

# Rationale For Anaplex™

The ultimate objective of fitness and athletics should be long-term good health. Unfortunately, it is easy for this goal to be lost in the pursuit of the competitive edge. Additionally, modern society is caught up in the misguided notions of getting something for nothing and instant gratification. The desire for winning and attractiveness can become a narcissistic obsession, causing us to grasp at anything that promises us quick and easy results.

Modern technological society attempts to convince us that we are simply machines that can be manipulated and repaired at will. We are learning the hard way, however, that this is not so. Excess exercise and steroids can result in women athletes losing reproductive function; marathoning men are dying of heart attacks in the prime of life; women body builders are seen masculinized to the point that they substitute cut biceps for breasts and ripped abdominal muscles for shapely feminine hips; men approach the bulk (and look) of Hereford bulls, while shrinking their testicles and falling victim to an array of organ diseases and cancers.

Although it is possible to achieve temporary results by unnatural means, such as by using anabolic steroids, the body ultimately reacts to such substances as if they were toxins. The stress on the body can push our adaptability beyond its ability to cope. Disease and loss of health can ultimately result.

Additionally, it is possible to eat many harmful, unnatural, additive-laden, fractionated, dyed, and embalmed foods and not notice any immediate consequences, but this is simply a testimony to the resiliency of biological organisms. If the abuse is continued, such capacity, particularly present in youth, will be lost. The consequences will then surface later in life as degenerative disease conditions such as heart disease, Alzheimer's, autoimmune problems, cancers, obesity, stroke, arthritis, and general loss of health and vitality.

Fitness and athletics can be an exciting, fulfilling part of life. The benefits derived physically as well as psychologically and socially are without question. But if not approached with appropriate respect for our environmental context, and with a goal of achieving long-term wholesome, healthful living, those benefits can be lost.

Anaplex™ is the result of several years of research seeking nontoxic, natural nutritional supplements. Ingredients have been selected based upon the weight of scientific evidence and traditional experience with their use. Supplementation with natural nutrients and "nutraceuticals" is an emerging science and precise mechanisms of action have not been determined in many cases.

## ANAPLEX™

Nutrient Support Formula

W Y S O N G

### PURPOSE:

A nutritional supplement designed to supply natural nutrients for anabolism (muscle and all tissue growth) and energy metabolism.

### INGREDIENTS:

Natural Phytonutrient Extract of *Citrus aurantium*; L-glutamine, L-carnitine, Valine, Leucine, Isoleucine, Octacosanol.

- Contains no additives -

### DIRECTIONS:

**Suggested Dosage:** Two capsules three times daily. Anaplex™ is best assimilated if swallowed with meals. For best results, Anaplex should be used as part of the Wysong Optimal Health Program™.

For long-term usage follow the Wysong Foundation Formula Cycle or discontinue two days out of every week and five successive days every month to decrease the potential for intolerance developing.



## Biochemistry

The Anaplex ingredient octacosanol has been identified as a principal chemical of wheat germ oil. It is now known to be a long-chain, saturated alcohol which functions to improve oxygen utilization and glycogen storage, while stabilizing the basal metabolic rate under stress. Anaplex octacosanol enhances physical performance during strenuous exercise, improves muscular reflexes, and strengthens the body's resistance to stress.

Anaplex L-carnitine is a very extraordinary nutrient found naturally within the body at suboptimal levels. It is essential for moving fat molecules into the mitochondria of every cell in the body. It is thus essential in using fat as an energy source, and thus for weight loss. It also allows one to exercise longer without fatigue (refer to Figure 1). This is why Anaplex increases energy while promoting fat loss. Anaplex can also support the health of the heart, since the heart gets up to two-thirds of its energy supply from the metabolism of fat.

Anaplex L-glutamine is a nonessential amino acid that is essential in any type of stressful situation (illness, injury, and exercise) to the body. L-glutamine acts not only as a precursor for protein synthesis (important for increased muscle size), but is also an important intermediate in a large number of metabolic pathways. As the amino acid with

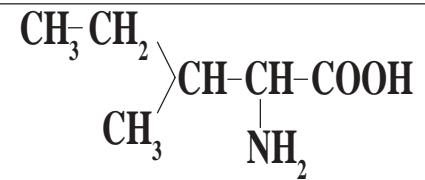
the highest concentration in the bloodstream, L-glutamine serves as a nitrogen transporter between various tissues, creating a natural anabolic nitrogen balance.

The Anaplex branched-chain amino acids (BCAA) leucine (leu), valine (val) and isoleucine (ile) are essential amino acids in mammals. They serve as building blocks for tissue proteins, as carbon precursors for the synthesis of tricarboxylic acid cycle (for the utilization of sugar for energy) intermediates, ketone bodies, and fat. They also serve as carbon and nitrogen precursors for synthesis of the amino acids alanine, glutamate and glutamine.

Anaplex bitter orange is a thermogenic herb, meaning that it promotes an increase in the metabolic rate, thus utilizing all available energy sources, especially fat stores, more quickly. Bitter orange has been shown to stimulate beta-3 adrenergic receptors, increasing lipolysis (breakdown of fat into energy), while not involving the beta -1 or -2 receptors (those which increase resting heart rate and blood pressure, a negative effect) like other thermogenics such as Ma huang can do.

## Clinical Evidence

Many studies have been performed using Anaplex octacosanol as a dietary supplement. Two separate clinical stud-



The Branched-Chain Amino Acid Isoleucine  
Figure 2.

ies have shown that octacosanol supplementation improves vertical jump reaction time and total body reaction time, both very important factors in overall physical performance. Additional studies on humans have demonstrated improvement in endurance by improving glycogen storage, stabilizing basal metabolic rate, and reducing oxygen debt.

Research demonstrates the athletic-enhancing properties of L-carnitine. Two studies have shown that there is an increase in maximal aerobic power. These observations are particularly important in endurance exercises. Other work has shown a direct correlation between L-carnitine levels and athletic performance. One study found that in two groups of four healthy, untrained volunteers, L-carnitine improved significantly the cardiovascular response to exercise and produced a more rapid return to the resting heart rate after exercise. In general, Anaplex supplementation is advantageous to exercising individuals, since it is well known from studies that prolonged exercise increases the urinary loss of L-carnitine, followed by a drop in the muscular levels. The

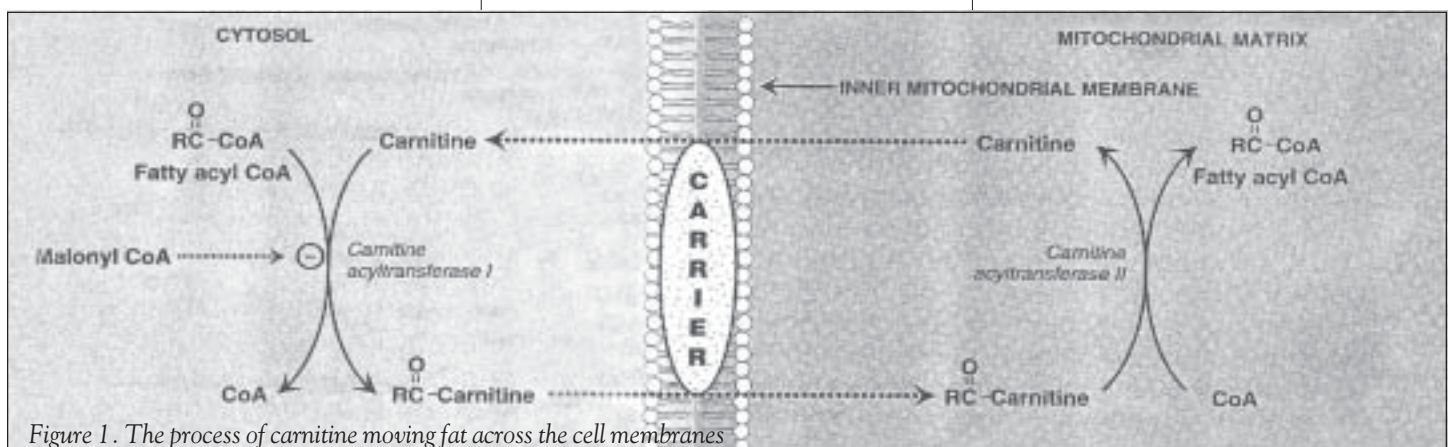
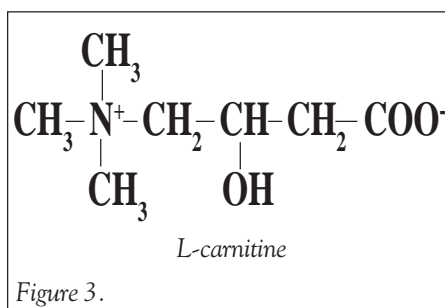


Figure 1. The process of carnitine moving fat across the cell membranes

latter may not be replenished quickly enough through normal nutritional intake.

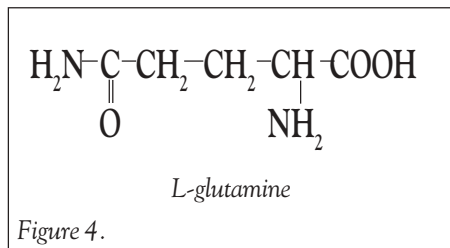
Recent observations suggest that Anaplex L-glutamine is involved in the regulation of muscle protein balance. There is a direct correlation between muscle L-glutamine and the rate of protein synthesis. Maintaining the intracellular L-glutamine pool promotes the conservation of muscle protein, i.e. skeletal muscle is less likely to break down in high stress situations.

Research has demonstrated that Anaplex BCAAs are the most important muscular fuel for strenuous exercise. These amino acids must be present at the same time to be effective and prevent metabolic imbalances. The availability of Anaplex BCAAs during exercise is important because they are interdependent with the tricarboxylic acid cycle (TCA). They make sure enough glycogen (sugar) is available for maximal aerobic output of muscle. It has been suggested that an increasing drain on the BCAA aminotransferase reaction, not compensated for by synthesis of TCA cycle intermediates from glycogen and glucose, plays a role in the muscular glycogen fatigue mechanisms during prolonged exercise. The drain may be the reason why athletes have to reduce the inten-



sity of exercise when glycogen stores are emptied and when they depend mainly on fatty acid oxidation for energy.

In a study of 14 lean and 14 obese patients, resting energy expenditure rose



15% above normal when these patients were given Anaplex ingredients. The net effect is to burn tissue fat while at rest, thus contributing to the Anaplex antiobesity activity.

The ingredients in Anaplex have a significant body of scientific research demonstrating their effectiveness in aiding physical endurance and increased musculature. A partial listing of scientific references substantiating the efficacy and safety of these ingredients follows this monograph.

Anaplex, as with all Wysong Nutrient Support Formulas, is designed to enhance and complement the lifestyle and dietary guidelines in the Wysong Optimal Health Program and the Wysong Foundation Formula supplements, which should be taken routinely. Taken alone, Anaplex will exert benefits, but these benefits will be greatly enhanced by the synergy of using it in conjunction with these other Wysong-designed programs.

Additionally, Anaplex should not be viewed as a pharmaceutical with which immediate powerful results may occur, (often with a trade-off of powerfully dangerous side effects). Problems that may have developed in the body over decades cannot be expected to be resolved in a day or two. Restoring healthy balances in the body takes time and usually several weeks must pass before results can be seen. Patience and commitment to an ideal of safe and natural nutrition are critical to long-term results.

Anaplex is carefully designed to be safe and to avoid excesses or imbalances. If taken with the Foundation Formulas, even though the Foundation Formulas may contain some of the same ingredients, excesses above researched allowable limits will not occur. This also applies to taking Anaplex in conjunction with other Nutrient Support Formulas. Uniquely among supplement programs, all Nutrient Support Formulas and all Foundation Formulas can be taken simultaneously without exceeding safe limits.

However, intolerance to any food item, regardless of how natural it may be, can occur. This is why all Wysong supplements should be rotated as described on bottle directions and in the Foundation Formula guidelines.

To avoid disrupting the balances designed into the Wysong supplement program, and to prevent potential excess, it is not recommended that other non-Wysong supplements be taken in conjunction with this Wysong program unless specifically recommended by a nutritionally knowledgeable physician.

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*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.*

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