition and dietetics to a level which supports safe practice.
• Demonstrates a broad and thorough knowledge of food use in Australia.
• Demonstrates a thorough knowledge of food science as it relates to nutrition and dietetics.
• Demonstrates a thorough knowledge of food service systems.
• Utilises the basic principles of education theory as it applies to dietetic practice.
• Applies theories of communication to the practice of counselling.
• Demonstrates a basic knowledge of theories of organisation and management.
• Demonstrates a basic knowledge of the theory of health promotion.
• Demonstrates a basic knowledge of nutrition research methodology

Unit 2. Interprets and translates scientific knowledge and principles related to nutrition into practical information

• Utilises nutrition and health-related data to identify nutrition problems
• Translates technical nutrition information into practical advice on food and eating
• Develops education resource material
• Utilises nutrition and health-related data and scientific literature in identifying nutrition problems in individuals and in the community.

Unit 3. Collects, organises and assesses health and nutrition data relating to the health and nutritional status of individuals and groups

• Collects food intake data
• Provides quantitative and qualitative assessments of food intake data
• Collects social, biomedical and environmental data.
• Assesses and assigns priorities to all data
• Draws justifiable conclusions from data

Unit 4. Manages nutrition care for individuals

• Negotiates case management goals
• Prepares plan for achieving management goals
• Counsels individuals and families on nutrition, food and diet issues
• Plans and implements meal and food orders for individuals
• Monitors progress of the individual’s condition and care and adapts plan as necessary.
• Documents all steps of the process
Unit 5. Manages components of programs which deal with nutrition issues in the community as part of a health care team

- Determines goals for dealing with nutrition issues in the community
- Develops plans for dealing with nutrition issues in the community
- Develops plans for group education sessions
- Facilitates learning in small groups
- Documents all steps of the process

Unit 6. Influences and contributes to activities promoting a safe and nutritious food supply

- Acts as an advisor and advocates on behalf of individuals, groups and the profession to positively influence the wider political, social and commercial environment, about factors which affect eating behaviour and nutritional standards.
- Acts as an advisor and advocates to positively influence the wider environment on factors affecting eating
- Applies nutrition principles to food service
- Describes meal plans and menus for individuals and groups including the formulation and modification of suitable recipes and serving methods.

Unit 7. Demonstrates basic skills in research and evaluation

- Adopts a questioning and critical approach to all aspects of practice
- Evaluates practice on an ongoing basis
- Applies research and evaluation findings

Unit 8. Demonstrates an organised professional and ethical approach to work

- Develops and maintains a credible professional role by commitment to excellence of practice
- Works effectively within the organisation
- Applies quality management principles to all aspects of professional practice.
- Demonstrates professional leadership to promote the contribution of nutrition and dietetics to health and disease
4.2 DAA CODE OF PROFESSIONAL PRACTICE

DIETITIANS ASSOCIATION OF AUSTRALIA
BY - LAW
CODE OF PROFESSIONAL CONDUCT

(By-law Made Pursuant to Clauses 9, 21, 37 of the Constitution)

Revised August 2001

Preamble
The Dietitians Association of Australia (DAA) is a self-regulatory professional body which sets standards for best practice, fosters professionalism and provides the basis for internal disciplinary mechanisms for the protection of members and the public.

The Code of Professional Conduct sets minimum national standards for accountable conduct which promotes the health of the public and engenders confidence in the services provided by members.

The set of standards embodied in the Code of Professional Conduct differs from the Code of Ethics which relates to the ideals of the profession and the moral values that members voluntarily accept.

A member shall adhere to the Constitution, By-laws, rules of the Association, and all laws of the Commonwealth.

A member of DAA shall advance the science and art of food and nutrition by application of the objects of the Association in its Constitution.

A member has a responsibility to representatives from the wider environment which may include, consumers, customers, individuals, the public, groups, patients, students, employers, employees, organisations or a community to provide safe, competent practice and care.

1. Anti Discrimination
A member of DAA provides service objectively and with respect to the unique needs and values of individuals. A member must avoid discrimination on the basis of factors that are irrelevant to the provision of services, including, but not limited, to race, colour, sex, religion, political opinion, national extraction, social origin and age.

2. Confidentiality
A member of DAA maintains the confidentiality of information, including, but not limited to:
(a) treating as confidential appropriate information;
(b) using discretion with regard to confidentiality; and
(c) seeking consent wherever practicable
3. Conflict of Interest
A member of DAA declares the potential for conflict of interest, and stands aside when conflict of interest exists. A conflict of duty and interest arises where a member's private interests may reasonably be seen to be in conflict with official duties. A conflict of interest can be either actual or potential, financial or personal, and can sometimes extend to the interests of immediate family.

4. Representation of Qualifications
A member of DAA accurately presents professional qualifications and credentials, including, but not limited to:
(a) membership class within DAA;
(b) using 'APD' or 'Accredited Practising Dietitian' only when current to the qualification;
(c) using 'Specialist', 'Advanced Practitioner' or 'Fellow' only when conferred;
(d) permitting use of their name for the purpose of certifying that services are rendered only if the member provides or supervises the provision of those services;
(e) identifying areas of expertise; and
(f) identifying roles or positions held in or on behalf of DAA.

5. Competence
A member of DAA assumes responsibility for their competence, including, but not limited to:
(a) recognising the limits of their qualifications and expertise;
(b) recognising the extent of their knowledge in specific areas of practice;
(c) applying practice guidelines where appropriate;
(d) continually evaluating and refining their services based on outcomes;
(e) continually updating and expanding their knowledge and skills required for professional competence;
(f) supporting the application of research findings to their professional practice;
(g) providing sufficient information to enable others to make informed decisions; and
(h) presenting substantiated information and interpreting controversial information, without personal bias.

6. Practice
A member of DAA acts with honesty and integrity, including, but not limited to:
(a) collaborating with clients to assess needs, background and resources and to establish mutual goals;
(b) informing clients of their rights and accurately documenting proceedings;
(c) applying knowledge and skills to determine the most appropriate action;
(d) implementing quality practice by following legislation, policies, procedures and practice guidelines;
(e) collaborating with other professionals as appropriate;
(f) sharing knowledge and information with clients and other professionals as appropriate;
(g) fostering excellence and exhibiting professionalism in practice;
(h) making and fulfilling professional commitments in good faith.
(i) using factual information and not promoting or advertising in a misleading manner; and
(j) providing objective evaluation of candidates including: for professional association membership, awards, scholarships, or job advancements

7. Research
A member of DAA acts with due consideration of ethical practice, and observes conventions of scholarly enquiry when engaged in study and research including, but not limited to:
(a) participating in or generating research to enhance knowledge;
(b) sharing research data and activities as appropriate;
(c) ensuring that anonymity and privacy of study participants are protected and that information is obtained by consent;
(d) protecting the interests of research participants above members' personal interests;
(e) reporting research and evaluation results accurately and objectively;
(f) acknowledging the contribution of co-workers in the publication of original material; and
(g) applying standards relating to copyright and intellectual property

8. Application of the Code of Professional Conduct
It is the responsibility of each member to evaluate practice and maintain competence as well as to evaluate the professional standards and contribute to the objects of the Association.

The Code of Professional Conduct shall be adopted by all members to ensure that they will continue to be recognised by the public as the most valued and credible source of food and nutrition information.

The Code of Professional Conduct is enforced by DAA under the Complaints and Disciplinary Procedure By-law and reviewed from time to time.
Continuing education

A guide to critical reading: how to evaluate a nutrition research article

Samir Samman and A. Stewart Truswell

Continuing education and the APD program
Reading this article is an ideal activity for APD members to include in your CPD log, and putting it into practice with papers relating to your personal learning goals is recommended. Record the time taken, to the nearest hour, to read the article and any associated research.

Background
Critical reading helps in thinking about a subject in a clear, deep and broad way. It is particularly useful when there is a need to keep abreast of a rapidly evolving literature, such as that of nutrition. It is not realistic to read all articles published in the ever-increasing nutrition research literature. But to maintain and improve general knowledge in nutrition—as well as answer specific questions—a method for evaluating articles is valuable. The option of reading reviews and editorials is also there but these can express the writers' bias and good reviews are not always there when you need them. Ideally, nutrition professionals should be able to read research articles and see their strengths and weaknesses and whether the conclusions support present practice or suggest change.

When reading a paper in a scientific journal, readers should ask themselves a series of questions. Some of these (not necessarily in order of importance) are given below.

Source and authors
- Note the name of journal and offer an opinion about its standing in the scientific literature, for example its impact factor. Journals are ranked, evaluated, and compared based on their impact factor. This factor is a measure of the frequency with which the 'average article' in a journal has been cited in a particular year or period. Important papers sometimes appear in low impact journals, and poor papers can appear in high impact journals. (Nutrition journals do not usually have very high impact factors.)
- Who are the authors? Are they experienced or newcomers. Is their place of work one that is well equipped?

Title and abstract
- Do the title and abstract reflect accurately the data which are presented? Often, the title and abstract are the only parts of the paper which are read, for example via a Medline search. After reading the paper, read the abstract again and think whether you agree with the way the paper was summarised.
- Abstracts should be clear, complete and informative. The main components of the paper should be echoed. Many abstracts are structured with subheadings such as aims, methods, results and conclusion.

Introduction
- Has the background been adequately reviewed?
- What are the goals of the research?

- What questions is this research designed to answer? Is it clear why it is important to know the incidence of a particular condition or undertake an intervention trial?
- Why or how are these questions important for nutrition?
- From what perspective are the authors working?
- Is this approach appropriate for this research, and why?
- Did the authors state their theoretical perspective or hypothesis to guide the research?
- What is the hypothesis? If the hypothesis is presented as a negative such as: 'Supplementation with 5 g vitamin C will not induce gall stone formation', it is known as the null hypothesis. Authors rarely believe the null hypothesis when they embark on their research.
- Do the authors state their biases and assumptions, or can you anticipate what they might be?

Methods
- Is the approach epidemiological, clinical or laboratory-based? The questions are different for each type of research. If it is epidemiological, then what type of study is it? If it is clinical, was it adequately controlled? If the experiments are in animals, are they suitable models for human situations?
- What was the research design? What is the setting?
- What were the selection criteria?

Human Nutrition Unit, Department of Biochemistry, University of Sydney, NSW
S. Samman, PhD, Senior Lecturer
A.S. Truswell, MD, DSc, Emeritus Professor
Correspondence: Human Nutrition Unit, Department of Biochemistry, University of Sydney, NSW 2006. Email: s.samman@biochem.usyd.edu.au

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• If a change is an end point, is its size an important one and was the number of subjects or measurements to detect this change calculated statistically before the study was undertaken?
• In the description of the study design is it clear what data are to be collected, how and why? Decide what you need to know about the methods in order to understand the results, conclusions and the bottom line.
• See Table 1 for some useful definitions.

Results
• What were the major findings? Were they biologically significant? What statistical method was used? What level of statistical significance was reached?
• Are the results presented in a way which is relevant to the question that is being addressed?
• Are the figures and tables appropriate? Do points on figures correspond to numbers in the text?
• Are the results supportive or contrary to the hypothesis?
• Were there any unintended changes in important variables such as body weight, body composition or alcohol consumption?

Discussion and conclusion
• Was the research carried out ethically?
• Are the authors’ findings summarised clearly? Are the results discussed in relation to the hypothesis? Are the strengths and weaknesses of the research discussed. Could these findings be interpreted differently? (See Table 2.)
• Do the results justify the conclusions?
• What makes the research persuasive or credible?
• Can these findings be extended to other aspects of nutrition?
• What are the implications of the research to nutrition and to the Australian setting?
• How do the findings contribute to our understanding of this area of nutrition research? Do the results make a significant contribution to nutritional science?
• How do the results fit into the pre-existing literature on the topic?

Other issues
• Was there an editorial published with the paper?
• Have there been letters to the editor of the journal appearing in the six to nine months afterwards commenting on aspects of the study?
• Who sponsored the research? Is this relevant? Do the authors record any possible conflict of interest?

Table 1. Useful definitions for understanding study designs

<table>
<thead>
<tr>
<th>Design</th>
<th>Description</th>
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<tbody>
<tr>
<td>Case-control study</td>
<td>Patients are compared with controls to see how their exposures to potential causative factors may have differed. Also called retrospective because the disease already exists.</td>
</tr>
<tr>
<td>Cohort study</td>
<td>Data are collected from a group who do not have the disease under investigation. The subjects are then followed up to see whether the development of disease is related to the diet.</td>
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<tr>
<td>Crossover</td>
<td>Each subject receives all treatments which are being investigated, including control treatment, usually in random order, sometimes separated by a wash-out period.</td>
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<tr>
<td>Double blind</td>
<td>Subjects and investigators do not know which treatment they were receiving. The treatments are coded and a third party holds the code.</td>
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<tr>
<td>Factorial design</td>
<td>Allows investigation of the effects of two or more than one variable on a given outcome. For example, a 2 x 2 factorial design testing the effect of placebo, iron alone, vitamin C alone, or iron plus vitamin C on iron status.</td>
</tr>
<tr>
<td>Paired comparison subject</td>
<td>Different treatments are compared in the same subject.</td>
</tr>
<tr>
<td>Parallel group design</td>
<td>Each group receives a different treatment, with both groups being entered at the same time. Results are analysed by comparing groups.</td>
</tr>
<tr>
<td>Placebo controlled</td>
<td>Subjects in the control group receive a placebo supplement which ideally looks, tastes and smells like the active pill.</td>
</tr>
<tr>
<td>Randomised controlled trial</td>
<td>Subjects are allocated randomly to either receive a trial of a treatment or placebo. The result is usually measured as a change in a risk factor.</td>
</tr>
<tr>
<td>Single blind</td>
<td>Subjects did not know which treatment they were receiving.</td>
</tr>
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</table>

Table 2. Useful questions for interpreting an epidemiological study

<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>Is there a valid association (positive or inverse)?</td>
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<tr>
<td>Is the association statistically significant?</td>
</tr>
<tr>
<td>Is the association likely to be due to bias?</td>
</tr>
<tr>
<td>Is the association likely to be due to confounders?</td>
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<tr>
<td>To go further and judge if cause and effect</td>
</tr>
<tr>
<td>Is the association strong?</td>
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<tr>
<td>Is the hypothesis biologically credible?</td>
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<tr>
<td>Is this finding consistent with other studies?</td>
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<tr>
<td>Is the time sequence compatible?</td>
</tr>
<tr>
<td>Is there evidence of a dose-response relationship?</td>
</tr>
</tbody>
</table>

(6) Based on Hennesen CH, Burin JE, Mayrent SL. Epidemiology in medicine. Boston: Little Brown; 1987
Further reading


