Study and Research Skills in the Health Sciences
Orientation Week Screening – Thursday 22nd February 2007

Background/Rationale

The University environment is one in which you will be exposed to many new and different experiences and challenges. You will meet people from different backgrounds; encounter different methods of course delivery and course materials of a more challenging nature, and need to cope with varying expectations of what, and how much, you will successfully achieve. Initially, courses may appear to be presented in a foreign language, as lecturers routinely use unfamiliar, discipline-specific terminology in classes. As part of your studies you will be required to read and interpret various course materials, critically evaluate and synthesize them into a coherent story, and effectively communicate ideas and findings using the appropriate format and language for the discipline area. All of these requirements assume at least a basic level of skill in accessing and critically analysing discipline-appropriate literature.

The short task that you are asked to undertake is aimed at identifying your current level of ability in recognising, extracting and logically organising key points from literature available on a topic. The outcomes of this task will enable us to provide you with appropriate support (e.g. tutorials, workshops, online guides) to enable you to develop and refine the research skills necessary to succeed in your studies in Health Sciences.

Task Instructions:

Read the two short articles about obesity printed on the reverse side of this handout and complete tasks 1 and 2.

1. *Integrate the information presented in the two articles to write your own dot-point notes on the worksheet attached*. To do this:

    - Identify 3-4 key ideas from the articles

    - Use these key ideas to formulate headings

    - Make bullet-point notes and list them under these headings.

    - After each point, indicate its source, i.e. whether the idea came from article 1, article 2, or both

    - Provide a title that embodies the content of your notes.

2. Write one or two short paragraphs (incorporating appropriate sentence structure, spelling and grammar) that address the following questions.

    - Which of the two articles do you consider to be the better source? On what characteristics/features of the article have you based your choice? / How have you arrived at your choice?

Childhood obesity: modernity's scourge

Overweight and obesity affect about 23% of Australian children and adolescents, with 6% being obese.[1] These are conservative estimates, as there has been no systematic monitoring of the prevalence of overweight and obesity in Australian children and adolescents since 1995. However, over the previous decade, the prevalence of overweight children has almost doubled, and the prevalence of obese children more than tripled.[1,2]

Health inequalities related to overweight and obesity are evident. There is a higher incidence of overweight and obesity in children of parents of particular backgrounds,[3] and maternal education is the strongest social determinant of overweight and obesity in childhood.[4] Although there are limited national data, and combined New South Wales, Victorian and National Nutrition datasets[1] failed to find a rural/urban difference, Victorian epidemiological data show a statistically significant, higher proportion of overweight and obese boys in metropolitan areas, but this difference was not found for girls.

The health consequences of overweight and obesity are substantial.[5] Issues of social acceptance, athletic competence and physical appearance are well known to obese children and affect their sense of social and psychological wellbeing. Obese children with decreasing self-esteem are more likely to smoke and drink alcohol compared with those whose self-esteem increases or remains the same.[7] Obese children and adolescents may also have a range of medical conditions including hypertension, dyslipidaemia, and even type 2 diabetes. Other problems, such as musculoskeletal discomfort, obstructive sleep apnoea, heat intolerance, asthma and shortness of breath, greatly affect their lifestyle.[8]

Addressing the determinants of health and wellbeing for children and adolescents will improve population health and wellbeing overall. The overarching cause of the obesity epidemic is energy imbalance — a relative increase in energy intake (food intake) together with a decrease in energy expenditure (decreased physical activity and increased sedentary behaviour). Identifying the most important predictive determinants of each of these behaviours, as well as the most effective and sustainable remedial strategies, is complex and involves parental education and employment; housing environments; play, recreation and physical activity; food and nutrition; accessible active transport; and child-friendly physical and social environments.[9]

From: Waters EB and Baur LA 2003 Childhood obesity: modernity's scourge. Medical Journal of Australia 178(9), 422-423.
http://www.mja.com.au/public/issues/178_09_050503/wat10857_fm.pdf

Halting the Obesity Epidemic: A Public Health Policy Approach (2000)

Traditional ways of preventing and treating overweight and obesity have almost invariably focused on changing the behavior of individuals, an approach that has proven woefully inadequate, as indicated by the rising rates of both conditions. Considering the many aspects of American culture that promote obesity, from the proliferation of fast-food outlets to almost universal reliance on automobiles, reversing current trends will require a multifaceted public health policy approach as well as considerable funding.

National leadership is needed to ensure the participation of health officials and researchers, educators and legislators, transportation experts and urban planners, and businesses and non-profit groups in formulating a public health campaign with a better chance of success. The authors outline a broad range of policy recommendations and suggest that an obesity prevention campaign might be funded, in part, with revenues from small taxes on selected products that provide "empty" calories—such as soft drinks—or that reduce physical activity—such as automobiles.

They conclude by saying 'we do not pretend that these suggestions alone will eliminate obesity from American society, but they will be valuable if they help to produce even small reductions in the rate of obesity, as even modest weight loss confers substantial health and economic benefits. Without such a national commitment and effective new approaches to making the environment more favorable to maintaining healthy weight, we doubt that the current trends can be reversed'.

From: Nestle M and Jacobson MF 2000 Halting the Obesity Epidemic: A Public Health Policy Approach. Public Health Reports 115, 12-24.
Web reference: http://www.cspinet.org/reports/obesity.pdf

Study and Research Skills in the Health Sciences: O-Week Assessment

Student Name: …………………………………………..   ID number: ……………………………………………..

Program: (tick appropriate box) ☐ BHlthSc   ☐ BSocSc/BHlthSc   ☐ BHlthSc/Law

☐ BHlthSc/BMaths&CompSci   ☐ B Psych(Hons)

Entry Category: (tick appropriate box) ☐ School leaver   ☐ Tertiary Transfer   ☐ Special (STAT etc)

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'O-Week' Research Skills Assessment: Marking Criteria

Student Name: _____   Student ID: _____

Marker: _____

↓ Facet of Inquiry	Student Autonomy Level 1 Students research at the level of a **closed inquiry** and require a **high degree of structure/guidance**	Student Autonomy Level 2 Students research at the level of a **closed inquiry** and require **some structure/ guidance**	Level 3
*A. Students **embark** on inquiry and so determine a need for knowledge/ understanding*	❑ Identifies some peripheral or duplicated ideas as key	❑ Identifies KEY ideas	❑
*B. Students **find/generate** needed information/data using appropriate methodology*	❑ Points/notes generated partially relate to the headings under which they are listed ❑ Notes produced are sourced predominantly from 1 text only	❑ Points/notes generated elaborate on the key ideas to which they are linked ❑ Notes produced draw on ideas from both texts	❑
*C. Students **critically evaluate** information/data and the process to find/generate it*	❑ Identifies indicators of source credibility and reliability but does not fully apply them in evaluating data or process	❑ Identifies several relevant indicators of source credibility and reliability and provides appropriate rationale for usage/inclusion of information	❑
*D. Students **organise** information collected/ generated*	❑ Has attempted a note-taking framework, but information is organised predominantly as a list of undifferentiated bullet points	❑ Uses a hierarchical note-taking framework that organises related information under the appropriate key headings.	❑
*E. Students **synthesise, analyse** and **apply** new knowledge*	❑ Produces point form notes (information is not directly copied or in sentence format) but notes separated according to source	❑ Combines and integrates ideas/data from different sources to generate notes	❑
*F. Students **communicate** knowledge and the processes used to generate it with an awareness of ethical, social and cultural issues*	❑ Title is present ❑ Partial and/or incorrect acknowledgement of sources of information	❑ Title relates clearly to the key ideas presented in the notes ❑ Full and correct acknowledgement of sources of all noted information	❑