

## **Benefits in doing Resistance Training**

By Marie Murphy

Having a balanced body in which our two halves are symmetrical is the goal in resistance training. The more symmetrical we are the more efficient and easy our movements become which means less wear and tear is exerted on our bodies and we feel better because we are balanced.

A symmetrical body is also less prone to injury. A particular muscle group will be less likely to compensate for a weaker muscle group, thus overburdening that muscle group while further weakening and potentially injuring, the under-developed muscle group, if the weaker muscle group is balanced with the stronger grouping.

An example would be a breast cancer survivor who finds themselves out of balance. In many cases their pectoralis (chest muscle) and latissimus dorsi (back muscle) have been interfered with through radiation, treatment and surgery. If the imbalance is not corrected or improved upon it may cause more problems down the road along with the added risk and/or side effect of lymphoedema. In addition, the appropriate ratio of both strength and flexibility in opposing muscle groups is of vital importance to a breast cancer survivor.

The best cure for any person who finds themselves asymmetrical is doing progressive resistance training using dumbbells, to be sure that each muscle group is doing its equal share of work. Dumbbell exercises allow you to work each major muscle individually - we put our concentration on the weaker arm or leg and the weaker will lead the exercise. Free weights (dumbbells) will allow a greater adaptation to training and lower the risk of injury due to you controlling the weight and not the weight controlling you. Developing a symmetrical body entails focusing on all muscle groups equally through the work of a variety of exercises. The Murphy (METs) Programme uses all ten major muscles of the upper and lower body - emphasis is placed on developing a balanced physique.

The greatest benefits in doing resistance training with dumbbells is that the weight is divided into each hand separately to lift, pull or push the weight that is selected for each specific exercise. Lifting weights by using gym equipment, machine, barbell, pulley etc. and not free weights (dumbbells); will find that the stronger muscle group will compensate for the weaker muscle group because they are holding, pulling, pushing the resistance with both hands. The individual who chooses this technique of training will not realize they are favouring one side over the other and may be at a greater risk of injury. The format of the Murphy (METs) Programme; allows the individual to safely work towards bringing all muscle groups into line. When this is done, symmetry is achieved.

### **Note:**

I have completed three studies for breast cancer survivors. All women started their resistance training lifting either 500ml water bottles or 1kg dumbbell weights (working the ten major muscles of the upper body). They did two sets of ten repetitions for each exercise, progressing to 20 repetitions and lifted a volume of 160kg at the start of their programme progressing to over 1800kg at the end of their programme. The Programme ran for a period of 15 weeks and no adverse side effects occurred with any participant throughout all three studies.

The Murphy (METs) Programme: *The Irish Experience of Delivering Physical Activity for Cancer Survivors* has since been published and acknowledged by the American Institute of Cancer Research (AICR) 2012.