

# THE MICRONUTRIENT MIRACLE

## GUIDE TO:



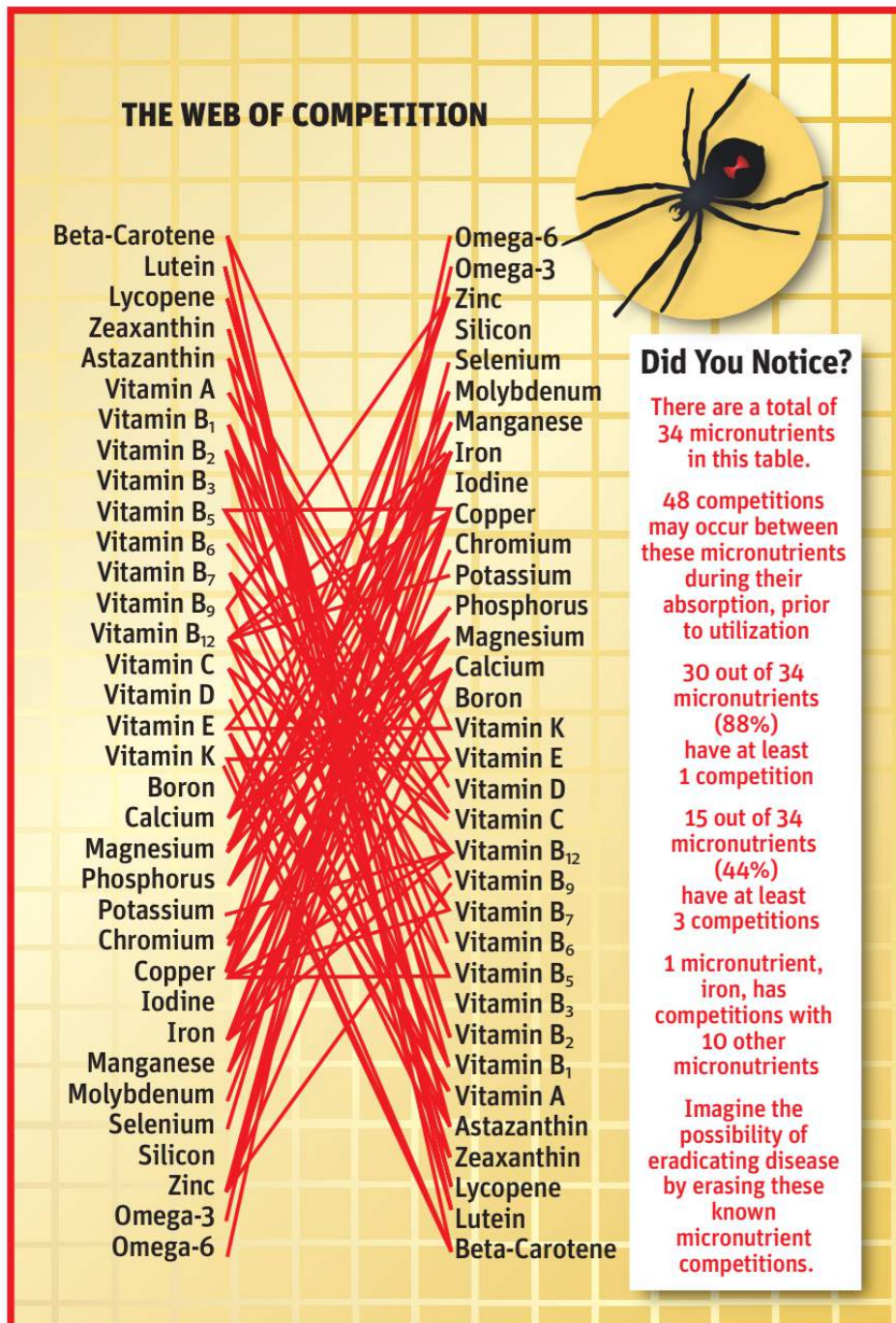
### **Micronutrient Competition: The Secret Battle For Absorption Occurring in Your Multivitamin or Nutritional Supplement.**

Each micronutrient, whether essential or nonessential, vitamin or mineral, differs in form, function and in the amount needed by the body to produce or maintain our individual health. They are absorbed by the body by attaching to receptor sites, or absorption pathways, which act as docking locations for specific micronutrients. These receptor sites are found throughout the entire gastrointestinal tract. For the most part, the majority of micronutrients are absorbed in the small intestine. However, due to something called micronutrient competition the process of absorption can be more like an epic battle scene than a harmonious event. Unfortunately, most supplement companies simply overlook this battle (competition) for absorption during the formulation process of their multivitamins and nutritional supplements.

Science has shown that there are four types of competition that can occur between micronutrients, they are chemical, biochemical, physiological, and clinical competition. Research published in the *American Journal of Clinical Nutrition* (AJCN), the *British Journal of Nutrition* (BJN), the *Harvard Health Letter* as well as many other nutritional and medical based peer-reviewed journals shows that competitions for absorption occur between many of the vitamins and minerals typically found in popular multivitamins. This makes it so that unless specifically formulated to prevent micronutrient competition, many of the vitamins and minerals in the typical multivitamin and/or nutritional supplement are simply not absorbed.

## INTRODUCING THE WEB OF COMPETITIONS

“When spider webs unite, they can tie up a lion.” ~ Ethiopian Proverb



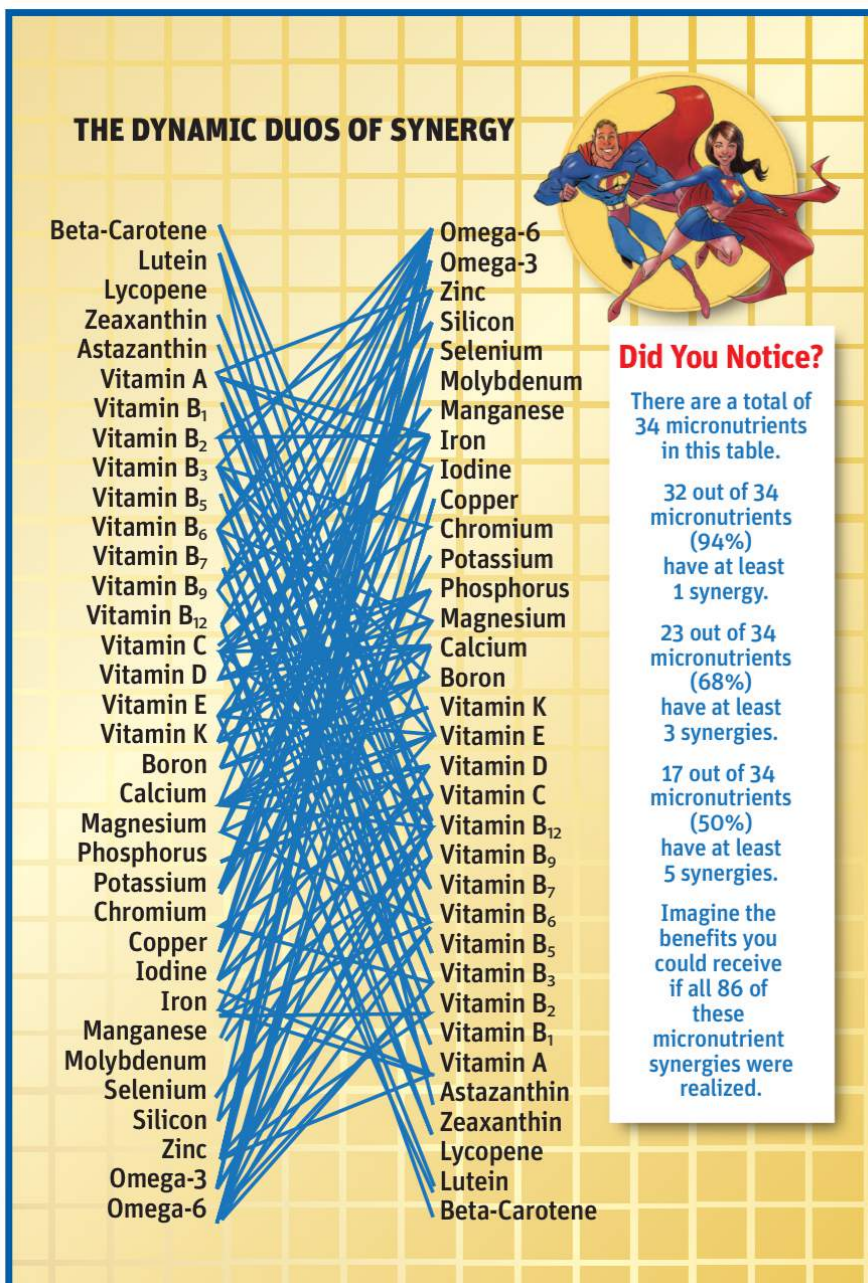
As you can see, micronutrient competition can greatly reduce your body’s ability to absorb the vitamin and minerals in the typical multivitamin or nutritional supplement. In fact, nearly 90% of the common micronutrients evaluated above are affected by

micronutrient competition in some way. To make matters worse, when key micronutrients don't get absorbed, the ability of other micronutrients to perform specific functions in the body can be greatly diminished or even eliminated. We call this the **domino effect**. Regardless of which kind of the four types of micronutrient competition is present, taking a supplement that is not formulated to eliminate these competitions can be like throwing money down the toilet and can leave you vulnerable to micronutrient deficiency.

## Introducing Synergy

**“Teamwork is the ability to work together toward a common vision . . . It is the fuel that allows common people to attain uncommon results.”**

~ Andrew Carnegie



It turns out that micronutrient synergy is like a mirror image of micronutrient competition. While micronutrient competitions can reduce or eliminate the beneficial effects of certain micronutrients, micronutrient synergies can enhance the beneficial effects of certain micronutrients. However, and this is important, **micronutrient synergies cannot reverse or eliminate the effects of micronutrient competitions on their own; they can only offer enhanced absorption and utilization if all of the micronutrient competitions that could affect their absorption have been eliminated.**

## THE DOMINO EFFECT OF MICRONUTRIENT COMPETITION



### STEP ONE

Let's begin by taking a standard multivitamin and mineral supplement containing both vitamins A and D. These two vitamins compete for receptor sites for absorption. Therefore, when vitamin A gets absorbed, vitamin D may not. Assuming this happens, you may develop a vitamin D deficiency.



**REMEMBER:** Vitamin D maintains healthy bones, aids in immunity, and works as an anti-inflammatory. Low levels of vitamin D have also been scientifically linked to excess body weight.



### STEP TWO

A vitamin D deficiency would affect your calcium (Ca) levels. This is because vitamin D is synergistic with calcium and is needed to make the calcium-binding protein essential for the calcium's absorption. The end result is compromised calcium absorption, potentially leading to a deficiency in calcium.



**REMEMBER:** Calcium's chief functions in the human body are the mineralization of bones and teeth, muscle contractions and relaxations, nerve functioning, blood clotting, blood pressure, and immune defense. All of these functions have now been jeopardized.



### STEP THREE

Reduced calcium levels may create another problem. Since the proper absorption of vitamin B<sub>12</sub> is dependent on calcium, your reduced calcium levels may result in reduced B<sub>12</sub> levels.

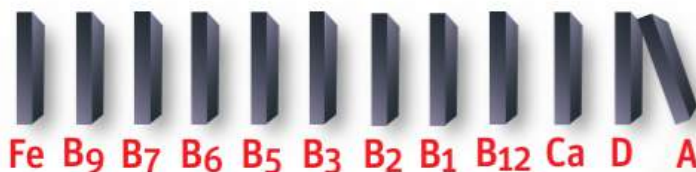


**REMEMBER:** A slight deficiency of vitamin B<sub>12</sub> can lead to anemia, fatigue, mania, and depression, while a long-term deficiency can potentially cause permanent damage to the brain and central nervous system.



### STEP FOUR

Vitamin B<sub>12</sub> is part of a close-knit, intimately involved family of B vitamins. A lack of vitamin B<sub>12</sub> may put the absorption and/or utilization of vitamin B<sub>1</sub> (thiamine), vitamin B<sub>2</sub> (riboflavin), vitamin B<sub>3</sub> (niacin), vitamin B<sub>5</sub> (panththenic acid), vitamin B<sub>6</sub>, vitamin B<sub>7</sub> (biotin), vitamin B<sub>9</sub> (folic acid), as well as iron (Fe) at risk.



*Just imagine what might happen if we started this domino effect with all of the villainous micronutrient competitions.*



## Is your multivitamin stuck in the past?

While the multivitamin is found in almost every home in America, most people don't know its history. How long ago do you think the multivitamin was created? Would you be surprised to learn that McDonald's, robots, electronic shavers, and car stereos all existed before the multivitamin? It's true. Even more shocking is the fact the while the first multivitamin was introduced in the 1930's, (more than 80 years ago) most multivitamins today are still being manufactured using the same outdated technology as its original prototype. Even though science now understands much more about vitamins than it did back in the early 20th century when they were first discovered, most supplement manufacturers continue to throw them together in their multivitamin and nutritional supplements regardless of known competitions. Unlike the telephone, which has evolved since the 1930's from an antiquated wall-bound talking machine to a handheld personal computer/phone/ipod today; or the television that has gone from a small 13 inch screen, with a black and white picture and manual dial control to a 50 inch, curved screen entertainment center with 3D capabilities, unlimited movie access and voice control; **most multivitamins are still stuck in the past.**

## Anti-Competition™ Technology (ACT) – Patented Science Bringing The Multivitamin Into The 21st Century!

The invention of **Anti-Competition™ Technology** by Calton Nutrition founders, Dr. Jayson and Mira Calton has changed the world of supplemental science forever by greatly enhancing the likelihood of micronutrient absorption and utilization and providing a clear pathway for the true benefits of all micronutrients to be realized. First introduced in their book *Naked Calories* (Changing Lives Press 2012) **Anti-Competition™ Technology** is a patented scientific breakthrough in the formulation of multivitamin/nutritional supplementation. The Calton's created this new technology through their identification of over 45 micronutrient competitions, which science has shown to reduce the absorption, metabolization and/or utilization of individual micronutrients when combined in a typical multivitamin or nutritional supplement. **Anti-Competition™ Technology** works by separating competing micronutrients into different formulas to be taken at different times of the day in order to naturally eliminate the competitions between them, thus greatly increasing the absorption, metabolization and/or utilization of the individual micronutrients. Just as antibiotics work to eliminate the dangerous effects of certain bacteria, **Anti-Competition™ Technology** eliminates the negative effects of micronutrient competition. **nutreince™**, by Calton Nutrition is the first and only multivitamin in the world to be formulated using **Anti-Competition™ Technology** to unlock the health enhancing power of the micronutrient.