



Windsor-Essex Cardiac Wellness Centre Newsletter

Encouraging Results... The Benefits of Cardiac Rehabilitation

Some Quick Facts....

Recent statistics have identified cardiovascular disease (CVD) as the highest single cause of death and disability in Canada, accounting for 37% of all deaths, and in economic terms, 15.3% of the cost of all illnesses (greater than \$20 billion per year) (1). It is estimated that there are over 60,000 heart attack admissions in Canada each year (2). In Ontario alone, there were over 25,000 admissions in 1999, with an average length of stay of 8 days in hospital (3). This number is projected to rise with the aging population and with the increasing number of inactive and obese children (4).

Cardiac Rehabilitation is Where it's at!

Participation in cardiac rehabilitation (CR) after a cardiac event is important in reducing hospital readmissions and mortality. Attention is focused on the management of the modifiable heart hazards initially identified by the Framingham study, which can delay or prevent the onset of coronary artery disease (CAD). Researchers (5) have shown that CR promotes recovery and enhances the post-surgical quality of life of participants by improving exercise tolerance, cardiovascular efficiency, psychological well-being, cholesterol levels, promoting smoking cessation, and reducing stress.

In 1996, the Cardiac Care Network of Ontario (CCN) published a document stating that a strategy of cardiac rehabilitation and secondary pre-

vention produces a 20-30% reduction in the chance of subsequent death due to cardiac events and all other causes, as well as cardiac-related hospitalization. In the same report, CR was found to be as cost-effective, or more so, than common interventions such as coronary by-pass surgery or angioplasty (7).

It is well-known that individuals who incorporate regular exercise into their lifestyle after myocardial infarction have improved rates of survival (6). In fact, specific modifications to exercise and diet can actually slow the progression of CAD. A study published in the Journal of the American College of Cardiology involving a low-fat, low cholesterol diet (fat less than 20% of total calories/day; cholesterol less than 200 mg/day) showed that a minimum of 1533 kcal/week of physical activity (walking 24 km/week) may halt the progression of CAD (8). Regression may be achieved with an energy expenditure of 2204 kcal/week (walking 32 km/week). So dust off your

Statistics from the Windsor-Essex Cardiac Wellness Centre

Since first opening its doors in July, 2001 for the provincial pilot study, the **Windsor-Essex Cardiac Wellness Centre** has graduated a grand total of 751 participants. The average participant is 63.5 years old, although females tend to be an average of three years older (65.5 for females versus 62.7 for males). There is generally a higher number of males enrolled in the program than females (70% male, 30% female).

One of our goals as health professionals is to teach you how to live a healthy lifestyle. But it is ultimately up to

you to maintain these "healthy habits". An evaluation by our very own Gloriana Jeun (9) based on questionnaires mailed out to 2001-2002 graduates reported that our program had successfully taught its participants the basic exercise principles (frequency, intensity, time and type) required to maximize the training effects of an aerobic workout. A total of 86% of the 178 (135 male, 43 female) respondents continued exercising after graduation, a higher compliance than reported after other CR programs (10). Excellent!

According to the SF-12 health-related quality of life questionnaire that each participant was asked to complete at the beginning and again at exit, psychological well-being improved by 7% for men and 14.6% for females following our 6-month program. Participants reported a greater ease at completing activities of daily living, as indicated by an improvement of 12.3% for men, and 9.5% for women in self-reported physical functioning scores of the SF12. Participants were able to exercise for a longer duration at a higher intensity, with a 1.7 average increase in maximal METs for men and 1.3 for women from the initial to the 6-month stress tests. Interestingly, a 1 MET overall increase in exercise capacity has been associated with a 12% improvement in survival, and a reduction in the risk of having another cardiac event! So it's safe to say that graduates of the Windsor-Essex Cardiac wellness are living a long, heart-healthy lifestyle and are feeling better, physically and emotionally ♥

Fundraiser Update.....

An Evening of Heart and Enchantment

On Friday, February 6th, 2004 for the second consecutive year, the Windsor-Essex Cardiac Wellness Centre held "An Evening of Heart and Enchantment", fashion show and silent auction featuring scenes from Life Production's "Chicago". The evening was once again full of laughs, style and bidding wars for silent auction items. A total of \$24,000 was raised! A heart-felt thank-you goes out to Tim Lumley, event coordinator, and all of the models, clothiers and volunteers involved. Without you, this "enchanting" evening could not have taken place. Mark your calendars for Friday, February 4th, 2005 for the next *Evening of Heart and Enchantment*.

The Path to a Better Heart

On May 16, 2004, for the fourth consecutive year "The Path to a Better Heart", took place at Malden Park. We had a record-breaking 291 competitive runners in the 5km run, 40 kids in the dash and 75 participants in the "Walk of Life" for Cardiac Rehabilitation, which took place on the same day across Ontario. We raised \$16,000 this year! If you did not have a chance to come out this year, the "Fun Walk" will be held as a separate event in 2005, catered more specifically to graduates and participants of the program, and their family members and friends. We'll keep you posted!

Golf Anyone?

We are hosting our first **Golf Tournament in October**. So for all of you golfers out there, we need your participation to make this event a success! You'll have a chance to demonstrate your skills that you always boasted about during your exercise days at the Cardiac Wellness Centre. The event will take place at **Fox Glen**, on **Saturday, October 16th, 2004**, with a dinner to follow. We are looking for golfers, volunteers, door prizes or corporate sponsors. This is a great opportunity to get involved, have some fun, and show your support for the program! Please call the Cardiac Wellness Centre for more information.

DID YOU KNOW??

All of your contributions remain local, and go **DIRECTLY** to raise funds for the Windsor-Essex Cardiac Wellness Centre, so that we can ultimately provide the best possible care to heart patients in Windsor and Essex County, by expanding our building, or buying new equipment. Please remember, we **ALWAYS** appreciate your support and your ideas!

Cardiac Wellness Staff: Winning Awards, Fighting Fires and Running Marathons!!

We are very proud of **Kim Stockinger**, our Nurse Practitioner who was awarded the **2004 Nursing Excellence Award** for Windsor Regional Hospital. This prestigious award recognizes outstanding achievements in the nursing field. What an incredible honour!

Congratulations is in order for **Shawn Fryer**, our kinesiologist, who (after a few applications & interviews) was finally hired to work for the Windsor

Fire Department! Shawn will be bravely fighting fires, while continuing to cover when needed here at Centre.

So who's running these marathons? Let me remind you that a marathon is 26 miles in duration, and it takes an incredible amount of discipline and training. Just being able to cross the finish line is a goal that many people set for themselves. **Jaye Kendrick**, our kinesiologist in Leamington ran the Boston Marathon in April and finished in

3:50 (that's 3 HOURS and 50 minutes!), 500th overall out of 3932 females in her age group. Jaye also ran the recently-held Ottawa Marathon along with **Jason Petro**, our program coordinator who came in 36th overall, out of 2127 male runners, finishing in 2:49. With all this exercise, it's safe to say that they practice what they preach and that their hearts are strong and happy! You should all be as proud as we are of your accomplishments.

References (from front-page article)

1. Statistics Canada. (2002). Canada at a Glance. Available at: <http://www.statcan.ca>
2. Weilgosz et al., (1999). The changing face of heart disease and stroke in Canada 2000. Ottawa, Ontario, Heart and stroke foundation of Canada.
3. Health Care in Canada, 2002: Canadian institute for Health Information and Statistics Canada (www.cihi.ca).
4. McGinnis. (1992). The public health burden of a sedentary lifestyle. *Medicine and Science in Sports and Exercise*, 24, S196-S197.
5. Lavie & Milani. (2001). Benefits of cardiac rehabilitation and exercise training programs in elderly coronary patients. *American Journal of Geriatric Cardiology*, 10, 323-327.
6. O'Connor et al. (1989). An overview of randomized trials of rehabilitation with exercise after myocardial infarction. *Circulation*, 80(2), 243-244.
7. Cardiac Care Network of Ontario. (1996) Planning for the Future of Cardiac Services in Ontario: Final Report and Recommendations. [online]. Available: <http://www.ccn.on.ca/publications/futur-xs.html>.
8. Hambrecht et al. (1993). Various intensities of leisure-time physical activity in patients with coronary artery disease: effects on cardio-respiratory fitness and progression of coronary atherosclerotic lesions. *Journal of the American College of Cardiology*, 22, 468-477.
9. Jeun et al. (2003). Exercise knowledge and practice following a six-month pilot outpatient cardiac rehabilitation program. Abstract and poster presented at CACR annual conference, Toronto, Ontario.
10. Mulder. (1981). Patient compliance to individualized home exercise programs. *The Journal of Family Practice*, 12(6), 991-996.