

The High Intensity Training Value Proposition

- The purpose of this presentation is to provide an introduction to the principles of H.I.T. for potential clients looking to upgrade their health, or existing trainers who might be interested in upgrading their skill set.
- If you're interested in learning more about proper exercise techniques, or you're looking for the most effective and efficient to optimize your training, this is a great place to start.

The High Intensity Training Value Proposition

1. Effectiveness
2. Efficiency / Time Value
3. Safety / Sustainability

Many people derive value from the privacy of the 1 on 1 setting, the professionalism of the trainers, and the knowledge that each trainer has been educated in the principles & mechanics of high intensity training.

At the end of the day, the effectiveness, efficiency, and safety of a high intensity training session are the 3 primary ways in which we have, and will continue to improve the training experience for clients.

Effectiveness

Momentary Muscular Failure (MMF)

- MMF is what sets High Intensity Training apart from traditional training techniques.
- **MMF:** This is the point at which the muscle can no longer produce any forward or positive movement, and the weight stops moving. MMF is also the point at which positive metabolic adaptations are occurring within the muscle.
- When you reach MMF, your body begins the process of reinforcing itself up to a new & stronger level.

Effectiveness

Momentary Muscular Failure (MMF)

- Reaching MMF also means that you are producing natural growth hormones; such as testosterone, and also emptying the carbohydrate (glycogen) which has been stored in your muscle fibers.
- This is an EXTREMELY important process because it re-sensitizes the insulin receptors on your muscles, thus it contributes to the PREVENTION of metabolic diseases/diabetes/obesity.
- **Please note:** Without achieving or approximating MMF, the preceding process DOES NOT occur, hence a large reason for the Diabesity epidemic of the West.

Effectiveness

Do We Really Need MMF?

- By achieving MMF during an intense but brief workout, we're essentially tricking the body into thinking it's LITERALLY fighting for its life.
- In essence, we're very closely mimicking the physiological & metabolic environment that the human body would be experiencing when it was chasing down and killing a wild animal, or defending itself from a predator.
- These are the conditions under which the greatest gains in strength are experienced, during brief and very intense "Fight or Flight" scenarios.

Effectiveness

Can You Reach MMF Without a Trainer?

- It's unlikely that any average person would possess the skill / ability to achieve MMF without supervision. The reason is simple. During intense 'Fight or Flight' scenarios, the reasoning part of the brain is 'hijacked' by your emotional center because it perceives a threat.
- This shuts down your ability to concentrate on your mechanics, and redirects 100% of your attention to 'get me the heck outta here!' This can cause your mechanics to fall apart, in lieu of 'survival at all costs'

Effectiveness

A Conservative Estimate

- The average trainee at the average gym has NEVER experienced MMF, in their entire lives, and as a conservative estimate, 99.9% of the trainees at traditional gyms will NEVER progress a routine in such a way that true muscular failure is even possible.
- Even the stronger trainees at traditional gyms who do appear to show progress over time, are really only achieving said progress because of dramatic increases in exercise volume, in combination with their particular genetics, which are normally a recipe for either burnout or injury, or both.

Effectiveness

The End Result of MMF

- Although dramatic muscle building is definitely possible with H.I.T., that process largely depends on genetic makeup. The true end results of a properly applied, long term H.I.T. routine for the average person are:
 1. Increases in strength & or lean body mass.
 2. Physiologic Head Room, or the ability of your metabolic & muscular machinery to perform increasing amounts of physical work over time, without you keeling over in the process. (This can be likened to an increase in MVO₂)

Effectiveness

The End Result

- The purpose of H.I.T. is less about egregious muscle building and more about Bodybuilding. In other words, Bodybuilding - and Physiologic Head Room - are about human health, whereas competitive muscle building is more about posing for judges.
- Another way to think about Physiologic Head Room is that it's the difference between the least you can do and the most you can do.

Efficiency / Sustainability

Minimal Investment -- Maximum Return

- This is a concept we can all appreciate. It's also a concept the vast majority of us will continuously strive for in our financial & economic lives.
- This concept is actually rooted in our Biology, in fact, from a hunter-gatherer perspective, our very lives depend upon the concept of efficiently finding and consuming more calories than we burn.
- H.I.T. is so efficient, because the human body cannot physically or psychologically sustain a very high intensity routine for any longer than 10-20 minutes..

Efficiency / Sustainability

Minimal Investment -- Maximum Return

- Just think of each machine as being the equivalent of a full out sprint, and multiply that by 5 or 6 machines. Upon completion, the tank is empty! Achieving MMF within the span of approximately 10-20 minutes also means that a lot of healing has to occur in order for the body to reinforce itself up to a stronger level. (Sleep & Nutrition)
- Recall that we're essentially tricking the body into thinking it's fighting for its life, so evolutionarily speaking - given proper sleep and nutrition - the body will then adapt to the specific demands imposed upon it, ie: increases in both strength and lean body mass, but always within your particular genetic potential and lifestyle considerations.

Efficiency / Sustainability

Minimal Investment -- Maximum Return

- Given that we 'empty the tank' within a 10-20 time frame, and a considerable amount of healing has to occur, a once per week workout of 10-20 minutes is all that is necessary for a trainee to experience strength gains over time.
- This ties directly into the sustainability argument. Twenty minutes per week is inherently far more sustainable than the average amount of time a trainee spends in a traditional gym - likely in the range of 3-6 hrs per week without seeing any meaningful change over time.

Efficiency / Sustainability

The Kicker

- Here's what most people think. "The stronger I get, the more I have to go to the gym in order to maintain & increase my strength."
- This way of thinking is actually perfect, but only in the sense that it's perfectly wrong, at least as it relates to human health.
- Exercise over a lifetime will only ever be sustainable if you're working with the correct model, and unfortunately, almost all of our traditional assumptions about weight training are empirically incorrect - or not based on evidence - if we assume human health is the goal.

Efficiency / Sustainability

The Kicker

- So here's the correct model. As you get stronger over time, the intensity of the stimulus that you're able to bring to your body will increase as well.
- *Picture it:* How much of an exercise stimulus do you have to recover from if you were to complete a 50 lb leg press for 1 minute? How high would your heart rate go? How difficult would this be?
- Now imagine it's 6 months later and you can safely sustain a 400 lb leg press for 2 minutes. How much do you have to recover from? How high would your heart rate go? It's quite a bit more intense

Efficiency / Sustainability

The Kicker

- The reality is this. The stronger you get over time, and the more intense the exercise stimulus you're able to bring to your body, THE LESS volume you will have complete, in order to heal from that increased intensity.
- Practically, this can translate to 10 days, 2 weeks, or possibly even 3 weeks of rest depending on lifestyle. And this is especially true if your sleep and nutrition have suffered during the supposed healing time.
- **Please Note:** Beginner/Intermediate trainees don't have to worry too much about this, as it mostly applies to stronger advanced trainees.

Efficiency / Sustainability

- At this point, seeing as how we're talking about long term health & sustainability, I have to mention that during the healing process, and really at all times, proper sleep and good nutrition are absolutely essential.
- If your desire is to be as healthy as you can possibly be, you will not experience any significant improvement in your health until your nutrition and your sleep habits are really dialed in and under control.
- Over the medium & long term, NO exercise routine is sustainable or efficient without proper sleep & nutrition, and anyone who tries to tell you otherwise is lying to you.

Efficiency / Sustainability

The Time Value of HIT

- Take an employee with a salary of \$60,000/year and assume a 40hr work week = \$31.25 per hour.
- Traditional gym would demand about 5 hours per week of said employee's time in order to be able to produce the value of 'health' = \$156.25/week
The sheer time commitment to keep that employee 'healthy' equates to about 20 hours per month, OR \$625 of company time per month
- And again, it's highly debatable whether or not traditional gyms and traditional routines *ACTUALLY* keep employees healthy,

Efficiency / Sustainability

The Time Value of HIT

- So **\$625** or approximately 20 hrs per month in a traditional gym will theoretically produce the value of 'healthy employee..
- Contrasted with a HIT gym, the appointments are 30 mins in length, once per week.
- Assuming the same employee at \$31.25/hr at a HIT gym = 2 hours of employee time per month & **\$62,50** per month worth of company resources/time.

Efficiency / Sustainability

<u>Traditional Gym</u>	<u>HITgym</u>
20 hrs per month in the gym	<i>2 hrs per month in the gym</i>
\$625 in company resources/time per month	<i>\$62.50 in company resources/time per month</i>
	<i>It is 10x more economical in terms of time value, for a company to utilize HIT vs a traditional gym, and HIT is definitely more effective, and safer.</i>

Safety

- Many of the things you see people doing in traditional gyms are, from a biomechanical perspective, extremely unsafe for the average person.
 - These are all ways in which average people sustain very common injuries, such as, repetitive strain injuries, muscle strains/tears, muscle spasms, arthritis, etc.
1. Loading the spine
 2. Failing to stabilize the torso & L-sp during particular movements
 3. Moving too quickly and in the wrong direction
 4. Working outside a muscle's optimal functional range
 5. Locking out joints under load
 6. Not knowing when enough is enough

Safety

Why is HIT safe?

- Proper HIT machines are engineered so the strength curve of the muscle, matches the force curve of the machine.
- All movements performed by the trainee are done slowly and under complete control. When your biomechanics start to fall apart, the set is either over ie: you've reached M.M.F., or an adjustment is made with the weight or the machine settings.

Safety

Why is High Intensity Training safe?

- Every second is overseen by a trainer who understands the biomechanics required to safely complete a movement. Feedback in real time whenever adjustments need to be made.
- **Force = Mass x Acceleration**: If I could get people to understand one thing, it's this, by moving very quickly to get the weight up at all costs, you are transmitting higher and higher forces through your joints. Weight training is meant to be joint protective, not joint destructive. More force = more wear & tear. Wear & tear is cumulative which why people tend to throw out their backs picking up a pencil.

Recap

Effectiveness: Momentary Muscular Failure is ideal for optimal metabolic and physiological adaptations to occur within the muscle.

Sustainability: 10-20 minutes per week of High Intensity Training is much more in line with our evolutionary past, & much easier to sustain over the long term when compared to traditional high volume / high risk / low intensity 3-6 hrs/week of exercise.

Safety: Machine design, combined with slow movement - dampening momentum - and trainer oversight, means far less force is being transmitted through the joints.

Further Information

For potential clients in the Greater Toronto Area

www.medxpf.com