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Resistance Training after Breast Cancer Treatment
By Marie Murphy

Breast cancer survivors can find themselves out of balance; meaning that their two halves are asymmetrical. In many cases the 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.

Having a balanced body in which our two halves are symmetrical is the goal in resistance training and even more so after breast cancer treatment. 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.

The best cure for the asymmetrical body is doing progressive resistance training using dumbbells, to be sure that each limb is doing its equal share of work. Dumbbell exercises allow you to work each major muscle individually so that the stronger one can't pick up the slack. When training with dumbbells a breast cancer survivor will put their concentration on the weaker arm and the weaker arm 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. Murphy's resistance training programme uses all ten major muscles of the upper body; pectoralis major & minor, latissimus dorsi, brachioradialis biceps, triceps, anterior deltoids,, medial & posterior deltoids, trapezius upper & lower and obliques. 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 so that the weaker arm has no choice but to lift, pull or push the weight that is selected for each specific exercise. Breast cancer survivors who lifts weights by using gym equipment, machine, barbell, pulley etc. and not free weights (dumbbells); will find that the good arm will compensate for the weaker arm 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 Murphy's resistance training programme allows the individual to safely work towards bringing all muscle groups into line. When this is done, symmetry is achieved.



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Marie has completed three studies with the Irish Cancer Society for breast cancer survivors. All women started their resistance training programme 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 350lbs at the start of their programme (all ten exercises combined) progressing to over 4,000lbs at the end of their programme (all ten exercises combined). The Resistance Training Programme ran for a period of 12-16 weeks and no adverse side effects occurred with any participant throughout all three studies.

To read published article please go to Irish Cancer Society - [Report on the Success of the Physical Activity Pilot Study - 2011](#)

If you would like to sign up for a Breast Cancer Survivors Study please contact Eimear Cotter at the Irish Cancer Society 01 231 6624.