



Why feeling the BURN is BAD!

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Have you ever been in a group fitness class and heard the instructor yell “come-on people, 30 more reps. let’s feel that burn. Keep working through the burn!” Here is an interesting new research into why feeling the burn is not really a good thing for *Fat Metabolism*.

Fat is stored in fat cells in the form of triglyceride. When energy is needed the triglyceride is broken down, the fatty acid molecules pass into the blood for transport to the working muscles. The hormone epinephrine (adrenaline) stimulates a receptor in the fat cell membrane and activates the enzyme lipase. Lipase (an enzyme secreted in the digestive tract that catalyzes the breakdown of fats into individual fatty acids that can be absorbed into the bloodstream) splits the triglyceride molecule, and the fatty acids are free to enter circulation. This means that inside the muscle is where fat is burned.

Research discovered that lactic acid seemed to inhibit the mobilization of free fatty acids (FFA’s) from adipose tissue. The lactic acid blocked the action of epinephrine, thereby reducing the availability of fat for muscle metabolism” In simple terms, if the body produces too much lactic acid it stops fat from burning inside the muscle.

- When doing **aerobic classes or strength training** this industry based everything on repetitions. Repetitions were based on time not numbers. In order to utilize the muscle to burn the most amount of fat, we should choose a specific number of repetitions within a certain amount of time. This is termed **Time under Tension**.
- **Jack LaLanne** was quoted as saying in the past, if you didn’t vomit after a workout then you didn’t have a good workout. Jack was referring to the ability of lactic acid build up in the body from anaerobic (without oxygen) training. Bodybuilders didn’t have to worry about fat metabolism; their fat percentages were very low so they just had to concentrate on building muscle.
- When lactic acid builds up in the muscle the **Ph (potential hydrogen)** balance changes to a more acidic level than that of alkaline. Lactic acid is the by-product of carbon dioxide (CO₂).
- When the body becomes more acidic from the “burning” in a workout then we change the physiology of the body to **inhibit** (prevent) the release of fat for the production of energy.
- The difference between a bodybuilder and the normal weight loss person is that most “bodybuilders” are already in great shape and have very little fat. They use the **progressive overload principle** to gain muscle (**hypertrophy**).
- Most everyday people think they can train the same way and get the same results. The problem with this is most people have more body fat percentages and need to train in a different way and use different energy systems.
- Most “bodybuilders” are training in **anaerobic pathways** and training specific muscles per workout. Everyday members should train in both **anaerobic and aerobic pathways** during a workout; this type of workout is commonly called “**circuit training**”. **Check out our Studio 2 setup and ask how to effectively use it.**
- So why do we insist on feeling the burn during exercises? The past has told us that the burning is in fact fat melting away inside of us. **WRONG!**
- **The bottom line is:** we should choose a proper weight that will fatigue a specific group of muscles within 30-70 seconds (60 being the average) of **Time under Tension**, pick another group of muscles to work within the same time and repeat. This is called a circuit. Remember, less weight and more reps (20-30) only build up the lactic acid and thus stop the production of fat burning. Now you know better huh?