

FACULTY OF KINESIOLOGY

Leading the way to healthy living through education, research, activity and inspiration



'Healthy UNI': a decade of work surrounding student health

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Wellness is a complex multi-dimensional phenomenon that requires an "integrated health" approach. Institutions of higher education have long been concerned about promoting health among students and there are many well-known advantages to placing value in health. Research states the attainment of health is achieved not only through individual effort but must be supported proactively in the culture of one's environment.

Kinesiology Culture

My home faculty is Kinesiology, which champions the culture of a healthy and physically active environment. Students within the program graduate 'with a degree within a degree' because there is an underlying emphasis on a life course approach to diet, nutrition, physical activity and the prevention of chronic disease. Simply put students get to take stock of their health. They learn to set priorities surrounding behavioural change while increasing their knowledge of physiology and their skills sets associated with exercise prescription and health promotion.

Signature Course

One such course that contributes intentionally to student health is Kinesiology 433. The lectures are focused on health literacy, primary prevention screening and cardiovascular disease risk reduction. The culminating project is a written Personal Health Report where students summarise their individual lab

components including personal cholesterol values, 3-day diet record, health risk appraisal, longevity index and their family tree. Quotes from the reports are used in the following semesters to highlight personal reflection. Lauren Voss a 2014 graduate wrote "Reflecting on my lifestyle and risk factors sets me up well for optimising healthy living and minimising health risks and unhealthy behaviours moving forward." Previous graduates state that learning their cholesterol numbers was one of the most empowering experiences for adopting a healthy lifestyle. The education received in Kinesiology both metaphorically and literally contributes to improving student quality of life.

Campus as a natural environment

After teaching the above course for about 10 years I wondered if these important health outcomes could be duplicated in students outside the Kinesiology faculty. After all, campuses can be considered the natural environment of students and therefore provide a setting for prospective epidemiological studies of young adult populations. Students can be followed for a period of 1-4 years and this is likely long enough to identify certain characteristics and personal habits that are strongly related to the probability of the onset of cardiovascular disease. In 2005, myself and Jeff Zahavich (M.Sc student), conducted a scoping review and found very little published data on health measures in this age group other than the ubiquitous term of the 'Freshman 15.' This gap in the literature was surprising because we had thought that universityaged adults had long been identified as a



group at risk for life style-related health problems. It seemed obvious that these problems would arise given that students were living on their own without the supervision of parents to guide their eating, physical activity, and alcohol consumption.

"Healthy UNI" Initiative

We turned to colleagues for assistance in developing a research driven program that would focus on facilitating healthy eating and improved physical activity levels for all students attending university. In 2007, Dr. Keith Sharkey (Faculty of Medicine) applied for and received an internal university grant to fund a "Healthy UNI" project. It was to be a twoyear campus-wide healthy lifestyle and social marketing initiative. The program was to include health promotion and surveillance activities and build capacity through involvement of students from different faculties, and other campus community members. The funding

provided a catalyst for several research studies and immediate recruitment of masters and honor level students.

FYI: Forgotten Youth Initiative

In the fall of 2008, we began a one-year prospective study recruiting young adults (16-19 years). There were 3 measurement points spread over the fall and winter semesters and several health parameters including cholesterol, glucose, vitamin D, bone density, lean mass etc. were measured. We titled it 'the FYI Health Study', because it's a nice play on words by sending a message of attention and it identifies the lack of research in our study population. One of the research objectives investigated whether university students prospectively gained 15 lbs in their 1st year as compared to age matched non-university students. About 78% of the freshman in the study gained weight, but the mean weight change only amounted to 3.3 lb (1.5kg). So much for the "Freshman 15"; a term



that originated in a 1989 article written by a college sophomore published in Seventeen Magazine.

Students and non-students were given their results in an individualised health booklet with one-on-one educational sessions. Despite this personalised attention it was challenging to get participants to complete the repeat testing. On a positive note the study did fulfill the surveillance objective of the 'Health UNI' initiative and also left the door open for more research.

Come take a RECESS with us

Fast-forward 4 years later and now Universities are becoming increasingly pressured to recognize declining student mental health on campuses. This time we were not surprised that undergraduate university students were commonly identified as an at risk population for suicide and depression. My lab group again completed a scoping review to identify and pinpoint gaps in the

relationship between depression and physical activity in university students. We found an overwhelming number of studies that supported physical activity as a means to ease and reduce symptoms of declining mental heath in student populations. An interesting outcome was that a reduction in physical activity was a defining characteristic of 1st year university students. In 2014, the RECESS (Recreation Exercise Caloric Expenditure Sitting and Sleep) study in 1st Year University Students was launched by the Faculty of Kinesiology and Active Living. The study used a pre-post test design and employed mostly questionnaires including the SF36-v2, a practical, reliable and valid measure of physical and mental health. Technology was incorporated as the students were given a Garmin Vivofit to wear on their wrist to objectively track steps and sleep duration during the semester.

When designing this study we were also cognisant of instructional innovation and the recent post-secondary call to have



students share in the responsibility for learning with each other. Undergrad students ran the RECESS study fulfilling another objective of the 'Healthy UNI' initiative.

Rewarding Behaviour Change

In retrospect the 'Healthy UNI' initiative was a great idea and the subsequent research projects provided the foundational wheels to keep moving forward. But after a decade of research we have come full circle with our approach to promoting healthy lifestyles to students. We have found our wings with the pilot program initially called 'Passport' in 2014. This fall (2015) we rebranded it and launched 'Level Up your U Calgary Experience' (www.ucalgary.ca/activeliving/levelup). It uses an online calendar that encourages students to sign up for events based on the seven 'pillars' of student wellness. It is campus wide, uses social marketing, and will build capacity through involvement of students from different faculties and other campus community members.

Sign up is free because it is paired to the University of Calgary Active Living membership, which is included in student tuition.

The 'Level Up' development was very labour intensive but the design employs a common sense approach to using incentives to elicit behaviour change. Each time a student participates by registering and attending events, their student number automatically assign points, which can be redeemed for rewards. (https://www.ucalgary.ca/levelup/Rewards). Our emphasis is that "health-has-a-value," which has been found to be one of the strongest predictors of healthy behaviours among university and college students.

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