



INTRODUCTION

Consistent hard work in the gym and under the bar is something I preach and practice daily.

I'm sure those of you reading do too.

It is an essential part of making progress and hopefully breaking PBs and records.

But let's be honest, repeated bouts of resistance training, strength sports in particular are especially unforgiving on the body.

No matter how hard you train, your progress or lack thereof will always be governed by how hard you can recover.

Therefore I ensure my clients understand why and how to optimise the initial four pillars of recovery:

1	Sleep
2	Nutrition
3	Hydration
4	Supplementation

The fifth pillar and topic of this article is hyperthermia or heat therapy, which I recommend to anyone who will listen.

It has proved to be such a game changer for myself as well as all clients who implement correctly that I have saunas in both my home and gym Spartan Performance.

So, stop competing in the Instagram Olympics and get your cold ass out of the ice bath and into a Sauna instead.

WHY NOT COLD?

Whilst post workout cold water immersion may help with reducing soreness and inflammation, it has been found that doing so after resistance training can reduce the effect of anabolic hypertrophy signals in muscles.

Therefore it is detrimental to all muscle and strength adaptations by shutting down the adaptive processes.

EMBRACE THE HEAT

The benefits of Sauna use are extensive and profound. These include:

- Better cardiovascular health
- Improved Insulin sensitivity
- Faster physical repair and recovery
- Lower inflammation and oxidative stress
- Reduced risk of stroke/heart attack
- Stronger immunity
- Decreased risk of respiratory infections
- Higher growth hormone levels
- Lower glycogen depletion
- Improved glycogen synthesis

It also does not appear to have the same negative effect on hypertrophy or strength gains as cold water immersion does.

In fact post workout sauna use may actually enhance training adaptations by increasing blood flow to the muscles and raising other pro growth factors.

When I hosted Dmitry Klokov back in 2016 it was the first thing he enquired about when I was proudly showing him around my gym.

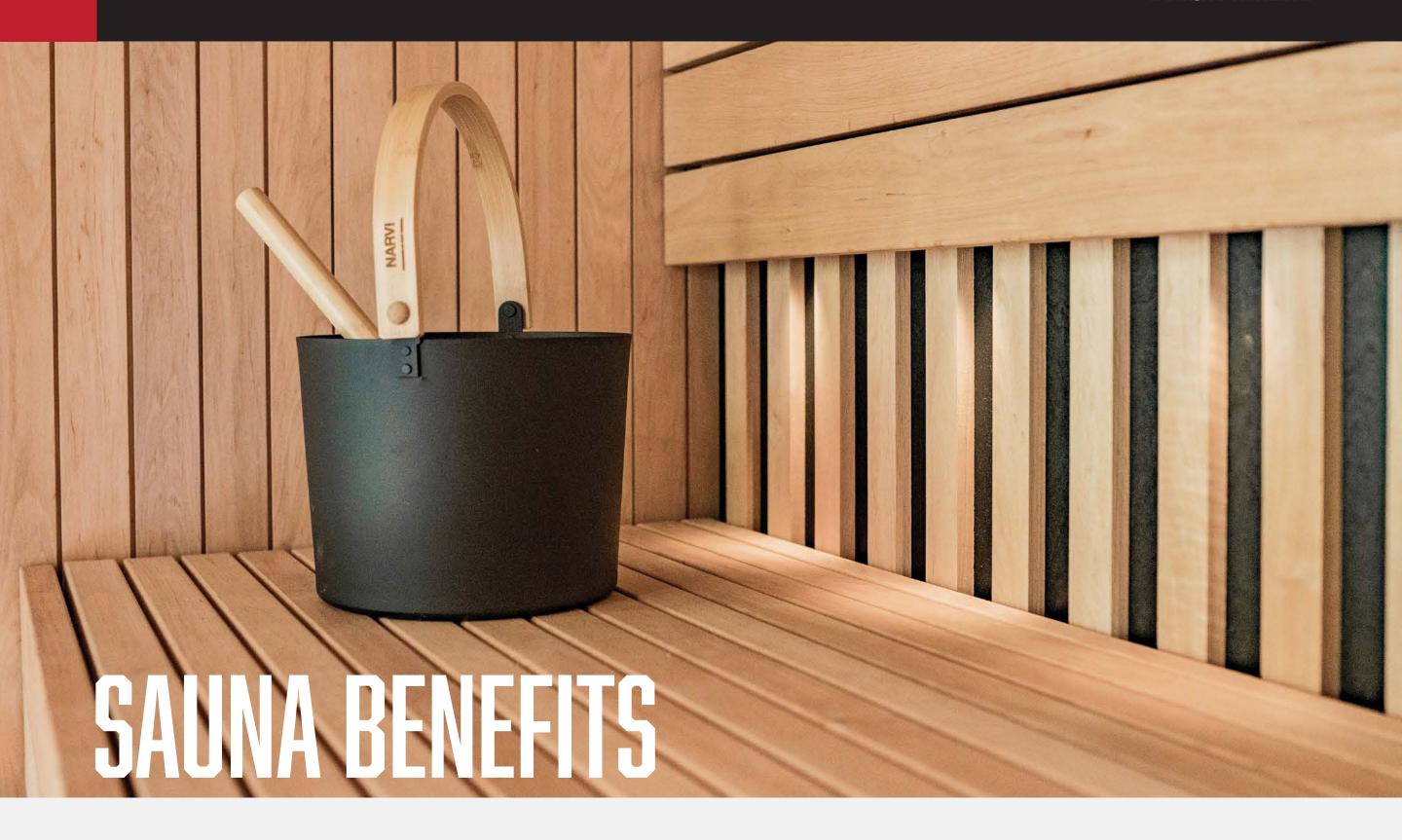
'Great gym, but where is sauna? Sauna is life.'

Check out the below stats and it is hard to argue with him.

SAUNA MORE THAN 4X PER WEEK

- > 63% lower risk of sudden cardiac death
- **63% reduced** heart disease mortality
- > 50% lower fatal cardiovascular disease
- ▶ 48% lower fatal coronary heart disease
- ▶ 46% lower risk of hypertension
- ► 40% reduced all cause mortality (Laukkanen et al (2018), Patrick (2021), Zaccardi et al (2017)
- ▶ 41% fewer respiratory diseases
- > 47% reduced risk of pneumonia
- Lower risk and frequency of influenza
- Common cold **cut in half** (Laukkanen et al (2018), Brenke (2006), Laurent (2019)

We can take an even deeper dive and look more closely at the benefits.



PSYCOLOGICAL BENEFITS

- Helps with relaxation and reduces stress.
- Improves mood.
- Builds mental toughness.

PROVIDES NEUROPROTECTION

- Increases neurogenesis (new neuron formation in the brain).
- Improves brain blood flow.
- Reduces inflammation.
- Increases the amount of heat shock proteins which help prevent the breakdown of proteins, repairs misfolded/damaged proteins and helps to maintain glutathione levels (glutathione is the master antioxidant).

SAUNA BENEFITS

REDUCES INFECTION RISK

- Reduces influenza risk.
- Reduces cold duration.
- Reduces viral replication.
- Increases immunosurveillance (how well the body recognises pathogens) and reduces immunoessence (reduction in immune function with age).

IMPROVES HEART HEALTH

- Increases nitric oxide which helps dilate blood vessels, improving vascular function and prevents atherosclerosis which can otherwise lead to heart disease.
- Improves blood flow.
- Improves vascular function.
- Lowers blood pressure.
- Reduces bad and increases good cholesterol.
- Reduces oxidative stress and therefore lowers the risk of heart disease.

SAUNA BENEFITS

IMPROVES RECOVERY AND PERFORMANCE

- Post exercise sauna lasting 30 minutes 4-5 x week for 3 weeks has been shown to increase performance (Dr James Dinicolantonio).
- Reduces the amount of protein degradation during exercise and at rest, resulting in greater muscle hypertrophy and strength (Selsby et al (2007), Naito et al (2000).
- Lowers the amount of inflammation created from resistance training and reduces muscle soreness (Khamwong et al 2015).

MIMICS EXERCISE

- Increases body temperature in the short term.
- Increases immune cells.
- Increases heart rate.
- Increases insulin sensitivity.

Quite the arsenal of benefits.

So how best to implement and which sauna to go with?

TRADITIONAL VS INFRARED

Infrared is quicker to heat and cheaper to run according to most sellers.

Traditional takes longer to warm and more expensive to run apparently.

I have an Infrared in the gym (our 3rd such type) and a traditional at home.

Most studies pertaining to the previously mentioned benefits apply to traditional sauna at a minimum temperature of 75 degrees Celsius for at least 20 minutes.

Infrared Sauna does not go as warm as a traditional, typically 65 degrees is their maximum. Therefore I would say a longer exposure time (upwards of 40 minutes) would be required. Even then the benefits will not match the traditional in my opinion.

In my experience I find the traditional sauna quick to heat and just as cheap to run as an infrared. Likely less since you do not require to be in as long.

Whilst any sauna is better than no sauna, my personal preference remains a traditional whenever possible.

It is also worth noting that in most cases UK suppliers provide good quality heaters in either sauna type but their woodwork leaves a lot to be desired. I have spent a lot of extra money reinforcing the infrared sauna's in our gym. Shop around and do your research before buying.

The first infra red sauna I bought (and most expensive) I sent back after I day.

MAKE SURE TO HYDRATE

Sweating is an integral part of the sauna experience but remember we lose minerals in sweat including:

- · Sodium
- Chloride
- Potassium
- Calcium
- Magnesium

- · Iron
- Copper
- Zinc
- Iodine
- Selenium

So ensure to hydrate well before and after you use the sauna. But remember plain water is not the best way to hydrate. Your body needs electrolytes for optimal hydration. Hydration electrolytes include sodium, chloride, potassium and magnesium.

Drink at least 16oz / 470ml for every 10 minutes you spend in the sauna.

POST SAUNA COOLING

Upon completion of a sauna session, ensure you have a fast cool down so that the body is quickly cooled and stops sweating.

This doesn't have to be in an ice bath or cold shower. For me simply 'enjoying' the climate of North East England suffices. Five minutes outside is all it takes.

Why this approach? Studies show prolonged sweat release leads to a decrease in intravascular plasma volume and consequently causes an increase in hematocrit (HCT) and total red blood cell count (RBC). (Blum, 207) Certainly something larger and enhanced athletes may want to consider managing.

MY OWN SAUNA PROTOCOL

For what it is worth my current sauna protocol is shown below:

- Traditional Sauna 4-7 x week.
- Starting temperature, a minimum of 80 degrees Celsius (176F) but this soon ramps up to 120 degrees celsius (248F)
- > 20-25 minutes at this temperature.
- Cool fully / stop sweating outdoors before showering then cooling again.
- On training days this is post workout and typically close to bed.
- On rest days it will be whenever my schedule allows. But pre bed remains my preference.

REMINDER

Hydrate fully upon exiting.

For me the sauna is a non-negotiable that will always be a key part of my health and wellness routine. Nothing comes close to its proven benefits and I've yet to encounter someone who doesn't leave feeling significantly better than when they entered.

Implement into your own recovery regime, embrace the heat and reap the rewards.