

LIFTING

“Don’t be afraid if things seem difficult in the beginning. That’s only the initial impression. The important thing is not to retreat: you have to master yourself.” – Olga Korbut



IN THIS ISSUE

DISPELLING MYTHS.

MENTAL HEALTH AND LIFTING.

PODCASTS TO RELATE TOO.

BENEFITS TO LIFTING HEAVY.

Lift and be lifted.

Understanding the power that resistance training yields extensive health benefits that will serve you for the short and long term. Resistance training extends further than the gym floor and will reach far out into every corner of your waking (and sleeping!) day. Sounds magical, well I would say it kind of is.

With the power to transform both body and mind, adding heavy lifting into your workout is a must for creating a happier and healthier mindset and lifestyle. Through resistance training you will experience a whole spectrum of human emotion. You will experience great achievement and the occasional failure, but ultimately you will connect with your body in a way you have never done before; transforming your mental approach to life's challenges and proving that you are capable of much more than you thought.

Experience the power of STRONG!

*PLEASE NOTE: This document is not intended as a recommendation for exercise. If you wish to undertake any new form of exercise regime please consult a health professional first.



Dispelling myths.

You may have heard an overwhelming amount of information surrounding resistance training; some, most or all of it you might not know if its fact, fiction, a mix of both or complete nonsense.

The truth is, there is so much misinformation circulating in the media that it is hard to decipher what is what. With the rise of the 'fitness influencer' and the mass amount of freely available online content, how do we work out what is real and what is fake news?

You should aim to research for yourself. We must take responsibility to question the content that we ingest. As with any aspect of your health, it's down to the individual to remain impartial to advice until a reputable reference or background check is verified.

Strive to follow social and mainstream media that interprets information from scientifically researched information or from qualified, experienced and well informed individuals.

The issue of false information is rife, especially when it addresses women's resistance training. Never take anything as true until you can verify the source!

Podcasts to get you fired up.

TRAINED - NIKE

Through years of research and working with the world's best athletes - Nike has learned greatness isn't born, it's trained. This podcast explores the cutting-edge of holistic fitness to help make you a better trainer and athlete. Listen to conversations with industry experts and discover the latest innovations, insights, and trends making the biggest impact on the training world.

THE STRONG WOMEN PODCAST - PILATES PT

The aim of this podcast is to interview strong women from all walks of life and take key learnings from their personal experiences. Now, by saying 'strong' I don't exclusively mean strong physically; I'll be talking to women who are strong mentally, emotionally, or simply women who have overcome odds throughout their lives. The key themes in each podcast will be around fitness, mental health, and business.

MORE FEMALE STRENGTH

Strength Coaches Katherine Bickford and Cassi Niemann offer candid conversations on strength and its culture for the more female lifter. Together they discuss training topics with a healthy heaping of perspective, feelings, and humour.

Reasons to rep.

BONE DENSITY

Lifting heavy weight increases bone density. As we age (especially women) your natural bone density decreases, leaving you vulnerable to health concerns such as osteoporosis - a condition that causes brittle and weak bones. Lift heavy to compact the bone and age proof your skeleton! In 2000 study published in the British Journal of Sports medicine researchers found 'Elderly women are outstanding adherers to structural exercise programmes, and resistance training over one year can result in strength changes and related bone density changes.' (Rhodes, 2000)

PREVENTS INJURY

A strong musculature system helps your body to move the way it was designed. You must ensure to strengthen ALL the muscles, as an imbalance of weak and strong muscles will create potential for injury. This means upper body, lower body and everything in between! Strong muscles mean optimal support for you skeletal system, better posture and less chance of aches and pains! In an article published by the American Collage of Sport Medicine it is suggested that assuring the right prescription of exercise is issued by a qualified professional, 'improvements in muscle strength and power, increase in muscle size and improvement in sports performance are common benefits resulting from resistance training programs. In addition, resistance training has also been suggested to reduce the risk for musculoskeletal injuries, or perhaps reduce the severity of such injury.' (Hoffman, 2017)

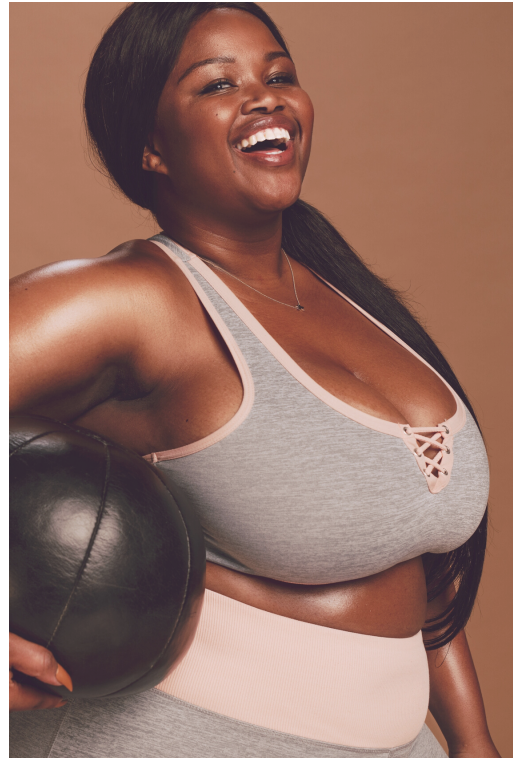
Its the same.

Female and male resistance training is 99% the same! There needs to be no alternations between men and when when its comes to exercises. The only differences are how much weight is added and slight performance accommodations for the menstrual cycle. Everything else is the same!



CONFIDENCE BOOST

Mastering new skills, smashing PBs and creating a strong and capable body will bring you a feeling of confidence that extends further than aesthetics. When you achieve and succeed, you generate positive feedback making you feel amazing about what your body can do, not just how it looks. Research relating to the mental health benefits of resistance training is limited due to the infancy of the area and the difficulty in quantifying values such as 'self esteem' and 'confidence'. But as awareness emotional 'well-being' increases more studies are emerging that suggest a positive correlation between the two. A 2019 meta analysis of previous studies published in the journal Sport Medicine - Open concluded, 'Resistance training was found to have a positive effect on resistance training self-efficacy, perceived physical strength, physical self-worth, and global self-worth. (Collins et al., 2019).



NEURAL PATHWAYS & MOTOR RECRUITMENT

As well as making the muscle strong, lifting weights strengthens neural pathways. When you want to move a body part your brain sends a signal to the muscles needed to make the action happen. As we age, neurological function decreases making us susceptible to a degeneration of muscle mass and the ability to control movement and reaction times diminishes. By lifting weights we also train the 'mind/muscle connection', helping strengthen existing pathways AND build new ones! This enhances our mobility now and fights the symptoms of age in the future!

It is important to note that heavy loads are required to increase recruitment. This is why lifting heavy is highly beneficial to our brain too. Lifting light will not provide that same cognitive adaptations. In an article published via Science Daily - Nathaniel Jenkins from the University of Nebraska -Lincoln states his 2017 study 'found evidence that the nervous system activates more of those motor neurons -- or excites them more frequently -- when subjected to high-load training. That increased excitation could account for the greater strength gains despite comparable growth in muscle mass.' (Schrage, 2017)

INCREASE METABOLIC RATE

What does weight training do best? ...Build muscle!

And what does muscle need to function?...energy.

What does fat need to function?.... nothing. So more muscle mass = higher energy exertion. If you have a higher muscle mass you have a higher metabolic rate meaning you use more energy!

New research into the training of type 2 muscles fibres (those commonly trained by heavy lifting) has shown that in mice, the increase and presence of type 2 fibres decreases metabolic diseases. Boston University published this about the findings of the study, 'In the study, the Akt1 gene was turned off and the MyoMice were fed a high fat/high sugar diet with a similar caloric composition as a meal from a fast food restaurant. Over an eight-week period, the mice became obese and insulin resistant and developed fatty acid deposits in their liver, a condition referred to as hepatic steatosis or fatty liver disease. The researchers then activated the Akt1 gene in the animals which led to the growth of type II muscle fibers. "Remarkably, type II muscle growth was associated with an overall reduction in body mass, due to a large decrease in fat mass. In addition, blood tests showed that these mice became metabolically normal and their fatty liver disease rapidly resolved," said senior author Kenneth Walsh, PhD, a professor of medicine and head of Molecular Cardiology at the Whitaker Cardiovascular Institute at BUSM.'

(“WEIGHT TRAINING” MUSCLES SHOWN TO REDUCE FAT & IMPROVE METABOLISM IN OBESE MICE »
Office of the Provost | Boston University, 2020)



"I'M SCARED TO GO INTO THE WEIGHTS SECTION"

This is totally normal. As environments go, its particularly intimidating. There's a lot of equipment and often a lot of people who 'look' like they know what they are doing. The natural reaction is to feel apprehensive to pick up weights. You must know, although the space is intense it does not mean you don't belong there ,YOU DO! if you need help or advice, seek out a fitness instructor, but most of all know that everyone is concentrating on themselves and not you.

"I DIDN'T SWEAT ENOUGH TO HAVE WORKED OUT PROPERLY."

The purpose of a resistance training day is not to break a sweat. You might do, but this does not equate to the effectiveness of the workout. Sweat does not = effort. Sweat = body temperature. Strength training will elevate the hear-rate and can function as a cardio-vascular exercise but will not feel the same as a HIIT workout. They both have vastly different purposes.



Questions & concerns

"I DON'T WANT TO GET TOO BULKY"

This is the single most damaging misconception that is holding women back from achieving their goals. Women are not able to build the same amount of muscle mass as men. There is simply not the hormonal support to create a 'bulky' look unless you are eating, sleeping and training at athlete level. For women to gain large muscle mass you need to design your life to generate this. Your training and nutrition would require extreme specificity and high volume. If you want to add bulk, amazing! But if you want to 'tone' then you will NEED to gain muscle mass but you will not match the same amount of male hypertrophy.

"DO I NEED PROTEIN TO GAIN MUSCLE?"

Yes. Yes you do, protein is the building blocks that make up muscle. Without feeding your body enough protein to generate new muscle it is not biologically possible to increase muscle mass or 'tone up'. When you are training harder you will require more protein to support it. Look at your macro split and increase the protein intake staying within your desired calorie parameters. This may mean researching into different protein sources.

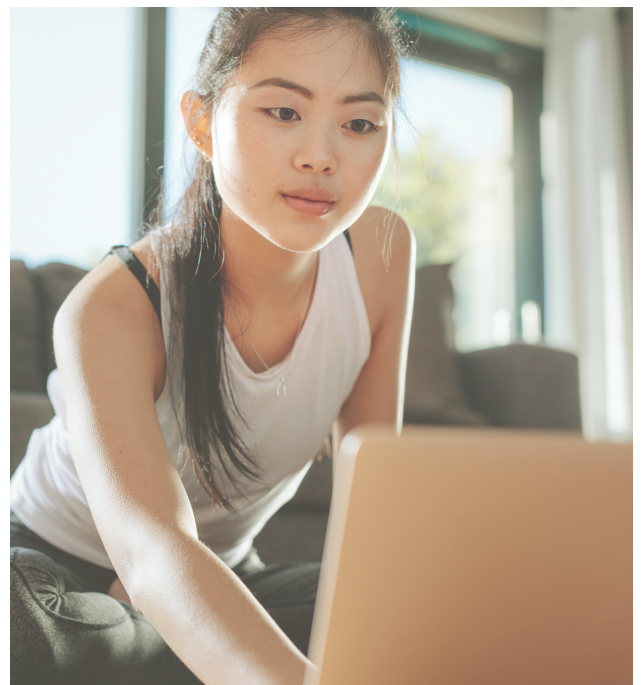
Get inspired.

NATACHA OCÉANE

Natacha's channel is one of the few fitness you-tubers that presents well researched content that promotes resistance training along with all the other great fitness and wellness activities she documents.

SHOULD WOMEN LIFT LIKE MEN?

Should men and women train the same? Or should women train differently to men? Common marketing has us believing that there are major differences in training between men and women. But looking at the scientific literature, does it support that claim? Let's find out.



SCULPT YOUR BODY, SCULPT YOUR LIFE |

YASHMEEN CHAUHAN | TEDXAMITYUNIVERSITY

"Struggle. Fall down. Fall. And get up and get up again," says Ms. Yashmeen Chauhan, one of India's top Bodybuilders. In this talk, she emphasizes that weight training is for all ages, and is a source of true strength, beautification of the body and also an opening to a healthy lifestyle. She narrates her struggle being a woman who defied the norms of society, and not only became a champion bodybuilder but also found exercise to be a source of confidence and energy.

Ms. Yashmeen Chauhan is known as 'India's Iron Woman'. She is a double Gold-medallist of the International Bodybuilding and Fitness Federation Miss India.

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If you enjoyed this e-book, tag me @thisiskatesfitness in your Instagram stories with your favourite take away from this info. #strongfemale

Thank you for your continued support.

Kate

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