

SUCCESS WITH NATURAL FUNCTIONAL MEDICINE

Michael C Gaeta, DAOM, MS, CDN, Dipl Ac & ABT (NCCAOM), LAc, LMT, CAT

- Doctor of Acupuncture & Oriental Medicine
- Dietician-Nutritionist
- Herbalist

michaelgaeta.com



The Gaeta Institute

FOR WHOLISTIC HEALTH EDUCATION




*Nature
First,
Drugs
Last*

**Practitioner
Training,
Public
Education &
Patient Care**



1




The Gaeta Institute

FOR WHOLISTIC HEALTH EDUCATION

Standard Process or Doctor's Research?


A Senior Clinician's Initial Assessment

With Dr Michael Gaeta, DAOM, MS, CDN, Dipl Ac & ABT (NCCAOM), LAc, CNFMP, LMT, CAT



**Standard
Process®**

WHOLE FOOD NUTRIENT SOLUTIONS



Doctors Research, Inc.

2



The Gaeta Institute
FOR WHOLISTIC HEALTH EDUCATION

Your Questions

Please type your questions in the
Zoom Chat during the webinar.

I will answer as many as time allows.



3

SP / DR

Introduction



4

If We Haven't Met Before...

Doctor of Acupuncture & Oriental Medicine; MS in Acupuncture

Licensed Dietician-Nutritionist; BPS in Health Sciences

Licensed Acupuncturist, Diplomate in Acupuncture (NCCAOM)

Licensed Massage Therapist; AOS in Massage Therapy, BPS in Asian Bodywork Therapy

Certified Practitioner & Instructor of Asian Bodywork Therapy (AOBTA); Diplomate in ABT (NCCAOM)

Certified Natural Functional Medicine Practitioner

Clinician: 33 years practicing Chinese & functional medicine

Educator: trained 20,000 practitioners over 30 years of teaching (18,000 practitioners for SP)

Standard Process (SP): Started using SP clinically in 1996 (Metagenics, etc. before that)

Deep study of the teachings of Royal Lee, Mark Anderson, Joseph Antell, others

Began teaching in 2001, one of the top national speakers since 2005

Most effective SP speaker in increasing sales after seminars

Created the largest online school in the clinical application of SP + MH + FxMed + Business Success



↑ first career! ↑



5

Honesty, Clarity & Humility

- I am teaching this webinar to answer questions I am getting weekly from my students and colleagues.
- These are my initial impressions and research. I don't know everything and I get things wrong sometimes.
- I have not used DR products personally or clinically.
- I am not telling any practitioner what they should do.
- I am offering my own perspective to help practitioners decide for themselves.



6

My Two Principles

I am not attached to SP or any other products. If there was a non-SP product line that better embodied these two principles, I would use it. I switched from high-dose synthetics 27 years ago for this reason.

1. What helps the patient
2. What is as natural as possible, honoring the wisdom of the Creator as expressed through Nature



7

Background: Recent History

How did we get here?

Note: numbers below are estimates, and may be a little off

January 1, 2023: After 93 years, SP replaced its entire sales force of 36 ISRs and about 60 ASRs with employees, losing about 500 person-years of product knowledge, and decades of relationships carefully built with health professionals

Initially 7, now 6, of the 36 ISRs have continued on as employee reps; so about 94 new reps

Most SP practitioners lost the support of reps they had known for decades, and many have less trust in and loyalty to SP as a result

17 of the not-hired ISRs have chosen to rep for a relatively unknown company, Doctor's Research, and/or Gaia Pro (Gaia Herb's professional line)

Many of SP's roughly 60,000 practitioners are now understandably confused



8

Questions We Are Receiving Every Week at the Gaeta Institute

Practitioners are asking us every week:

- Am I going to switch from SP to DR in my practice and teaching?
- Should we, his students, switch companies?
- Is this the end of an era and the start of a new one, for the Gaeta Clinic for Chinese and Functional Medicine, and the Gaeta Institute for Wholistic Health Education, and SP practitioners in general?



9

A Whole Lot O' Questions

Questions abound among practitioners and in online forums:

- What is a health professional to do?
- Which product line to choose?
- Which is the best source for food-based nutritional, and herbal, products?
- Is it time to abandon SP and move on?
- Is DR SP 2.0, the evolution of whole-food / food-based supplements?
- Has SP run its course, to be supplanted by superior DR products?



10

SP / DR

Standard Process & Doctor's Research



11

What Is Standard Process?

The apex brand in the professional supplement industry

Established in 1929, the oldest supplement company, and the first multi-nutrient supplement (Catalyn)

Created by the greatest nutritionist of all time, and the one of the founders of the field of wholistic nutrition, Dr Royal Lee, DDS

About 500 employees; headquarters + farm in southeast Wisconsin

Other supplements companies regularly attempt to imitate / emulate / copy or improve on SP (we will explore a current example of that today)

Third-generation, family-owned company; the President and CEO is Royal Lee's nephew by marriage



12

Dr Royal Lee, DDS

(1895 – 1967)

Created the first whole food supplements
in the world

The greatest nutritionist of all time

Inventor, engineer

Biochemist

Agriculturalist, farmer

Researcher, author

Philanthropist

Educator



13

SP – Unique Characteristics

- From seed to supplement – they own the 500-acre beyond-organic farm that produces 80% of the ingredients in their 250 formulas
- Sole US Distributor for the most potent, professionally-relevant herbal medicines in the world, MediHerb, of Australia – 136 formulas
- Unparalleled 94-year history of clinical application & experience with several million patients using these food-based formulas
- The sole producer of protomorphogen tissue extracts, one of Dr Lee's greatest contributions to humanity



14

What Is Doctor's Research?

A food-based supplement company with 3-4 employees, perhaps formed in 1998, that has based its approach on Dr Lee's whole-food philosophy, and its product line and names on Standard Process

It appears to be a private label brand of Enzyme Process, which is mainly a custom supplement manufacturer formed around 1977, which became much more active starting in 1988, when it was taken over by a former New York SP rep David Roderick (deceased), and now run by his son




15

Doctor's Research - doctorsresearch.com



16



Who is Doctors' Research

Headquarters 1036 W Grand Ave, Grover Beach, California, 93433, United States

Phone Number (805) 489-7185


Website www.doctorsresearch.com


Revenue <\$5M


Industry

[Drug Manufacturing & Research](#) [Pharmaceuticals](#) [Healthcare](#)


View Employees

**Brian Thiel**
Web Development
[Phone](#) [Email](#)


**James Estoque**
Office Manager and Creative ...
[Phone](#) [Email](#)



DR. ROBERT THIEL
Owner / CEO




JAMES ERWIN ESTOQUE
Office Manager / Creative Director



SHELLEY MILLER
Inventory Manager

17



Robert Thiel, Ph.D. Naturopath and Scientist

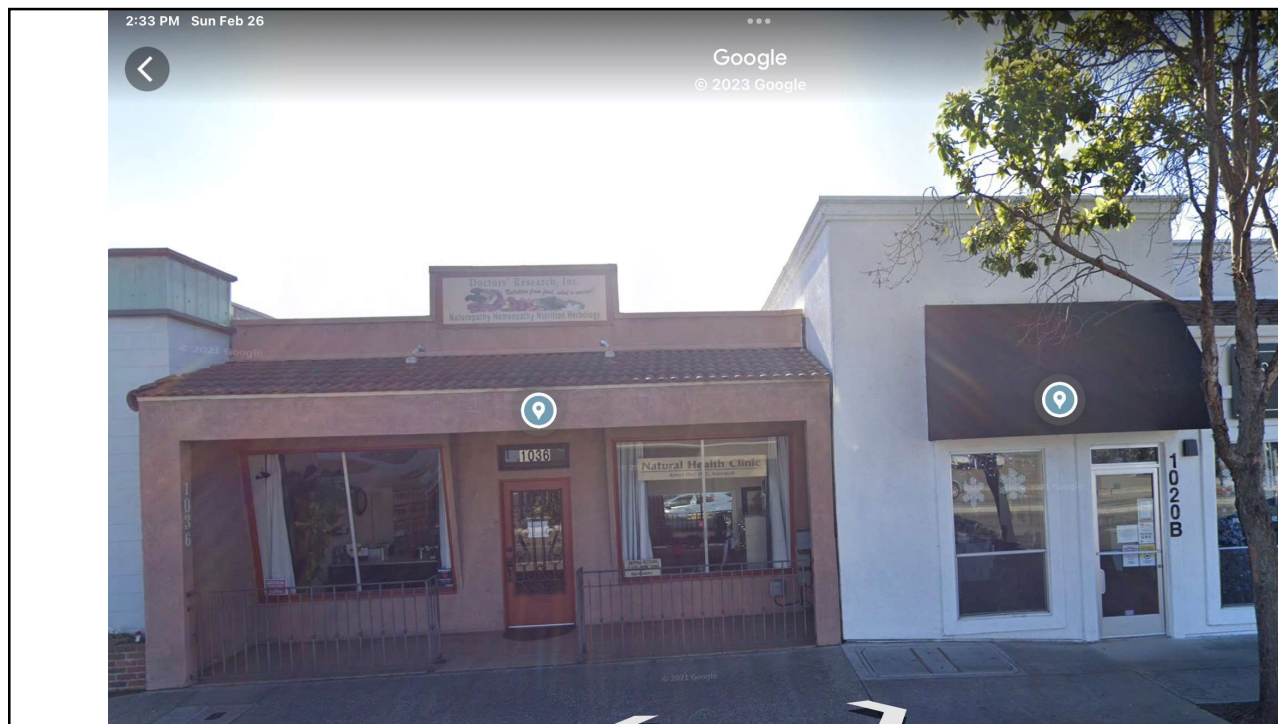
Dr. Thiel runs a clinic in Grover Beach, San Luis Obispo County, California.

The research group at Doctors' Research is directed by Robert Thiel, who holds a Ph.D. in nutrition science. He held a license as a naturopath by the State of North Carolina, was registered as a naturopath by the District of Columbia, and held a license as a naturopathic physician within Idaho. He maintains a natural health clinic in Grover Beach, California.

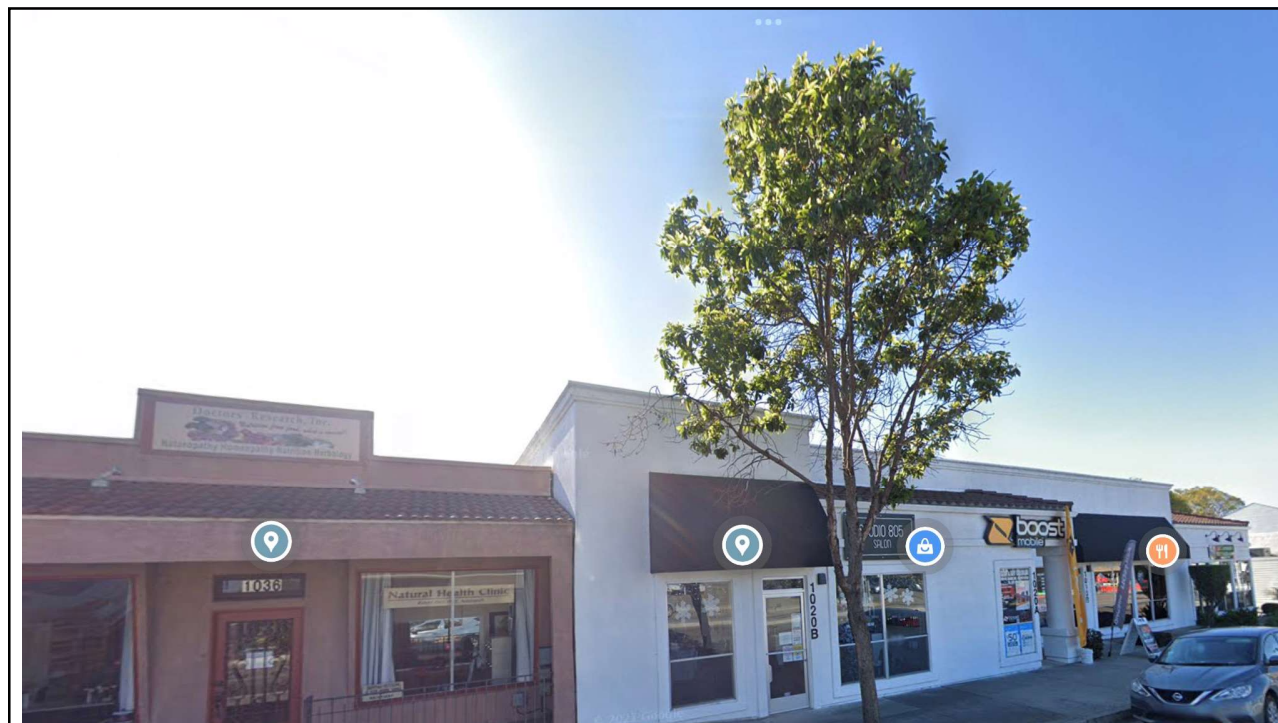
RESEARCH
The research group for Food Research International, LLC is headed by Dr. Robert Thiel, director of Food Research, Inc. Dr. Thiel holds a Ph.D. in nutritional science.

Email Us at doctorsfoodresearch@gmail.com for more info

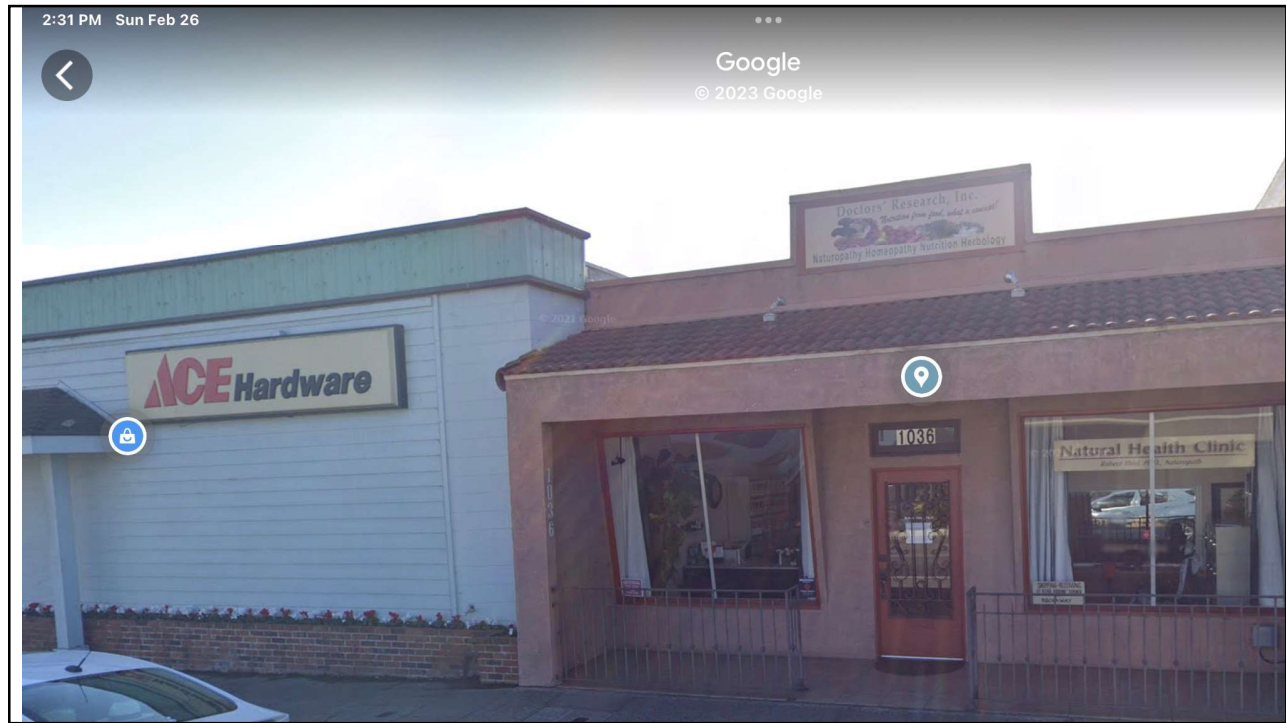
18



19



20



21

SP / DR

Doctor's Research Product Line



22



23

Doctor's Research Food-Type Ingredients

Three Types of Ingredients, in order:

1. Hydroponic vegetables and fruits – about half of all ingredients
2. Isolates added to yeast (Biotics-style)
3. Organic foods grown in soil on a farm



24

Explanation From a DR Rep

“When you add a synthetic vitamin to the [hydroponic growing solution or yeast] and the food absorbs it, then it is no longer synthetic.”

25

5. Why are our FOOD brand products the best?

<https://doctorsresearch.com/faqs/>

In order to obtain the potencies of nutrients that members of modern societies need, many of the nutrients in our products are hydroponically-grown to improve the concentration of nutrients in the specific raw foods that we use. The processes essentially take advantage of a law of nature that a plant will absorb more of a nutrient when that nutrient is more available. Essentially, the plant is fed an enzyme-containing liquid that will be higher in one particular mineral. The plant will absorb more of that mineral, since more of it is present. The nutrient foods are grown in an FDA registered facility.

Creating a whole from different elements is nature in action. The best method of creating a union, like those created by nature, between inorganic fractions and the whole food matrix seems to be by utilizing hydroponic technologies. whole food matrix through low temperature hydroponic farming The reason that the process is “cold” is in order to preserve the naturally-occurring enzymes and other beneficial substances in the foods. Many of the processes and equipment had to be custom-made or altered to accommodate our need to maintain the fresh frozen raw foods used to create the usable raw materials.

Hydroponically grown and then frozen

26

Standard Process & MediHerb – Food Research International

List of Product Equivalents

No two products are identical if made by different manufacturers and some are more "equivalent" than others. Also, companies tend to use different ingredients (Standard Process Laboratories sometimes uses porcine glandulars, USP vitamins, claimed mineral salts, and/or colors, whereas none of these are in Food Research International products).

It should be noted that Standard Process uses its trademarked term "Protomorphogen" (which is abbreviated PMG) for some items and Food Research International uses the terms Cytotrophin (the original term that Royal Lee received his patents with, but that Food Research International has permission to use) and Enzymorphogens (EMG), for some similar items.

As a general rule, products listed below as "vegetarian" can take longer to notice efficacy in some cases than those with glandulars.

LIST OF PRODUCT EQUIVALENTS

Standard Process*	Food Research International	Food Research Int'l Vegetarian
AC Carbamide	Uro-Kid Support	Green Vegetable Alkalizer
Adrenal, Desiccated	Simply Adrenal	Vegetarian Adrenal
AF Betafood	Betafood	Pro-Enzymes
Albaplex	Uro-Kid Support	Green Vegetable Alkalizer
Alterplex	Alter-Lung Support	Alter-Lung Support
Antroplex	Alter-Lung Support, Simply Liver	Alter-Lung Support
Argiplex	Arginine Badder	Green Vegetable Alkalizer
B6 - Nicotinamide	B Stress Complex	B Stress Complex
Betafood	GB Support	Pro-Enzymes
Betafood	GB Support	Pro-Enzymes
Betaine Hydrochloride	Digesti-Pan	Pro-Enzymes
Biodent	*Cal-Mag Complex	Cal-Mag Complex
Bioct	*Cal-Mag Complex, Conga-Immune	Cal-Mag Complex
Calcifood	*Cal-Mag Complex	Cal-Mag Complex
Calcium Lactate	*Calcium Complex	Calcium Complex
Cal-Ma Plus	Parathyroid Plus	Cal-Mag Complex
Caloil	Cal-Mag Complex	Cal-Mag Complex
Cardio-Plus	Cardio-Powder	CoQ10-Cardio
Cardio-Plus GF	Cardio-Powder	CoQ10-Cardio
Cardiographin PMG	Simply Cardio	CoQ10-Cardio
Catalyn	Catalyst Complex	Vitamin-Mineral
Catalyn Chievable	Catalyst Complex	Vitamin-Mineral Shake
Cataplex A-C-P	A-C-P Complex	C Complex, plus Vira-Bac-YST
Cataplex A-C	A-C-P Complex	C Complex, plus Vira-Bac-YST
Cataplex B-Core	B Stress Complex	B Stress Complex
Cataplex B-DF	B Stress Complex	B Stress Complex
Cataplex B	Nerve Chex	B Stress Complex
Cataplex B12	Vitamin B-6, B-12 & Folate	Vitamin B-6, B-12 & Folate
Cataplex C	C Complex	C Complex
Cataplex D	D Complex	D Complex
Cataplex E	Selenium E, plus Simply Liver	Selenium E
Cataplex E2	Selenium E, plus Simply Spleen	Selenium E
Cataplex F	Omega 3/EPA/DHA	Wheat Germ Oil E
Cataplex G	Nerve Chex, plus Migratrol	B Stress Formula
Cataplex GTT	Glucose-Sugar-Balance	Glucose-Sugar-Balance
Cayenne Pepper	Advanced Joint Complex	Detox-N-Cleanse
Cellular Vitality	B Stress Complex	B Stress Complex
Cheslyn	Zinc Complex, plus Simply Liver	Zinc Complex
Chlorophyll Complex	Green Vegetable Alkalizer	Green Vegetable Alkalizer
Cholachol	GB Support	Pro-Enzymes
Cholaplex	GB Support or Nattokinase	Cholestase-Right or Nattokinase
Choline	Choline Complex	Choline Complex
Circuplex	Anise-Tone	Vegetarian Adrenal
Collagen C	C Complex, plus Advanced Joint Complex	C Complex
Collinsonia Root	GB Support	Pro-Enzymes, plus Magnesium Complex
Congaplex	Conga-Immune	Vira-Chron, plus C Complex
Cruciferous Complete	Green Vegetable Alkalizer	Green Vegetable Alkalizer
Cyrotfood	Simply Liver, plus Vitamin-Mineral Shake	Vitamin-Mineral Shake

*Dento-Gums is more equivalent. *Calcium Lactate + is more equivalent. All of these are available from Bioscience Formulas.

27

SP / DR

Major, Massive, Immense & Huge Concerns About Hydroponics

28



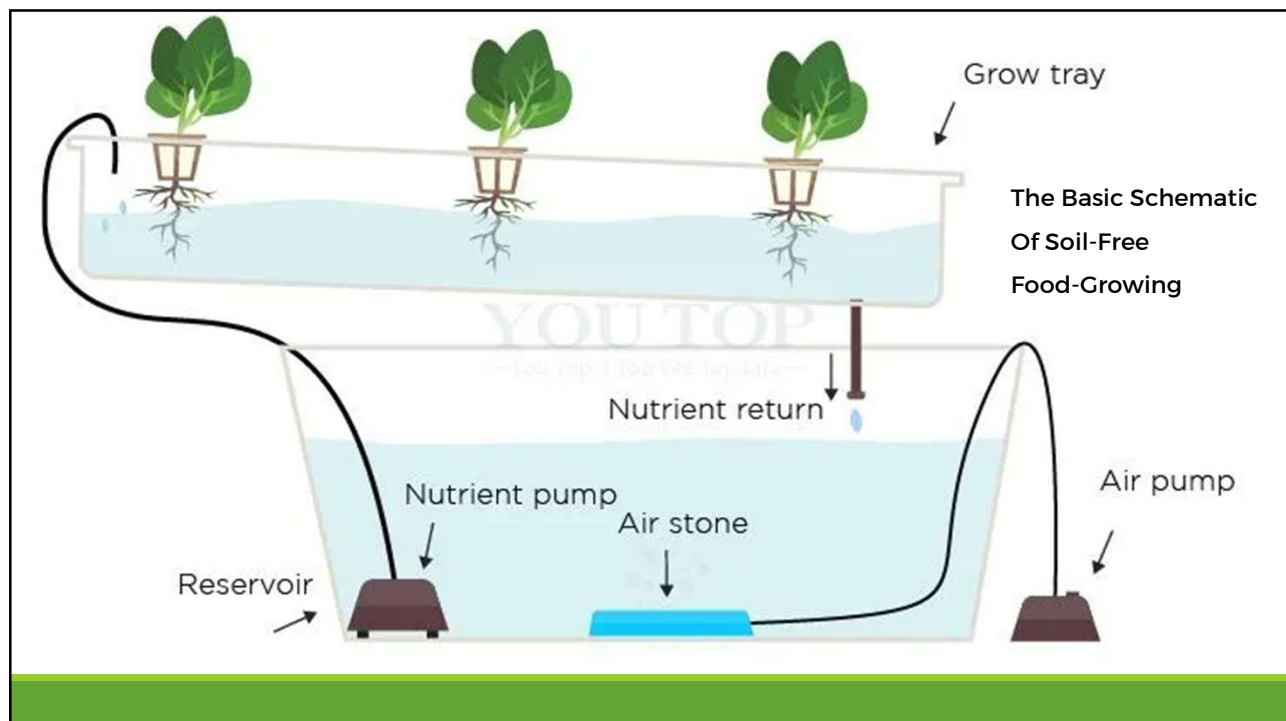
So What is Hydroponics?

Put simply: Hydroponics is a way to skip the soil, sub in a different material to support the roots of the plant, and grow crops directly in nutrient-rich water.

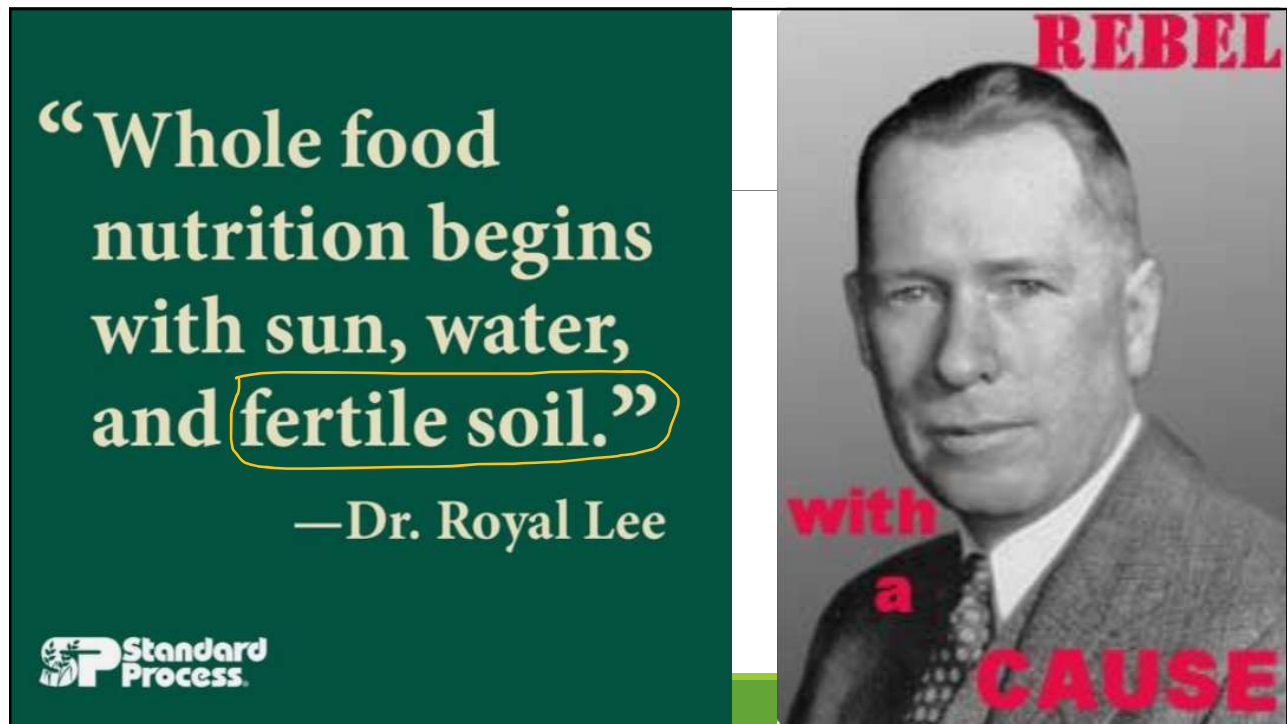
There are multiple approaches to designing hydroponic systems, but the core elements are essentially the same.

verticalroots.com/the-what-and-why-of-hydroponic-farming

29



30



31

DR On Their Hydroponic Foods

"Foods **distributed** [emphasis added – they don't make their own products] by Doctors' Research are specially-grown, **with most being hydroponically farmed** (since the US has not established organic standards for hydroponically farmed Foods, we cannot currently label our US products as organic). Our growing processes build on the laws of nature, as it is well known that plants will increase their absorption of nutrients if more nutrients are present in their environment."

doctorsresearch.com/about

32

Improving on Nature?

In order to obtain the potencies of nutrients that members of modern societies need, many of the nutrients in our products are hydroponically-grown to improve the concentration of nutrients in the specific raw foods that we use.

Comment: this is reductionism (pharmacological nutrition), not wholism, in nutrition. The processes essentially take advantage of a law of nature that a plant will absorb more of a nutrient when that nutrient is more available. Essentially, the plant is fed an enzyme-containing liquid that will be higher in one particular mineral. The plant will absorb more of that mineral, since more of it is present. The nutrient foods are grown in an FDA registered facility.

Comment: the hydroponic plants have no choice but to eat whatever they are given. In reality this is duplicating the process of nature when we create food nutrients. Nature's process takes inorganic, non-food substances from the soil and delivers them to the cells of the plant. This natural process is the merging of different elements into a union creating one. Creating a whole from different elements is nature in action. The best method of creating a union, like those created by nature, between inorganic fractions and the whole food matrix seems to be utilizing hydroponic technologies.

Comment: it is QUITE a stretch to claim that hydroponics are a natural process, when there is no soil anywhere to be found. Food Research wanted to supply the best possible form of nutrients so it looked into modern technologies that would be compatible with the natural life processes that nature uses to improve the nutrients in natural plants.

Comment: the arrogance of reductionist nutrition manifests in the attempt to improve on Nature with synthetic chemicals.

33

DR / Hydroponics Sees Microbes as Contaminants

Enzyme Process?

Many products have density food nutrient ingredients that have been specially grown. All specially grown nutrients are grown in the United States of America on the East Coast by a company that has been in business since 1977. Prior to the start of the nutrient growing process, the nutrition media must be diluted, clarified, and pH adjusted. This process provides a consistent feed material important for high nutrient growth, that is also free from unwanted microbial contamination or foreign nutrient related raw materials are purchased from vendors who meet the strict specifications established for these various materials.

DR catalog page 13

34

Actual Organic Foods are Not Produced as OTC Drugs. DR Hydroponics Are.

DR catalog page 13

The high nutrient foods are produced using modified OTC drug manufacturing standards. The nutrient growing company has cGMP and GLP protocols in place for the manufacturing of its nutrients. Even though regulations do not require many of these steps, it is believed that by following these strict guidelines, this ensures that the finished product is of superior quality. At the growing plants, two independent outside contractors are responsible for monitoring water quality and pest control on a monthly and biweekly basis, respectively.

DR catalog page 14



In actual farming, “pests” are what make for strong, resilient foods high in hormetic phytochemicals

Hormesis: “what doesn’t kill you makes you stronger.” Plants in actual soil produce toxic chemicals to dissuade insects from eating them. We eat those plants and ingest those poisons, which activates our cellular defenses (e.g. Nrf2 multi-organ protector system) and increases cellular resilience (cytoprotection).

35

“We are not simply nourished
by the soil. We are the soil.”
DAPHNE MILLER

FARMER'S
FOOTPRINT

Hydroponic = “grown without soil”

36



**FARMER'S
FOOTPRINT**

Dr Zach Bush's Farmer's Footprint Organization



"If we have healthy soil we'll have clean water,
healthy plants, healthy animals and clean air."

GABE BROWN

37





"We need to be in the dirt
together. We need to look to
mother earth as our template."

ZACH BUSH MD

38



39



40



CENTER FOR
FOOD SAFETY

MARCH 2020 FACT SHEET

WHY HYDROPONICS SHOULD NOT BE CERTIFIED ORGANIC

HYDROPONICS ARE CROPS that are grown in nutrient rich solutions rather than soil.¹ The majority of hydroponic crops are grown indoors in greenhouses, storage containers, and other structures.²

Many variations of hydroponic support systems deliver nutrients to a plant's roots through liquid solutions, and sometimes solid materials such as peat moss, vermiculite, and perlite.³ Another variation, known as aeroponics, suspends a plant's roots in air and continually mists them with nutrient solutions.⁴

While many plants could be grown hydroponically, the most common commercial hydroponic crops grown today include leaf lettuce, tomatoes, peppers, cucumbers, strawberries, watercress, celery, and herbs.⁵

WHY HYDROPONICS SHOULD NOT BE CERTIFIED ORGANIC

The United States Department of Agriculture (USDA) currently allows hydroponic production to be certified organic.⁶ However, hydroponic systems are fundamentally different from organic production systems as defined by federal law

and therefore should not be eligible for organic certification. As isolated systems, hydroponic production does not build soil fertility, the hallmark of organic farming. For example, the most common nutrients used in hydroponic solutions are synthetic salts, most of which are not permitted in products labeled organic.⁷

ORGANIC STANDARDS TIMELINE

1990—The Organic Foods Production Act (OFPA) establishes baseline requirements for organic production and handling systems that not only apply to agricultural materials like seeds and herbicides but also to farming practices.⁸ OFPA's framework for organic crop production includes provisions designed to "foster soil fertility" through soil management methods.⁹ OFPA also established the National Organic Standards Board (NOSB), a 15-member board composed of farmers, handlers, environmental experts, scientists, certifiers, and other representatives of the public interest, to provide the USDA with recommendations on the implementation of the OFPA, and how organic labeling should be carried out.¹⁰

ORGANIC

The Organic label and standards for organic production were created by Congress with input from organic farmers, producers, certifiers, retailers, and consumers. In creating these standards, consumers, farmers, producers, certifiers, and retailers have defined organic agriculture as an ecologically-balanced production system. This is reflected in part in requirements in the organic statute and regulations which require organic producers to foster soil fertility, improve soil quality, and use environmentally beneficial farming methods such as manure application, cover crops, and crop rotation.

VS

HYDROPONICS

Most hydroponics are grown in liquid solutions or other isolated ecosystems and therefore are unable to enhance soil fertility or increase biodiversity.

NATIONAL OFFICE: 660 Pennsylvania Avenue, SE, Suite 402, Washington, DC 20003
NORTHWEST OFFICE: 2008 NE Alberta St., #207, Portland, OR 97232
CALIFORNIA OFFICE: 303 Sacramento St., 2nd Floor, San Francisco, CA 94111

For example, the most common nutrients used in hydroponic solutions are synthetic salts, most of which are not permitted in products labeled organic.⁷

41

Don't break the chain!™

FOOD... Doctors' Research is about Food—Other nutrient companies are not. All professional supplements distributed by Doctors' Research are 100% Food! Our slogan, our process, and our products are all about Food! When we at Doctors' Research say *Don't break the chain!* we mean don't break the Food chain. We are surprised that other supplement companies seem to feel that it is "natural" for humans to eat synthetic vitamins, most of which are not even the same chemical form (and less of which are in the same structural form) as vitamins found in Food. We are surprised that most other supplement companies seem to feel that it is "natural" to supplement human nutrition with chemically treated crushed rocks and petroleum derivatives. While nature teaches us that plants have the ability to ingest these types of substances and render them as Food, it also teaches us that humans are not plants and should not directly consume crushed rocks.

Humans naturally do not consume soil or other crushed rocks. If they do, medically the condition is termed "pica" or "geophagia." Yet everyday, millions of Westerners (generally unknowingly) consume dozens of industrial processed rocks to "supplement" their diets—these products normally contain dozens of substances that are not natural for humans to consume. Should people swallow rocks, industrial chemical compounds, petroleum derivatives, arsenic, and cyanide daily? Well, they do. Should your body or the bodies of your clients, be a dumping ground for these industrial substances? We think not!

We at Doctors' Research understand the need for supplementation, given modern lifestyles and the availability of highly processed foods. However, we feel that supplementation should be from Foods and that these Foods should contain their nutrients in the same chemical and structural forms as those found in real human Foods. We also feel that the supplements should contain the Food factors needed for proper absorption and utilization. Even modern science recognizes that minerals need protein chaperones for optimal absorption yet isolated mineral salts (as are commonly found in so-called "natural" supplements) do not contain them. Foods (including the Foods used at Food Research International Ltd) do naturally contain these substances.

Foods distributed by Doctors' Research are normally specially-grown, with most being hydroponically formed since the US does not enforce organic standards for hydroponically formed Foods, we cannot currently label our US products as organic.

Our clinical research group is headed up by Robert Thiel who holds a Ph.D. in Nutrition Science as well as a doctorate in Natural Health. Dr. Thiel authored the world's leading MEDLINE medical journal article on natural vitamins. Dr. Thiel has been named *Research Scientist of the Year* and *Physician of the Year* plus has received the *Orthomolecular Leadership Award* for his leading edge natural health research. He was a licensed naturopathic physician in Idaho and has been a licensed scientist in the State of Alabama since 2003.

Unlike some companies, we do not engage in slick marketing. Our literature contains solid scientific information—we encourage you to read all of it. We believe that since you are interested in truly natural health, you will recognize the benefits associated with using real Food supplementation, as well as the benefits of avoiding industrial chemicals that are in other companies' products. We truly appreciate your interest in our products and trust you will share our story with your clients.

- 100% FOOD Products
- Grown Nutrients With Assays
- HPLC Validated
- Cold Fused and Low Temperature Processed

- 100% FOOD Nutrients
- Professional Quality Products
- Digestive Disintegration Tested Nutrients
- Nutrients Grown in an FDA Registered Facility

As a health professional, you need to decide whether FOODS or industrial chemicals are right for you and your clients.

"The best method of creating a union, like those created by nature, between inorganic fractions and the whole food matrix is achievable through hydroponic technologies. This led to the acquisition of foods combined with a natural cold fusion process. The definition of fusion is the merging of different elements into a union, creating an enhanced whole from different elements. A natural cold fusion process is used to produce superior nutrients that are always 100% food. Enhanced nutrients occur from the merging of specific elements through a living plant into a whole food matrix through low temperature hydroponic farming."

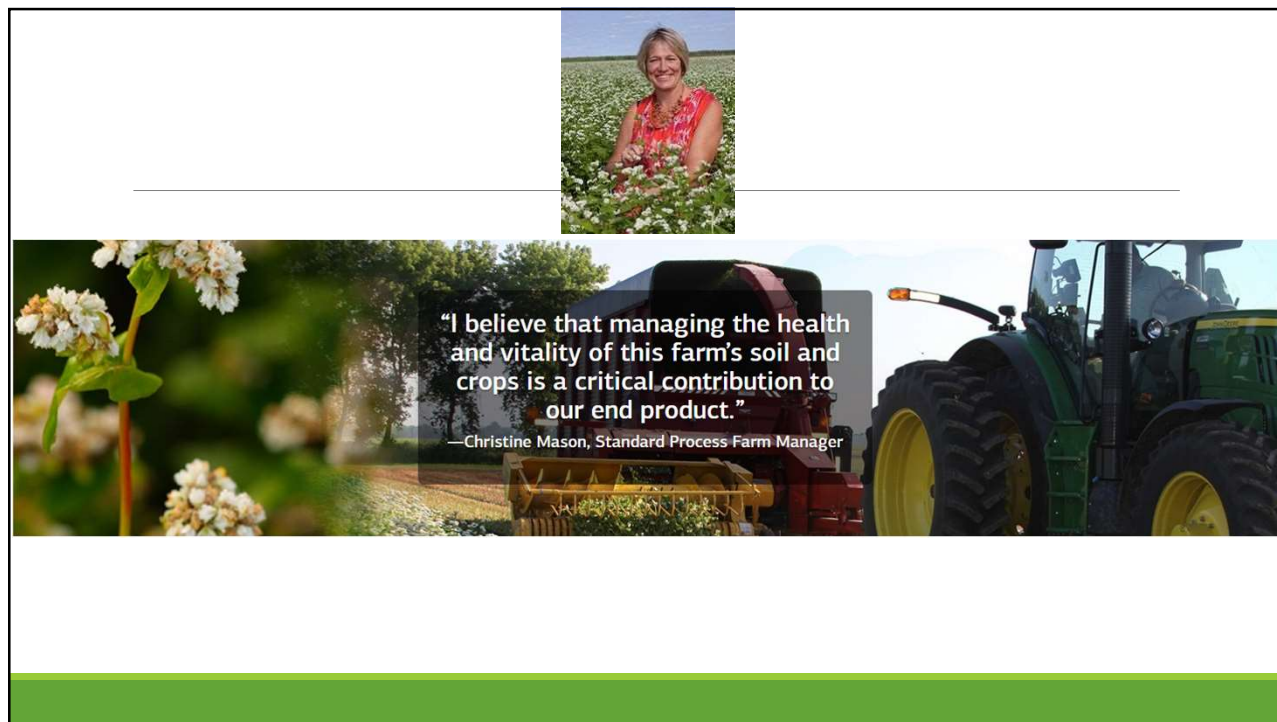
42



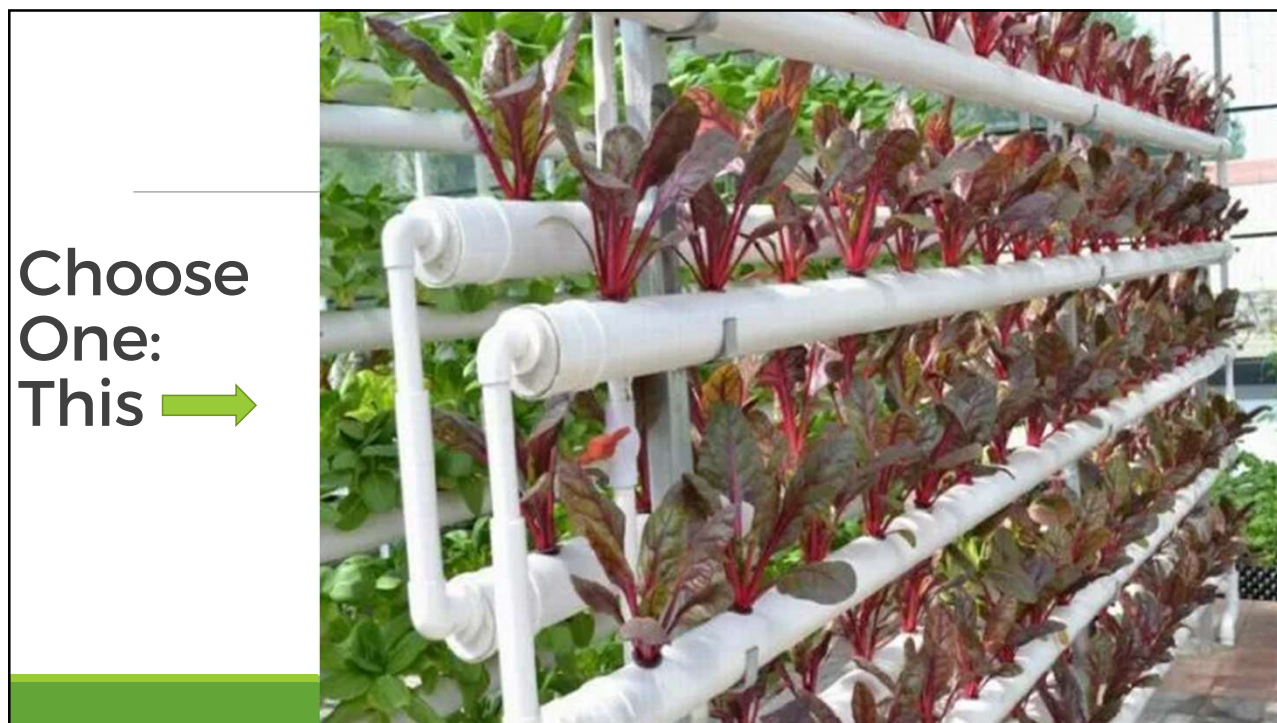
43



44



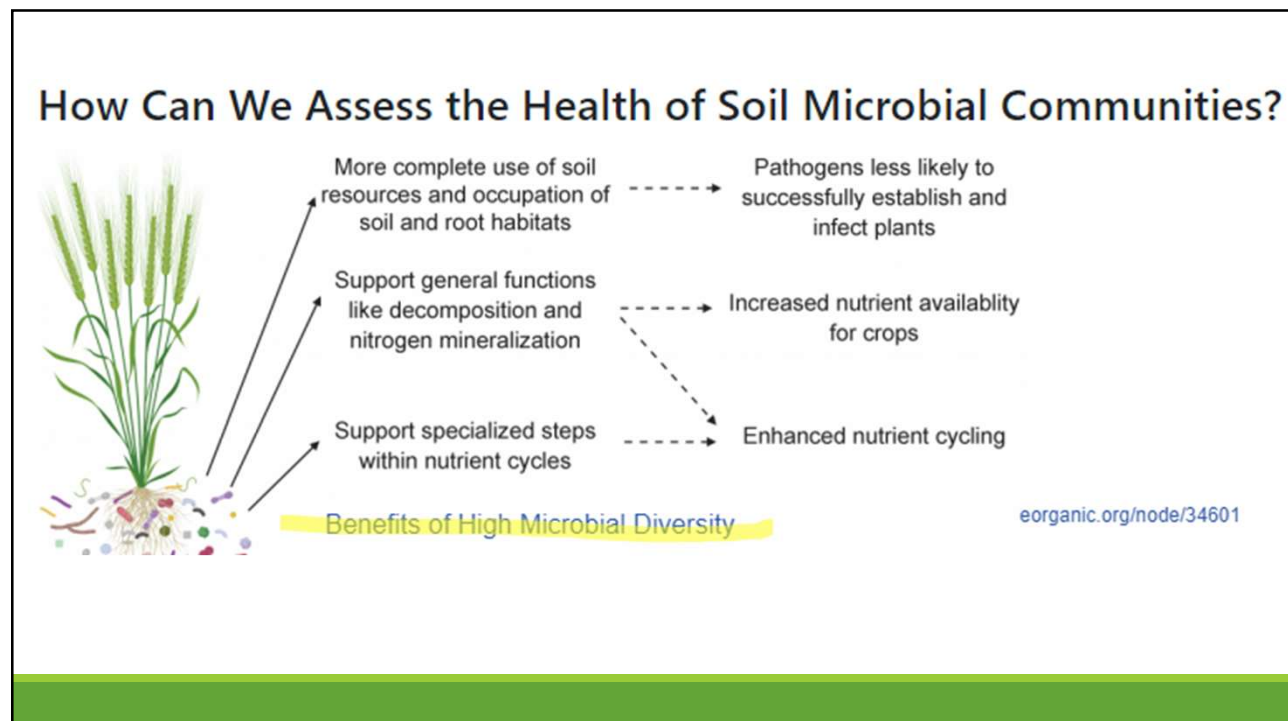
45



46



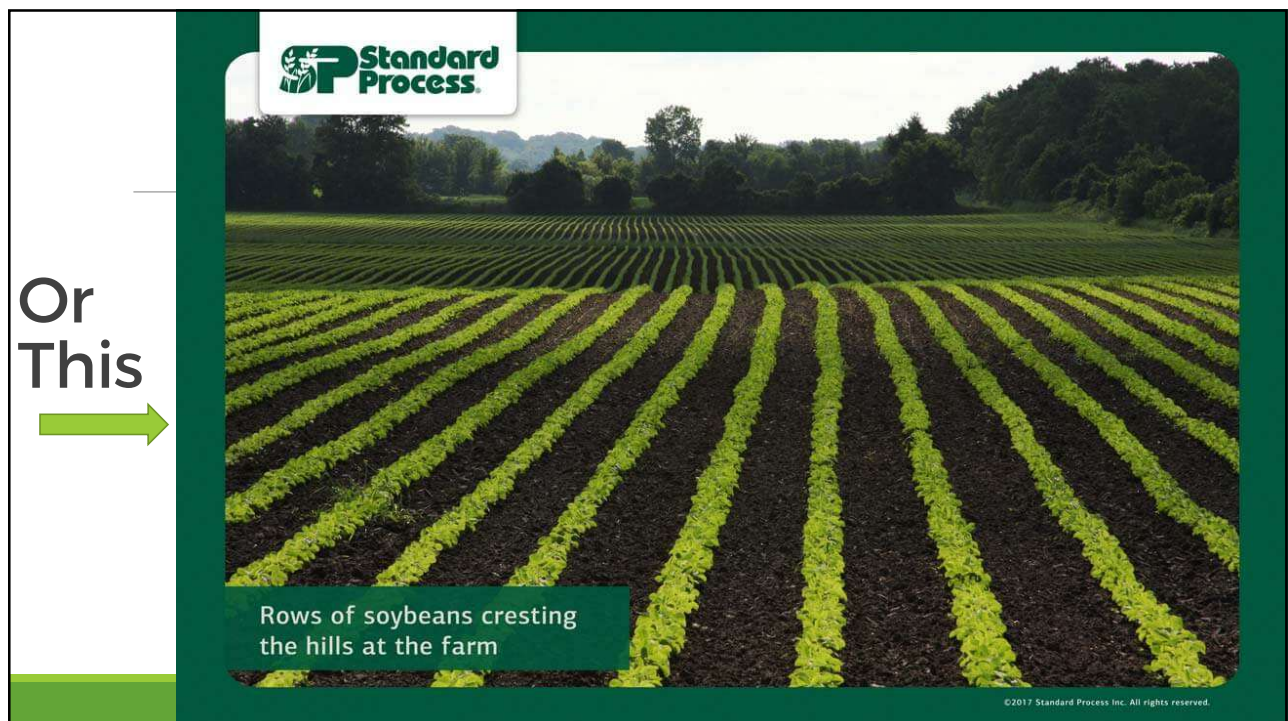
47



48



49



50

Ohio
line
Ohio State University Extension


THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Advanced Search About OSU Extension

Understanding Soil Microbes and Nutrient Recycling

ohioline.osu.edu/factsheet/SAG-16

James J. Hoorman, Cover Crops and Water Quality, Extension Educator, Ohio State University Extension
Rafiq Islam, Soil and Water Specialist, Ohio State University Extension, South Centers at Piketon

“There are more microbes in a teaspoon of soil than there are people on the earth.”

51



52

Or
This




An expansive field of barley soaks in the sun's rays.


©2017 Standard Process Inc. All rights reserved.

53

“Without Vitality in the Soil There is No Vitality in the Bottle” – Dr Royal Lee



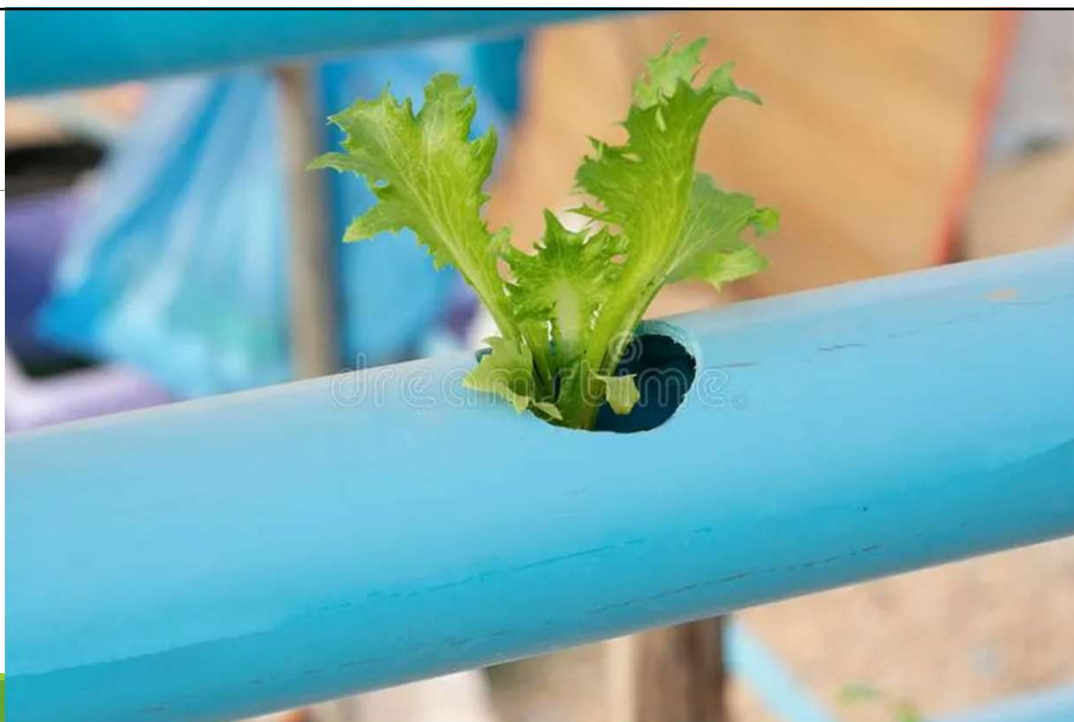
Seleneiverpress.com
Discount code: Michael



Nutrient density of our ingredients is supported by
optimal soil health,
precision farming and harvest proximity to processing.

54

Choose
One:
This



55

Or
This



A colorful Brussels
sprouts seedling

©2017 Standard Process Inc. All rights reserved.

56

Soil is the most basic foundation of our food security.

Recent scientific assessments have found that one third of the globe's land is significantly degraded due to numerous factors such as erosion, salinization, compaction, acidification and not least of all, chemical pollution. This is an alarming and astonishing statistic. Just as global demands for food are increasing at unprecedented rates, the healthy agricultural basis needed to support this demand is shrinking at a rapid rate. (Source: [Science Direct](#)).

Soil composition is diverse, complex and varies greatly from region to region, but generally, **healthy soil requires the following:**

1. Balance of moisture
2. Gases
3. Organic matter
4. Minerals
5. Microorganisms

<https://farmersfootprint.us/>

57

HOW CAN WE HELP SOIL DO ITS JOB?

Regenerative Agriculture is a system of practices and principles that **increases biodiversity**, enriches soils, improves watersheds, and enhances the ecosystem's natural functions. The key is to not only NOT HARM the land but actually to improve its capacity by using practices that revitalize the soil *and* the surrounding environment. It is a dynamic and holistic approach to agriculture that incorporates the use of

- Permaculture & organic farming
- Conservation tillage
- Cover crops & crop rotation
- Composting
- Pasture cropping and more!

SP is a world leader in organic farming, that uses all of these methods and more to nourish the land, plants and people.

farmersfootprint.us/2018/11/02/starving-for-healthy-soil/

58

Soil fertility that is optimal for the production of quality foods depends not only on the minerals, [the soil's] physical structure, tillage, moisture, and sunlight but also on the fauna and flora of the soil. The bacteria play an important part in making air nitrogen available to the plants and in the decomposition of humus. The fungi surround the rootlets and even penetrate them, forming what is known as the mycorrhizal association and what is described by Howard as being the living fungus bridge that connects soil and sap.

McComb¹⁶ and others, in comparing mycorrhizal and nonmycorrhizal plants, showed that the mycorrhizal seedlings contain four times as much phosphorus as the nonmycorrhizal plants. - Dr Royal Lee
seleneriverpress.com/historical/relationship-of-soil-fertility-and-psyche-reactions/

THIS IS GOLD

Howard states: "The principle followed, based on the Liebig tradition, is that any deficiencies in the soil solution can be made up by the addition of suitable chemicals. This is based on a complete misconception of plant nutrition. It is superficial and fundamentally unsound. It takes no account of the life of the soil, including the mycorrhizal association—the living fungous bridge that connects soil and sap. Artificial manures lead inevitably to artificial nutrition, artificial food, artificial animals, and, finally, to artificial men and women."¹ 1. Howard, Sir Albert. An Agricultural Testament. Oxford University Press, 1940

seleneriverpress.com/historical/relationship-of-soil-fertility-and-psyche-reactions/

59

There seems to be a correlation between deficiency diseases and some pathological psychic reactions. Malnutrition is etiological of deficiency diseases; deficiency in nutrition is due in part to soil deficiency and poor [soil] fertility; deficiency in soil fertility is the source of food poor in quality and therefore inadequate to maintain optimal health. Thus soil fertility becomes a factor in the psychobiology of man.

James Asa Shield, MD, Assistant Professor of Neuropsychiatry.

Reprinted from Virginia Medical Monthly, Vol. 72, March 1945, by the Lee Foundation for Nutritional Research.

We in medicine are interested in optimal health, and in psychiatry we are vitally concerned with malnutrition as it affects psychobiology. It is for this reason that we find ourselves today interested in the source of malnutrition—soil, impoverished soil—as a cause of an impoverished people with psychopathological complaints.

In order to treat, we will have to understand health and disease of the soil. A fertile soil is alive with its bacteria, fungus, and protozoa. The maintenance of this microscopic life seems to be as vital for the plant as the intestinal flora is for man's nutrition. The nutrition of this microscopic life in the soil demands that we concern ourselves about its environment—the food supply, the oxygen supply, and the physical condition of the soil.

seleneriverpress.com/historical/relationship-of-soil-fertility-and-psyche-reactions

60

The optimal health of the bacteria, the fungus, the protozoa, and the earthworms takes on vital importance in the maintenance of a food supply to human beings that is adequate in quality as well as in quantity. Today, when the soil is being called on to furnish nutrition to large urban populations and to produce so much raw material, especially at this time for synthetic rubber and fuel, the maintenance of soil fertility becomes a greater problem.

James Asa Shield, MD, Assistant Professor of Neuropsychiatry. Reprinted from Virginia Medical Monthly, Vol. 72, March 1945, by the Lee Foundation for Nutritional Research.

The ancient agricultural practices of supplying the soil with nutrition for its life by returning all things and the refuse of all things to the soil is no longer practiced or, perhaps, possible. The multiple demands of protoplasmic growth seem to be best satisfied by natural manures. However, if chemical substitutes must be used, let us supply more completely the protoplasmic need. At the same time, the effect on the microscopic life in the soil that is vital to man's vitality must not be destroyed.

seleneriverpress.com/historical/relationship-of-soil-fertility-and-psyche-reactions

61

Are Hydroponically-Grown Foods Real Food? Kinda yes, kinda no.

Is food grown without soil really 100% real food?

Advantages	Seemingly low price-smaller tablets.	Greater nutrient utilization than most rocks.	Chelated meal in tablet form.	100% real food.
Disadvantages DR Catalog Page 7	Not food. Not natural for humans. Eating rocks can be a sign of geophagia or pica.	Low potency of many minerals.	Chelated is not a defined term and some chelates are really the same as rock minerals.	None known. Humans have been consuming food since pre-history.

But humans only started using hydroponics at scale in the last 100 years.

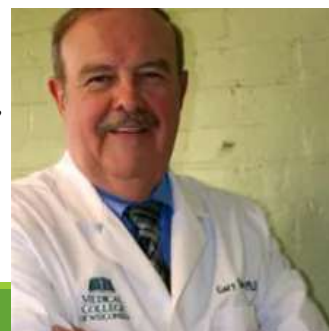
"The modern history of hydro begins in the 17th century, when Jean van Helmont's flawed yet hugely significant "Willow Tree Experiment" proved that plants obtain substances from water." -hightimes.com/grow/the-history-of-hydroponics

62

Freeze-Drying Nutritional Consequences

“...nutrients, such as vitamins C and E and folic acid, are somewhat depleted through the freeze-drying process.”

- Dr Gary Stoner, PhD, professor of medicine,
Medical College of Wisconsin



63

When Hydroponics Could Be Really Great

Emergency / Survival / Preparedness

- Hydroponics can grow quickly, all year round, with little water, if actual farming is not possible and you have no real food options
- An intermediary food source after you've used up actual soil-farmed / dehydrated / canned foods, and before you start using emergency long-term storage foods
- Some preppers wisely have a fully stocked, ready-to-go, dormant hydroponic greenhouse ready to go for a SHTF scenario – ongoing food supply within a few weeks

64

Some Good News – Actual Organic Food In certain DR formulas

All of the FOOD brand listed vitamins and minerals are from vegetarian sources, and they are either wild-crafted or otherwise all grown without preservative, pesticides, fungicides, artificial colors, etc.

[DR catalog page 12](#)

Most of the fruits and vegetables listed in the products are organically grown at certified organic farms or wild-crafted. Tests done have found no GMOs (genetically-modified organisms) in any FOOD brand products. ↑

Yay!

65

SP / DR

DR Isolates Added to Yeast



66

Isolates Added to Growing Yeast

(Similar process used by Biotics Research)

The growing process itself begins by adding water to the appropriate food at 95-105°F. The grown nutrients are natural products derived from a pure culture of *Saccharomyces cerevisiae* or other food grown in the proper medium under carefully controlled conditions. **Certain nutrients are grown by feeding a controlled amount of the pre-bionutrient embedded into an appropriate glycoprotein to the food during the budding and/or growth process.** This controlled metabolization process results in a high bionutrient food product in its most natural environment. **During the budding and/or growth process, the pre-bionutrient is added to the budding yeast or re-grown food at an exact concentration,** then after a predetermined time the food is harvested. The **higher density mineral/vitamin food** is then thoroughly washed a number of times with purified water. Then the product, upon enzyme treatment, is **cold pasteurized**, spray-dried and packed. These products provide minerals and vitamins in a form that is readily absorbed and bio-available.

[DR catalog page 13](#)

??? "pasteurization" means heat treatment

67

From a Recent DR Presentation A Super Simple Process



Nutrient-dense foods

Nutrient culture is combined with a growth culture of *Lactobacillus bulgaricus* and *Saccharomyces cerevisiae*.



Nutrient conversion

A controlled quantity of vitamins and mineral salts embedded in a strategically chosen amino acids & protein matrix are added.



Completing the Process

The mixture is cooled, dried at proper temperature and added to gelatin-free capsules for consumption.

68

SP / DR

Some DR

Formula Concerns



69

Supplement Facts

Serving Size 1 Tablet Servings per Container 180

Amount per Serving			% Daily Value▼
Vitamin A (Betacarotene)	(in 15 mg food)	225 rae	25%
Vitamin E	(in 9 mg food)	2.25 mg	15%
Vitamin B-6	(in .85 mg food)	.17 mg	10%
Calcium	(in 10 mg food)	.5 mg	*
Iodine	(in 2 mg food)	30 mcg	20%
Magnesium	(in 10 mg food)	.5 mg	*
Bovine Kidney Cytotrophin		10 mg	**
Bovine Liver Cytotrophin		30 mg	**
Bovine Orchic Cytotrophin		10 mg	**
Bovine Prostate Cytotrophin		20 mg	**
Milk Thistle	<i>Silybum Marianum</i>	10 mg	**
Organic Carrot Root	<i>Daucus Carota</i>	65 mg	**
Organic Sunflower Lecithin	<i>Helianthus Annuus</i>	10 mg	**
Wheat Germ (Defatted)	<i>Triticum Aestivum</i>	10 mg	**
Wildcrafted Alfalfa Flour	<i>Medicago Sativa</i>	10 mg	**
Wildcrafted Beet Root and Juice	<i>Beta Vulgaris</i>	85 mg	**
Wildcrafted Flaxseeds	<i>Linum Usitatissimum</i>	25 mg	**

* Contains less than 2% of the RDI
** Recommended Daily Intake has not been established

Other ingredients: Enzymatically processed *Saccharomyces Cerevisiae*, Fatty Acid from Palm Kernel, Plant Polysaccharide, Silica, Digestive Aid. Contains No Magnesium Stearate.

Suggested use: Serving size or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.


Beetafood™

Beetafood™ contains beets and beet juice. Beets are a good source of betaine, which has been shown to be an effective lipotropic agent that can sometimes assist with sugar cravings and related issues.

180 Tablets • \$42.98

23 ingredients
85 mg beet root and juice
No beet leaf / Swiss chard(!)

70



Introduced 1943

Supplement Facts


Serving Size: 1 Tablet
Servings per Container: 90

	Amount per Serving	%Daily Value
Proprietary Blend	312 mg	†
Organic beet (root), organic swiss chard juice powder, organic oat flour, and organic beet (leaf) juice powder.		

Betafood®	180 Tablets	\$34.50	<p>Five ingredients Most of 312mg is beet root & leaf (Swiss chard)</p>
Betafood®	90 Tablets	\$18.50	

71

Highly Variable Vitamin C Content: From Differing Amounts of Isolates Added to the Hydroponic Solution?



100% Food Nutrients
Vegetarian Formula
Gluten-Free

FOOD RESEARCH

C Complex

#204

- ✓ Detoxifies free radicals
- ✓ Superior source of vitamin C
- ✓ 10 times less acidic than ascorbic acid
- ✓ Contains real antioxidants

60 Tablets • Dietary Supplement • Product of USA

Supplement Facts

Serving Size 1 Tablet Servings per Container 60

	Amount per Serving	% Daily Value
Vitamin C (in 1248 mg food)	300 mg	500%
Wildcrafted Mixed Citrus (Pesticide/Herbicide free)	1188 mg	*
Wildcrafted Acerola Cherry <i>Malpighia glabra</i>	60 mg	*

* Recommended Daily Intake has not been established

Other ingredients: Fatty Acid from Palm Kernel, Vegetarian Coating.
Suggested use: 1-3 tablets per day or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.

No SYNTHETIC NUTRIENTS • No DAIRY • No PRESERVATIVES • VEGETARIAN

✓None of the statements on this label have been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, or cure any disease.

NOTICE: Store in a dry place with lid tightly closed. Keep this natural food product out of the reach of children. Not recommended if contraindicated.

25%
of the
“food”
is
Vit C

72

Typical DR Ascorbic Acid Concentration is 25% e.g. 15 mg Vit C from 60mg "food"

Supplement Facts: This is the part of the label that shows how much of a food and/or a food nutrient are in the product. Let us look at information from a typical label on one vitamin: [DR catalog page 15](#)

Vitamin C (in 60 mg food) 15 mg Daily Value 25%

This means that each serving contains 60 mg of a food that is high in Vitamin C which supplies 15mg of Vitamin C,

73

Variable Vitamin C Content: From Differing Amounts of Isolates Added to the Hydroponic Solution?



100% Food Nutrients
Gluten-Free

FOOD RESEARCH

Conga-Immune™ #270

- ✓ Enhanced immune health
- ✓ Supports throat health
- ✓ Supports a healthy thymus gland

90 Capsules • Dietary Supplement • Product of USA 

Supplement Facts			
Serving Size 2 Capsules		Servings per Container 45	
Amount per Serving		% Daily Value ▼	
Vitamin C	(in 30 mg food)	15 mg	25%
Zinc	(in 100 mg food)	5 mg	33%
Bone Marrow Cytotrophin		30 mg	*
Bovine Liver Cytotrophin		50 mg	*
Bovine Lymph Cytotrophin		30 mg	*
Bovine Spleen Cytotrophin		20 mg	*
Bovine Thymus Cytotrophin		100 mg	*
Wildcrafted Acerola Cherry Malpighia glabra		60 mg	*
Wildcrafted Alfalfa Plant Medicago sativa		20 mg	*
Wildcrafted Buckwheat Fagopyrum esculentum		100 mg	*
Wildcrafted Carrot Root Daucus carota		100 mg	*
Wildcrafted Echinacea Echinacea purpurea		10 mg	*
Wildcrafted Garlic Allium sativa		20 mg	*
Wildcrafted Rice Bran Oryza sativa		30 mg	*
Wildcrafted Shiitake Lentinula edodes		30 mg	*

* Recommended Daily Intake has not been established

Other ingredients: Vegan Capsule.

Suggested use: 2-10 capsules per day or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.

Somehow 50% (not the usual 25%) of the "food" is Vit C in this formula

74

Incongruence in Nutrient Sourcing?

One part of the catalog states the whole food sources of certain nutrients (below), but the actual formulas do not use those foods as the source of those nutrients.

Vitamin	Food Nutrient*		
Vitamin A/Betacarotene	Carrots	Vitamin B-12	Nutritional yeast
Vitamin B-1	Nutritional yeast, rice bran	Vitamin 'B-x' PABA	Nutritional yeast
		Choline	Nutritional yeast, rice bran
Vitamin B-2	Nutritional yeast, rice bran	Vitamin C	Acerola cherries, citrus fruits
Vitamin B-3	Nutritional yeast, rice bran	Vitamin D	Nutritional yeast, mushrooms
Vitamin B-5	Nutritional yeast, rice bran	Vitamin E	Nutritional yeast, vegetable oils
Vitamin B-6	Nutritional yeast, rice bran	Vitamin H	Nutritional yeast, rice bran
Vitamin B-8	Nutritional yeast, rice bran	Vitamin K	Alfalfa
Vitamin B-9	Nutritional yeast, rice bran		

DR catalog page 78

DR catalog page 77

75

None of those foods appear in this formula (except the 20mg of rice bran)




**100% Food Nutrients
Vegetarian Formula
Gluten-Free**

FOOD RESEARCH

B Stress Complex™ #174

- ✓ Supports energy metabolism
- ✓ Eases stress
- ✓ Superior source of B vitamins
- ✓ Contains no dangerous synthetics

90 Capsules • Dietary Supplement • Product of USA 

Supplement Facts

Serving Size 1 Capsule Servings per Container 90

Amount per Serving	% Daily Value ▼
Thiamin (B-1) (in 24 mg food)	6 mg 400%
Riboflavin (B-2) (in 60 mg food)	6 mg 354%
Niacinamide (in 120 mg food)	30 mg 148%
Vitamin B-6 (in 33 mg food)	6.5 mg 330%
Folate (in 27 mg food)	265 mcg 67%
Vitamin B-12 (Methylated) (in 17 mg food)	85 mcg 1416%
Biotin (in 40 mg food)	200 mcg 67%
Pantothenate (in 120 mg food)	30 mg 300%
Choline (in 40 mg food)	10 mg *
Inositol (in 40 mg food)	10 mg *
Organic Rice Bran <i>Oryza sativa</i>	20 mg *

* Contains less than 2% of RDI
** Recommended Daily Intake has not been established

Other ingredients: Vegetarian capsule
Suggested use: 1-6 capsules per day or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.

76

SP Uses the Actual Food Sources of B Complex Listed in the DR Catalog, for Cataplex B Core



Supplement Facts

Serving Size: 2 Tablets
Servings per Container: 60

	Amount per Serving	%Daily Value
Calories	10	
Cholesterol	5 mg	1%
Total Carbohydrate	<1 g	<1%*
Protein	<1 g	1%*
Thiamin	0.1 mg	8%
Folate	10 mcg DFE	3%
Sodium	10 mg	<1%

Proprietary Blend 1,515 mg †
Bovine liver, organic beet (root), nutritional yeast, defatted wheat germ, rice bran, organic carrot, organic sweet potato, and bovine adrenal.

*Percent Daily Values are based on a 2,000 calorie diet.

†Daily Value not established.

Other Ingredients: Honey, calcium stearate, and ascorbic acid.

77

More Nutrient Sourcing Incongruence

States that carrots are the best source of beta-carotene (pre-vitamin A), then uses something other than carrots as a source

In my opinion, betacarotene in carrots, however, is safer than even Dr. Sinatra suggests (there is about 12,000 i.u. of betacarotene in one raw carrot). The reason for this is because betacarotene in carrots is attached to lipoproteins which appear to aid in preventing toxicity. Isolated USP betacarotene, even if it allegedly comes from "natural" sources, simply does not have the attached lipoproteins or other potentially protective substances as found in foods like carrots.

DR catalog page 81

Vitamin

Vitamin A/Betacarotene

Food Nutrient*

Carrots

DR catalog page 77

78

So Where are the Carrots?



100% Food Nutrients
Vegetarian Formula
Gluten-Free

Supplement Facts

Serving Size 1 Capsule Servings per Container 90

Amount per Serving	% Daily Value
Vitamin A as Betacarotene (in 40 mg food)	2000 I.U. 40%
Vitamin C (in 160 mg food)	36 mg 60%
Vitamin E (in 50 mg food)	12 I.U. 40%
Zinc (in 60 mg food)	3 mg 20%
Selenium (in 17 mg food)	17 mcg 24%

Wildcrafted Acerola Cherry <i>Malpighia glabra</i>	20 mg *
Wildcrafted Eleuthero Root <i>Eleutherococcus senticosus</i>	10 mg *
Wildcrafted Ginger Root <i>Zingiber officinale</i>	10 mg *
Wildcrafted Turmeric Root <i>Curcuma longa</i>	10 mg *
Wildcrafted Ginkgo Leaf <i>Ginkgo biloba</i>	10 mg *
Wildcrafted Milk Thistle Seed <i>Silybum marianum</i>	13 mg *
Wildcrafted Rosemary Leaf <i>Rosemarinus officinalis</i>	10 mg *
Wildcrafted Schisandra Fruit <i>Schisandra chinensis</i>	10 mg *

* Recommended Daily Intake has not been established

Other ingredients: Vegetable Lubricant, Silica, Vegetable Cellulose.
Suggested use: 1-3 capsules per day or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.

FOOD RESEARCH

Herbal Antioxidant #410

- ✓ Provides 12 real antioxidant foods
- ✓ Supplies 12 free-radical fighting foods
- ✓ Superior source of antioxidants

90 Capsules • Dietary Supplement • Product of USA

79

Oh, Right - **There** are the Carrots!

Real Carrots, Grown on a Real Organic Farm, in Real Dirt (Topsoil)



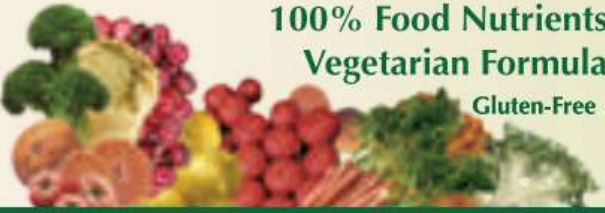
Supplement Facts

Serving Size: 1 Level Tablespoon
Servings per Container: 30

Amount per Serving	% Daily Value
Calories	25
Total Carbohydrate	5 g 2%*
Dietary Fiber	3 g 11%*
Proprietary Blend	6 g †
Oat fiber, beet fiber, rice bran, organic beet (root), apple pectin, organic carrot , organic sweet potato, and carrot fiber.	

80

Unfortunately, this D Stands for Disaster




100% Food Nutrients
Vegetarian Formula
Gluten-Free

FOOD RESEARCH

D Complex

#281

- ✓ Supports bone ossification
- ✓ Helps maintain healthy serum calcium levels
- ✓ Helps maintain healthy serum phosphorus levels
- ✓ Provides vegetarian vitamin D3
- ✓ Helps maintain healthy vitamin D levels

90 Capsules • Dietary Supplement • Product of USA 

Supplement Facts

Serving Size 1 capsule
Servings per container 90

Amount per Serving	% Daily Value
Vitamin D (in 1.1 mg food)	1000 IU 250%
Wildcrafted Shitake Mushrooms	380 mg *

* Recommended Daily Intake has not been established

Other ingredients: Vegetarian Capsule.
Suggested use: 1-3 capsules per day or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.
In addition to containing 1000 i.u. of **vegetarian vitamin D3**, **D Complex** naturally also provides **vitamin D2 as found in shitake mushrooms**. Thus, **D Complex** is more complete and a superior choice of vitamin D. No other product on the market is like **D Complex**. Most commercially available sources of what they call vitamin D are made up of unnatural isolates—they are not foods.
No SYNTHETIC NUTRIENTS • No DAIRY • No PRESERVATIVES • VEGETARIAN

81

D is for Deleterious

1. There is no such thing as “vegetarian D3.” D3 is ALWAYS an animal or fish source. So we have no idea what the source of the so-called D3 is
2. Irradiated mushrooms produce irradiated ergosterol (D2). It is not only ineffective in providing or replenishing vitamin D, it is highly toxic.

82

Vitamin F

*Excerpt from Lectures of Dr. Royal Lee, Vol. II.
Used with Permission of Selene River Press,
Inc.
seleneriverpress.com*

83

83

Vitamin F transfers calcium from the blood into the tissues. Vitamin D puts calcium into the bloodstream. So, if you get too much D, it locks up the calcium in the blood and can't go into the tissues and you're in a bad way. That's sunstroke. You're out in the sun too much, you get too much D, your calcium is held into the blood supply and can't get into the tissues. The tissues run out. You get weak and your perspiration is shut off and you won't live very long if you don't get into the shade. Vitamin F reverses that trend, acts as an antidote for the D by diffusing the calcium again into the... moves it along where it's suppose to go. That's the function. If you use natural cod liver oil you'll get the two vitamins together and you'll never know they existed. But when you take them apart and then take the synthetic D alone then you're in trouble. Synthetic Vitamin D has killed thousands of youngsters because it caused calcification of the kidneys and created a Vitamin F deficiency.

84

84

Highly Aggressive Processing (I would say Adulteration) of Fish Oil

To prevent the possibility of toxic metal accumulation, the oil from the wild herring fish that is in Omega 3/EPA/DHA has been ~~molecularly-distilled~~ for purity.

[DR catalog page 12](#)

SP wisely does NOT use molecular distillation, as many fish oil manufacturers do. Every batch is third-party tested and verified free of contaminants, while being minimally-processed to make it as “whole-food” as possible.

85

SP / DR

Freeze-Dried vs Low-Temperature Vacuum-Dried Food



86

Frozen Foods

This led to the acquisition of foods combined with a natural cold fusion process. The definition of fusion is the merging of different elements into a union, creating an enhanced whole from different elements. A natural cold fusion process is used to produce superior nutrients that are always 100% food. Enhanced nutrients occur from the merging of specific elements through a living plant into a whole food matrix through low temperature hydroponic farming. The reason that the process is "cold" is in order to preserve the naturally-occurring enzymes and other beneficial substances in the foods. Many of the processes and equipment had to be custom-made or altered to accommodate **our need to maintain the fresh frozen raw foods used to create the usable raw materials**. Cold fusion processing was not an after thought. No expense was spared to create these cold fusion processes and the state of the art manufacturing plant needed to keep Food Research International products the best available on the planet.

Furthermore, this form of "cold fusion-hydroponic" farming is pesticide free, and hence the quality of the food nutrients produced this way can be considered superior to conventionally grown foods. After they are grown to proper maturity, the plants are then harvested and dried.

[DR catalog page 11](#)

87

Incoherent Commentary on Freeze-Drying

"Freeze-dried foods have some high quality characteristic compared to products of alternative drying process ... Drying removes the moisture from the food so bacteria, yeast and mold cannot grow and spoil the food, so can extend the shelf life. Drying also slows down the action of enzymes, but does not inactivate them. ... The application of freeze-drying process to foods is most important appears to be for meats such as beef" [48].

"Freeze drying can best preserve meat original color, aroma, taste and nutrients. Freeze drying was conducted under the conditions of low temperature and **high oxygen**, thus microbes and enzymes have no effect on it, **you can't have it both ways** **food is also not affected by oxidation**, food color, aroma, taste and nutrition loss minimum, so especially suitable for drying food of extremely thermal and oxidation easily. Freeze-dried is not damaging protein in meat, **fat soluble vitamins VA, VD, etc have no loss**" [49]. "Freeze dried foods retain nearly 100% of the health benefits of the original food product. Active enzymes, nutrients, antioxidants, amino acids, and more remain "locked in". When frozen, vital molecules remain in place and so the overall integrity of the nutritional composition remains intact. The freeze dried food is still considered a "raw food" that remains vibrant and alive in a dormant state just waiting for moisture to reactivate" [50].

I CAN'T EVEN

<https://doctorsresearch.com/blog/2759/the-truth-about-glandulars-in-nutritional-supplements/>

88



Deep Freeze Oxidizing and Vitamin K (1959)

*Excerpt from Lectures of
Dr. Royal Lee, Vol. II.*

*Used with Permission of
Selene River Press, Inc.*

89

As soon as you put anything in a deep freeze it starts oxidizing. Just like your ground up wheat flour will only last for one week before all the vitamin E is gone. 📢

Dr. Dole, a medical doctor down in Norfolk, Virginia, points out that the incidence of coronary disease went up three thousand percent in some areas where deep freezers were introduced. He said it's the oxidation of the Vitamin K in the green vegetables that did it. People didn't get any Vitamin K and their blood coagulated and went all haywire and they had a coronary attack.

90

So, deep freeze isn't what it's cracked up to be.

There are ways of preventing this trouble if you put your vegetables in a cellophane bag and fill it with water to keep the air away from it and then freeze the whole thing you won't have that trouble.

If you want to put up fruit you can put it up in diluted honey and water, pour over your berries and let the whole thing freeze. When you thaw it out and drain off that honey and water it tastes just like fresh ones. You've protected it from the atmosphere. You can use that same solution for the next batch if you want or you can use it in cooking or what-have-you, but you don't have to throw it away.

91

**National Center for
Home Food Preservation**



Resources for Home Food Freezing

*National Center for Home Food Preservation
April 2018*

Freezing is the easiest, most convenient, and least time-consuming method of preserving foods. The holiday seasons have a way of filling the freezer with leftovers. Adding these to the frozen bounty of the past fall's harvest makes for tightly packed freezers. You can freeze almost any foods and a list of foods and freezing instructions can be found here: <http://www.uga.edu/nchfp/how/freeze.html>. For a table of foods that don't freeze well see: http://www.uga.edu/nchfp/how/freeze/dont_freeze_foods.html.

Freezing to fend off food spoilage

Food spoilage is caused by microorganisms, chemicals, and enzymes. Freezing foods to 0 degrees F. is recommended for best quality.

- Freezing stops the growth of microorganisms; however, it does not sterilize foods or destroy the organisms that cause spoilage. A few organisms may die, but once thawed to warmer temperatures, these organisms can quickly multiply.
- Chemical changes affect quality or cause spoilage in frozen foods. One major chemical reaction is oxidation. If air is left in contact with the frozen food oxidation will occur even in the freezer. An example is the oxidation of fats, also called rancidity.

92

The Etiology Of Acute Coronary Thrombosis

HUNTER MCGUIRE DOLES
Norfolk, Virginia

(Reprinted from THE TRI-STATE MEDICAL JOURNAL, February 1959)

Reprint No. 129

LEE FOUNDATION FOR NUTRITIONAL RESEARCH
Milwaukee Wisconsin

The morphology and pathology of acute coronary thrombosis with or without myocardial infarction is more or less clearly understood but little is known of its etiology. A better understanding of the cause of this disease can be had if one looks back over a period of thirty or more years and compares its frequency then as of today. It would be helpful if we include areas in different parts of the world and a study of the animal kingdom in which it is almost unknown.

The use of anti-coagulant therapy has gained a tremendous following in the treatment of thrombo-embolic disease. As pointed out by Sobrell¹ it is an empirical form of treatment.

It has been established that a normal prothrombin activity varies from eighty-five to one hundred per cent. (Quick)² We must conclude that since those cases which develop thrombo-embolic episodes have hypoprothrombinemia a deficiency of prothrombin is responsible. The results of prothrombin deficiency is hemorrhage; either intimal, subintimal or in the atherosclerotic plaque. (Wartman,³ Winternitz,⁴ Patterson,⁵ Boyd,⁶ Durlacher⁷) Thus the anticoagulant therapy is the only form of treatment in use today that attempts to convert a normal condition into an abnormal one.

* From the private pavilions of The Norfolk General and Leigh Memorial Hospitals.

I wish to thank Dr. Edward Levy, Clinical Pathologist of The Norfolk General Hospital and Mr. A. D. Farmer, Director of The Norfolk City Laboratories. Also the technicians and dieticians of both hospitals for their assistance in this work.

Prothrombin determinations have been routine procedure on all patients either in the hospital or office during the past fifteen years. During this period I have never seen a case of acute coronary thrombosis that was not associated with hypoprothrombinemia. In many instances a temporary rise in the prothrombin activity may reach as high as ninety-five percent following an acute episode, which may be nature's effort to offset the injury but the supply of prothrombin stored is not equal to maintain its activity within the

level to prevent further hemorrhage and further thrombosis. Shapiro⁸ has attributed this temporary rise to thromboplastin released from the thrombus.

A series of investigations brought out a new fat-soluble vitamin known as Koagulation Factor, later shortened to K Factor and then called Vitamin K. (Dam,⁹ Alquist,¹⁰ and Stokstad¹¹) Stokstad showed that the product of this vitamin was prothrombin. Dam showed that when chicks were fed on a diet deficient in this vitamin they hemorrhaged and were then controlled by supplying vitamin K. It was found that Vitamin K is absorbed in the small and a portion of the large bowel through the action of bacteria and bile present in the intestines and from there it is carried to the liver through the blood stream where it is synthesized into Prothrombin, an active element in blood clotting.

In determining the prothrombin level the Quick Method still gives the most consistent results as it determines the prothrombin activity by the logarithmic curve. This method shows a lower reading warning of the early danger of hemorrhage.

Primary factors entering into the mechanism of blood clotting:

Platelets plus foreign substance	Thromboplastin
Thromboplastin plus Prothrombin plus Calcium	Thrombin
Thrombin plus Fibrinogen	Fibrin (Clot)

(Alexander¹²)

It is now known that the richest source of Vitamin K is found in pig-liver, fish meal and vegetables such as cabbage, tomatoes, spinach, kale, turnip salad, collards, broccoli, outer leaves of lettuce, all of the pea and bean group, cauliflower. Any two of the above eaten daily will maintain a prothrombin level within safe limits.

Vitamin K is stable to heat but apparently not to extreme cold or freezing. The following chart shows the effect of vegetables frozen and vegetables fresh or canned on the prothrombin activity of one hundred and fifty cases admitted

Vitamin K is stable to heat but apparently not to extreme cold or freezing. The following chart shows the effect of vegetables frozen and vegetables fresh or canned on the prothrombin activity of one hundred and fifty cases admitted

93

What About DR Glandulars?

Enzyme Process

David Roderick?



However, a different company founded by people who once worked for Royal Lee also developed an enzymatic extraction process to boost certain biological effects of glands. The end result of this process produces glandulars that are known as enzyomorphogens (EMGs). For certain applications, this results in a superior product.

<https://doctorsresearch.com/blog/2759/the-truth-about-glandulars-in-nutritional-supplements/>

Fun fact: enzymatically-processed glandulars (EMGs) are NOT protomorphogens

94

Enzomorphogen (EMG) Supplements



These are enzyme-processed glandulars, **not** PMGs or an upgrade to PMGs

95

DR Has No Clue About What a PMG Is

Fun fact: Dr Lee was a multimillionaire who had access to freeze-drying tech, which was invented in 1906 and widely used in WWII. First PMGs were post-War, 1952. Lee CHOSE not to use freeze-drying.

Protomorphology and EnzoMorphoGens

MUCHO WRONGO

Completely incorrect. PMGs are not beef jerky

Royal Lee often used a ^{wrong ↓} salt-drying process for glandulars. This may be why, although he advocated ^{wrong ↓} whole glands for acute problems, he tended to prefer more processed glandular extracts for long term consumption. While that was fine for his time, ^{wrong ↓} freeze-drying later became commercially available. In this author's view, that made a generally superior glandular product for long term consumption.

Anyway, it appears to partially boost the efficacy of ^{wrong again ↓} salt-dried glandulars, Royal Lee came up with a process to add back part of the gland and he referred to the end product as a protomorphogen.

which Lee never actually did ↑

<https://doctorsresearch.com/blog/2759/the-truth-about-glandulars-in-nutritional-supplements/>

WRONG – SO WRONG – SO VERY WRONG

96

What About DR Animal Ingredients?

“Bovine glandulars are often referred to as cytotrophins, meaning cell foods. Other bovine glandular extracts are known as enzomorphogens.”

- Food Research catalog, page 13

97

SP / DR

Evaluating Recent DR Claims

Made by a Former SP Educator



98

The Claim:

Truly made from food

Contains nothing but food, beneficial yeast,
Lactobacillus, and naturally-occurring enzymes.
Nothing synthetic added. Ever. Period.

My Opinion: False. Hydroponic solutions are necessarily and by definition made of synthetic chemicals and nutrients added to an aqueous solution. I do not believe that just because synthetics are not added to the formula during production (post-harvest), that we can ignore the DR-stated fact that isolates are added to the hydroponic solution and the yeast during their growth phase.

The “truly made from food” statement is likely true for the third and smallest category of DR ingredients, the organically-farmed foods.

99

The Claim:

Truly made from food

Contains nothing but food, beneficial yeast,
Lactobacillus, and naturally-occurring enzymes.
Nothing synthetic added. Ever. Period.

Additional Comments: SP does add trace amounts of synthetics to their formulas, for two reasons:

1. Dr Lee wrote them into the formulations. We may never know why.
2. To meet label claims of nutrient content, considering year-to-year natural crop variations in nutrient levels.

The synthetics are not why SP formulas work, and are in such small quantities as to be insignificant and certainly not harmful. My opinion is that DR uses A LOT more synthetic isolates in growing their hydroponics and enriched yeast than SP does in their post-harvest manufacturing process.

100

Practitioner Commitment

The Claim:

Products are not available online and never will be. Practitioner-owned Doctors Research (distributor) is on our side.

My Opinion: Mostly true. This is a valid criticism of SP's highly controversial decision to sell most (not all) of their products, above suggested patient price so as to reduce competition with clinics, on Amazon. This statement leaves out the fact that DR policy allows their practitioners to sell DR products on their clinic websites, so long as they do not discount. This is similar to SP practitioners (myself included) who have an SP-created inSITE online store to sell many (not all) SP & MH products to the public.

101

Animal Tissue Quality

The Claim:

Does not contain shellfish, porcine, or US-derived bovine. All animal products are from New Zealand, Australia or Argentina.

My Opinion: Irrelevant or misleading. There are hundreds of nutritional supplements sold through retail and practitioner channels that contain shellfish or porcine (pig) products, so I do not see how this statement is relevant.

The fact that DR animal products come from New Zealand, Australia or Argentina does not guarantee quality or purity. Each time SP has lab-tested products from other countries, those test batches never pass because of herbicide or pesticide contamination.

102

Animal Tissue Quality

The Claim:

Does not contain shellfish, porcine, or US-derived bovine. All animal products are from New Zealand, Australia or Argentina.

Additional comments: SP uses two purveyors that seek the best available animals from the US – first pastured / grass-fed / organic, then USDA Prime (the top 1-3% that go through and pass inspection), since there simply not enough pastured animals available to meet their needs (30M+ animals per year). The multi-million dollar, state-of-the-art SP lab performs over 1,000 tests per week, and the company has a perfect 94-year safety record with their animal products.

103

SP / DR

Conclusions



104

Dr Thiel & Dr Lee

1. Thiel espouses the Lee Philosophy of whole-food nutrition and quotes Dr Lee a lot, though his products do not at all reflect what Lee taught.
2. Theil attempted, unsuccessfully, like many other companies, to replicate or emulate Dr Lee's formulas. He did succeed in emulating many product names.
3. Good news: he orders thousands of dollars in SP products himself annually.



"Imitation is the sincerest form of flattery that mediocrity can pay to greatness."

— Oscar Wilde

goodreads.com/quotes

105

Why I Am Not Moved to Switch

- Unlike DR, SP manufactures its own formulas, with a few exceptions, e.g. RNA
- 80% of all SP product ingredients are grown in actual, incredibly rich soil on its beyond-organic farm: "from seed to supplement" – they control the entire process
- I have **immense** concerns about hydroponics – weak foods grown without soil or soil microbes, with synthetic nutrients and minerals added to a hydroponic solution
- 94 years of accumulated SP clinical experience with tens of millions of patients
- PMGs and cytosol extracts are **entirely** different than "cytotrophic extracts" (glandular desiccates) and "enzomorphogens" (enzyme-processed organs)



106

Why I Am Not Moved to Switch - 2

- I do not see the level of Dr Royal Lee's genius reflected in these formulations, most of which appear to be comprised of a tiny amount of a **lot** of different things, similar to most retail "whole food" supps, e.g. Innate Response
- The 23 PMGs are entirely unique to SP, and do NOT function as **glandulars**, but rather as **antigens** (and possibly as sources of epigenetic miRNA)
- The five Cytosol extracts are entirely unique to SP, and do NOT function as glandulars, but rather as quick optimization of that organ / gland.



107

Conclusions

- Standard Process entirely created this national confusion by firing about 93% of its sales force, some of whom understandably sought similar employment. With all my concerns about DR products, I deeply respect and honor those reps.
- I am absolutely clear that SP formulas are superior to DR formulas.
- I see no reason to switch companies, unless SP ceases to exist.
- I opened a DR account and may use DR products that SP does not make, e.g. nattokinase.
- You make your own decisions about what's best for you, your patients and practice.
- I hope I did my job today, which was to offer my perspectives and opinions, so you can make an informed decision. Please share your comments and questions now in the Zoom chat.



108



The Gaeta Institute
FOR WHOLISTIC HEALTH EDUCATION

Resources & Next Steps



109

Educational Resources

michaelgaeta.com – the most effective and comprehensive online & live trainings, and functional medicine certification program, in the clinical application of Standard Process + MediHerb + natural functional medicine + practice success, from the Lee Philosophy. Also there is my clinical practice: in-person and phone/video consultations & treatment

seleneriverpress.com – the teachings of Dr Lee, Mark Anderson, me and many other carefully vetted SP teachers. Use discount code Michael

drroyallee.com – Dr Lee's story

110

If You are an SP Rep Here Today

Thank you for being here today. I hope you've gotten some ideas about how to address the inevitable and increasingly common questions practitioners are asking.

Let's work together! Schedule a seminar or webinar through Mr Tim Bahan. I also offer live Zoom case discussion study groups for small groups of SP practitioners nationally, discussing their patients, and how to think through a case and develop a protocol. These are VERY effective.

111

Nature First, Drugs Last

michaelgaeta.com



The Gaeta
Institute

FOR WHOLISTIC HEALTH EDUCATION

- Natural Health Courses for the Public
- Online CEU Courses & Live Programs
- Functional Medicine Certification



The Gaeta
Clinic

CHINESE & FUNCTIONAL MEDICINE

- Patient Care & Consultations
- Boulder, CO office, or
 - By phone or video



Questions? support@michaelgaeta.com, or 303-442-2525

112

Phone and Video Consultations with Dr Gaeta

michaelgaeta.com

Go to The Clinic at the top right

Chinese and natural functional medicine,
and practitioner consultations:
clinical, business, case consult


**The Gaeta
Clinic**

CHINESE & FUNCTIONAL MEDICINE

113

113

Master SP + MH + Natural Functional Medicine + Practice Success

Dr. Michael Gaeta's



Clinician's Mastermind Circle

CERTIFICATION PROGRAM IN NATURAL FUNCTIONAL MEDICINE

EXPAND YOUR NATURAL MEDICINE PRACTICE

A Private Clinical and Business Training Program for
Acupuncturists, Chiropractors & Natural Health Professionals

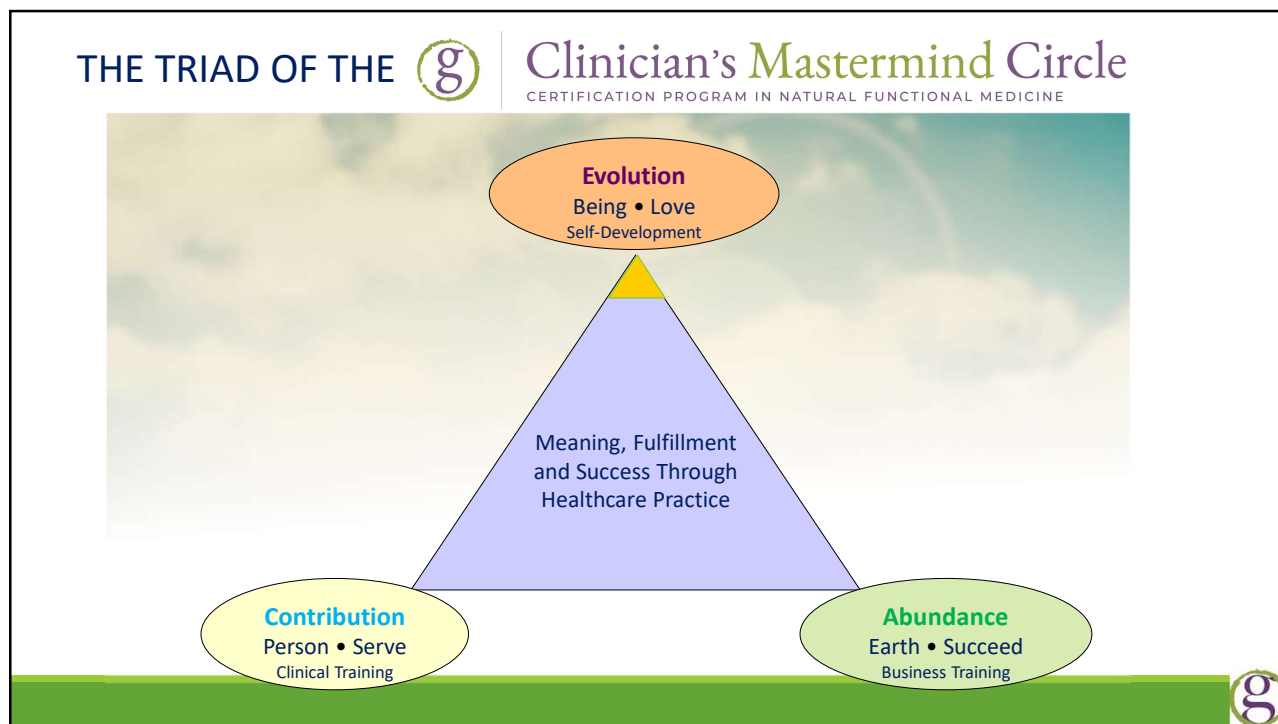
The most comprehensive & effective training available anywhere in SP, MediHerb, Functional Medicine & Practice Success



cliniciansmastermind.com



114



115

Next Steps: Professional Trainings to
Improve Your Patient Care & Practice Success

Learning with the Gaeta Institute:

1. Functional Medicine Certification Program
2. Interactive Live + Online CEU Courses
3. Self-Study CEU Courses



**The Gaeta
Institute**

michaelgaeta.com Questions? support@michaelgaeta.com

FOR WHOLISTIC HEALTH EDUCATION

116

Learn How to Increase Cancer Resistance & Support Patients on Conventional Treatments cancercourse.com

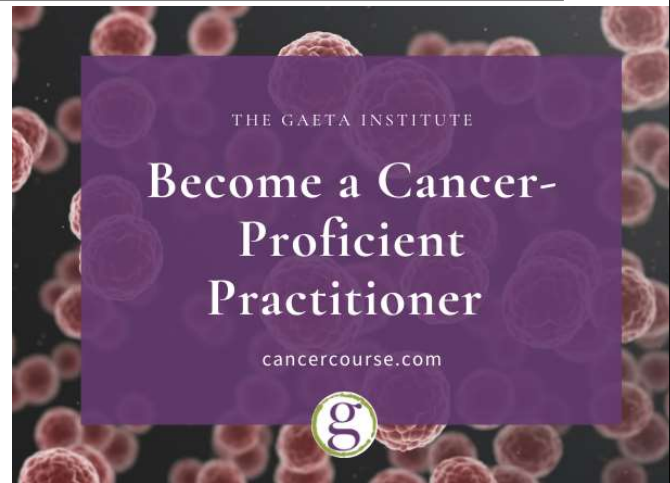
Cancer Support & Prevention

Study Online at Your Own Pace


Optional **13 CEUs** for DC, LAc, ND


Your Faculty & Topics:

Michael Gaeta, DAOM: Core Curriculum
Joseph Antell, CN: My Journey Through Cancer
Mark Berger, MD: Integrative Radiology
James Lyons-Weiler, PhD: HPV, Cancer & Vaccines
Jeff Prystupa, DC: Cancer Is Hot
Kerry Bone: Cancer, Herbs & Chemotherapy
Nancy Fisher, LAc: My Cancer Journey



117



 **The Gaeta Institute**
FOR WHOLISTIC HEALTH EDUCATION

2021 Cardiovascular Mastery Program

Become a Cardio-Proficient Practitioner


12 CEUs for DC, LAc, ND Pending
7 live weekly calls start June 10th
All Calls Recorded

cardiocrourse.com

Your Faculty & Topics:

- Michael Gaeta, DAOM, MS
Core Curriculum,
Natural Functional Medicine
- James Lyons-Weiler, PhD
COVID-19 Vaccines, Blood Clots &
Myocarditis
- Mark Berger, MD
Metabolic Radiology
- Bernie Siegel, MD
The Heart of Healing
- Duane Graveline, MD, MPH
Statins and the Misguided War
on Cholesterol
- Uffe Ravnskov, MD, PhD
The Cholesterol Myths

Self-Study, On-Demand, 12-14 CEUs



118

Weekly Webinars in Natural Health & Health Freedom – open to all
michaelgaeta.com/mwm



119

Acknowledgement & Appreciation

Many thanks to Mr Mark Anderson, who has been with Standard Process since 1972. He continues as an educational consultant since Jan 1, 2023. Mark is the standard bearer and champion of the Lee Philosophy, and generously provided historical facts I was looking for to back up some of the statements I made in this talk.

120

SP / DR

Time for Your Questions



121

g

"Remember the largeness of who you are, the greatness of your purpose in living, and the enormity of your power to create."

- Dr Michael Gaeta

michaelgaeta.com

122

122



The Gaeta Institute
FOR WHOLISTIC HEALTH EDUCATION

SP / DR

Thank you!

Peace and success to you in the days ahead.



123