

Topic 8

The weaker sex – its stronger facet

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On average, women are 10 to 15 cm (4 to 6 in.) shorter than men. The reason is earlier skeleton maturity caused by hormonal changes that lead to the fusion of the epiphyseal cartilage. In addition, women have 8 % more body fat than a man. This serves as an additional energy reserve for use during pregnancy. Similarly, women have a wider iliac wing in order to facilitate childbirth. They also have lower levels of testosterone and so have less muscle mass than men and female strength is only 70 % that of men. Women also have less blood. But these differences are irrelevant when it comes to health-oriented strength training. The training methodology for men and women is the same and both sexes can enjoy the health benefits that come with targeted muscle build-up. However, there are certain aspects that are particularly relevant to women.

Muscles iron out cellulite

As women have a higher percentage of body fat, they are often affected by cellulite, sometimes known colloquially as orange peel syndrome. Cellulite is an age-related change in the cell tissue. The fascia of subcutaneous fatty tissue become weaker and so fat cells penetrate into the dermis. The result is undulating irregularities – dimpling effect – on the surface of the skin. This condition has no effect on health but it does not correspond to the aesthetic ideals of our modern world. Large amounts of money can be made from beauty products and so the beauty industry has come up with innumerable suggestions on how to deal with the problem. However, you cannot

get rid of cellulite by massage or cosmetic products. The external application of creams may be good psychologically but the effect does not go deep enough to change the situation. However, strength training can produce an indirect effect: It strengthens the muscle tissue and so the top layers become firmer and the skin's surface smoother.

Strong mothers – strength training during and after pregnancy

Pregnancy is a natural state, albeit a special one. Women can and should continue strength training during a normal pregnancy as long as they trained regularly before the pregnancy.

However, the weight and duration of each exercise should remain constant, i.e. not increase during pregnancy. Similarly, women should not train to the point of local exhaustion as the aim is merely to maintain strength. Certain exercises may be impossible to do in advanced pregnancy for anatomical reasons and they should be replaced by others. To prevent pressure increasing in the abdominal cavity, women should not hold their breath under strain. If complications arise, women should stop training immediately. The guiding principle is to follow the advice of the gynaecologist.

After the birth, women may resume training as soon as they feel able to do so and provided that their doctor has approved.

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The shape of our muscles has a major impact on our external appearance. Women have less muscle mass and more fatty tissue than men and so strength training can quickly have a visible effect on the figure. Strength training increases muscle volume, partly as a result of the higher water content. This increases osmotic pressure in the muscle cells and the tissue becomes firmer. In terms of physics, it is the same as what happens if you water a dry plant, i.e. it straightens itself. The effect is particularly evident in one of the body's largest muscle groups, the gluteals. Breasts, too, can be lifted if the underlying muscles are trained.

Don't worry about «too much» muscle

Many women have an unjustified fear that strength training will make them look too masculine and that they will develop too much muscle mass. Women react to intensive strength training far less strongly than men do because of their lower levels of testosterone. However, if at any point they want to stop muscle build-up, there is a simple solution: Once women have achieved their optimum appearance, they merely «freeze» the load. Regular training should be continued, but the weight, number of repetitions and duration of each exercise should not be increased. In this way, women can remain «in shape» in the truest sense of the world through-out their life.