
Supplement Quality

Why Highest Quality Control is Essential in a Functional Medicine Practice.



Nutritional and herbal supplements, when used therapeutically and judiciously, are incredibly powerful tools to aid the body both in healing and in prevention. Asking a Functional Medicine doctor to practice without the use of supplements is like asking a fisherman to fish with bait but no rod. In a Functional Medicine practice, supplements are chosen based on each patient's biochemical needs in order to re-

direct the body, guide the body, and facilitate healthy functioning of cells and organ systems. It allows us to both accelerate and ensure the positive effects of a healthy lifestyle. It also allows us to alleviate pain and discomfort when you need it most without the use of harmful drugs and chemicals.

Why the *Brand* of a Supplement is so Important

For better or for worse, the supplement industry is unregulated. On the bright side, this allows companies healthy competition in innovation and in pricing. Unfortunately, it also means that the supplement industry essentially operates by the "honor system"¹. The small amount of regulation that does exist has set a very low bar for the quality of supplements, and there is virtually no enforcement of this low standard. As the patient and the consumer, you are at the whim of the company's personal level of dedication to quality.

**Nutritional and herbal supplements are not created equally
for a few key reasons:**

1. Where and how the herb or nutrient was extracted is not regulated. A company is not required to verify the species of plant, for example, from which it is making the product. If you are taking an herbal formula, this is in the best case a waste of your money and time, and in the worst case it is extremely dangerous. There is an alarmingly high rate of products containing false information on their labels². They may boast on their label that they contain, say, 200mg of a specific herb when in fact, they contain *none* of that herb whatsoever^{3,4}.

2. Requirements for testing for contaminants are also minimal, even in formulas that boast special certifications. In a trade-heavy world, this gap within regulations results in concentrated levels of heavy metals, radiation, toxic minerals, microbes / pathogens, allergens, and other contaminants *without any reference* to them on the product label^{3,4,5}. This is particularly true of herbal products, probiotics & fish oils.

3. Herbal medicines are only therapeutic if they are grown, harvested and concentrated properly. This requires masterful knowledge within the company and the application of advanced technology to ensure the potency, concentration and bioavailability of the therapeutic phytochemicals within the herb in every single batch of product produced. Unless the company *chooses* to undertake this complex task throughout the manufacturing process, your product is likely close to useless.

This is why at our Practice, we only recommend brands that take the extra steps and spend the extra time and money to ensure that every step along the way from growing and harvesting to manufacturing and shelf-stability is thoroughly tested and third-party verified using the most effective technologies available. *We are using supplements as primary tools to achieve positive health outcomes. It is critical that we know you are using safe & effective products.*

Why the Distributor You Buy from Matters so Much

In recent years with the development of online retail and profit-seeking on massive scales, we have seen another big problem arise for our patients. Our patients may find themselves tempted to purchase supplements from an illegitimate supplement distributor because the price seems lower or the delivery more convenient. Unfortunately, this comes at a huge quality cost to the consumer. There are a myriad of ways individuals are scammed day after day by purchasing from commercial online-retailers who distribute from large general

warehouses *or* from individuals who are actually selling these products illegally independently or through a big-name online retailer's website.

1. A seller will empty the bottle and re-fill it with a decoy capsule / tablet and re-seal it as the original product. Aside from being morally disturbing, it also means that your product is, in the best case inert and wasteful, in the worse case dangerous to your health^{6,7,8}.

2. A seller will scratch off / remove the expiration date from the bottle. They may or may not add a replacement expiration date that extends long past when the bottle was set to expire by the original manufacturer, or simply not include an expiration date at all. This is an illegal practice, but accountability and prosecution are rare due to poor enforcement of safety standards.

3. The warehouse where the product is stored is not climate-controlled. Unless you are purchasing from a source that makes the painstaking efforts to diligently control the environment in which the product is stored, your product will not be of therapeutic quality. A product in a warehouse can be kept at high temperatures, in a humid environment *for months, even years* before it reaches you. Herbal medicines are from organic material and are only therapeutic when kept within certain ranges of heat and humidity. Fillers operate much the same way. Probiotics, fish oils, and various food-based and synthetic nutrients also require specific temperature and humidity controls to maintain their efficacy and shelf-life. For the same reason you need to be cautious about where you leave supplements in a house during the summer months if you don't have AC, you need to know you can trust the distributing location⁹. The importance of environmental control to maintain supplement quality is not understood by general retailers who are non-experts in the herbal and nutraceutical industries. Additionally, enforcement of optimal storage conditions may not be adhered to because it costs retailers profit, and there is no legal obligation to adhere to these standards. A classic example of a consequence of inadequate storage is with fish oil. Fish oil notoriously becomes rancid in heat, altering the chemical composition of the fatty acids present. Not only does this fatty acid damage negate the health benefits, but will also cause deleterious health effects.

4. The *delivery* from the warehouse is similarly not well-controlled. Even in a world where the product *was* kept in a cool enough, dry enough environment to ensure the health of the product during storage, it is then shipped out to an individual's home

where the environment *during transport* is not controlled. This is why at our office we pay extra to have products' shipping conditions well-controlled to our standards.

Your time as well as your emotional and financial investment in your health are important to me. In fact, I also feel emotionally invested in the time and effort you dedicate to getting well. Because our therapeutic tools depend on an industry that is self-regulated, we must be incredibly vigilant about pranks, scams, and profit-seeking measures that prevent you from healing and staying healthy. We must demand the highest quality from distributors and our manufacturers. *This is why supplements matter. This is why we must know who made the product, and where the product has been before it arrives in your hands.*

Quick Article References:

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