We've nearly all bought supplements of some sort. Whether we're everyday 'normal' individuals taking a multivitamin tablet, or opting for 'fortified' foods, such as dairy produce with added vitamins or eggs with omega-3.

Then there are some pretty fun and fashionable extremes too. Such as taking creatine, pre and post-workout to get a few extra reps out of your weight-lifting session and build bigger muscles. Maybe some extra amino acids too. And don't forget the protein powder!

Protein powder needs a whole section of its own, there are so many types. Different forms of whey protein, then there are vegan proteins made from rice, hemp, soy, pea, the list goes on. If there is a food out there with any sort of compound that is beneficial for something, you can be sure there is a factory out there, extracting/isolating that compound to sell it as a high-potency nutrient.

If you're anything like me, you've tried many if not all the supplements that are sold to health enthusiasts and/or athletes. Yep, I've experimented with the lot.

My biggest discoveries have been that:

Vitamin C (as ascorbic acid) works. It does everything it says on the tin.
Magnesium very much depends on the source. I can only tell that magnesium citrate makes a difference. Most magnesium supplements are a waste of money.

Vitamin D3 is a great investment if you don't live in a sunny climate. Quality matters here.

As for the rest of the vitamin and minerals, I don't supplement with these anymore because they are less bio-available when they have been isolated. This means that although they might be 'high-potency', they are pretty useless without the rest of the food from which they were derived.

Take calcium, for example. You need vitamins D and K to be able to absorb it efficiently. Luckily, the foods that contain calcium already have vitamins D and K.

So, onto the biggie: Protein

It is pretty trendy now to take protein. I have found that protein powder is a bit like alcohol; a little is good, more is not better.

I started taking protein powders when I was a strict vegetarian. At that point it made the world of difference to my energy, satiety and my exercise! Without the protein powders I would have continued to harm my body.

But here's the annoying thing; meat is better! And although you can get twice as much protein with half the amount of calories from a powder, it's still less effective at muscle-building and more fattening than meat.

I went through a few phases taking protein powders as well as meat. Mostly whilst trying to shed fat, but it wasn't until I cut out the powders altogether and swapped them for much 'higher-calorie' meats that I began to burn fat again!
I suspect it has something to do with the fact that the protein in protein powders is more bio-available when it is consumed alongside the natural fats and other unprocessed nutrients in the food from which it was extracted in the first place.

I also have a sneaking suspicion that protein powder is high GI (Glycemic Index). Athletes often take the protein powder straight after exercising so that it hits their muscles immediately, but the problem is, it hits them TOO quickly, and then there is too much all at once. What does the body do with any food it has too much of in one go? Stores it as fat.

So there we are. There is just no substitute for real food, sadly. I wish I could put this arsenal of different protein powders I have in my home to good use, but alas, they act like empty calories. With that said, I will occasionally put some in my coffee, because it makes it taste good, and doesn't give me acne, whereas actual milk does.

Ooh, and here is an awesome reference:

**Muscle Performance, Size, And Safety Responses After Eight Weeks Of Resistance Training And Protein Supplementation: A Randomized, Double-Blinded, Placebo-Controlled Clinical Trial.**

Edit: I'd just like to say that whey protein powders (not protein with carbs) turn out to be very effective for me during fasts.