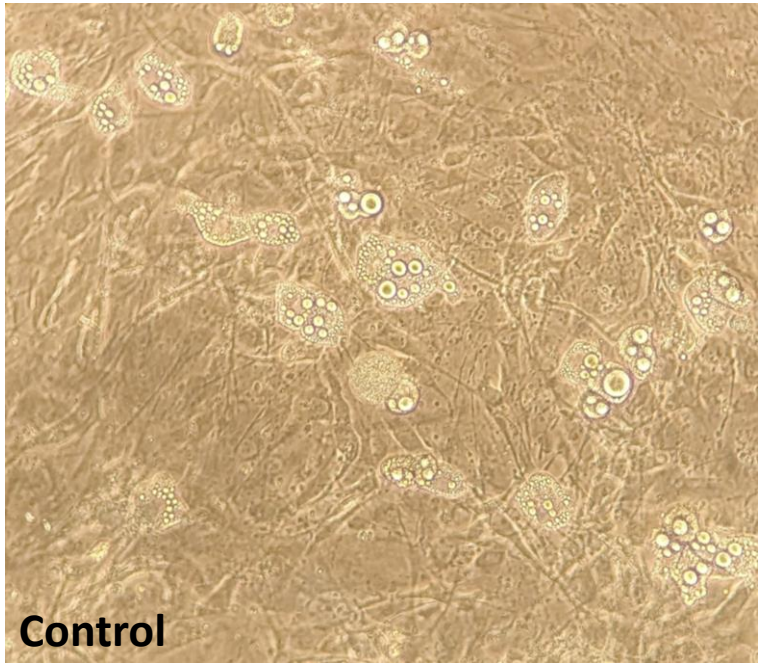
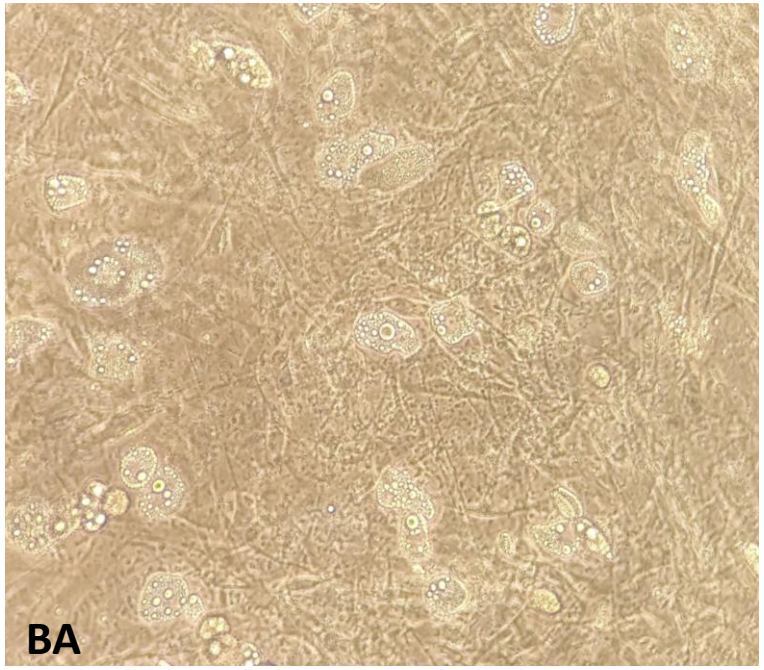
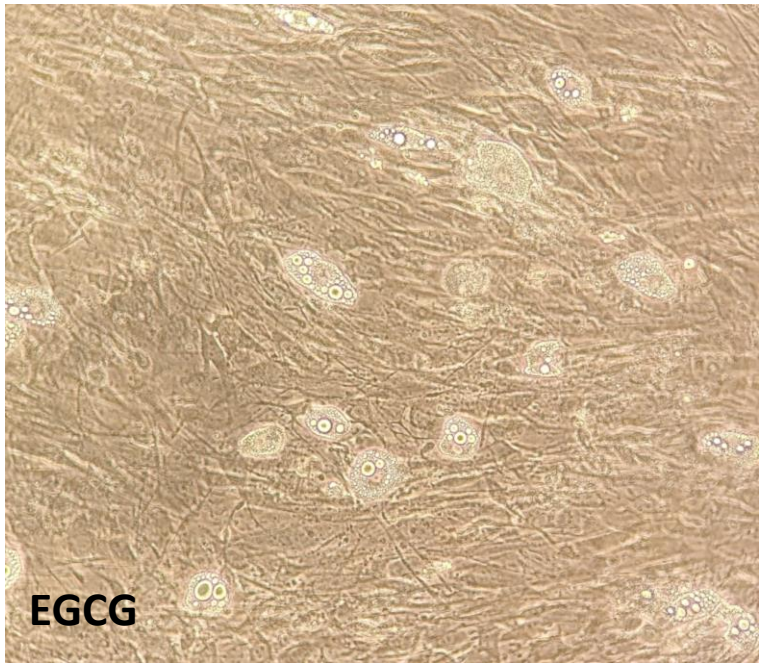
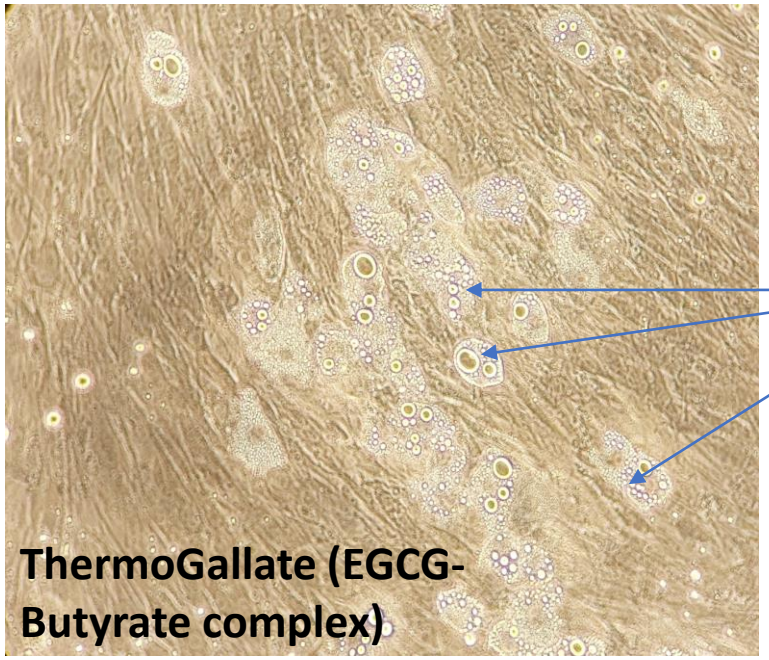
THERMOGALLATE™









Plethora of differentiated and activated Brown Fat Cells (BAT).

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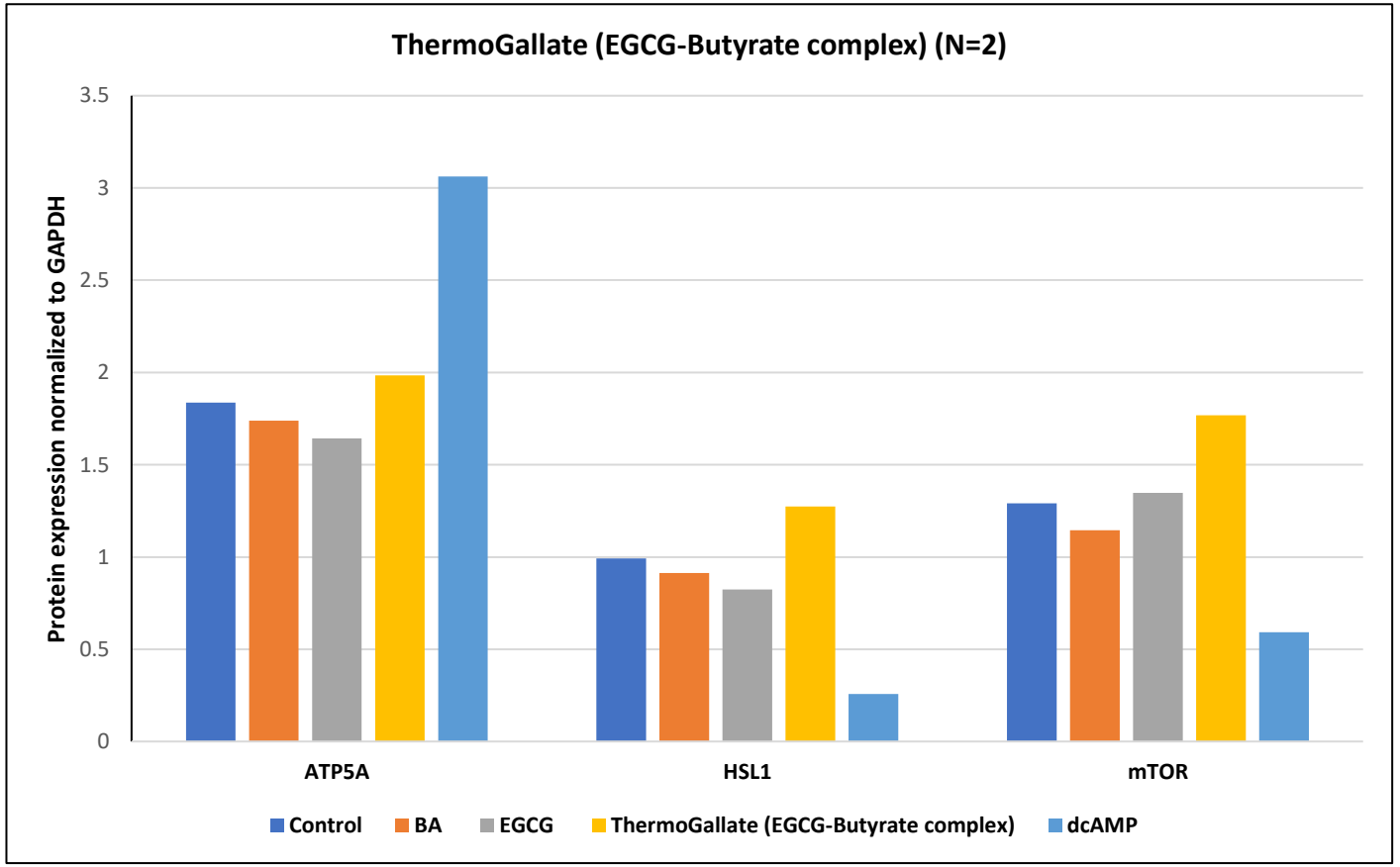

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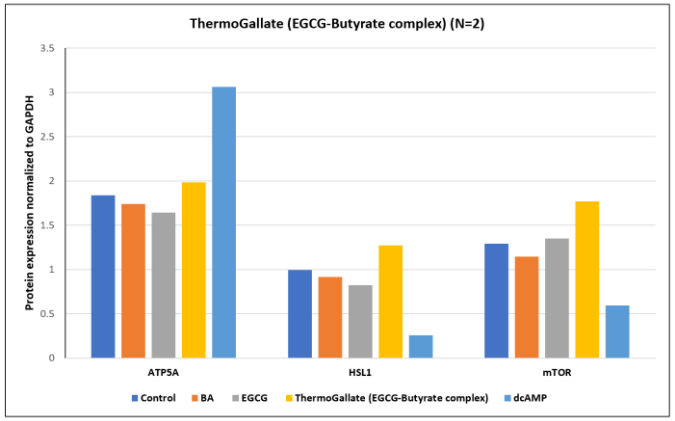

THERMOGALLATE™

Support Lean Muscle Burn Fat

SUPPORT LEAN MUSCLE
to restore and maintain the metabolically active tissue that uses up calories.

BREAK DOWN FAT
and burn it up into thin air independent of and in addition to exercise spent calories; improve appetite control to further support calorie balance in your favor.

mTOR

Integrates signaling, substrates, nutritional building blocks and other processes including insulin, amino acids and growth factors like IGF to initialize growth and restoration in response to nutrient availability. One of the ways higher protein diets support muscle growth is, in fact, the onset of mTOR, a signaling protein that turns on 'protein synthesis' in the skeletal muscle cells. Coupling high protein intake to this mTOR stimulus is exponentially supportive of lean mass regeneration which in turn supports long term calorie expenditure alongside the fat burning BAT activity.

BAT Differentiation

Unlike the fat storing WAT (White Adipose Tissue), BAT (Brown Adipose Tissue) has inbuilt mechanisms that literally 'burn' or oxidize fat to produce heat (Thermogenesis) resulting in the removal of fat calories form the body independent of exercise. These fat furnaces can spontaneous 'burn' fat all day, all night while you sleep, as you sit or run, and as you work; continuing to remove food and body fat calories along side whatever other calorie expenditure program you might be engaged in. Imagine burning calories into thin air whether you exercise or not to help balance the calorie equation in favor of fitness! And be in control of diet due to appetite suppression.

ATP5A

Increased ATP5A status is associated with increased mitochondrial activity and biogenesis. This marker is also use to evaluate mitophagy associated with cold exposure adaptation demonstrating positive activity in the context of mitochondrial activity and energy generation.

Hormone Sensitive Lipase (HSL)

An enzyme that facilitates the hydrolysis or breakdown of triglycerides (fat) in the adipose storage system releasing these fatty acid building blocks into the bloodstream as substrates for energy generation. However, if this energy substrate is not used up it is returned to storage. BAT activation as shown above serves as a mechanism to assimilate and burn this released fat substrate; and burn it into thin air through thermogenesis (generation of heat).

More research in progress to report on as we go into market;
keeping the narrative refreshed, vibrant and renewed.

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THERMOGALLATE™

THERMOGALLATE™ activates SIRT proteins

SIRT proteins are induced in Cold Plunge Therapy and CR (Calorie Restriction) to support the cells and the body with stress resilience and improved recovery from work load, injury, disease and more. SIRT induction is the next trend to become house-hold knowledge because its so powerful with regards to ant-aging, performance and mental health.

SIRTUIN (SIRT) Protein Activation by THERMOGALLATE:

SIRTUIN proteins (SRT) are a group of subcellular proteins that when induced help reverse the age-related and metabolic-syndrome related symptoms. SIRT proteins are responsible for helping the body stay alert and in an optimal performance state especially when under stress and physical and mental load. They are responsible for correcting metabolic anomalies like disrupted insulin signaling and insulin resistance; supporting mitochondrial activity for better energy metabolism; mental focus and stress resistance.

Activation of sirtuin proteins promotes genomic deacetylation and lifespan extension in a 'dose dependent manner'. SIRT activation is shown to support improvement in serum glucose management and improved energy and recovery rates. Its central to management of brain cell NAD/NMN metabolism – key factors in aging, ATP management and cellular efficiency. There are 7 key SIRT proteins dispersed in different cellular compartments and serving metabolic health in different ways: SIRT1, SIRT6 and SIRT7 are predominantly in the nucleus, SIRT2 cytoplasm, and SIRT3, SIRT4 and SIRT5 in the mitochondria