Supplementation : The Base Supplements

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SUPPLEMENTATION

THE BASE SUPPLEMENTS

TheBody360 always advise that any supplementation is approved by your medical practitioner, because even some basic supplementation can be contraindicated with certain medications, or medical conditions. We also recommend you seek the help of a nutritional advisor skilled in supplementation advice, so you obtain the best 'band for your buck' from the supplementations you choose for your health condition and you do not double up on supplements that may be detrimental to your health in excess. The Body360 also highly recommends getting bi-annual checks for routine vitamin levels like vitamin D, folate and B12 and Iron/ferritin and these should be supplemented to obtain optimal levels, or in deficiency.

Supplements can be a minefield these days! With so many different options and promising claims, it can be difficult to know what exactly we should be taking and if it will even work. When truth be told, if a supplement claims to do something that can replace a normal lifestyle habit or behavior, then you should probably steer clear. Supplements are not to be confused as staples. They should supplement a healthy diet, not be a core of one.

However, not all is wasted, there are a small number of supplements that have been scientifically researched and field tested to show they work. And the best part - the ones that work do not have any fancy names or shiny packaging and are usually consumed already via our diets. The supplements recommended below are merely vitamins, minerals or oils that can be sourced to natural origins, not artificial powders or liquids made in a factory.

So why should we supplement natural nutrients when following a healthy eating plan?

Well, many people who follow healthy, varied diets can get by without any food supplements. But do we really want to "get by"? I say we want to thrive, and this is why it is recommended that we need higher dosages of some vitamins and minerals than our food can provide us. This is only the case for some micronutrients however, while for others, too much can be a bad thing! Usually these levels are much higher than we can typically get from our food sources alone, even when eating high quality foods. We should also

consider the overall quality of our foods in today's society; pollution is more of a problem, crops are sprayed more and many items are heavily processed before reaching our plate. The quality of our food is not up to scratch any more and is lacking some of the key nutrients they can be regarded for.

Further, many individuals are regularly training and exercising. This can be depleting on the body, adding further external stressors while also requiring extra energy and nutrients to recover from in order to force the body to adapt to the stimulus.

As you can see, increasing some natural vitamins and minerals via supplementation is sometimes warranted in specific circumstances. Provided our nutrition is dialed in and we are eating a balanced diet with high quality foods, research suggests they can add additional benefits.

1. Vitamin D

Functions – Health, strength, muscle gain and immune function

Many countries in Europe do not get nearly enough of this vitamin due to our low exposure to natural sunlight. Vitamin D from the sun is absorbed by our skin and converted to the active form of Vitamin D3 in the body. This acts as a hormone in the body and plays a variety of important roles supporting immune function, calcium absorption and cell growth and more.

NOT SO FUN FACT: Even on sunny days in many European countries, the angle of the sun in the winter months does not allow adequate vitamin D absorption and so it is usually an official recommended for residents of these nations to supplement during the winter months.

HOW TO TAKE

'For moderate supplementation, a dose of 1,000-2,000IU vitamin D3 is sufficient to meet the needs of 50- 95% of the population and should be seen as the lowest effective dose range. Higher doses based on body weight are in the range of 20-80IU/kg daily, with the lower half of the range being a dose taken during periods of high sun exposure and the higher range being taken during periods of little or no sun exposure. It is recommended to take vitamin D supplementation in the vitamin D3 (cholecalciferol) form rather than D2 (ergocalciferol) due to better utilization in the body, and to take it with meals.' (1)

2. *Omega 3 Fish Oil*

Funtions – Health, immune function, cell protection and structure, muscle function

Fish oil contains the essential omega 3 fatty acids EPA and DHA, which are known to provide a number of health and performance benefits due to the highly anti-inflammatory properties they provide. From a health perspective, these fatty acids appear to reduce the risk of heart disease and stroke, while from a performance aspect they can help to prevent muscle breakdown, enhance joint healing and improve brain function. Because of the blood thinning effects of Omega 3, it may be contraindicated with some medications or health conditions, so always seek medical opinion before supplementing with Omega 3.

HOW TO TAKE

'All the below numbers are based not on omega-3, but on combined EPA and DHA. Also, total daily EPA+DHA intake should be from both supplements and food intake; a higher intake of EPA+DHA from food would mean less needed from supplements.

For primary prevention, if you do not consume fatty fish 2-3 times per week, the minimum daily recommendation is 250 mg of combined EPA/DHA. The American Heart Association recommends 1g daily, and it is advised for pregnant women to increase intake of DHA by at least 200mg daily (although mercury should be a concern). These doses are effective but would not result in any short-term (less than a week) changes. For more acute and dramatic effects, such as reducing soreness or attempting to increase metabolic flux of muscle cells, a higher dose nearing 6g may be used over the course of a day.' (2)

3. *Green Tea*

Functions – Health, antioxidants (anti-inflammatory), energy and focus (natural caffeine)

Green tea contains compounds called catehins, including EGCG, the primary active ingredient that is known for it's potential thermogenic properties. EGCG is believed to play a role in inhibition of an enzyme that breaks down norepinephrine, the neurotransmitter involved in regulating metabolic rate and fat burning. Green tea also contains caffeine, which helps boost energy levels and

provide further fat burning actions during low-intensity aerobic exercise. It can also serve as a potent antioxidant which we know help to reduce oxidative stress, inflammation and related illnesses.

HOW TO TAKE

‘Most doses are standardized against EGCG. Although the amount of EGCG-equivalent varies from one cup of tea to another dependent on many factors (species of tea, length of steeping, time spent oxidizing) a rough rule of thumb could be that one cup of camellia sinensis green tea contains approximately 50mg of EGCG-equivalence.

Fat burning: Benefits of green tea catechins on lipid oxidation and related fat-burning pathways are achieved in a dose dependent manner, although significant effects in humans are noted only at high doses, such as 400-500mg EGCG equivalent per day (most Green Tea Extract supplements are roughly 50% EGCG). Fat burning effects are highly synergistic, almost dependent, on not consuming caffeine habitually.

4. Minerals

Zinc

‘Zinc is most commonly dosed in either the ‘low dosage’ range of 5-10mgor the ‘high dosage’ range of 25-45mg. The low dosage is a daily preventative that reduces the risk for deficiency, and the high dosage range is the one used to prevent deficiency in persons who have more than just a dietary deficiency working against them (athletes, diabetics, etc.).

There is zinc ‘superloading’ protocol using up to 100mg zinc daily, and while this is confirmed to be safe for short term usage (2-4 months) it is well above the tolerable upper limit (TUL) of 40mg and thus not advisable for prolonged supplementation. (4)

Magnesium

Magnesium doses range from 200-450mg Magnesium, when looking at the weight of the ion itself (known as Elemental Magnesium). Depending on what the ion is ingested as this dose is increased by a variable amount. For the purposes of relieving a deficiency or maintaining Magnesium status, any form of Magnesium may be used but Magnesium L-Threonate may not be the best choice (due to the low amount of elemental Magnesium per dose).

Although all forms appear to be able to attenuate a deficiency, gastrointestinal side-effects such as diarrhea and bloat are more common with the forms that have less absorption rates; oxide and chloride. Citrate tends to be a good choice in these instances. For any attempt of superloading Magnesium above and beyond dietary sufficiency, more bioavailable forms of Magnesium such as Diglycinate or Gluconate (taken with food) should be used in moderate to high doses.

Magnesium L-Threonate appears to be able to enhance cerebral Magnesium levels to a supraphysiological level even when at a moderate dose and may be a good choice for cognitive enhancement.’ (5)

5. *Vitamin K*

Function – Energy production, blood clotting, enzymatic cofactor

Only recently has the importance of vitamin K realized. Research is uncovering many roles for this vitamin in the body. There are two main types of vitamin K – K1 (phylloquinone) and K2 (menaquinone). What is currently known is that vitamin K plays a critical role in enabling certain enzymes in the body to function. Some of these enzymes help to form blood-clotting factors that allow blood to clot and some are important for fixing calcium in bones.

These roles appear to be performed by K1. A certain type of K2 is known as MK-4 has recently been shown to increase testosterone production.

HOW TO TAKE

Look for vitamin K supplements that provide both K1 and K2. While most supplements use a form of K2 known as MK-7, your best bet it to use a form that includes MK-4 to maximize testosterone production. Take 100-1,000mcg of vitamin K1 and vitamin K2. Please always consult a medical practitioner before supplementing with any vitamin K.!

6. *Whey Protein*

Funtions – Muscle gain, tissue recovery, overall health

Whey protein makes up to 20% of the protein in milk. Whey is the most effective protein for increasing muscle protein synthesis, the process in muscle cells that results in muscle growth. There are numerous reasons why whey is so effective, such as its high content of branched-chain amino acids (BCAAs) and it's ability to boost blood flows to muscles. However, the most important characteristic of whey is its rapid rate of digestion. Whey protein is the fastest-digesting protein source that you can get. This is a critical property for a pre-workout and post-workout protein. Pre-workout this means that the amino acid from the whey will be available to your muscles during the workout, which is when they need them the most. During workout, muscles that have been provided with amino acids will have more energy and will experience less muscle breakdown. Getting a fast-digesting protein is also a great idea after workouts, to drive aminos to muscle tissue, promoting recovery and growth.

HOW TO TAKE

Dosage: Typical recommendations are 20-40g first thing in the morning, within 30 minutes before workouts, within 30 minutes after workouts, and between meals as needed.

Summary

Lastly, I often get the question, 'Can I just take a multi vitamin instead?' The answer to that is no, again multi vitamins do not have high enough quantities to provide the benefits that the higher dose protocols can. Just like our food, the quality of our supplements matter too, always buy the highest quality product to match your budget.

If a supplement falls well short on the typical dosages recommended, it is more than likely poor quality and a waste of money. Not only that, you would have to take more of these in order to reach the ideal dosages, so in the long wrong you would be spending just as much. Also, many of the cheaper products contain fillers and further ingredients to bulk up the product, therefore it is always best to buy the higher quality option in order to know exactly what you are taking.

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