1.0 Drugs vs. Supplements

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Dr McAnalley leads Aroga's cutting-edge research and product development.
His passion as a scientist is his focus on developing proprietary natural products that help build health and he currently holds 300+ patents.

The FD&C Act defines drugs, in part, by their intended use, as "articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease" and "articles (other than food) intended to affect the structure or any function of the body of man or other animals" [FD&C Act, sec. 201(g)(1)].

Drugs are considered unsafe until proven safe.
In general, the FDA considers new drugs to be unsafe until they are proven safe through clinical trials. And the FDA must approve any new drug before it can be legally sold in the US.

In 1994, the Dietary Supplement Health & Education Act (DSHEA) defined dietary supplements as a category of food, which put them under different regulations from drugs.

Dietary supplements are considered safe until proven unsafe.

FDA is not legally responsible for the safety of dietary supplements; the manufacturers are.

The manufacturers are also responsible for what's in them and being sure the contents are the same from one pill or 'package' to another.

The FDA only looks into reported problems or safety hazards.

They do not routinely check for quality of supplements, like they do for drugs.

FDA Cannot Oversee Supplements Like It Does for Drugs

But since supplements became widely available in 1994, the FDA and some independent researchers have found problems with some dietary supplements. FDA does not have the manpower to oversee production of over 60,000 supplements, as it does for about 20 new drugs introduced into the market each year.

Supplements, like herbs, are sometimes tainted with germs, pesticides, or toxic heavy metals. Other supplements do not contain what's listed on their labels. Still others often contain more or less than the amount of the herb listed on the label. Many have ingredients that aren't listed on the label at all. This problem extends beyond supplement makers and sellers. Some herbal suppliers (those who grow, harvest, or sell the crops) may mix or even substitute their crops with less expensive or more readily available plants.

There's also the problem of accidental contamination, when one plant grows in with others, as well as cases of mistaken identity (when one plant looks like another). Given the global market, all of these problems can make it harder for a company to be sure that what they thought they were buying to make their supplements with is actually the herb they wanted.

In 2013 researchers in Toronto published a report in which they sampled and analyzed 44 herbal supplements.

The supplements were sold in both the US and Canada and labeled as containing single herbs.

Using DNA bar coding analysis, less than half the supplements (48%) contained any of the herb listed on the label. More than half of the supplements contained something that wasn't on the label (substitutions or fillers). Even among the samples that contained the herb on the label, many also contained fillers or contaminants.

And again, in early 2015, the New York Attorney General sent warning letters to major retailers who sold supplements that were shown by DNA testing to be mislabeled.

Lab tests determined only 21% of **GNC**, **Target**, **Walmart and Walgreen** products actually had DNA from the plants they advertised on their labels.

Although they're not tested very often, careful studies find that many supplements are not what they are supposed to be

A more serious trend today is adding extra ingredients in supplements. Some ‘herbal‘ supplements have even been found to contain prescription drugs or other compounds that are not listed on their labels.

For example, some supplement ads are targeted to men as 'enhancers’ or muscle builders. Some of these so-called 'supplements’ have been found to contain substances much like Viagra® or Cialis®, and been recalled.'Prostate health’ supplements have been found to contain the prescription drug terazosin, used to treat the symptoms of an enlarged prostate.

Other ads target women and tout the supplement as an aid to weight loss. Some of these ‘weight loss supplements’ contained the weight loss drug sibutramine, which was banned in the United States because of the risk of heart attack and stroke.

The supplement makers recall these products only after they have been found to contain these illegal additives. Then the FDA can seize these drugs and prosecute the companies who make them.

There are also times that new ingredients with little-known effects are slipped into supplements. In one situation, supplements were labeled as being made from geranium but turned out to contain the stimulant drug dimethylamylamine (DMAA). This type of supplement was sold as a 'natural stimulant,’ but it contained DMAA, a man-made drug.
The DMAA-containing supplements were exposed after some serious events, including several deaths, leading the FDA to send warning letters to US manufacturers in 2013.

These kinds of extras can cause serious health issues for people who take such a supplement. There are also risks of mystery drug interactions because the person doesn’t realize that he or she is taking a drug.

Why Choose Aroga Supplements?

Aroga supplement ingredients are tested and retested to make sure none of the above ingredient problems exist in our supplements.

Aroga has the knowledge and assaying equipment to ‘flag’ and prevent these problems.

Early on, Aroga found problems with about 90% of its potential ingredient suppliers. When first notified of these supply chain issues, and returning substandard batches, suppliers quickly learned Aroga inspects and assays (analyses) all of its incoming ingredients as part of the company’s GMP (Good Manufacturing Practices).

Many automated capsule or tableting machines require so much binding and/or flowing agents, that the capsule or tablet contains only 5% of the desired ingredient.

Aroga’s Apoptosis supplements are filled by hand to avoid the need for binders, fillers and flowing agents.

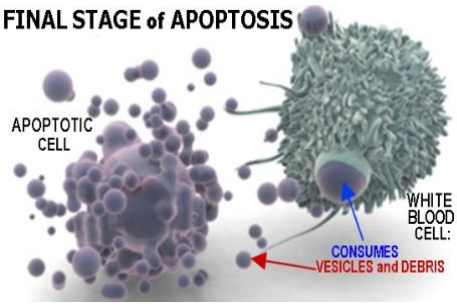
Hand fill assures Aroga capsules are only filled with 100% active plant-based ingredients.

It is the bitter tasting small food ingredients that first activate Apoptosis signaling pathways in cells, so cells can use the remaining food ingredients to fix their structure and restore proper function.

Not knowing their value until recently, many of these bitter ingredients have been removed from our foods by genetic selection or genetic modification. Aroga obtains freeze dried foods from 26 countries where the bitter ingredients still exist to modulate or activate different apoptosis pathways.

Aroga supplements can affect the structure and/or function of cells via modulating apoptosis pathways. Apoptosis pathways determine the structure and function of all cells.

In healthy people an average of 60 billion cells, that cannot be fixed, are digested via apoptosis into their basic biomolecules.



These biomolecules are used later to help build new healthy cells.

Healthy cells build healthy tissues, which make up healthy organs, healthy systems and subsequently, a healthy body.

Healthy people need good nutrition…to stay healthy.

Sick people need good nutrition even more…to become healthy again.

Science now confirms:

Good nutrition must include

Bitter foods that support *Apoptosis pathways*