Tre-en-en Grain Concentrates

Feed your cells

Background: We first discovered the important role lipids play as building blocks for our cell membranes in 1925[13]. By the 1950's researchers realized that the cell membrane not only served as a mechanism to separate the inside of the cell from the outside, but also functioned as a highly selective filter that facilitated transport systems controlling nutrient entry and waste removal[14]. From that point, we began to recognize the importance of specific lipids in membrane function, energy production and metabolite secretion (biochemicals manufactured in cells; i.e.; hormones, enzymes)[15].

GNLD Research: In the mid-1950s, a group of Southern California doctors investigating the possible causes of patient-reported 'chronic fatigue' drew a connection between the absence of whole grain dietary lipids and reduced cellular energy production. This research led to the concept of lipid supplementation made from whole grain wheat, rice and soy, as a solution to 'chronic fatigue'. This gave rise to GNLD's Tre-en-en Grain Concentrates. In the years that followed, Tre-en-en's beneficial effects on cell membrane structure and function were further confirmed. The most compelling demonstration of the positive effects of the lipids and sterols in Tre-en-en Grain Concentrates was in a study conducted at Texas A & M University in 1987. This study compared the effects of Tre-en-en use in the test group to a control group. The results *(see charts 2-4)* were dramatic[16].

Chart 2 - Cardiovascular Development

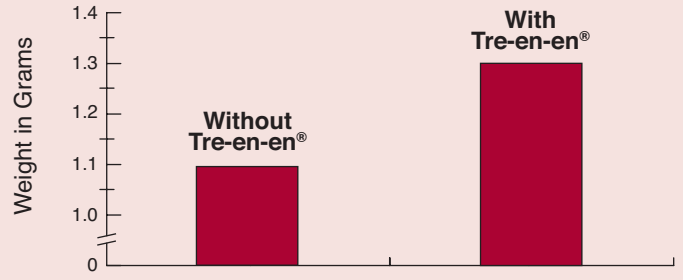


Chart 3 - Nutrient Utilization Efficiency

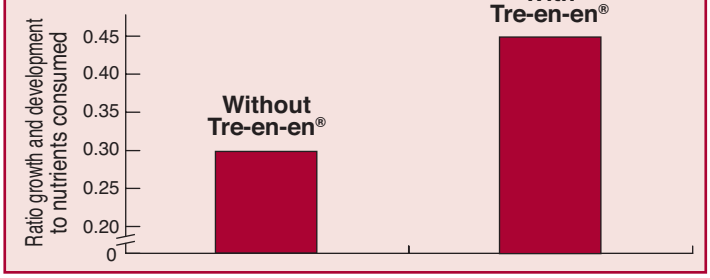
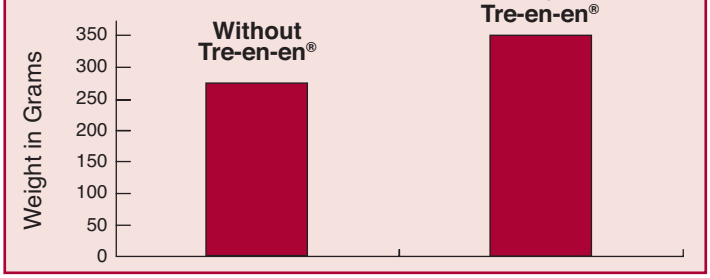


Chart 4 - Overall Growth Development



Latest Findings: The significance of the key role whole grain lipids and sterols play in cellular structure and function, and in human health overall, continues to be supported by even more recent scientific publications and government-funded awareness campaigns. A 1998 study of 34,000 women showed whole grain nutrition had a strong cardio-protective effect[17]. A component of the 1999 Nurse's Health Study (a survey of 75,000 nurses) showed regular whole grain consumption lowered the risk of heart disease by 25% and stroke by 36%[18]. Another study from 2000 published in the *Journal of the American Medical Association* showed nearly a 50% reduction in ischemic stroke risk for people who normally consumed whole grain products[19]. Whole grain nutrients and the importance of lipids and sterols continue to be a strong focus point for nutritional research[20]. Here are a few more examples: A May 2005 article in *Human Nutrition & Metabolism* identified whole grain oils, now nearly devoid from the average diet, as anticancer dietary components[21].

Two studies conducted in 2005[22,23] demonstrated the unique benefits of rice bran oil in cholesterol reduction.

A 2007 meta-analysis study (a study of an accumulation of evidence)[24] concluded that the need for whole grain nutrition is so acute in the population that government efforts to promote awareness should be doubled. The researchers further concluded that the process of refining grains removed many biologically active agents, including fiber, vitamins, minerals, lipids, sterols and other compounds. *"These biological agents influence cardiovascular risk through effects on glucose metabolism, lipids, lipoproteins, endothelial function, and other mechanisms, potentially accounting for much of the observed benefit of high intake of whole grains"* wrote lead author Phillip Mellen of Wake Forest University.