

Home Lab Testing

Functional Lab Tests Done at Home

Learning about health on a cellular level!

Keri Brown, ND



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Assessing Your Body's Health

Functional Medicine can provide a big picture of what is occurring. It is one of the tools to help assess your health. It studies the interactions between the environment and your gastrointestinal tract, endocrine and immune systems and helps to develop "individualized" health plans.

How Healthy Are You?

Functional Medicine adopts a model that disease is based on "triggers" and "mediators." These triggers correspond to numerous underlying causes, immediate causes, and the particular characteristics of a person's illness or how they feel.

Functional medicine tests are beneficial in reviewing health. These tests can reveal your biochemistry on multiple levels.

Testing at Home

You can conduct these functional medicine lab tests at home: Mineral and Heavy Metal, Zinc Tally test, to your Urine and Saliva pH. You can print each applicable test form below. The instructions are clear, and once filled out, charts allow your health progress to be evaluated and followed.

These tests are historically known for monitoring your health and body functions

Hair Tissue Mineral Analysis and Heavy Metal

This functional medicine lab test uses your hair to and profiles your mineral and trace minerals, ratios, and heavy metals like alumina, mercury, and cadmium.

The test consists of your mineral levels, metabolic rate, energy levels, sugar and carbohydrate tolerance, immune system, glandular activity, autonomic balance, metabolic trends, basic dietary guidelines, and a complete dietary supplement program designed to balance body chemistry.



The complete Multi-Element Laboratory Analysis includes a thorough 35-45-page interpretation guidebook that reviews significant mineral levels and ratios and provides pertinent information.

Supplements from Standard Process and Endo-met are suggested in their treatment portion.

(Test included and shipped to your door. It is then mail in, envelope included).

[pH Saliva and Urine](#)

Body pH is critical because pH controls the speed of our body's biochemical reactions. It does this by controlling the speed of enzyme activity and how electricity moves through our bodies.

The higher (more alkaline) the pH of a substance or solution, the more electrical resistance that substance or solution holds. Therefore, electricity travels slower with higher pH, >7. Alkaline pH, on the other hand, biochemically speaking, is slow and calm. If we say something has an acid pH, it is hot and fast. <7

(Test included and shipped to your door from Emerson Ecologics).

[Zinc Tally Test](#)

Zinc is responsible for over 50 co-enzyme reactions in our bodies. That means it keeps many-body circuits, our biochemistry, running smoothly. Zinc is an essential co-factor of the immune, healing, and sexual hormone systems.

(Test included and shipped to your door from Emerson Ecologics).

[Iodine Fulfillment Test](#)

Total Body Iodine Fulfillment or Sufficiency can finally resolve challenging, stubborn problems that resist all other treatments. Called Orthoiodo-supplementation, this nutritional approach employs elemental iodine supplements until the thyroid gland, and all other iodine-sensitive sites in the body have reached iodine sufficiency.

(Test included and shipped to your door from [J. Crow](#) at 2% Iodine)

Eldon Blood Typing Kit

The blood typing kit has everything you need, including instructions, a finger lancet, alcohol prep, plastic applicator sticks, and a testing card. Performing the test is easy.

After first cleaning with the supplied alcohol prep pad, the index or middle finger is lanced with the sterile disposable lancet. You turn your hand downward, and blood drops are placed on each of the four sticks.

The sticks are then applied to the card and stirred for two minutes. The results are then read from the card. The total time to results is less than five minutes. Single-use test.

(Test included and shipped to your door).

Basal Body Temperature

Basal body temperature monitors fluctuations in a woman's monthly cycle and determines how well the thyroid works. One of the most consistent ways of assessing one's thyroid function is by checking body temperature because this reflects the thyroid's influence on the body's metabolic rate.¹ A basal body temperature consistently less than 97.8° F over one month may indicate low thyroid function.

Other tests, primarily blood tests, have been developed to check thyroid function. However, these values may return to normal despite symptoms of hypothyroidism. You will need a thermometer for this test.

(Complimentary handout to be printed out).

Yeast Test through Saliva

The yeast test is a do-it-yourself test to determine a possible overgrowth of fungus. The functional tests look at your first-morning spit. A positive sign with this practical medicine lab test shows overgrowth of fungus and should be discussed with Dr. Brown for appropriate diagnosis and treatment.

(Complimentary handout to be printed out).

Body Mass Index – BMI

As far as health is concerned, excess body fat is harmful. In contrast, an above-average muscle mass is more likely to be positive. In three out of four cases, BMI seems to have significant relevance to health. This calculator computes the body mass index and rates it appropriately for men, women, children, juveniles, and seniors.

Check out the BMI calculator [HERE](#) to determine your BMI,
<https://www.smartbmiccalculator.com/>

[Annual Blood Lab Testing](#)

(Done through your M.D. or [Directlabs.com](#))

Annual fasting blood test for CBC, thyroid, heart, sugar, Vitamin D, and other tests. You must fast for 10-12 hours before this blood test.

These tests are to be conducted via patient orders and payment online at www.DirectLabs.com, through your physician and insurance, or contact Dr. Brown at 719-423-0306 to order these labs.

(Complimentary handout to be printed out)

Test To Be Done at Home

Hair Mineral & Heavy Metal Analysis

Functional laboratory assessment for minerals, heavy metals, and their significant ratios.

This profile includes the complete Multi-Element Laboratory Assay, plus a thorough 35–45-page interpretation that reviews significant mineral levels and ratios and provides pertinent information relating to you. It is a screening test for the level of 20 minerals and toxic metals in your hair sample. Interpretations can be read by the information in the chart and guide or contact Dr. Brown.



Why a hair tissue mineral analysis?

Hair, like all other body tissues, contains minerals that are deposited as the hair grows. Although the hair is dead, the minerals remain as the hair continues to grow out. A sample of hair cut close to the scalp provides information about the mineral activity in the hair that took place over the past three to four months, depending on the rate of hair growth.

The test includes

- | | |
|-------------------------------------|------------------------------|
| 1. Mineral levels | 6. Immune system |
| 2. Metabolic rate | 7. Glandular activity |
| 3. Heavy metal concentrations | 8. Autonomic balance |
| 4. Energy levels | 9. Metabolic trends |
| 5. Sugar and carbohydrate tolerance | 10. Basic dietary guidelines |

Complete nutritional supplement program to assist in balancing body chemistry

Easy Testing

1. Clip tiny portions of your hair in the back of your head.
2. Trim 1 1/2 inches off from the top and weigh it on the scale.
3. Place the hair in the envelope and mail it off.

REVIEW THE [BROCHURE HERE](#)

Shipped and Ordered from <https://www.drkeribrown.com/products/>.

Ph Testing of Saliva and Urine

Acid-Base Body Balancing

Our pH-Strips let you know exactly where your pH level is at. This is especially useful when taking pH-Basic, as it lets you track how your body returns to normal. With a 15-foot single roll dispenser, accurate color chart, and immediate results, finding your level are easy and quick. Know where you stand as you get back into balance.

Benefits of pH monitoring

- Know your body's pH level
- 15-foot single roll dispenser
- Immediate results
- Accurate color chart
- Track progress when using pH-Basic

When the body's pH balances, everything else feels and works better.

What is the pH scale? The pH scale measures acidity, with lower numbers being more acidic and higher numbers being less acidic, also known as more alkaline or basic.

The tissue in our bodies falls on this scale, and it's better to have our levels fall closer to the neutral middle than the ends of the scale.

How do pH levels affect the body?

While our internal pH level can land somewhere between 4, acidic, to 8, alkaline, the cutting side of the scale has more worrying effects, including not being able to get the most out of our enzymes. Several factors can make our bodies more acidic, from diet to pharmaceutical drugs, environmental toxins, obesity, and other lifestyle issues.

How do pH-Strips work together with pH-Basic?

Fortunately, alkalinizing agents like pH-Basic can promote balanced pH levels in the body.* Not only is pH-Basic formulated with a special blend of enzymes, nutrients, and botanicals to



maintain the body's optimal pH level, but it's been designed to bypass the acidic environment of the stomach and deliver nutrients directly to the small intestine.*

pH-Strips can help you track progress and know exactly where you stand.

Body pH is essential because pH controls the speed of our body's biochemical reactions. It does this by controlling the speed of enzyme activity and the rate at that electricity moves through our body.

The higher (more alkaline) the pH of a substance or solution, the more electrical resistance that substance or solution holds. Therefore, electricity travels slower with higher pH. If we say something has an acid pH, we say it is hot and fast. Alkaline pH, on the other hand, biochemically speaking, is slow and calm.

The homeostatic mechanism works by depositing and withdrawing acid and alkaline minerals from other locations, including the bones, soft tissues, body fluids, and saliva. The pH of saliva parallels the extra cellular fluid representing ionic calcium deficiency.

With this home test, you will monitor your health progress toward a proper acid/alkaline balance by testing saliva pH. pH paper is read by the color that shows up after it has dipped in saliva or urine: 5.5- strongly acidic (yellow) to 8.0- strong alkaline (dark green)

- The ideal saliva pH is between 7.0 - 7.2
- The ideal urine pH is between 6.8-7.2

pH controls the speed of our body's biochemical reactions of enzyme activity and the speed at which electricity moves through our body. The higher (more alkaline) the pH of a substance or solution, the more electrical resistance that substance or solution holds, and the electrons travel slower.

pH Miracle Living Acid/Alkaline Saliva and Urine Test

1. First, upon waking, test your saliva with the pHDrion paper. When you get out of bed, lick and wet the end of a pHDrion test strip with your saliva. Note the color change and write down the pH number. Do this before brushing your teeth, drinking, smoking, or eating.

The optimum saliva pH should be 7.2.



2. Next, test your first urine of the morning. This is urine stored in your bladder at night and is ready to be eliminated when you get up. It would help if you peed on a strip of pHDrion paper, noted the color change, and wrote down the pH number.

3. The first urine should run optimally between a pH of 6.8 to 7.2.

Check your pH daily to three times a week. Once one has achieved a pH above 7.2, it is helpful to monitor saliva pH regularly to ensure that the body remains sufficiently alkaline.

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|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Date | | | | | | | | | | | | | | | | | | | |
| Saliva pH | | | | | | | | | | | | | | | | | | | |
| Urine pH | | | | | | | | | | | | | | | | | | | |

Zinc Tally Test

The most deficient mineral in the American diet is zinc. Over 90% of the population show signs of Zinc insufficiency. This test is designed to test and monitor your zinc status. You will know if your system needs zinc by reacting to the taste.

Zinc is responsible for over 50 co-enzyme reactions in our bodies. That means it keeps many body circuits, our biochemistry, running smoothly.

Zinc is an essential co-factor of the immune system, healing, and sexual hormone system.

Easy Testing

Place 1 teaspoon of zinc sulfate, 7-hydrate solution in the mouth and swish for 15-20 seconds.

The taste response should fall into one of the following four categories.

1. No specific taste or other sensations are noticed, even after the solution has been in the mouth for about ten seconds. You have a poor zinc status and should supplement.
2. No immediate taste is noted, but after a few seconds, a slight taste variously described as "dry," "mineral," "furry," or (more rarely) "sweet" develops. You have a mild zinc status and should supplement.
3. A definite, though not intensely unpleasant, taste is noted almost immediately and tends to intensify with time. You have moderate zinc status and should monitor yourself with the zinc tally test.
4. A strong and unpleasant taste is noted immediately. The person grimaces typically. You have an excellent zinc status and should continue what you are doing or stop zinc supplementation.



In our experience, responses in categories (1) and (2), especially the former, suggest the individual is zinc deficient, and a favorable response to zinc supplementation may be expected.

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|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Date | | | | | | | | | | | | | | |
| Enter Response 1, 2, 3, or 4 | | | | | | | | | | | | | | |

Iodine Fulfillment Test

Whole Body Iodine Levels

Total Body Iodine Fulfillment or Sufficiency can finally resolve challenging, stubborn problems that resist all other treatments. Called Orthoiodo-supplementation, this nutritional approach employs elemental iodine supplements until the thyroid gland, and all other iodine-sensitive sites in the body have reached iodine sufficiency.

The most common complex problem for which this therapy has been called panacea is fibrocystic breast, polycystic ovary syndrome, hypo-and hyperthyroid (with or without goiter). Also, brain fog, constipation, obesity, diabetes, hypertension (high blood pressure), and even some heart problems – most notably irreversible arrhythmia like atrial fibrillation.

Synthroid has been shown to deplete the thyroid and tissue iodine levels. All patients on thyroid therapy should additionally be on iodine therapy. The goal of treatment is to achieve *whole-body iodine sufficiency*.

Thyroid Patch Test

Iodine NOT INCLUDED must be purchased from [J. Crow](#) at 2% Iodine.

Paint a 2" round spot of Tincture of Iodine on your inner arm. Be generous; leave a dark area in the center.



1. If it disappears in less than eight (8) hours, you desperately need Iodine.
2. If it disappears in less than twenty-four (24) hours, you still need additional Iodine.
3. If it simply stays on your arm and begins to fade in color after 24 hours slowly, you have already reached iodine sufficiency.

You can retest yourself every one to two weeks while on therapy. You can use the test to judge your individual dosage need for Iodine. Most patients who need iodine therapy require it in an absorbable, whole-food form daily for three months.

Iodine sufficiency (when all tissues have adequate Iodine) can require daily Iodine for three (3) months. After three months, reduce your dose to ½ for one month. Repeat the patch test in a couple of weeks to ensure you maintain your levels.

Watch for problems, watch for improvement, and see for yourself if Iodine is the missing link in your stubborn health problems.

How to apply your Iodine test patch

- Place a patch on the soft tissue of your forearm.
- If you have a roller-top bottle: It works best to make little circles going counterclockwise, 2 or 3 circles, then clockwise, 2 or 3 back and forth to get the Iodine flowing.
 - If you put Iodine in an eyedropper bottle, saturate a 2" circle area with Iodine.
- Repeat until you are satisfied that you have adequate Iodine on your skin. – wet, but not dripping off.
- Allow the Iodine to dry before you pull down your sleeve or put on your pants, so you don't get a dark stain on your clothes.
- Repeat once weekly and record Patch Test Time.
- Please write down the time you put it on the when it disappeared. You must pay attention to the iodine patch.



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|------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Date | | | | | | | | | | | | | | | |
| Test Time | | | | | | | | | | | | | | | |
| Test Disappears | | | | | | | | | | | | | | | |
| Hours Lasted | | | | | | | | | | | | | | | |

If depleted: Consider using an Iodine supplement for 2-3 months and eating rich foods.

Positive Patch Test

If your Patch Test is positive, you need iodine therapy.

- Build up your dosage slowly, starting with one tablet daily for several days.
- Iodine sensitivity is very rare but may happen. If you experience problems or side effects, stop your therapy and contact our office immediately for advice on how to proceed. Possible Side Effects among sensitive individuals include skin irritation, watery eyes, nose, and saliva: nervousness, or headaches. If you experience a racing heart, you must stop iodine therapy immediately.

Some people need only one tablet or two, while others more.

At the end of each week, repeat the Patch Test and record how long it takes the Iodine to disappear from your skin. When it stays there longer, you need less of your iodine supplement.

Support: Consider [Proline iodine](#) from Standard Process and switch to [Iodimere](#) after your iodine stores are full.

You can find them at <https://drkeribrown.standardprocess.com> or [contact us](#) for whole Body Support.

[Supplement Ordering - Patient Direct Ordering](#)

Basal Body Temperature

Thyroid Assessment and Monitoring

Basal body temperature (BBT) determines how well the thyroid works and monitors fluctuations in a woman's monthly cycle.

Historically, one of the most consistent ways of assessing one's thyroid function is by checking body temperature because this reflects the thyroid's influence on the body's metabolic rate.¹

A basal body temperature consistently less than **97.8° F** over one month may indicate low thyroid function.

Other tests, primarily blood tests, have been developed to check thyroid function and are also essential to conduct. A full thyroid panel should include a TSH, free T3, and free T4.

These values may often come back normal even though symptoms of hypothyroidism are present. We call this Sub-Clinical Hypothyroidism.

Thermometer NOT INCLUDED.

Signs and symptoms of hypothyroidism

In measuring your BBT, you should consider if you have any of the above symptoms.

- Dry or thinning hair
- Fatigue
- Dry skin
- Short nails with white spots
- Poor circulation with cold hands and feet
- Shivering spells
- Fluid retention
- Difficulty losing weight
- Slow digestion
- Constipation
- Mental tiredness
- Depression
- Poor memory
- A chronic headache that is usually worse in the morning
- Ringing in the ears
- Disturbed sleep
- Achy
- Stiff joints
- Low/high blood pressure
- Slow heart rate



Measuring Your Basal Body Temperature

If using an electronic thermometer, do not move it before you test it in the morning.

Thyroid Testing

1. Shake down the thermometer below 95°F and place it beside the bed before sleeping.
2. First thing in the morning.
 - a. Place a mercury-style thermometer under the armpit. The less movement you make, the more accurate the reading; place it in your mouth or use digital.
3. After 10 minutes, record the reading.
 - a. Do this for 5 consecutive days.

The average temperature is between 97.8 and 98.2

Less than 97.8° F over 5 days may indicate low thyroid function.

Above 98.2 suggest hyperthyroid.

| | | | | | | | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Date | | | | | | | | | | | | | | | |
| Basal Body Temperature AM | | | | | | | | | | | | | | | |

[For menstruating women, make day 1 the beginning of your menses. So, if you know where you are in your cycle, you can start on that day, i.e....., if you are on day 15 of your menstrual cycle, you will put your first day's reading under day 15. Your body goes up during ovulation. If you don't know where you are in your cycle, record your basal body temperature on a separate piece of paper until you begin your menses and then fill in the chart.]

Saliva Test for Yeast (*Candida albicans*)

Test to determine a possible overgrowth of fungus.

Steps for The Test

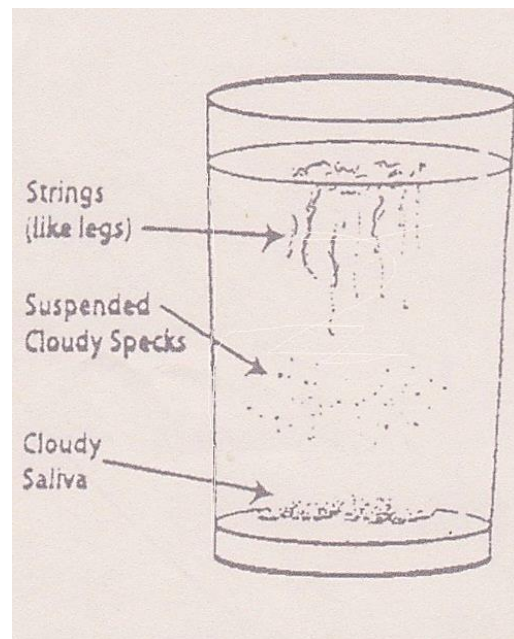
1. First thing upon waking
2. Before drinking or putting anything in your mouth
3. Spit the first sputum into a glass of fresh water.
4. Check the water every 15 minutes for up to one hour.

If you should observe no change in the water and the saliva is floating after an hour, then it appears you are not in a state of overgrowth of fungus.

Positive Test Signs

If you should observe any of the following changes, then the saliva is likely carrying a fungal infection.

- Strings (like legs) traveling down into the water from the saliva floating on top.
- Cloudy specks suspended in the water.
- Cloudy saliva sinks to the bottom of the glass.



| | | | | | | | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Date | | | | | | | | | | | | | | |
| Yes | | | | | | | | | | | | | | |
| No | | | | | | | | | | | | | | |

A positive test for an overgrowth of fungus should be discussed with Dr. Brown for appropriate diagnosis and treatment.

Blood Work and Urine

Online Lab Access

If your Doctor can order these tests on your insurance, that is an excellent way to go. Dr. Brown will also order these tests for you if needed.

www.DirectLabs.com

privatelabs.com

- No doctor's prescription is necessary
- A patient can order and pay for tests online, go to a local draw center, and get results online
- Not available in some states
- Discount combination profiles on cardio, thyroid, sugar, and comprehensive annual labs using/online.

Essential Blood Work:

CBC With Differential And Platelets

Comprehensive Metabolic Panel (CMP)

Lipid Panel (Cholesterol And Triglycerides)

Cardiovascular: Cardio (High – Sensitivity) C – Reactive Protein (C – CRP or H.S. – CRP), Homocysteine, Fibrinogen, Oxidative LDL, Lipoprotein A, Lipoprotein – Associated Phospholipid A2 (LpA-PLA2)

Thyroid: Thyroid Stimulating Hormone (TSH), Free T3, Free T4, Thyroid Peroxide Antibodies (TPO AB), Thyroglobulin Antibody (TG AB)

Sugar: Insulin, Hemoglobin A-1 C (HGC A1C)

Others: Blood Type, pH, Ionized Calcium, DHEA-Sulfate, Ferritin, Vitamin D (25-OH-D), D-Dimer (presence of blood clots), a hormonal panel of estrogens, progesterone, testosterone

Urine: Comprehensive urinalysis

Test Suggestion from DirectLab.com

- CWP, Vitamin D 25-OH, Ferritin, CRP-hs, Testosterone Total & Free, DHEA-s, Estradiol, HgbA1c, Progesterone, and Homocysteine
- Dr. Gaeta's Comprehensive Annual Blood Test

- CBC w/ diff & plt, CMP-14, Lipids, TSH, Free T3, Free T4, Reverse T3, TPO, TAA, CRP-hs, Homocysteine, Fibrinogen, Ferritin, Vitamin D 25-OH, Insulin, HgbA1c, and Ionized Calcium.
- Comprehensive Wellness Profile (CWP) + Thyroid Panel Complete W/ Antibodies
- Comprehensive Wellness Profile (CWP) + Complete Thyroid w/ Antibodies
- Thyroid Panel Complete
- Thyroid Panel With TSH, Free T3, Free T4, Total T3 and Reverse T3

Supportive Care

pH Acid and Alkaline Balancing Diet

As you read these words, you are generating acid. Not only are you causing acid, but you are also eliminating it. But, not to worry. Our bodies are in a constant state of flux, maintaining homeostasis and balancing the pH of the blood at 7.35-7.45.

Your cells naturally live in an alkaline environment. During metabolism, they produce large amounts of acid. For example, during vigorous exercising, your muscles have acid, which decreases the body's pH, which activates one of the buffering systems, the lungs, which huff and puff to bring the body's pH back into balance.

Eliminating acid this way is not depleted minerals, which is why aerobic activity is so good for your health. But this does not solve the problem alone and can cause more harm to your body if it is too acidic.

The kidneys also function in the body's buffering system by using the alkaline reserves to neutralize the acid that comes through the tubules. Here hydrogen ions are secreted (acid), and ammonia is formed and secreted (base). The ammonia combines with acids and is secreted in the urine as ammonium salts.

Our body is alkaline by design and acid-producing by function.

The acid the cells produces is weak and will not harm your body. The acid usually is eliminated when we breathe and exchange oxygen and carbon dioxide. Eating acid ash foods will produce a strong acid that cannot be neutralized by breathing, so it needs alkaline stores working on getting rid of it. The kidneys do this activity, so we can use urine to test the body's functioning levels.

The acid produced by acid ash foods is eliminated through the kidneys, and with-it minerals are leached and excreted in the urine. This is when we use our alkaline reserve.

The alkaline reserve is made of minerals that will offset the effects of dietary acid ash. These minerals are sodium, calcium, potassium, and magnesium, which are organically found in fruits and vegetables and inorganically in some vitamin supplements.

Most fruits are acidic but function as alkalizing agents in your body. They provide minerals to the alkaline reserve. In the cells, the acid produced is weak and can be eliminated through the lungs, and little stress is put on the body. The acid ash-producing foods leave strong acids, stress the body, take minerals from the reserve and need to be neutralized before elimination through the kidneys or colon.

A proper diet would consist of 70% alkaline ash foods and 30% acid ash foods. For a list of foods, refer to the attached chart.

pH Balancing Food Chart

Food and Chemical Effects on Acid/Alkaline Body Chemical Balance

| Most alkaline | More alkaline | Low alkaline | Lowest alkaline | Food Category | Lowest acid | Low acid | More acid | Most acid |
|---|---|---|--|---|--|--|---|-----------------------------------|
| Baking soda | Spices/cinnamon | Herbs (most) | | Seasonings | Curry | Vanilla | Nutmeg | Jam/jelly |
| Lime Nectarine Persimmon Raspberry Watermelon Tangerine | Grapefruit Cantaloupe Honeydew Mango Dewberry Loganberry | Lemon Pear Apple Avocado Blackberry Cherry Peach Papaya | Orange Apricot Banana Pineapple Raisin, currant Grape Strawberry | Fruit | Guava Dried fruit Fig Date | Plum Prune Tomato | Cranberry Pomegranate | |
| Lentil Yam Onion Daikon radish Taro root Sea vegetables Burdock | Parsnip Garlic Kale Parsley Endive Mustard greens Ginger root Broccoli Sweet potato | Potato Bell pepper Mushroom Cauliflower Eggplant Pumpkin Collard greens | Brussels sprouts Beet Chive Okra turnip greens Squash lettuce | Vegetables Beans Legumes | Spinach Fava beans Kidney beans String beans Chutney Rhubarb | Tofu Chard Pinto beans White beans Navy beans Azuki beans Lima beans | Green pea Peanut Snow pea Carrots Chickpea Legumes (other) | Soybean Carbo |
| Pumpkin seeds | Poppy seeds | Almonds Sprouts Primrose oil Sesame oil Cod liver oil | Avocado oil Seeds (most) Coconut oil Olive oil Flax oil | Nuts / Seeds Sprouts Oils | Pine nuts Sunflower oil Canola oil Grape seed oil Pumpkin seed oil | Safflower oil Sesame oil Almond oil | Pistachio Pecan | Walnuts HazelNut Brazil nut |
| | | | Oats | | Brown rice | Wheat | Oat bran | Barley |

| | | | | | | | | |
|--|----------|-------------|---------------------|------------------------------------|-----------------------------|--|-------------------------------|----------------------------------|
| | | | Quinoa Wild rice | Grains Cereal | Millet Kasha Amaranth | Spelled Buckwheat Semolina | Rye Corn | |
| | | | | Fowl | Wild duck | Turkey Goose | Chicken | Pheasant |
| | | | | Meat Fish Shellfish | Venison Fish | Lamb Elk Shellfish | Pork Veal Mussels/squid | Beef Lobster |
| | | Quail eggs | Duck eggs | Eggs | Chicken eggs | | | |
| | | | | Dairy | Yogurt Cream | Cow/goat milk Aged cheese Soy cheese | Casein Fresh cheese | Processed cheese Ice cream |
| | | Green tea | Ginger tea | Beverage | Kona coffee | Black tea | Coffee | Beer |
| | Molasses | Rice syrup | Succinate | Sweeteners | Honey Maple syrup | | Saccharin | Sugar Cocoa |
| | | Apple cider | | Vinegar | Rice vinegar | Balsamic vinegar | | White vinegar |

Zinc Deficiency – Fact Sheet

The Zinc Taste Test uses 0.2% zinc sulfate solution, developed by Professor Bryce-Smith, Ph.D. During his clinical work and research with anorexics, he established this test as practical as sweat testing. The test measures the activity of gastrin, a zinc-dependent enzyme required for taste. The following key should be used as a reference:

- Severe: Tasteless, like water.
- Moderate: Slight or delayed taste (dry, mineral, metal, or sweet). Mild: Unpleasant taste that intensifies with time.
- Adequate: Strong unpleasant taste noticed immediately. Signs of zinc deficiency: white nail flecks on two or more fingernails; inflamed cuticles, transverse nail lines, stretch marks, poor skin and hair condition including dandruff and loss of hair, poor sense of taste; frequent infections, poor appetite; ADHD/ADD, etc.

Why Are You Zinc Deficient?

You may be exposed to dietary or environmental antagonists that impede optimal zinc absorption, such as tartrazine (E102), phytates (e.g., wheat bread), tannic acid (e.g., black tea), cadmium (e.g., cigarette smoking), drinking water from copper supply pipes, contraceptive pills or IUD (raise the body's copper), some anti-depressant medications, fizzy drinks (high in the antagonist phosphate) alcohol and coffee, lead (air pollution, water pipes, paint, etc.).

Why Do I Need Zinc?

Zinc is a critical mineral assisting with essential systems functions:

- For the production of pancreatic protein-digesting enzymes (e.g., carboxypeptidase) and stomach acid, to ensure optimal digestion
- To aid the utilization of available protein
- To aid repair of any damaged tissue, including intestinal mucosa, necessary for best nutrient absorption, preventing malabsorption
- For manufacture of all the body's protein products (e.g., muscle and bone structure), antibodies (e.g., immune activation to prevent infection, cancer), hormones (e.g., thyroxin or thyroid hormone, which governs metabolic rate), and oxygen transport (hemoglobin)

- To manufacture critical neurotransmitters from amino acids responsible for mental state and mood (e.g., serotonin is needed along with Vitamin B6 by the enzyme 5HTP carboxylase for the final conversion step of 5HTP to serotonin), dopamine, etc.
- For the manufacture of essential fatty acids such as GLA and A.A., vital for optimal and balanced mental function and state, steady good health (required for many body functions), and adequate energy, g)
- For insulin synthesis and storage and blood sugar balance, helpful in appetite balance management)

How To Redress a Zinc Deficiency

Reduce antagonizes (see "Why are you zinc deficient?")

Improve Dietary Sources – Eat these foods!

- | | |
|---|----------------|
| • Pumpkin Seeds (Pumpkin Seed Butter*) | • Oats |
| • Egg Yolk | • Rye |
| • Fish (Animal Zinc Most Bio-Available) | • Peas |
| • Crustaceans (Especially Oysters) | • Ginger |
| • Pecan Nuts | • Thyme |
| | • Black Pepper |

Use organic where possible to avoid artificial NPK fertilizer, which antagonizes zinc.

Supplementing

45mg daily for adults (as picolinate, gluconate, or citrate) is recommended for 3-6 months. A general rule for adult dosing would be 12 years old, 120 lbs, and pubescent. Children's dosing should be determined by age and size and be a fraction of the adult dose.

[Zinc Chelate](#) from Standard Process is an excellent source of zinc. Try one to two bottles.

[Supplement Ordering - Patient Direct Ordering](#)

Positive Yeast Test

General Candida Treatment

Candida albicans is a strain of yeast commonly found in the intestinal tract. Its numbers are usually controlled by the friendly bacteria cohabiting with the yeast and the body's defense systems.

These friendly bacteria, known as a group by the name *Lactobacilli*, compete with the Candida yeast. Occasionally, however, the yeast will be allowed to overgrow, leading to significant disease states.

C. albicans' overgrowth is believed to cause various symptoms in virtually every body system, with the gastrointestinal, genitourinary, endocrine, nervous, and immune systems being the most susceptible.

C. albican's overgrowth or enteric candidiasis is most often associated with the chronic use of antibiotics. Other drugs such as corticosteroids (cortisone, prednisone, etc.), anti-ulcer drugs (Zantac, Tagamet, etc.), and oral contraceptives (birth control pills) can precipitate yeast imbalance, as does a lack of digestive secretions and having too much sugar in the diet.

Successful treatment includes reducing the predisposing factors to overgrowth, strengthening the body's ability to fight overgrowth, and administering agents that directly arrest the overgrowth.

There are Many Ways to Approach Candida's Treatment

The treatment for adults is different from children due to the difficulty of the regime. The regime is generally a six-week protocol with a follow-up visit around week five to assess the progress and give the client instructions about how to proceed after the treatment. The treatment is usually a 4-part approach.

Assessing the status of the Hydrochloric Acid (HCL) in the client's system.

Don't Feed The Fungus

It is essential to stay on this diet strictly if you are using medication to kill the fungus. If you do not strictly remain on a diet and take medication, you risk making a more resistant Candida.

Secondly, the physician advises you to get some books to help with the diet restrictions: The Yeast Connection, Yeast Syndrome, etc. The physician does not recommend one book over another because people may be attracted to one reader.

The following foods are to be strictly avoided:

- Sugar, Including Fruit Sugars
- Fruits Are To Be Avoided in The First Three Weeks; At Week 4, You Can Attempt To Introduce Meatier Fruits Such As Apples, Pears, Nectarines, and Banana. No Citrus, Melons, Berries, Or Exotic Fruits.
- Peanuts
- Mushrooms
- Leavened Products (E.G., Bread)
- Fermented Products (E.G., Soy Sauce, Vinegar, Cheese, Etc.)
- White Wheat Flour (It Is A Sugar....Watch The Pastas)
- No Sweeteners (E.G., Honey, Molasses, Malts)
- No Alcohol, caffeine

Things that are OK

- Milk
- Rice Dream
- Soy Milk
- Lemons To Make Salad Dressings
- Eat Lots Of Garlic
- Coconuts
- And Nuts

Include plenty of fresh vegetables, whole grains (barley, buckwheat, brown rice, Kamut, oats, quinoa, spelt, and teff), free range chicken & turkey, deep water fish, wild game, pheasants, quail, yeast-free crackers and bread, legumes, eggs, ground seeds, and nuts.

Include such foods as garlic, onions, green leafy vegetables, cabbage, broccoli, cauliflower, turnips, olive oil, flax seed oil, sesame oil, and sunflower seed oil.

Eat a handful of fresh pumpkin, sunflower, or sesame seeds daily.

Sample Diet

- Breakfast: eggs, hot cereals, fish
- Lunch: soups, salads
- Dinner: animal products, beans/rice, all vegetables
- Snacks: rice cakes and other unleavened bread products, nut butter (except peanut butter)

Good Bacteria

It would help if you took acidophilus 3x/day. The best product is HMF. This needs to be refrigerated.

Find supportive care with Dr. Brown and at [Fullscript](#).

Candida Food Avoidance List / NO-NOs

It is recommended that all of the following foods be avoided while treating Candida-related issues. They either contain yeast or sugar.

- | | | | |
|----------------|------------------|-----------------|---------------|
| 1. Beer | 12. Cookies | 21. Olives | 31. Soy Sauce |
| 2. Brandy | 13. Crackers | 22. Pastries | 32. Tomato |
| 3. Breads | 14. Enriched | 23. Pickles | Sauce |
| 4. Buns | flours | 24. Pretzels | 33. Truffles |
| 5. Buttermilk | 15. Fruit juices | 25. Rolls | 34. Vinegars |
| 6. Candy | 16. Gin | 26. Root Beer | 35. Vodka |
| 7. Cakes | 17. Malted Milk | 27. Rum | 36. Whiskey |
| 8. Catsup | Drinks | 28. Salad | 37. Wine |
| 9. Cereals | 18. Mayonnaise | Dressings | |
| 10. Cheeses | 19. Mince Pie | 29. Sauerkraut | |
| 11. Condiments | 20. Mushrooms | 30. Soft Drinks | |

Supplement Ordering

Patient Direct Ordering

Below are the various Supplement Companies I use directly to order profession-grade supplements.

You can order Patient Direct ordering with Fullscript, Standard Process, and Ecomet through my account access.

Key Benefits of Patient Direct Ordering

1. Place Orders Online
2. View & Trace Orders
3. Receive Products at Your Doorstep
4. Order and Reorder at Your Convenience

How IT Works

You must know what supplements you want to order, or you can search in categories for what you want.

From there, the online purchase process is swift and smooth. You can find anything, including teas.

Patient Direct Ordering gives you access to order the supplements you need when you need them.

Fullscript Professional

[Dr. Brown's Dispensary at FULLSCRIPT](#) carries high-quality, professional Doctor only supplements, oils, herbs, homeopathy, and more.

They have about anything you could think of in supplements and top brand companies like Pure Encapsulation and Herb Farm, including Yoga Tea, toothpaste, protein powder, and physical therapy items.



The Fullscript online dispensary takes only minutes to set up and provides quick and easy access to specific items. Once you register then, look for Dr. Brown's Favorite Recommendations.

[Receive almost all your supplement orders from fullscript.com](#), including teas, tinctures, and more.

Standard Process

Order Online Standard Process® Supplements

NOW You Can [Order Directly HERE!](#)

Standard Process has been pioneering high-quality products and nutrient interactions that work the way nature intended since the 1940s.

Standard Process does things differently. They grow 80% of the plants in their nutritional supplements on a family-owned, certified organic farm. They protect nutrients naturally for potency, efficacy, and quality.

You already know Standard Process for high-quality supplements. But did you know how accessible they are, especially given the realities of a hectic schedule?

Self-Guided Health Supplement Plans - [Healthy Supplement Plans](#) can help play a central role in everyday activities. Keeping fit with TOP Supplement Support and Standard Processes is essential to keeping the body healthy.

Endo-Met Nutritional Support

Supplements based on your Hair Mineral and Heavy Metal Test.

[ENDO-MET Laboratories](#) provides the health care professional with a high-quality, specially formulated line of vitamin and mineral supplements designed to assist in balancing body chemistry

Suppose you have ordered a Hair Mineral and Heavy Metal Test for tissue heavy metal and mineral deficiency with Dr. Brown. In that case, you can also access their Professional Dispensary at Endo-Met.com/Analytical Research Labs.

You must call their office at Endo-Med at 602-995-1581 to set up an initial account under Dr. Keri Brown.

Additional Health Support

Schedule an Appointment with Dr. Brown.

Contact Dr. Brown for a [remote appointment](#) for personal consultations. She will tailor fit a plan to fit your unique body chemistry.

Review our web site www.DrKeriBrown.com for additional resource and Functional Lab Test.

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