Corporate Fitness Works

“No Pain, No Gain” Myth Buster

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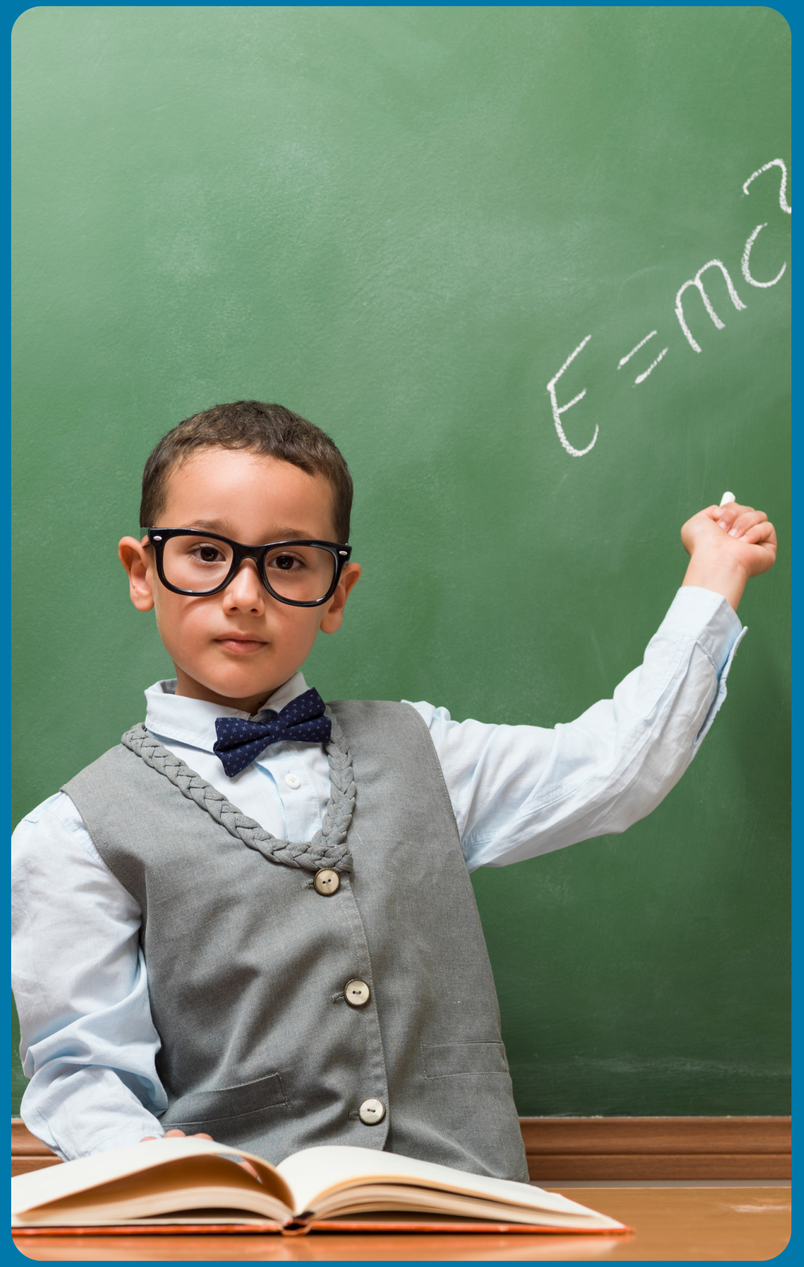


No pain, no gain...

...is what any coach might say to anyone under their guidance.

But pain... :

- represents a complex of varying types and intensities
- alerts us to situations that require our attention
- is not the only measurement of or requirement for adaptations to fitness

Misusing and/or misunderstanding this catchy rhyming slogan can be contraindicative to a successful athletic endeavor.

Listen to Your Body!

Good Pain:

- Discomfort experienced during elevated oxygen demand and depletion of available energy reserves.
- Muscular burn caused by elevated levels of lactic acid.
- DOMS (delayed onset muscle soreness) is the muscle soreness experienced one or two days post workout.

Bad Pain:

- A stabbing pain within soft tissue.
- Lengthening muscles (stretching) to the point of experiencing pain.
- Pain inside a joint while exercising.
- DOMS lasting 3 or more days.

Abnormal pain is the sign to stop exercising for a self-examination and assessment.

Associated Myths

DOMS = Lactic Acid

Lactic acid is an important fuel source for muscles during exercise but not the cause of post exercise soreness.

Stretching Prevents Muscle Soreness

While stretching after a workout increases flexibility and reduces lactic acid build up, soreness from your workout can still occur.

There is No Progress Without DOMS

When muscles experience the same movement and workload over and over they can develop a tolerance to soreness. This does not equate to zero progress.

Muscle Damage is Bad

Muscle fibers must be overloaded to a degree of breakdown that results in a stimulation of growth and repair. This is the muscular adaptation to an imposed demand.

Use It or Lose It?

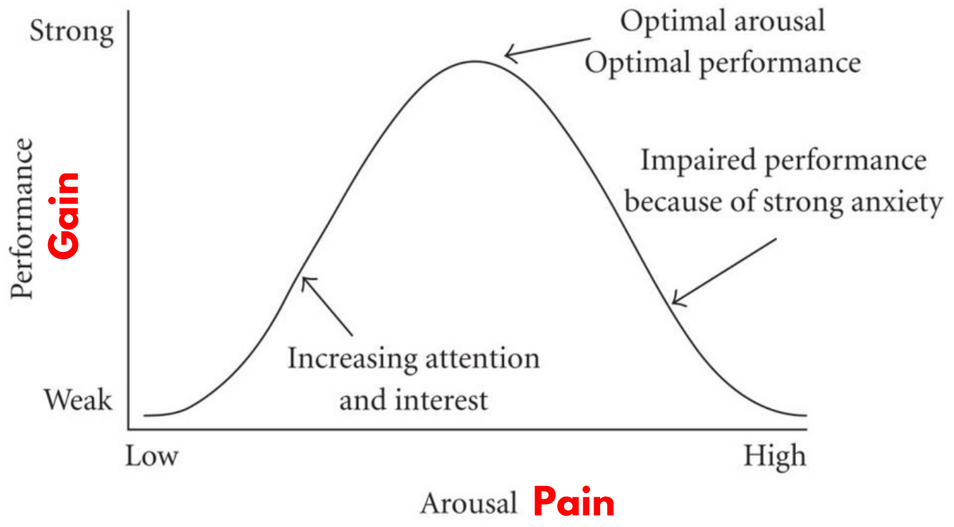
"No Pain, No Gain" is an example of tough love when it comes to motivational speeches. Perhaps "Use It or Lose It" is just as tough but less reckless.

The graph charts levels of stress (arousal or interest) and performance and illustrates the degree to which elevated stress aids performance. Notice a bell forms where performance peaks. Then performance decreases when stress levels continue to rise.

As is, the graph works well for fitness but substitute "arousal" with pain and discomfort associated with hard work. Then switch "performance" with gain. Too much pain will result in an outcome of diminished returns both mentally and physically during the workout and over time during periodization.

"Yerkes-Dodson Law"

Fitness Application



So... if "NO Pain, No Gain" is true then too much pain also means no gain.

"Use IT or Lose It" because doing nothing is not an option.

Threat Level: Pain!

The body adapts to external stimuli. In fitness, this may require some pain and discomfort but to varying degrees in differing modalities.

Muscle: Level 1

With training and experience, a gym goer can feel a significant muscular burn while simultaneously avoiding risk of injury.

Stretching: Level 2

The farther you stretch the muscle fibers and the longer you hold them, the more likely you are to be injured. If discomfort becomes pain, back off.

Heart: Level 3

Chest pain is NOT the type of discomfort we seek at the gym. Nor does steady state cardio training need to be intense to get results. Especially when starting out.

Gain without Pain

DOMS is not a given every time a person lifts weights. This does not mean the workout is ineffective. There are other indicators of progress:

- Steady increase of resistance
- Increase in overall volume of work
- Shortening break times

Try adopting an undulating program strategy when entering a maintenance phase or hitting a plateau.

- The variety and endurance of HIIT style workouts are great for maintenance.
- Meso periods of muscular endurance training can be a relief from max strength for the body and help in the long run.
- A true “deloading” week can do wonders for mental and muscular recovery.
- Think of undulation as ramming the plateau instead of applying steady pressure.

Change is good.
Change IS the next step!

Recovery does not need to take place on a couch, keep moving!

Growing Pains

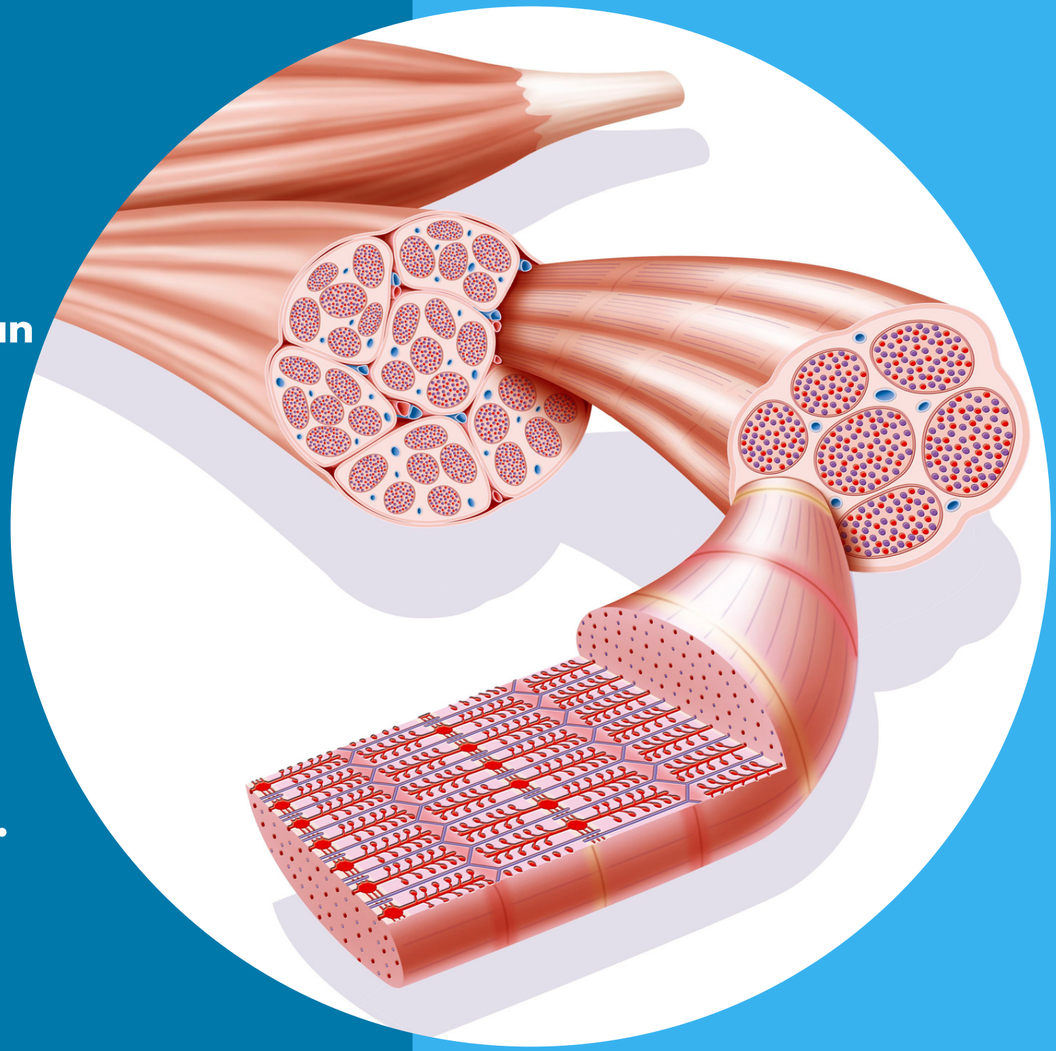
Specific Adaptation to Imposed Demands.

- **Muscles adapt when they are worked beyond daily requirements.**
- **Hard work causes micro tears in the fibers which stimulates rapid repair and growth to cope with an elevated level of activity. This can be uncomfortable or painful for a day or two.**

When fitness enthusiasts understand different types of workout pain they can then "listen to their body" in order to utilize the information.

- **Pain which occurs inside a joint may indicate damage to that joint and should be diagnosed and avoided.**
- **Static and dynamic stretches that cause pain are counterproductive. Mild discomfort at the most when stretching.**

***Do not hesitate to consult with a physician or physical therapist when learning to understand the difference between good and bad pain and discomfort!**



Nuggets

- DOMS: Delayed onset muscle soreness. Perfectly normal.
- SAID Principle: Specific Adaptations to Imposed Demands. Semi permanent physical changes are prompted by our activities.
- “Undulating” or variable exercise prescription can assist with a strength plateau.
- Pain can be either productive or counter productive. Understanding what pain is trying to tell you helps make a workout regimen safe and effective.

References:

https://www.ucihealth.org/blog/2019/04/no-pain-no-gain

https://bigthink.com/the-learning-curve/eustress/

https://www.cnn.com/2014/08/04/health/muscle-soreness-myths/index.html

The Role of Lactic Acid in the Body

https://www.healthline.com/health/muscular-hypertrophy

Stretching and Injury Prevention

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