

WOMEN

**can handle more
training volume than men.**

Here's why...

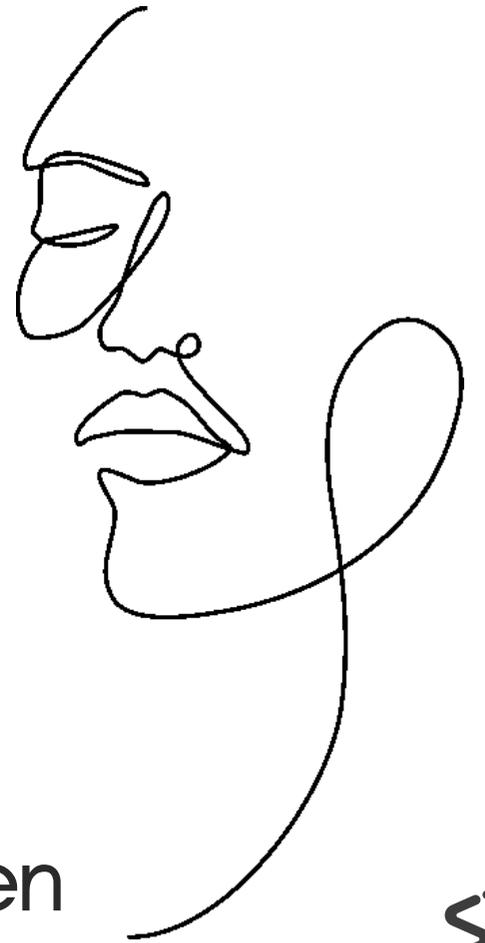


THEY RECOVER QUICKER

Not just between sets but between training sessions, too.

Women have a better delivery of nutrients to their muscles. They will therefore sustain less damage while training and recover in the time between training sessions.

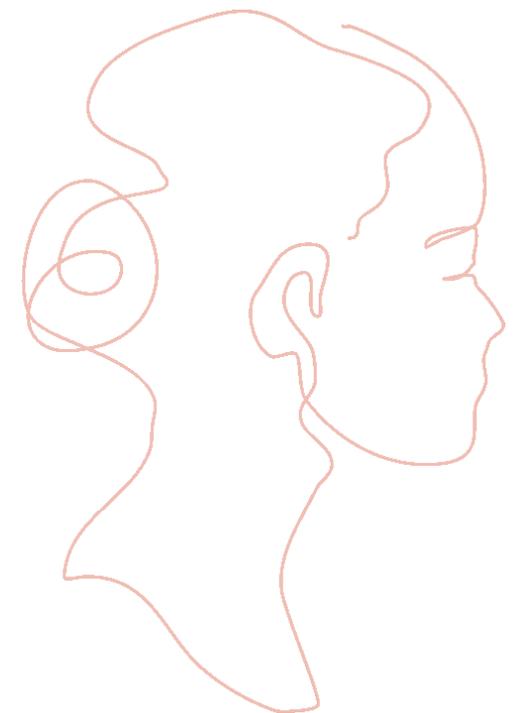
Read on to hear about the bench press study looking at recovery times and different impacts on strength between men and women.



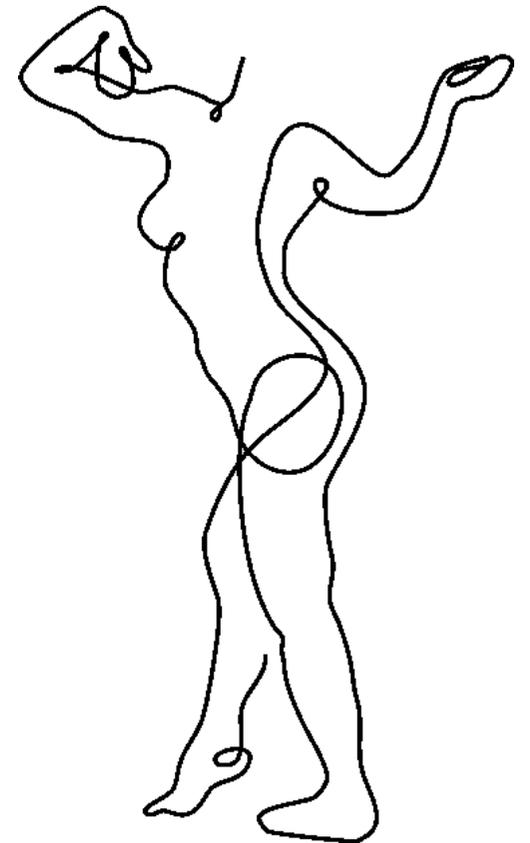
THE BENCH PRESS STUDY

Males and females of the same age were put through a bench press program 3 days a week for 3 weeks with different recovery times of 4h, 24h and 48h.

In the males, decreases in their estimated 1RM were found at both the 4h and 24h recovery times. There were no differences in muscular strength among the female subjects, regardless of the recovery time.



WOMEN ARE BETTER PREPARED FOR ENDURANCE



They can perform higher reps at a greater percentage of their 1RM without hitting fatigue...

So basically, women's training programmes can include more volume over a set period of time than men, including for strength training.

Combined with the ability to recover quicker we can conclude that women should absolutely be programmed differently than men to optimise their training and end results. Keep reading for more on women and endurance.

MUSCLE FIBRES

Women have a greater proportion of Type 1 muscle fibres and a higher capillary density than men, thus making them less likely to fatigue during training.

Type 1 muscle fibres contain more mitochondria and are recruited more in “endurance” exercise. This means they can get more blood flow to the muscle and have greater capacity to oxidise glucose for higher volume workouts. This is beneficial during training sessions, including for strength.



HORMONES

Women naturally produce and possess more estrogen than men. Estrogen is used by humans in the process of energy uptake in muscles. More estrogen leads to better energy supply to muscles ready for contraction.

All humans have estrogen receptors on mitochondria. A stimulus (e.g. strength training) gives the go ahead to recruit more energy. As women have higher levels of estrogen, it enables mitochondria to rapidly intake the available hormone and quickly create the necessary energy to perform strength tasks. This leaves women energized and ready to go for their next set quickly when compared to men.

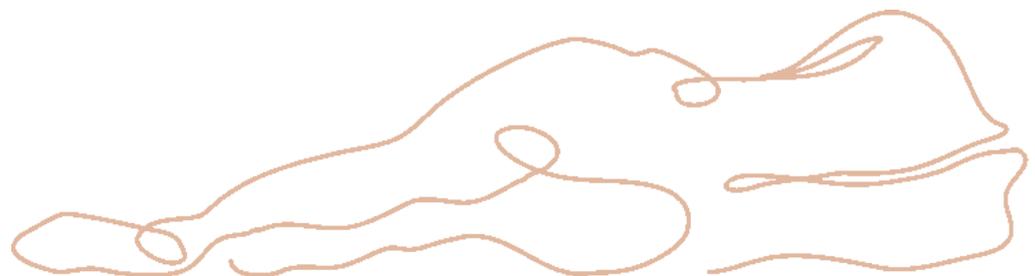


METABOLISM

Women are more metabolically equipped perform tasks of strength over long periods. Interestingly, men have around a 30 - 50% slower rate of glucose uptake than women. Glucose is fuel for muscle contractions and so is key in the metabolic process.

Due to women having a faster glucose uptake process, they're able to perform endurance style lifting programs better, while contrastingly, men will be better prepared for a max effort attempt than females. This is because generally speaking, males have a 50 to 100% higher rate of elevated fasting blood glucose than females, making immediate energy supply better.

Faerch K, et al. 2010.



IN CONCLUSION

Men can handle heavier loads in short periods (think 90%+ of 1RM), while women are more able perform tasks of strength over a longer period of time and for more repetitions.

Women have the ability to recover quickly while training and between sessions.

