



Quality Control and Manufacturing Process

Repeated testing ensures that we deliver the safest, highest quality products to you. On average, our herbs must pass 15 tests before reaching you.

"Seed to Shelf"

Consciousness, promoted by Dr. David Eisenberg of Harvard University, is an approach to tracking herbs and maintaining accountability from the origin as seeds, through planting, maturation, harvesting, processing, and testing, until the herbs are delivered to you. Evergreen Herbs employs the following safety processes and checks to assure safety, quality, and ultimately, clinical efficacy. These processes and commitments are why Evergreen Herbs are good for you and why medical professionals choose Evergreen.

Good Agricultural Practices (GAP) Raw Material

Quality products begin with premium raw material. We seek out growers who routinely test both the soil and water for quality and freedom from contamination. We select whole, medicinal-grade herbs with abundant phyto-nutrients and medicinal potency. By supporting farmers that follow Good Agricultural Practices (GAP), we help to ensure sustainable farming of high quality Chinese herbs.

Lab Tests Performed by Evergreen Herbs	Sole Acceptable Outcome
<input checked="" type="checkbox"/> Organoleptic Visual Check	Pass
<input checked="" type="checkbox"/> Microscopic Cellular Identity Check	Pass
<input checked="" type="checkbox"/> TLC Active Ingredient Check	Pass
<input checked="" type="checkbox"/> HPLC Potency Level Test	Pass
<input checked="" type="checkbox"/> Total Heavy Metal Test	Pass
<input checked="" type="checkbox"/> Total Bacterial Count Test	Pass
<input checked="" type="checkbox"/> Total Yeast and Mold Test	Pass
<input checked="" type="checkbox"/> <i>E.coli</i> Test	Pass
<input checked="" type="checkbox"/> Salmonella Test	Pass
<input checked="" type="checkbox"/> Staphylococcus aureus Test	Pass
<input checked="" type="checkbox"/> Loss on Drying Test	Pass
<input checked="" type="checkbox"/> Total Ash Content Test	Pass
<input checked="" type="checkbox"/> Acid-Insoluble Ash Test	Pass
<input checked="" type="checkbox"/> Dil. EtOH Extract Test	Pass
<input checked="" type="checkbox"/> Individual Heavy Metal Tests* (Lead, Cadmium, Mercury, Arsenic)	Pass
<input checked="" type="checkbox"/> Pesticide Test* (Organochlorine and Organophosphorus) (over 100 pesticides tested)	Pass
<input checked="" type="checkbox"/> Aflatoxin Test*	Pass
<input checked="" type="checkbox"/> Ochratoxin Test*	Pass
<input checked="" type="checkbox"/> Aristolochic Acid Test*	Pass
<input checked="" type="checkbox"/> Aconitine Test*	Pass

*These tests are performed on herbs when applicable.



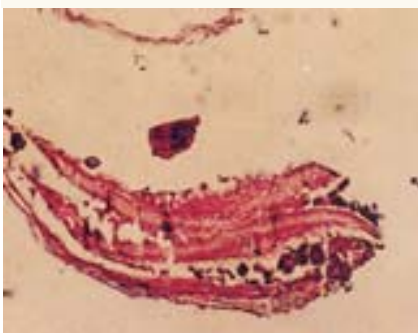
Geo-Authentic Selection



Ginseng, best from Jilin Province in China

We take geo-authenticity seriously. This means we obtain herbs that are indigenous to a specific region, and when grown there will yield the best medicinal results. For example, Chuan Bei Mu (Bulbus Fritillariae) should be grown in the Sichuan province for the best results, as the soil and climate of Sichuan produce the highest development of its therapeutic components. In addition, we select the appropriate therapeutic portion(s) of the plant and pay careful attention to the method and timing of harvesting, in order to maximize and preserve their effectiveness.

Herb Identification



Electron microscopy to examine the cellular structure of the herb to ensure authenticity and quality

Our senior herbalist, qualified to perform organoleptic identification, starts the process of confirming the authenticity of the herbs via taste and visual comparison. Criteria such as correct color, freshness, and appearance are taken into consideration in selection of the best raw material.

Because many herbs look and taste similar, we further ensure authenticity using electron microscopy to examine the cellular structure of the herb. The cellular structure of each herb is unique, much like a fingerprint. While many companies do not take this extra step, sometimes meaning that inappropriate substitute herbs and substandard subspecies are brought to market, this is one test that we at Evergreen consider absolutely

necessary to verify and ensure authenticity and quality. We are confident you agree that this is in your best interests.

Advanced Testing to Ensure Quality and Safety



Thin Layer Chromatography (TLC) identifies the unique component make up of an herb while High Performance Liquid Chromatography (HPLC) ensures that the bio-active constituents are present in proper concentration

After visual inspection, laboratory tests are performed to detect what cannot be seen or tasted. Evergreen uses Thin Layer Chromatography (TLC) to identify the unique component makeup of an herb to further guarantee its authenticity, and High Performance Liquid Chromatography (HPLC) to ensure that the bio-active constituents are present in proper concentration. Together, the TLC and HPLC guarantee accuracy in species and maximum deliverance of active ingredients in our herbs.



Protection Against Heavy Metals

After ensuring authenticity and active ingredients, our herbs are tested for safety. We have increased our standard of quality control by testing for safety against EACH heavy metal (arsenic, cadmium, lead and mercury) - rather than just the total heavy metal amount.* Most suppliers test only the total heavy metal amount, which means variance in one heavy metal above its individual limit may be offset by a low count in another. Total heavy metal count can be up to as high as 200 ppm (parts per million) in some companies. Though taking on this difficult task means rejecting many batches of herbs that do not meet the Evergreen standards, we believe it is still necessary in order to deliver the absolute purest herbs to you and your patients.

Our heavy metal tests are performed using scientifically validated methods, in accordance to the US Pharmacopoeia and the World Health Organization (WHO) standards.

*See Lab Test chart for detail

Non-Detectable Pesticides



Evergreen herbs are safe from pollutants, insecticides, fungicides, herbicides, and pesticides. Our on-site lab and independent labs test at-risk herbs for a total of over 100 different types of organochlorine and organophosphorus compounds.

Pesticide testing for over 100 different kinds of organochlorine and organophosphorus compounds for at risk-herbs

Safety Against Bacteria



We insist on microbial tests following the guidelines of the US Pharmacopoeia. Scientists in our full-scale microbiology lab test our herbs for Escherichia coli, Staphylococcus aureus, Salmonella spp., Enterobacteriaceae, and other gram negative bacterium; for total bacteria count, and for total yeast and mold counts, to ensure you receive the safest product on the market today.

Microbial tests for E.coli, Staphylococcus, Salmonella, Enterobacteriaceae, mold and yeast to ensure you receive the safest product on the market today



Manufacturing Process

Careful extraction of premium raw material is what makes Evergreen herbs better than the rest. Quality is an integral part of every step in our manufacturing process. Extraction is not a crude process, but a refined art and science that require oversight by master craftsmen and craftswomen at each stage in every process.

Preparatory Work

We wash our herbs repeatedly and rinse them in fresh running water to remove dirt and other impurities. Each type of herb and all individual pieces of each herb are then processed in particular ways to expose maximum surface area for further processing and to facilitate the highest extraction of active ingredients. For example, seeds are crushed open, and tonic roots are thinly sliced diagonally, prior to whatever is needed next to insure extraction of essential herb components. Like a chef preparing food in a kitchen, the proper preparation before cooking can make the whole dish.

Pre-Extraction Methodology

Our herbs are prepared according to a unique Pre-Extraction Methodology, during which time the herbs may be roasted, baked, stir-fried, or even wine-fried according to traditional method to yield the maximum therapeutic effect. Some herbs, like Dang Gui (*Radix Angelicae Sinensis*), contain key alkaloids that are soluble in alcohol rather than water. In order for these active ingredients to be released, the wine-frying procedure must be performed prior to water extraction, or the therapeutic effect would be compromised. Knowing this and committing to these details are what makes our herbs more effective than others, so that you can see the difference in therapeutic results.

High-Pressure Low-Temperature Extraction and Granulation



Extraction and granulation are performed in sealed, temperature-controlled, clean rooms

Our herbs are extracted in sealed, temperature-controlled, clean rooms. The only water that is used in extraction processes has been softened and purified to high standards. Our herbs are not subjected to heavy metals from tap water, or to industrial solvents such as acetone or hexane, which are used by some manufacturers to extract one specific standardized active ingredient.

Our high-pressure system maximizes extraction of active ingredients, and the low-temperature approach ensures that phyto-nutrients and active compounds are not destroyed by heat--thus yielding a more potent finished product. This principle is much like cooking vegetables. The right temperature and time

must be used to retain vital nutrients. If cooked for too long, or over high heat, all the vitamins and healthy ingredients are destroyed.



Finally, one herb at a time, the liquid carrying the extracted ingredients, now in paste consistency, is turned into the final individual granular product under vacuum-dry evaporation and granulation in a totally enclosed chamber to protect against cross contamination from other herbs or from any other potential contaminant. In addition, to ensure stability and prevent caking, excipients may be added during the granulation process (non-GMO corn starch for Classic herbs and formulas, non-GMO potato starch for Collection formulas, and in some cases, maltodextrin for the Western herbs).

The tracking process that began in the fields with the selection of herbs, continues throughout the many processes, as each batch of granules is sealed and labeled, including lot number tracking information, prior to leaving the manufacturing process.

Conclusion



From "Seed to Shelf," Evergreen ensures purity, safety and potency in our herbal extracts by following standards and guidelines set forth by the World Health Organization (WHO) and Good Manufacturing Practice (GMP) of the US Food and Drug Administration (FDA)

From "Seed to Shelf," Evergreen ensures purity, safety, and potency in our herbal extracts by following standards and guidelines set forth by the World Health Organization (WHO) and Good Manufacturing Practice (GMP) of the United States, Japan and Taiwan.

Efforts put forth by our team of experts in chemistry, microbiology, and Chinese medicine result in a Certificate of Analysis (COA), which guarantees that our customers receive the highest quality product that is safe and effective. We take all the extra steps to bring you the very best herbs. It's the right way, and the only responsible way to process and produce herbal extracts. We thank you for using Evergreen Herbs and your support of responsible herbal medicine practices.

Note: Evergreen distributes herbal extracts exclusively to healthcare practitioners. These statements have not been evaluated by the FDA. Our products are not intended to prevent, diagnose, treat, or cure any disease.