



The Joy of Food: *The Alkaline Way* Guide



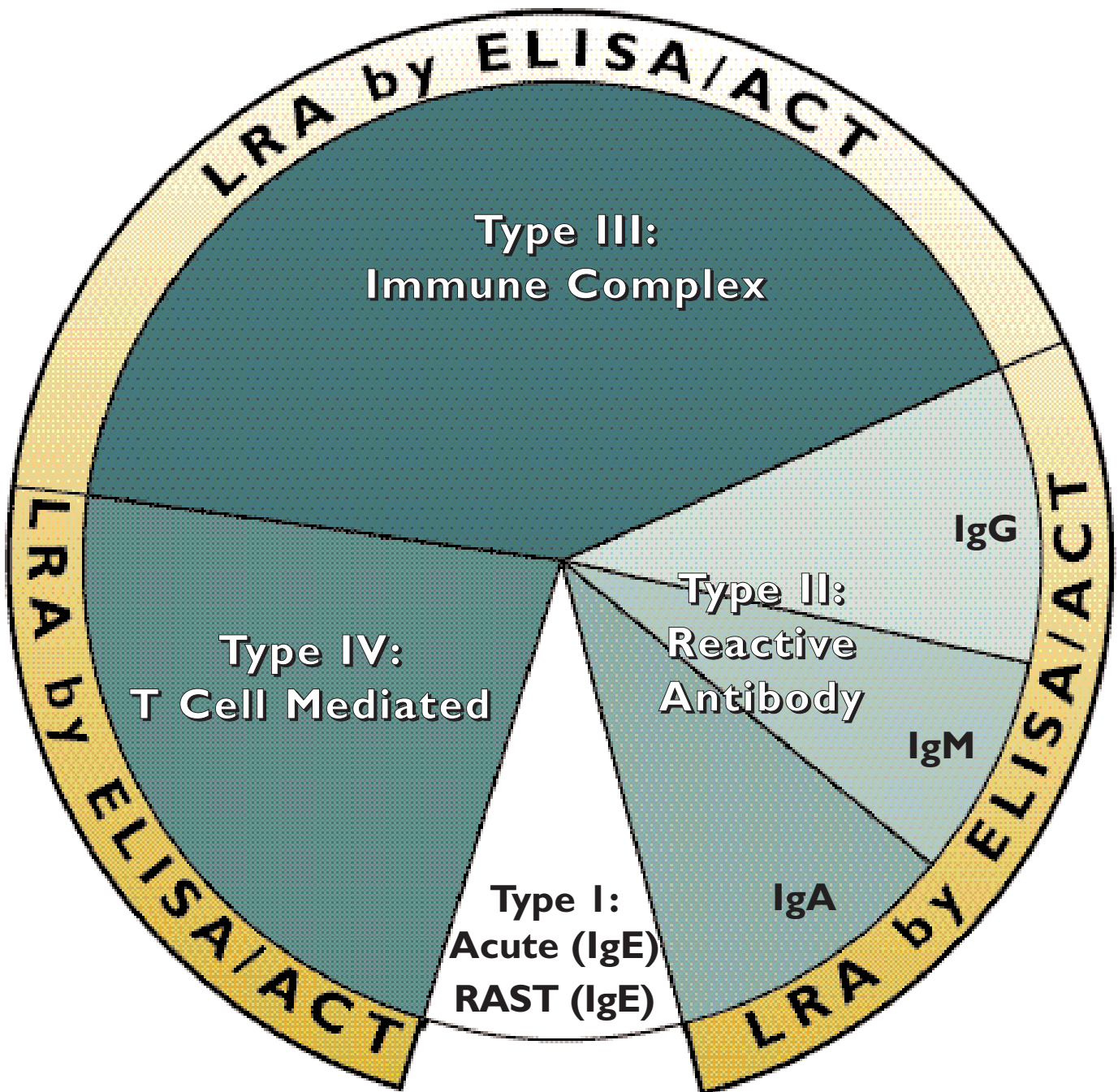
Updated for 2008-2009



**A guide to healthy living
through acid/alkaline
balancing, food substitutions,
and behavior recommendations**



Functional lymphocyte response assays (LRA) are able to measure all delayed allergy responses.



LRA by ELISA/ACT® is a true cell culture. Comprehensive, ex vivo, functional procedures have been proven in clinical outcome studies to provide superior, sustained improvements and long-term remissions in autoimmune and immune dysfunction conditions.

DEDICATION

To all those seeking enhanced health

The editorial assistance of Jayashree Mani, Victoria Trocki, Michelle Ferris, and Kelly Potter is gratefully acknowledged. The helpful comments of physicians and colleagues, especially Marc and Joan Condren, Norman Schwartz, Beverly Goode, Norton Fishman, Bob Iafelice, and Claire Musickant are also gratefully acknowledged.

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WELCOME

An Introduction to The Joy of Food: The Alkaline Way Guide

*This comprehensive handbook has been designed to introduce the basic concepts of a valuable health restoration program called **The Alkaline Way**. The purpose of this handbook is to explain the various steps of alkalinizing your diet and to help you understand the important benefits of eating **The Alkaline Way**, why being acidic is harmful to your body, and what foods alkalinize the body more than others.*

*Certain behavioral practices and lifestyle changes can significantly influence your health as much, if not more than, the food you eat. In **The Alkaline Way** handbook, you will find valuable information and protocols to help you successfully implement and maintain these proven practices and ultimately achieve optimum health.*

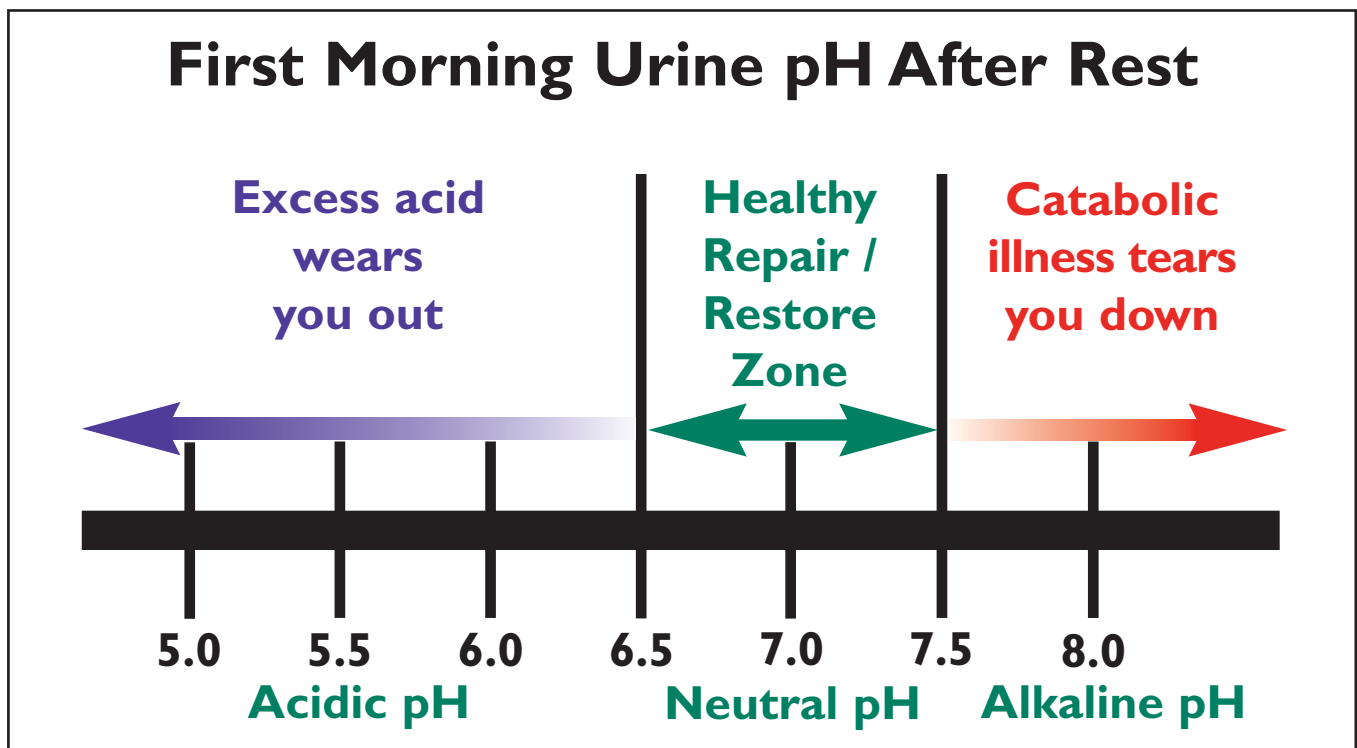
*In addition, **The Alkaline Way** handbook is a quick and easy reference for healthy recipes, interesting diet options, and recommended food sources, which is very helpful and convenient for people with special dietary restrictions like gluten-free, corn-free and dairy-free eating.*

*We hope **The Alkaline Way** handbook is a helpful and informative resource as you start on your journey to better health.*

Part I:

The Alkaline Way

Introduction



Dietary choice and delayed allergies are keys to your cellular chemistry's balance. Resistant ill health occurs when healthy chemical balance is lost. This guide can be key to bringing you back to health and chemical balance.

The Standard American Diet results in excess acid production when all the food has been broken down. What does this mean?

Excessive acid may be produced in the body when:

- Your eating choices are too high in fat, protein, and simple sugars. When your body metabolizes fat, protein, and simple sugars, acid products remain. To reduce the acid burden, the body links these excess acids with alkaline minerals (like potassium, calcium, magnesium, and others) and excretes them. Over time, this can deplete the body of needed minerals and lead to a build-up of excess acids in your cells. This reduces the efficiency and effectiveness of your cells and tissues.
- Your body is constantly being exposed to foreign elements by way of infection, pollution, and improper digestion. This burdens the immune system. When the burden exceeds the body's reserves, a continuous state of distress can emerge. As a consequence, the chemical messengers of distress (such as cortisol, adrenaline, and insulin) increase. The physiological response to these distress messengers is acid enhancing, thus increasing the total acid load the body has to handle.

Why is being acidic harmful?

- With an excess acid load, the delicate machinery of your body does not work very well. This cellular machinery is delicately balanced to work best within a narrow, slightly alkaline range (pH: 7.35 - 7.55).
- The efficiency of energy production in the cells is reduced with even slight excess of cell acid. This induces loss of resilience and repair mechanisms, and you become more susceptible to fatigue, illness, and pain. While your body tries to remove excess acid, critical minerals are lost as well. These minerals protect your kidneys, bladder, and ureter from acid damage.

What is *The Alkaline Way*, and why is it beneficial to me?

- The internal environment of your body is maintained at a pH between 6.5 - 7.5, which is alkaline. For necessary cell reactions and functions to occur, our body must maintain this appropriate pH. While your body can regulate pH, there is a limit to how much it can neutralize. Excess acids can accumulate from one or more of the following conditions:
 1. Acid-forming diet
 2. Distress
 3. Toxins (or their metabolites) that are acidic
 4. Immune reactions
- *The Alkaline Way* is a program based on foods that are predominantly alkaline forming. This directly neutralizes excess metabolic acids and makes it possible to maintain sustained health and immune competence.
- Over time, eating *The Alkaline Way* can help restore your digestive and immune system competence so that it is possible to lose your sensitivities. You become tolerant to, and can once again eat safely, the items to which your body had previously reacted.

* pH is the chemical measure of an acid or alkaline (buffered) state.

Going *The Alkaline Way* means to:

- Choose fresh, whole foods with certified organic and biodynamic being best choices. Examples are provided on the next page. Resources are provided in Appendix 2.
- Eat a wide variety of foods. Many Americans eat a limited variety of foods. A wider choice of foods is more interesting and helps to stimulate recovery. Rotation of foods may be advised by your physician, especially to help relieve a weakened digestive system.
- Drink lots of pure water. This will rapidly excrete soluble wastes rather than allowing them to accumulate in your body.
- Build your alkaline mineral reserves. This enhances energy production, efficient protein production, and tissue repair.

ACID / ALKALINE FOODS*

Alkaline Forming

Fruit (Most)



Vegetables (Most)



Lentils (Pulses)



Spices



Herbs and Seasonings



Seeds and Nuts



Acid Forming

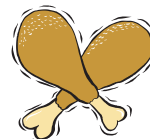
Meat



Fish



Poultry



Eggs



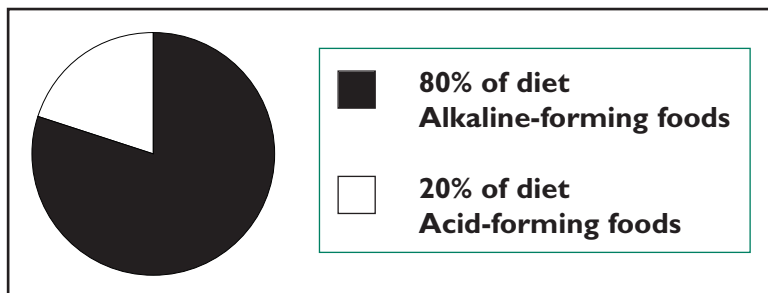
Grains*



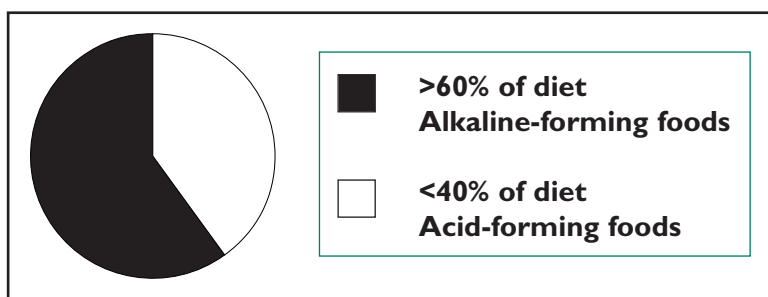
Legumes (peas and beans)



For **Health Restoration**, it is recommended that your eating pattern be as shown below:



For **Health Maintenance**, it is recommended that your eating pattern be as shown below:



*Please refer to the chart on page 14 entitled, **Food and Chemical Effects on Acid/Alkaline Body Chemical Balance**, for more details.

The Five Principles of *The Alkaline Way* are explained below:

1. Eat high-quality, whole (preferably, organically grown) foods that serve as your fuel for life.

We encourage you to eat what we call “lively foods,” which include fresh vegetables, fresh fruits, lightly toasted nuts and seeds, lightly steamed vegetables, sprouts of grains and beans, freshly-squeezed fruit, and vegetable juices. These foods retain active enzymes and other factors that enhance your digestion. These contain the largest fraction of delicate health factors that can be destroyed by too much heat or over-cooking.

Goal: Eat an abundance of lively foods.

2. Restore health by eating 80% of your foods from alkaline sources; maintain health by eating 60% of your foods from alkaline sources.

Looking at the Acid/Alkaline chart on page 14, you are encouraged to choose the majority of foods from the left-hand side (the alkalinizing foods). You will then be eating a wide variety of vital foods like vegetables, fruits, seeds, selected grains, and lentils. Eating this way makes your efforts more effective.

Goal: Eat well and amply from the healthy balance of your non-reactive foods.

3. Make use of a wide variety of foods since each food has its own special qualities.

Eating the same foods repeatedly limits nutrient intake. It also enhances the likelihood of becoming reactive to those foods if your digestion is distressed. Most overweight people lose weight effortlessly (even if they eat more calories) and enhance metabolism when they substitute for their reactors and eat *The Alkaline Way*. Since correcting body chemistry enhances protein synthesis and repair, many underweight people gain weight and lean body mass while on this program.

Goal: Consume as wide a variety of foods as possible.

4. Establish dietary balance as outlined below.

- Carbohydrates (“carbs”): Unless your health practitioner instructs you differently, your *Alkaline Way* eating plan should be rich in complex carbohydrates from vegetables, beans, lentils, seasonings, spices, herbs, nuts, and seeds.
- Protein: Eating *The Alkaline Way* will also ensure an adequate protein intake of approximately 50 to 60 grams per day. Your requirements for high-quality protein may be higher if you have some specific healing needs. Sources of protein may include organic eggs and deep and cold water fish like mackerel, sardines, tuna, and salmon. The complementary proteins found in mixed grain-legume (bean) or dairy-grain combinations can also give you high-quality protein.
- Fat: For *The Alkaline Way* dietary balance, an appropriate fat intake is necessary. The kind and amount are the critical features. As a nation, we consume as much as over 40% of all calories from fat. Half that amount is far healthier, tastier, reduces chronic disease risks, and is just as satisfying when eaten as suggested in this guide. However, many of us do not eat enough essential fatty acids (those necessary for health that our bodies cannot make).

Goal: Enhance essential good fat intake.

Where do we find these vital essential fatty acids?

Fresh nuts and seeds as well as cold-pressed, organic oils such as olive, safflower, flax seed (linseed), walnut, canola, sesame, soy, and fish oils are the main food sources.

How much of your total calories should come from wholesome fats?

The Alkaline Way recommends 10-20%. If you need essential fatty acid food supplements, fresh flax, borage, black currant, grape seed, and evening primrose oils as well as a blend of healthy fats known as Udo's oil are your better choices.

5. Consume enough fiber and pure water.

We encourage you to indulge yourself in both these life-supporting basics. As a group, Americans consume too little water and food fiber. Traditional cultures that remain free of Western degenerative diseases consume 25 to 50 grams of dietary fiber each day from whole, lively foods.

- **How much dietary fiber do we usually consume?**

Less than 10 grams daily is average. This “roughage” makes the stool bulky and soft. This helps maintain a shorter transit time so wastes are eliminated easily and comfortably. This gives less opportunity for toxic matter from wastes to be reabsorbed back into circulation. A healthy transit time (12-18 hours) removes the opportunity for unhealthy bacteria and yeast to grow.

- **Can you guess what makes dietary fiber really work for you?**

Water! Although roughly 70% of your body is water, the importance of drinking pure water is often overlooked. Many of us drink more soda than we do water. Water is nature's great detoxifier, and it is essential for every cell. When following *The Alkaline Way* program, we recommend that you consume at least one glass (eight ounces) of pure water eight times each day. For every 5-8 ounces of caffeinated beverages, add an additional glass of water. Sipping hot water can be a boost for you by enhancing digestion, speeding up metabolism, and aiding detoxification. If preferred, fresh lemon, lime juice, or ginger can be added since they act as digestive aids and alkalizers.

The key to a healthful diet is eating compatible foods in moderation.

Meal Suggestions For Eating *The Alkaline Way*

It is quite simple to develop wholesome, tasty meals comprised mainly of alkalizing foods. Below we have samples of *Alkaline Way* meals. Breakfast can be a simple and invigorating meal, followed by a hearty lunch and dinner.

Ideally, you would do well to make lunch your main meal. This is because your digestion is stronger mid-day than at night. Below we list various meal options that can serve as either lunch or dinner according to your personal preference. Examples are in the 80% target for alkaline-forming meals.

Sample Breakfast Ideas

Mix and match, of course, avoiding anything to which you happen to react.

- An alkalizing, whole-grain, hot cereal can be made from steel cut oats, amaranth, quinoa, japonica, or wild rice with the option of fresh or lightly toasted almonds or pumpkin seeds or fresh fruit cooked into the cereal. Cinnamon can be used as a spice, and molasses, rice syrup, or Sucanat® can be used as a sweetener.
- Cold cereals, such as 100% oat cereal and puffed rice or millet, can be used occasionally with almond or other nut milks as well as oat, soy, or rice milks.
- A salad of fresh organic fruits is a delicious, “light” way to begin the day.
- A vegetable miso soup or any other vegetable soup forms a hearty, warming breakfast.
- Almond butter, ghee, or avocado on rice crackers or other bread/crackers are wise choices.
- Avocado mixed with wild or brown rice and a pinch of sea salt (if desired) makes a delightful “green rice” suitable for any meal.
- Fresh vegetable and fruit juices can be your first meal or can accompany the above breakfast items.

Note: Many people are carbohydrate (sugar) sensitive. This means, in part, that they lack the chemical reserves from buffering minerals and have excess metabolic acids. Going alkaline helps avoid these insulin-excess reactions.

Sample Lunch and Dinner Ideas

- Lentils / pulses (as in soups, puree, or lentil loafs) served with rice and vegetables.
- A whole grain (brown, japonica or wild rice, millet, quinoa, etc.) served with steamed or sautéed vegetables and a small amount (2-4 ounces) of flesh food (e.g. meat or fish).
- A vegetable stir-fry with tofu, tempeh, or meat and a non-reactive grain or root crop (e.g. sweet or white potatoes, taro, or Jerusalem artichokes).
- Baked fish, chicken, turkey, or other meat with baked squash or sweet potato/yam or white potato served with steamed or sautéed greens (e.g. leafy vegetables).

Sample Snack Ideas

- Fresh fruits and vegetables make great snacks. If your digestion is weak, the use of fresh cooked fruits and vegetables is helpful (stewed pears or peaches, baked apples, apple sauce, fruit compotes, slices of baked sweet potato or yams, steamed vegetables, etc.).
- Rice, rye, or whole wheat crackers or toasted corn tortillas with a small amount of almond butter, cashew butter, tahini, or ghee (clarified butter).
- Lightly roasted nuts (especially almonds) or seeds (such as pumpkin or sesame).
- Freshly made fruit and vegetable juices. These can be diluted with water or canned fruit juice, if you choose.
- Vegetable broth.
- Fruit juice popsicles, sherbets, or smoothies.

Sample Dessert Ideas

Alkaline Way desserts are viewed as “nourishing sweets”. They add nutrient value as well as pleasure to your meals. Whole grains, fresh fruits, nuts, seeds, health-promoting spices, and alkalinizing sweeteners can be combined in endless variety for nourishment and delight.

Sample desserts include:

- Baked apples, stewed pears, or other fruit compotes.
- Whole grain puddings sweetened with maple syrup, Sucanat®, or rice syrup.
- Gelatin treats made of unsweetened gelatin, kudzu, or agar agar and fresh fruit juice with or without fruit.
- Fruit pies or apple crisp with oatmeal crust/topping.
- Whole grain cakes and cookies.

The Significance of Your First Morning Urine pH and Its Proper Measurement

Your first morning urine pH gives a good indicator of the body's mineral reserve and its acid/alkaline state. The body routinely uses overnight rest time to excrete excess acids. This capacity varies based on toxin load and individual ability to make energy, to make toxins inactive, and to excrete them.

- **How does one monitor the pH?**

To test your pH, follow these simple steps:

1. Obtain a packet of pH (Hydrion™) test paper with a test range of 5.5 to 8. Your local dispensary or pharmacist should have this item or be able to order it for you.
2. First thing in the morning, just before your first urination, open the test tape packet and cut off two or three inches of the paper tape. Now wet the test tape with urine. For best results, a 6-hour to 8-hour period of rest prior to pH testing is needed.
3. As the tape is moistened with urine it will change color. The color relates to the urine's acid or alkaline state and ranges from yellow to dark blue. Match the color of your test strip with the color chart on the back of the test tape packet.
4. Jot down the number that corresponds to the color of the urine-moistened tape has taken on. This can be done daily or periodically based on your needs as recommended by your physician.

- **How do I know if I am acidic or alkaline?**

Any number below 7.0 means that your urine is on the acid side. The lower the number, the more acid the condition. For example, a number of 5.0 indicates 10 times more acidity than 6.0. A number of 7.0 indicates the neutral state, neither acid or alkaline. Ideally, your first morning urine pH should be in a pH range of 6.5 to 7.5. When your first morning urine is neutral or just slightly acidic, this indicates that your overall cellular pH is appropriately alkaline and that the small amounts of acids built up from normal metabolism have been easily concentrated for excretion. The cells of your body function best in an alkaline state.

- **What if my urine pH is below 6.5 ?**

If your readings fall below 6.5, then you should begin changes aimed at alkalinizing your diet. Listed on page 13 are simple modifications that will help alkalinize your system. In the beginning, because of the acid-forming tendency of the standard American diet, you may well have low pH readings. Occasionally, you may find a 7.5 to 8.0 reading; this is acceptable. If your pH readings are consistently greater than 7.5, this occurrence represents a "false alkalinity" and indicates a catabolic state involving tissue breakdown.

Guidelines for Developing Your Alkaline Diet

Examine the chart on page 14 entitled, Food and Chemical Effects of Acid/Alkaline Body Chemical Balance. If you are in an acid state, the first step is to eat more alkalizing vegetables, fruits, spices, and lentils. Strive for two cups of alkalizing vegetables at both lunch and dinner. Enjoying a breakfast of alkaline fruits or oatmeal while limiting high protein foods will also go a long way toward reducing your acidity. In addition, the following simple changes are especially helpful for quickly alkalizing yourself:

- Drink the juice of one-half a lime, lemon, or a teaspoon of apple cider vinegar in 6-8 ounces of water a few times during the day. You may think this would make you more acidic. Not so! These substances metabolize to an alkaline residue due to the dicarboxylic acids that the body uses to make energy in a way that gives off an alkaline (bicarbonate) product. See the acid-alkaline effects on body chemistry chart on page 14 for more examples.
- Add lentils, ginger, yams, and sweet potatoes to your diet on a regular basis. These foods will give you an alkaline boost.
- Make it a point to eat daily at least two cups of alkalizing greens (kale, mustard and turnip greens, collards, or endive). Lettuce is fine to eat, but not in place of alkaline greens. Grated daikon radish is a wonderful alkalizing condiment.
- Add miso and seaweed to soups and other dishes as both a great digestive aid and as an alkalizer.
- Eat more of the alkalizing grains like oats, quinoa, and wild rice.
- Enjoy liberal amounts of fruits, especially watermelon.
- If you suffer from gas, bloating, or weak digestion, eat cooked fruit and small amounts of fresh juices.
- Certain supplements like a fully buffered ascorbate (vitamin C), soluble (ionized) magnesium, and L-Glutamine [with Pyridoxal-alpha-ketoglutarate (PAK)] will also alkalize you and should be used in doses as needed based on your metabolism. We have found that an optimum dose of fully buffered ascorbate with a combination of calcium, magnesium, potassium, and zinc is a health-promoting way to alkalize, energize, and enhance metabolism of toxins at the same time.

Be patient and persistent. Remember, your pH indicates your reserve of alkaline minerals. An alkaline pH indicates good reserves of the enzyme-activating alkaline minerals. It can take time to build up these reserves. It may have taken years to become depleted. Do not be discouraged with a slow movement toward the ideal alkaline state—a first morning pH of 6.5 to 7.5.

Food & Chemical Effects on Acid / Alkaline Body Chemical Balance

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The Importance of an Alkaline Diet

The internal environment of our bodies is maintained at a pH of just about 7.0. This means our internal environment is alkaline. Maintenance of this state is a dynamic, not static, process mediated moment to moment by numerous reactions that produce acid products. Our internal chemical equilibrium is primarily controlled by our lungs, kidneys, intestines, and skin. For necessary reactions and functions to occur, our body must maintain a proper pH. Adequate alkaline reserves are necessary for optimal pH adjustment. The body needs oxygen, water, and acid-buffering minerals to accomplish the pH buffering, while also briskly eliminating waste products.

When an alkaline environment is maintained in the body, metabolic, enzymatic, immunologic, and repair mechanisms function at their best. The acid-forming metabolites of stress and inflammation and of high fat and high protein foods are adequately and effectively neutralized only when sufficient mineral-buffering reserves are present. Mineral-buffering reserves are the gift that alkaline-forming foods give to our body. A diet that is predominantly alkaline forming is essential to the maintenance of sustained health.

Most vegetables and fruits contain higher proportions of alkaline-forming elements than other foods. These foods promote a more alkaline environment in the body. For example, commercial corn, barley, soybeans, and legumes are acid forming. This may reflect breeding selection in the last fifty years that favored higher carbohydrate and fat content. Traditional organically or biodynamically grown forms of these grains and grasses may well be much less acid forming. Surprisingly, despite their pronounced acid flavor, citrus fruit and rhubarb form alkaline residues. This is because their distinctive organic acids like citric, succinic, fumaric, and malic (Krebs' DCA or dicarboxylic acid) metabolize to water and alkalizing bicarbonate, while producing energy (ATP) inside the cell.

Body balance, in terms of acid-alkaline state, is a pH of 7.450 for blood in the arteries and 7.350 for blood in the veins. Acid-alkaline equivalence is a pH of 7.000. Thus, a healthy body means a pH that is slightly alkaline. This means there are more buffering mineral receptors for electrons than acid-forming electron donors.

In foods containing large amounts of protein and fat, the acid-forming elements predominate over the alkaline-forming elements. Thus, cow's milk

and related dairy products are acid-forming, although goat and sheep milk/cheeses (with less fat and protein) produce less acid. The one dairy product exception is clarified butter (known as "ghee" in Indian cookery), which has alkalizing short chain fats known as butyrates and caprylates. The butyrates and caprylates present in ghee are also thought to promote healthy bacterial growth in the intestines, promote repair of the intestine wall, and suppress pathogen growth of some yeasts and parasites if they are present.

Whole grains give an acid reaction disproportionate to their protein content due to the extra phosphorus present in the phytates. The phosphate content of commercial grains may be higher than traditional, organic, or biodynamic sources in part because of fertilizer differences and plant strain selection. Although most fruits have an alkaline effect, some such as prunes, plums, and cranberries make a net contribution of acid to the body since they contain organic acids that are not metabolized by the body. Nuts such as coconuts, almonds, and chestnuts are alkaline forming, while others like peanuts (a legume) and walnuts yield net acid. Highly refined and processed foods consisting chiefly of fats, sugars, and simple starches, along with protein-rich foods are metabolically acidifying.

The chart on the back of this page titled, Food & Chemical Effects on Acid/Alkaline Body Chemical Balance, presents the message that, in general, fruits, vegetables, lentils, seeds, sprouts, roots, and tubers are healthfully alkalizing, while grains, grasses, fowl, fish, seafood, dairy products, meats, and most beans are acidifying. Here is a way to simplify this and make it memorable. If it comes from under or near the ground, it is likely to be alkalizing. If it comes from on or high above the ground, it is likely to be acid forming.

The specifics of how each food was categorized on this chart are based on a formula wherein protein, fat, carbohydrate, mineral, and other specific factors were taken into account. More specifically, the basic neutral and acidic end-products of protein, fat, and carbohydrate digestion were calculated, and the content of minerals and special factors were also accounted. A computation was used to determine the relative degree of acid- or alkaline-forming effects of the food on body chemistry. Based on this determination, the items were placed in the appropriate acid or alkaline group on the chart.

Reference: Jaffe R and Donovan P. *Your Health: A Professional User's Guide*. Sterling, Va: Health Studies Collegium, 1993.

APPENDIX I

LIQUIDS-ONLY NUTRIENT SUFFICIENCY PLAN

The intestines of a typical American are over-loaded, over-stressed, and over-exposed to non-biodegradable waste products. The average two- to four-day transit time from mouth to rectum is two to four times too slow for efficient digestion, assimilation, and elimination. Dr. Dennis Burkitt suggests that a major predisposition to chronic illness is created by the slow-transit maldigestion, which has become endemic in Western industrialized countries during the last one or two generations. In part, foods with restructured, processed, or immature fiber are responsible for this. The way we move, the kind of exercise we get, the way we breathe, and the way we adapt to stress in our lives also play significant roles. These are all learned habits. With a bit of practice, better, life-restoring, and life-sustaining habits can be learned. Yet, these are the particular aspects of our lives that we can influence by our own actions and attitudes.

It has recently been proven that the intestines have all the elements of an intelligent nervous system and that the intestinal “gut brain” communicates with the “cortical brain” above your shoulders. Under stress, our “gut reactions” often reflect this dysfunction. When our intestine malfunctions, the clarity of our “gut reactions” to people, problems, or opportunities is often clouded. This feedback is often overlooked, yet it is important in maintaining health as well as in reducing risk of colon cancer, diverticular disease, inflammatory bowel disease, and certain autoimmune disorders.

In active twentieth-century lives, we often over-consume and under-digest what we eat. One element that can help reverse this condition is periodic rest for the intestines through “liquid diet days.” This is not juice fasting. It is a related plan made for active people and is usually integrated into a healthful dietary plan. An eight-ounce glass each hour is a suitable beginning. Drink as much as needed to feel satisfied. Keep all fresh juices covered to prevent air from oxidizing the delicate and healthful flavors and reducing the nutritional quality.

The following are recommended:

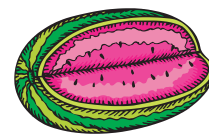
- **Miso Broth**

Miso broth (preferably with Hatcho miso, aged more than twenty-four months) is a fully fermented product derived from soy and is easily digested. The amino acids and other simple products are rarely a problem even for those with soy, yeast, or mold sensitivities. *The Book of Soy* by William Shurtleiff is a kitchen and reading resource.



- **Watermelon Juice**

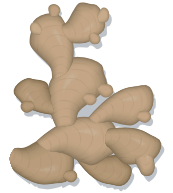
Watermelon juice is a surprisingly tasty drink made from blended ripe watermelon pieces (without seeds). A small amount of ginger tea or compatible liquid can be added to start the blending process. Other melons may also be used. This can be stored covered in the refrigerator for an entire day.



APPENDIX I, continued

- **Ginger Tea**

Ginger tea is made from whole, fresh ginger root (increasingly available in more grocery produce areas). The best ginger root currently comes from Hawaii. An easy way to make ginger tea is to freeze the fresh ginger, thaw until it is soft, slice and dice the juicy root, and steep in a warmed pot of hot water for ten minutes. Ginger tea is tasty at any temperature and can be stored refrigerated for several days in a tightly sealed jar.



- **Vegetable Juice**

Vegetable juice is an outstanding source of minerals, especially calcium, magnesium, potassium, and zinc, particularly if the vegetables are grown in rich, organic soil. Vegetables have a root system that will absorb and often concentrate whatever is in the soil, and pesticide/fungicide/toxic residues (if present) will be incorporated into the vegetable. Because of this absorption, it is important to obtain organic vegetables for juicing.



Carrot juice is the staple of vegetable juices. It can be drunk alone or can be combined with other vegetables. Usual combinations are 60-90% carrot juice with the remainder from parsley, celery, spinach, cucumber, Jerusalem artichokes, beets, beet greens, watercress, cilantro, cabbage, or other green leafy vegetables. Adding a half-inch of ginger root will enhance the digestion of the juice and make it more alkaline. Change the proportions or dilute the juice to suit your palate. Let your taste buds be your guide. The juice should taste robust and delicious.

- **Vegetable Broth**

Vegetable broth is made from ripe, healthy vegetables, legumes, and/or beans simmered together in a pot for several hours. You may add sea salt, soy sauce (if tolerated), capers, and such spices as oregano, basil, thyme, or curry to suit your taste and dietary compatibilities. The clear broth should be strained and may be drunk at any temperature. It will stay fresh for several days if refrigerated and for months if kept tightly sealed and frozen.



- **Fruit Smoothies**

Fruit smoothies are delightful when compatible with your “liquid days.” Tree-ripened fruit, pitted and cut into wedges, can be whipped into a tasty puree in your blender. Of course, the chosen fruits should be non-reactive with your immune system.



APPENDIX I, continued

- **Lhassi**

Lhassi, a beverage from India, is made from active culture yogurt (there should be nothing in the yogurt except probiotics that predigest the milk and yogurt cultures), rose water, and a little raw honey (to taste). Whip the mixture in the blender for 60 seconds. This can be kept in the refrigerator for two days. Exclude lhassi if you are cow dairy sensitive / reactive, or you can make lhassi with goat's milk or nut milk.



- **Water**

Water in its many forms is a valuable adjunct for improvement of metabolism: deep spring water, naturally carbonated water, and water with compatible citrus juice.



- **Herbal Teas**

Herbal teas, alone or with a squeeze of citrus juice or a drop of raw honey, are welcome additions to this program.



A reminder: This is not a fast. You should take in three or more quarts of fluid during the day and enough easily assimilated food building blocks to assuage hunger, enhance repair, and rebuild.

APPENDIX 2

REACTANT-FREE AND ORGANIC FOOD MAIL ORDER RESOURCES

Most large health food stores now carry a wide selection of alternative foods for those sensitive to one item or another. If you have difficulty finding a local supplier, you can obtain the item mail-order by contacting the following groups or companies.

Flours, Breads, Baked Goods, Pastas, Grains, and Grain Products

- **Seattle Sutton's Healthy Eating**, La Grange, IL 60525, (708) 352-6419 / (800) 442-3438 / www.seattlesutton.com: cellu cereal-free baking powder, cellu rice wafers, tapioca flour, water-packed fruits, and potato starch flour.
- **Ener-G Foods, Inc.**, P.O. Box 84487, Seattle, WA 98124, (800) 331-5222 / www.ener-g.com: Ener-G Rice Mix; Ener-G Egg Replacer; breads.
- **Enjoy Life Foods**, 3810 North River Road, Schiller Park, IL 60176, (888) 50-ENJOY, Fax: (773) 889-5090 / www.enjoylifefoods.com: gluten-free bread, cookies, and bagels.
- **Garden Spot**, 191 Commerce Drive, New Holland, PA 17557, (800) 829-5100/www.gardenspot.com.
- **Gluten-Free Pantry**, P.O. Box 840, Glastonbury, CT 06033, (800) 291-8386/www.glutenfree.com
- **Gold Mine Natural Food Co.**, 7805 Arjons Drive, San Diego, CA 92126, (800) 475-3663/www.goldminenaturalfoods.com: all organic grains, cookware, household products, books, etc.
- **King Arthur Flour**, P.O. Box 876, Norwich, VT 05055, (800) 827-6836/www.kingarthurfLOUR.com or www.bakerscatalogue.com: whole grain flours, mixes, and xanthan gum.
- **Miss Roben's**, P.O. Box 1434, Frederick, MD 21702, (800) 891-0083/www.missroben.com: baking mixes and ingredients.
- **Mr. Spice Healthy Foods**, 20 Silva Lane, Newport, RI 02842, (401) 848-7700 / www.mrspice.com: gluten-free, salt-free, and fat-free sauces.
- **Nu-World Amaranth, Inc.**, P.O. Box 2202, Naperville, IL 60567, (630) 369-6819/www.nuworldfoods.com: a wide variety of amaranth products.
- **Special Foods**, 9207 Shotgun Court, Springfield, VA 22153, (703) 644-0991/www.specialfoods.com: breads such as cassava, malanga, lotus, amaranth, milo, and white sweet potato and nut butters.
- **Quinoa Corporation**, P.O. Box 279, Gardena, CA 90248, (310) 217-8125/www.quinoa.net: a wide variety of organic quinoa products.
- **Mail Order Catalogue for Healthy Eating**, P.O. Box 180, Summertown, TN, 38483, (800) 835-2867/www.healthy-eating.com: whole wheat couscous, brown basmati rice, brown rice pasta and organic wild rice, as well as many other items.

APPENDIX 2, continued

Fruits, Vegetables, and Herbs

- Frontier Cooperative Herbs, P.O. Box 299, Norway, IA 52318, (800) 669-3275/www.frontiercoop.com.
- Miracle Exclusives, Inc., 36 Kenoshia Avenue, Danbury, CT 06810, (800) 645-6360/
www.miracleexclusives.com: juice machines.

Prepared / Packaged Organic Foods and Meals

- Amy's Organics, (866) 484-2697 / www.amyskitchen.com
- Diamond Organics, 1272 Highway 1, Moss Landing, CA 95039, (888) 674-2642/
www.diamondorganics.com.
- Eden Foods, Inc., 701 Tecumseh Road, Clinton, MI 49236, (888) 424-EDEN / (517) 456-7424 /
www.edenfoods.com
- Ener-G Foods, Inc., P.O. Box 24723, Seattle, WA 98124, (206) 767-6660 / (800) 331-5222: Ener-G Rice
Mix; Ener-G Egg Replacer.
- Spectrum Naturals, Inc., 5341 Old Redwood Highway, Suite 400, Petaluma, CA 94954,
www.spectrumorganics.com

Nuts and Seeds

- Diamond Organics, Freedom, CA 95019, (888) 674-2642.

Jams, Jellies, and Sweets

- Diamond Organics, Freedom, CA 95019, (888) 674-2642.

Meats and Fish

- Applegate Farms, 750 Rt 202 South, Bridgewater, NJ 08807, (866) 587-5858/www.applegatefarms.com:
antibiotic-free products made with simple ingredients and without nitrites, phosphates, binders, or fillers.
- Czimer Foods, Inc., 13136 West 159th Street, Homer Glen, IL 60491, (708) 301-0500/
www.czimers.com: organic foods and exotic meats such as game birds.
- Game Sales International, Inc., 2456 East 13th Street, Loveland, CO 80537/www.gamesalesintl.com,
(800) 729-2090: exotic animal meats.
- Garden Spot, 438 White Oak Road, New Holland, PA 17557, (800) 829-5100.
- Shiloh Farms, Sulphur Springs, AR 72768, (501) 298-3297: meats, seafood, etc.
- Broken Arrow Ranch, P.O. Box 530, Ingram, TX 78025, (800) 962-4263/
www.brokenarrowranch.com: antibiotic-free venison, antelope, wild boar, and wild boar sausage.
- Greg Gosar (Gosar Farms), Monte Vista, CO 81144, (719) 852-2133: beef and chicken.

If you have other resources that you would like to suggest, fax or send them to:

Health Studies Collegium

44621 Guilford Drive, Suite 150, Ashburn, VA 20147

Tel: 800.328.7372 • Fax: 703.450.2997

APPENDIX 3

SULFITE-CONTAINING FOODS (From FDA)

Not all manufacturers of these foods use sulfites. The amounts that are used may vary. Information from this list should be supplemented by reading the labels of packaged food.

Food Category	Types of Foods
Alcoholic beverages	Wine, beer, cocktail mixes, wine coolers
Baked goods	Cookies, crackers, mixes with dried fruit or vegetables, pie crust, pizza crust, quick crust, flour tortillas
Beverage bases	Dried citrus fruit base, bottled beverages, mixes, cider and root beer
Condiments and relishes	Horseradish, onion and pickle relishes, pickles, olives, salad dressing mixes, wine vinegar
Confections and frostings	Brown, raw, powdered, or white sugar derived from sugar beets
Dairy product analogs	Filled milk (skim milk enriched in fat content by addition of vegetable oils)
Fish and shellfish	Canned clams, fresh, frozen, canned or dried shrimp, frozen lobster, scallops, dried cod
Processed fruits	Canned, bottled, or frozen fruit juices (including lemon, lime, grape, apple) dried fruit, canned, bottled or dried dietetic fruit or fruit juices, maraschino cherries, glazed fruit, shredded coconut
Processed vegetables	Vegetable juices, canned vegetables (including potatoes), pickled vegetables (including sauerkraut, cauliflower, and peppers), dried vegetables, mashed potatoes, frozen potatoes, potato salad
Gelatins, puddings, fillings	Fruit fillings, flavored gelatin, pectin, jelling agents
Grain products and pasta	Cornstarch, modified food starch, spinach pasta, gravies, hominy, breadings, batters, noodle/rice mixes
Jams and jellies	Jams and jellies
Plant protein products	Soy protein products
Snack foods	Dried fruit snacks, trail mixes, filled crackers
Soups and soup mixes	Canned soups, dried soup mixes
Sweet sauces, toppings, syrups	Corn syrup, maple syrup, fruit toppings, high fructose corn syrup, pancake syrup, molasses
Tea	Instant tea, liquid tea concentrate

This material is provided courtesy of:

Health Studies Collegium

44621 Guilford Drive, Suite 150, Ashburn, VA 20147

Tel: 800.328.7372 • Fax: 703.450.2997

APPENDIX 4

FOOD COMBINING FOR BETTER DIGESTION

Protein & Starch:
Protein & Vegetable:
Starch & Vegetable:
Fruit by Itself:

NO! NO!
YES! YES!
YES! YES!
YES! YES!

• PROTEINS •

Fish:

Crab
Lobster
Shrimp
Clam
Oyster
Scallop
Anchovy
Bass
Catfish
Codfish
Haddock
Perch / Mackerel
Red Snapper
Salmon/Lox
Sardine
Shark
Sole / Flounder / Halibut
Swordfish
Trout
Tuna
Turbot / Whitefish

Eggs:

Egg White
Egg Yolk

Fowl:

Chicken
Goose / Duck
Turkey

Meats:

Beef / Veal
Lamb / Mutton
Pork / Bacon / Ham
Deer/Venison
Rabbit

Coconut

Bean Curd: Tofu

Raw Nuts and Seeds:

Alfalfa
Almond
Anise Seed
Brazil
Cashew
Chestnut
Hazelnut / Filbert

Macadamia
Peanut
Pecan / Pine
Pistachio
Poppy Seed
Pumpkin
Sesame
Sunflower
Walnut
Soybeans

Milk:

Casein
Cow
Goat
Yogurt

Cheese:

Brick
Cottage
Hard / Parmesan
Processed
Soft
Romano

• STARCHES •

Wheat
Amaranth
Barley
Brown Rice
White Rice
Buckwheat
Millet
Oats
Pasta, Breads
Lima Beans
Triticale

Dry Beans / Peas:

Black-eyed Peas
Carob
Garbanzo
Kidney
Navy / Ninja
Pinto
Potatoes
Yams, Corn
Hubbard Squash
Pumpkin, Acorn

NO

• VEGETABLES •

Leafy Green:

Sprouts: Alfalfa
Mung, Lentil, etc.
Chicory
Escarole
Beet Tops
Celery Greens
Swiss Chard
Dandelion Greens
Collard Greens
Turnip Greens
Endive
Kale
All Lettuces

Non-starchy:

Asparagus, Tomatoes
Bamboo Shoots, Okra
Green Beans
Broccoli, Bell Peppers
Brussels Sprouts
Cabbage, Turnips
Celery Stalk, Chili Peppers
Cucumber, Beet Sugar
Eggplant, Corn Sugar
Spinach, Mushroom
Zucchini Squash
Crookneck Squash
Parsnips, Radish

Mildly Starchy:

Artichokes
Beets
Carrots
Cauliflower
Chives
Ginger
Garlic
Jicamas
Leeks
Onion
Rutabaga
Shallots
Scallions
Peas
Water Chestnuts

YES

YES

NO

NO

Do not eat fruit with any other food

NO

NO

• ACID/SUB-ACID FRUIT •

Lemon, Lime, Orange
Tangerine, Grapefruit
All Other Citrus, Kiwi
Plum, Pineapple, Mango
Papaya, All Berries, Nectarine
Apple, Cherry, Grape, Pear
Apricot, Peach

• SWEET FRUIT •

Bananas
Currants
Figs, Persimmons
Dates
Raisins, Prunes
Dried Fruits
Grapes (Thompson, Muscat)

• MELONS •

Banana Melon
Musk Melon
Cantaloupe
Casaba
Persian
Crenshaw
Honeydew

Nuts are OK with these fruits.

It's good to eat sweet fruit
after other fruits.

Melons should be eaten alone.

APPENDIX 5

SUGGESTIONS FOR YEAST/MOLD HYPERSENSITIVITY

1. Avoid foods to which you are sensitive, especially wheat, milk, yeast, and simple sugars. For the first month, a high-protein (100 grams per day), high-complex carbohydrate (such as legumes, beans, and acceptable whole grains and vegetables, including fresh vegetable juices—100 grams per day), no fruit, and a moderate (less than 20%) fat diet is recommended. Gradually double the starch and halve the protein over the second month as symptoms improve. Organically grown sources are strongly recommended.
2. Ascorbate buffered salts based on individual calibration of need. See *Appendix 9* for details.
3. Active acidophilus culture, one-quarter teaspoon (two capsules) with each meal for 1 month, then twice daily for 3 months.
4. Ginger tea as a beverage of choice (made from fresh or freshly frozen ginger root, chopped or minced, and steeped in hot water). Sixteen or more ounces a day are recommended.
5. Brush teeth with buffered ascorbate, baking soda, and peroxide.
6. Gargle 0.5 % peroxide at any evidence of oral candidiasis.
7. Eat raw sauerkraut (6-8 ounces) every other day, a rich source of D-lactic acid (an inhibitor of yeast growth), assuming sensitivity to cabbage is absent. Glaser Organic Farms is recommended source for organic raw sauerkraut. Call (305) 816-4944 or visit www.glaserorganicfarms.com to order.
8. Apple cider vinegar is also useful: 15 cc (1/2 ounce) diluted to taste, if not sensitive to apple or its vinegar, on days sauerkraut is not taken. It can be used in soups, dressings, or juice.
9. Shitaake mushroom micelia tea, if not sensitive to fungi or mushrooms. Fungi Perfecti, which may be reached at (800) 780-9126 or (360) 426-9292, is a good resource for better mushroom products.
10. Biotin, starting at 1 mg. per day at least 2 hours before or after eating any carbohydrates and increasing by 1 mg. weekly up to 5 mg. per day, assuming no reaction to biotin source.
11. Garlic capsules (Arizona Garlic — unless sensitive to garlic, citrus, and soy, which it contains — or yeast-free Kyolic Garlic or equivalent), 2 with each meal and before bed. One clove of fresh garlic is a recommended alternative.
12. Active zinc, 1-2 per day (25 - 50 mg.) until zinc balance is restored.
13. Goldenseal (Hydrastis) tea or capsules from a freeze-dried, wildcrafted source such as HerbPharm, which can be reached at (800) 348-4372.
14. Avoid all alcoholic beverages, coffee, and processed foods during this digestive repair interval.

Resources: The Missing Diagnosis by Dr. Orion Truss, MD. The modifications of his work noted above have worked well in our study.

APPENDIX 6

PHOTOBIOLOGY: TRIGGER OF BRAIN RHYTHMS

During the day, certain brain rhythms are maintained by fluctuations of light intensity and spectrum. Recent research links mood changes to seasonal and circadian fluxes. Other studies suggest that seasonal depression may be reduced by exposure to appropriate lighting sources.

The sun produces a spectrum of color generated by refraction. Most mechanical sources produce color by pigment subtraction. In contrast, dichromatic sources, which are the most suitable for photobiologic effects, use materials of differing refractive indices to generate color. Both visual and non-visual pathways are employed.

Program

The person sits four to six feet from the face of a green light for 20 minutes twice daily. This is typically done in the morning and early evening. A socket-clamp light holder can facilitate positioning of the color source. During this time, other activities (such as deep breathing, relaxation reflex, guided imagery, range of motion exercises, certain reading) can be performed simultaneously. The person need not look directly at the light. Deep brain structures and chemical pathways can be health-adapted by this action.

If indicated by clinical experience, amber/yellow or blue dichromatics can be arranged to shine on the back, chest, abdomen, or any other specific area of the body in need. The same position and time conditions apply. Several lights can be used simultaneously. It is best if these are the sole source of illumination.

This program is based on the early work of Babbitt, Jadhali, Dharmawara, and the more recent studies by Rosenthal and Lewy.

Resources

PAR 38 DICHROMATIC 150 WATT Spot or Flood lights: In the United States, both Sylvania and General Electric produce these items. Quality lighting suppliers, particularly those specializing in outdoor or theatrical lighting (where true color rendering is important), should either carry or be able to obtain these lights for you. They are available at Sci/ART (866) 877-3562.

Of particular interest is the book, *Light Years Ahead: The Illustrated Guide to Full Spectrum and Colored Light in Mindbody Healing*, by Jacob Lieberman with Gabriel Cousins, DIANE Publishing Company, ISBN 0788167774 / 0788167774.



APPENDIX 7

LOW-TEMPERATURE SAUNAS

Purpose

Mobilize non-biodegradable, fat soluble, potentially immunosuppressive components from the fat storage sites in the body.

Method

We recommend the use of low-temperature saunas. For equipment, home sweat cabinets, home saunas, or commercial saunas are all acceptable. The choice is a matter of personal convenience.

There are two components that may be different from prior experiences with saunas:

1. The temperature is lower (105-110°F).
2. The time is longer (30-60 minutes, repeated 1-3 times a day for at least 3 and preferably 5-plus days a week).

The sauna is complete when an oily sheen on the skin shows mobilization of sweat oils.

NOTE: For children, a 15-20 minute sauna is recommended

There is work from Shnare and colleagues that suggests fat soluble residues, such as PCBs, pesticide residues, and solvents, can be excreted through the skin if the superficial fat pad is slowly warmed and sweat oils are encouraged to accumulate on the skin surface. We find that secretion is enhanced when a full complement of antioxidants and lipotropics is taken. This is quite different from high temperature saunas where water-sweat is mobilized. Shorter times at higher temperatures do not accomplish the same effect!

After the sauna, immediately shower with a glycerine soap such as Neutrogena, Black Soap, or a similar “super fatted” soap. This is quite important to prevent the mobilized oils from being reabsorbed. A loofa or similar gentle scrub brush is recommended.

Results

Over time, there will be a decrease in stored total body burden of fat-soluble waste material.

Interpretation

Based on the known potential of these compounds to alter cell membrane fluidity, neurotransmitter, neurohormone binding, and endocrine function, it seems reasonable to reduce the body's burden of these chemicals. In the absence of quantitative studies, we recommend that this program continue for three months, followed by a maintenance schedule of three days per week for at least six months.

NOTE: Remember that sweat oils secrete at low temperatures, and this secretion is different from the benefits of water sweat associated with high-temperature saunas. Following the sauna and scrub, we find that a cool shower is invigorating.

APPENDIX 8

DISTRESS BUSTING: CENTRAL HEALTH PROMOTING ACTIONS

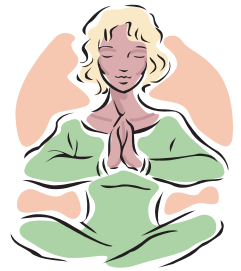
Salt and Soda Baths



- Daily, put one-half cup each of Epsom salt and baking soda in a tub of just less than hot water.
- Stay in for 10 to 15 minutes.
- Massage all parts of your body with your hands or a soft cloth. One to five tablespoons of olive oil can be added as a skin lubricant and emollient, especially in cold weather.
- Shower with a fatty or glycerine-based soap afterward to rinse away toxins that have been drawn to the outer layer of the skin.

Yoga and Meditation

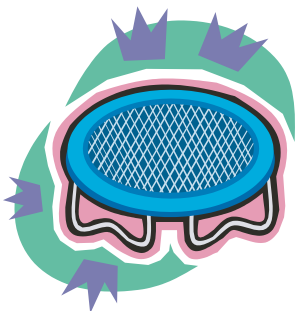
Try to practice Yoga daily. It has been shown to offer both physical and mental benefits to the body and the mind. Hatha Yoga, the foundation of all Yoga systems, is the preparation for higher Yogas. A near-perfect fitness routine, Hatha Yoga helps people of any age get and stay in shape as well as develop balance, coordination, and a sense of centeredness.



Meditation can help most people feel less anxious and more in control. Discuss the meditation technique with your health practitioner that is best for you. The awareness that meditation brings can also be a source of personal insight and self-understanding. *Active meditation: The Western Tradition* by Robert R. Leichtman, MD and Carl Japikse is an example of a non-sectarian, non-denominational approach to evoking your healing response. This book is available from Ariel Press at (800) 336-7769.



Rebounder Trampoline



Rebounding involves aerobic movements providing exercise that reduces your body fat and firms your legs, thighs, abdomen, arms, and hips. Rebounder trampolines can be purchased at your local sporting goods store. Exercise using a rebounder trampoline, starting slowly and working up to at least 15 minutes twice a day, is recommended.

APPENDIX 9

ASCORBATE (VITAMIN C) CALIBRATION: Find out how much buffered ascorbate you need to build energy and remove toxic burden

Which Ascorbate Is Best to Use

It is preferable to use a 100% l-ascorbate, fully reduced, buffered mineral ascorbate form of vitamin C that contains a proper balance of the major essential buffering minerals: 1) potassium, 2) magnesium, 3) calcium, and 4) zinc. No dl-ascorbate or d-ascorbate should be used as the d-ascorbate form is not absorbed by humans and may irritate the intestines; people take up only the l-ascorbate. Per gram of ascorbate, we find best outcomes, patient compliance, and satisfaction from a balanced mineral content of potassium (66 mg.), calcium (27 mg.), magnesium (11 mg.), and zinc (400 mcg.).

- This means that if you were taking a level half-teaspoon of buffered ascorbate that has no masking or “inert” agents in it, you would have 1.5 grams of ascorbate containing potassium, 99 mg.; calcium, 40 mg.; magnesium, 16 mg.; and zinc, 600 mcg. If there is less than 1.5 grams per half-teaspoon, there is likely to be a hidden or masking agent that may cause digestive or immune problems.

How to do Ascorbate Calibration “C Flush”

When possible, it is best to start (especially the first use of this protocol) on an empty stomach, first thing in the morning. After that, you may eat small meals throughout the day. Allow yourself that day to finish the “flush”. Most people saturate their ascorbate need within a few hours. Occasionally, the need is much greater, and it may take a number of hours to complete the initial calibration “flush”.

Dissolve each half-teaspoon (1.5 grams) of fully reduced, buffered mineral l-ascorbate powder in 2 or more ounces of water or diluted juice (juice diluted 1:1 with water). Plan to count and record each dosage. After dissolving the l-ascorbate and allowing any effervescence to abate (typically dissolves within two minutes), drink the beverage. The amount of l-ascorbate needed depends on how quickly your body uses it up. Below are suggestions for how to best determine your needs based on how healthy you are:

- A healthy person begins with a level half-teaspoon dissolved in 1-2 ounces of water or diluted juice every 15 minutes. Room temperature fluid is recommended.
- A moderately healthy person begins with 1 teaspoon dissolved in 4 or more ounces of fluid every 15 minutes.
- A person in ill health begins with 2 teaspoons dissolved in 8 or more ounces of fluid every 15 minutes.
- If after four doses there is no gurgling or rumbling in the gut, you should double the initial dosage and continue every 15 minutes.

Continue with these instructions at the proper time intervals until you reach a **watery stool** or an **enema-like evacuation of liquid** from the rectum. This is as if a quart or so of liquid is expressed from the rectum. **CAUTION:** Do not stop at loose stool. You want to energize the body to “flush out” toxins and reduce the risk that they may recirculate and induce problems. At this time, stop consuming the buffered ascorbate for the day. **HOWEVER**, if your calibration dosage is more than 50 grams of vitamin C, you should consume a dosage of vitamin C of at least 10% of the total l-ascorbate need to induce the l-ascorbate calibration “flush” in the later afternoon or evening. Many people find that preparing a “batch” of ascorbate allows for easier, more timely consumption of the beverage rather than making up a new batch at each interval. Example: 30 grams (10 teaspoons) may be dissolved in 20-30 ounces of liquid. If this method is chosen, we recommend using a capped, dark bottle to avoid air or light (photo-) oxidation of the ascorbate. Dissolved ascorbate is stable for a day if kept cool or cold and tightly sealed.

Changing Ascorbate Need

As you become healthier, the ascorbate is used more efficiently and is better conserved in your body, and less ascorbate will be needed to achieve the desired effect. As your need for ascorbate decreases, you may notice loosening of the stool indicating that your body is consuming ascorbate more efficiently and your need has decreased. That is the time to taper ascorbate intake and recalibrate. As you become familiar with your body's responses, your need for and best timing of ascorbate is likely to become clear through direct experience with this protocol.

Daily Consumption of Ascorbate after Calibration (C Flush)

Between calibrations, consume 75% of the total ascorbate you need to induce the flush. You may use ascorbate as a liquid or tablet four or more doses per day. If you need a daily dose of 6 grams or less, you may take it in two doses. The usual sufficiency need for a person in a state of good health is 2-10 grams/day.

Hints for Calculating Daily Therapeutic Ascorbate Requirement

- Calculate the amount of ascorbate consumed (1/2 rounded tsp. = 1.5 grams / 1 rounded tsp. = 3 grams.
 - Multiply number of grams x number of doses. Example: 2 grams X 12 doses = 24 grams.
 - 75% of this total is your approximate daily need or what is known as 'bowel tolerance.'
- Example: 24 grams X 0.75 = 18 grams. 18 grams divided by 4 = 4-1/2 grams/day (divided into at least 4 doses).

Range of amounts of level 1/2 tsp. = 1.5 gms.	Number of level tsps. = 3 gms.	Total grams of l-ascorbate consumed for calibration	Daily (75%) therapeutic level of l-ascorbate (1/2 level tsps.)	Daily (75%) level of l-ascorbate (gms.) [rounded to nearest unit for clinical use]
6	3	9	4.5	7
10	5	15	7.5	12
25	12.5	37.5	19	28
90	45	135	67.5	101

Outcome of Ascorbate Flush

Many people report a subjective sense of improved well-being after the completion of an ascorbate calibration. This may be of short duration, initially, but is a promising sign for long-term improvement. As toxins are eliminated from the body and as it is energized through the action of the ascorbate, you should feel progressively better for longer periods of time.

Repeat of Ascorbate Calibration

For most rapid progress, once per week is recommended. You select the frequency that meets your needs. Repair deficits increase ascorbate needs over time until a consistent dose of vitamin C is maintained. Discuss with your health practitioner the right frequency for you.

Potential Reservations Regarding Ascorbate Calibration Process

Be sure to consume adequate water with each ascorbate dose. The approach described above will help you in this regard. Any concern about fluid or electrolyte loss from the stool is thus minimized. Some people report gas or fullness while doing the ascorbate calibration "flush", but that is almost always due to dissolving the vitamin C in too little water or rushing the procedure. Room temperature liquid is best for absorption. Cramps may occur, though rarely, and it is usually because too little fluid is used to dissolve the ascorbate.

Helpful Hints and Insights

- Most people find that the flush is easy to do. Since the amount of time can vary quite a bit, it is best to do your first ascorbate calibration on a day when you can stay home for most of the day. Once you have done an ascorbate calibration/flush, you will have a better idea of how much time is needed.
- For most people, it takes somewhere between 3-8 teaspoons of ascorbate to flush. It could differ for others: 15, 20, or more than 50 grams depending on your health status and how quickly your body uses up ascorbate.
- Sometimes people remain bloated for the rest of the day of calibration. Occasionally, people have loose stools for a day or so after doing the ascorbate flush.
- Some people have reported hot stools that seem to burn the anus after several evacuations. If so, you can use a natural salve, such as calendula ointment, to soothe the area. This tends to cease after the first few times you do the calibration.
- People with hemorrhoids, irritable bowel disease, or inflammatory bowel disease may find that the ascorbate activates their tissues in the healing process. They may need to increase ascorbate and bioflavonoids slowly over time before doing an ascorbate calibration.
- Usually, people find that they feel better than they have in a very long time after the first ascorbate flush. Some report a greater sense of well-being after the second or third. The overall consensus is that as time goes on doing these calibrations helps people feel increasingly better.

Supporting Supplementation

When introducing higher dosages of vitamin C your cellular machinery works harder and more efficiently. The following supplements may be helpful prior, during, or after the flush to allow your repair to go smoothly. When energy disturbances, cramps, and magnesium deficits are likely:

- Choline Citrate: (1 teaspoon = 1,300 mg.) - 1 teaspoon twice daily in juice or water
- Magnesium: 100 mg. elemental twice daily
- L-Glutamine: 1,500 mg. L-Glutamine + 500 mg. PAK (the PAK recycles / potentiates Glutamine so less is needed) or the equivalent = 15 grams of L-Glutamine free-form amino acid, twice daily.

When digestive problems and inflammation are significant:

- Probiotics: 2-4 capsules of multiple cultured human strains of lactobacillus/bifidobacterium bacteria with each meal.
- Flavanoid/flavanol repair combination: 2-10 tablets of 500 mg. quercetin dihydrate plus 5 mg. Proanthocyanidins/soluble OPC twice daily.
- In the rare case of GI distress, drink valerian or chamomile tea with a dash of raw honey.

Scientifically Shown “Homeostatic” Benefits Ascorbate Promotes or Enhances:

- | | |
|---|---|
| * Scurvy resistance: improved blood vessel and cardiovascular integrity | ✓ |
| * Enhances hormone healthy and reduces hormone unhealthy actions | ✓ |
| * Enhances neurotransmitter functions healthy and reduces unhealthy actions | ✓ |
| * Promotes immune system healthy and reduces unhealthy actions | ✓ |
| * Enhances nitrous oxide (NO) functions | ✓ |
| * Enhances and repairs detoxification functions | ✓ |
| * Enhances ATP energy compound production | ✓ |
| * Enhances healthy bone formation | ✓ |

* Enhances and rebuilds glutathione functions	✓
* Promotes iron balance [uptake and release]	✓
* Reduces bioaccumulation of toxins	✓
* Improves transit time	✓
* Protects DNA from oxidative damage	✓
* Reduces toxic minerals in body	✓
* Enhances natural anti-cancer surveillance	✓
* Direct tumor cytolytic effects	✓

Scientifically Disproven Effects that Ascorbate Promotes or Enhances:

- * Immortality
- * Fenton reactions *in vivo*
- * B-12 remains active *in vivo*
- * DNA replication error theory not confirmed *in vivo*

l-Ascorbate: Its Scientific Significance for Human Health

Vitamin C (ascorbic acid or l-ascorbate) is nature's most potent, safer antioxidant cofactor. Ascorbate has gotten a fair amount of attention from the media in the last few years, including whether it is helpful, neutral, or harmful in limiting the number of colds, their symptoms, and their duration.

1. Ascorbate aids in the maintenance of cellular membranes, cellular respiration, the peroxidase cleansing system, the restoration of vitamin E /selenomethionine complexes, and sulfhydryl enzymes such as glutathione synthetase, thereby helping to detoxify various drugs and chemicals.
2. Ascorbate is also involved in hormone biosynthesis and maintaining the integrity of connective tissue, cartilage, capillaries, bones, and teeth. Vitamin C is, therefore, important in wound repair and tissue healing.
3. Ascorbate has been shown to increase cellular resistance to many common viral infections (most probably due to its interferon-like activity) and enhance specific parameters of immune function.

All of these actions of ascorbate are related to its antioxidant or reducing or electron donating abilities. The use of ascorbate in health and disease is complex and sometimes misunderstood, although much less so when one considers the following facts and supportive background information.

While almost all animals and plants synthesize their own vitamin C, exceptions are guinea pigs, monkeys, and humans. The first two of those eat mostly fresh vitamin C-rich foods: fruits and vegetation. Non-human animals, when adjusted for size and weight, make the equivalent of 5 to 15 grams of vitamin C a day, mostly in their livers and when stress free. Production can more than double when the animal is distressed. Our genetic ancestors once had the ability to synthesize vitamin C but appear to have lost it years ago. One enzyme is missing in a 6-enzyme process converting glucose to vitamin C. Scientists estimate that without this mutation, when healthy we would be making 10-30 grams of vitamin C a day throughout our lives and more when we are unwell or distressed.

Ascorbate Need

Many of us eat only small amounts of vitamin C-rich foods. Also, our food supply contains less and less vitamin C because of premature food harvesting, artificial ripening, and food processing. Studies of the effects of vitamin C seem to be confusing.

1. Generally, when small doses are used (1 gram or less), little to no significant effects were reported. When larger doses are given (20-200 grams/day), significant positive changes are typically reported.

2. Almost all conditions, acute or chronic, can have shortened courses and patients respond favorably. Vitamin C (in the pure, buffered, l-ascorbate) has virtually no side effects. Vitamin C has been given up to 300 grams per day, taken intravenously, without reported side effects.

This approach to determining your need for ascorbate is of the next generation and builds upon the experience gained with “bowel tolerance” determination of ascorbate need. Our livers would be making vitamin C steadily, with increases commensurate with distress, if we had not lost that key enzyme. Thus, for best health, it is important to take ascorbate regularly and steadily. Often gas, cramps, and diarrhea occur at rather low doses of ascorbate (below 10 grams). There are many possibilities for this that are addressed above in the additional supplements recommended as helpful in selected cases.

If one wishes to or must stop ascorbate for any reason, it is quite important to taper gradually. Sudden cessation of ascorbate does not allow the body time to accommodate to the change, and the body will continue to metabolize/excrete large amounts. You must reduce your ascorbate level by several grams/day over a sufficient period (depending on how much you were taking) to prevent this from occurring. Using the C Flush is important. Many helpful things happen at the ascorbate saturation level that will not happen otherwise. Doses from 50 grams to 200 grams or more a day are usual for immune dysfunction states like cancer, chronic viral and bacterial infections, and other serious inflammatory or autoimmune diseases. We recommend appropriate doses throughout life and see l-ascorbate used effectively to charge up the cellular electron pool, promoting cellular healing and metabolism, purging the body of foreign invaders, and providing a base on which to build health. Over a period of ascorbate use, the amount of ascorbate necessary to achieve bowel tolerance changes and fluctuates. During stress or illness, many times more can be taken (and is appropriate to take) than at other times. We ask each person to begin to see ascorbate as a useful tool. As healing occurs and health becomes more balanced, the amounts of ascorbate should also change accordingly. Vitamin C can be useful to you. Use it wisely and you will be well rewarded.

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APPENDIX 10

DEVELOPING AN ALKALINE DIET

Getting Started

The first step in establishing a health-promoting alkaline diet is to assess your current first morning urine pH. This is a good measure of your average body pH and is easily obtained by following these simple steps:

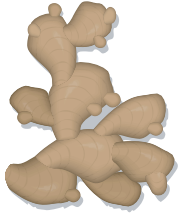
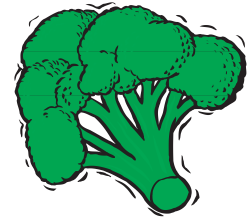
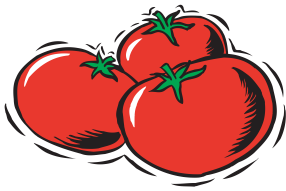
1. Obtain a packet of pH hydrion test paper. This test tape measures acid-alkaline states and should be marked into one-half point divisions ranging at least from 5.5 to 8.0. Should you not be able to obtain this tape locally, please call PERQUE LLC at (800) 525-7372 for information.
2. First thing in the morning, just before urinating, open the test tape and cut off two to three inches of the paper tape. Next, wet the tape with urine (either by urinating directly on the tape or by collecting the urine in a cup and dipping the tape into the urine).
3. As the tape is moistened with urine, it will take on a color. The color relates to the acid or alkaline state of your urine and ranges from yellow to dark blue. Match the color of your test strip with the color chart on the back of the test tape packet.
4. Jot down the number that corresponds to the color your tape has taken on. Any number below 7 means that your urine is on the acid side. The lower the number, the more acidic the condition. For example, a number of 4.5 indicates considerable acidity, while 6.0 indicates much less. A number of 7 indicates the neutral state, not acid or alkaline. As the body functions best in an alkaline state for health promotion, we would try to avoid highly acidic metabolic states. Ideally, our first morning urine pH should be 6.5 to 7.5, with an occasional, but not constant every day 7.5 reading.
5. If your reading is below 6.5, then you are advised to begin changes aimed at alkalinizing your diet. Below are listed simple dietary modifications that will help alkalize your diet. In the beginning, because of the acid forming tendency of the standard American diet, most of you will find low pH readings. On the other hand, there will be an occasional person where the initial pH readings are always highly alkaline (greater than 7.5), which is due to catabolism (the process of tearing us down). In this process, nitrogen (in the form of ammonia and alkaline amino acids such as lysine, arginine, glutamine, and asparagine) is lost and the urine becomes excessively alkaline. If constant 7.5 to 8.0 readings should occur in your case, you would do well to consult your health professional about how to stimulate the repair (anabolic) state thus reversing the catabolic cycle.

Simple Steps to Alkalinize Your Diet

Remember, your body is in essence one very complicated chemical processing plant with 60 trillion cells involved in some 6 trillion chemical reactions each second. While the chemical processes can occur amid an acid environment, such is not ideal. An alkaline internal state is required for ideal chemical functioning and for the achievement of optimal health.

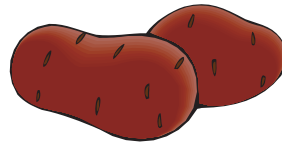
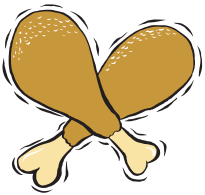
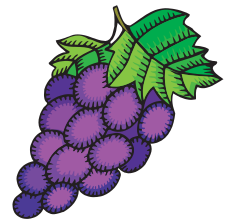
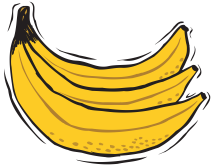
If your pH readings are regularly below 6.5, you would do well to alkalinize your diet by making the following dietary changes:

1. Take a few minutes and study the chart on page 14 entitled, "Food and Chemical Effects of Acid/Alkaline Body Chemical Balance." On the left side of the page, the foods and substances that are alkalizing to the body are listed. To the furthest left, are the most alkaline substances like sea salt, sea vegetables, sweet potato/yam, lentils, and fruits like lime and watermelon. Toward the middle of the sheet on the same left side are the lower alkaline substances like ginger tea, oats, brussels sprouts and oranges. The acid forming foods are listed on the right hand side of the page. The highest acid forming foods, including jams, ice cream, walnuts, and beef, are listed to the far right. The lesser acid forming foods are to the center of the page and include honey, fish, brown rice, kidney beans, and figs. This easy-to-use chart clearly details which foods make the body more alkaline and which make it more acidic.
2. As you are studying the chart mentioned above, note that most of the common standard American favorite foods and drinks are acid-forming--meats, sugar, coffee, tea, cheese and all dairy, except clarified butter. Wheat is acid-forming as are most grains. No wonder most Americans are in an acid body chemical state. We eat mostly acid-forming foods! Most fruits and vegetables are alkaline-forming and so are grains like oats, quinoa and wild rice and most spices and seeds.
3. If you regularly have a first morning urine pH lower than 6.5 and are attempting to regain health, a good goal would be to strive for a diet of predominately alkaline-forming foods. For those recovering from disease, ideally the diet should be 80% alkaline-forming and only 20% acid-forming. As one regains health, 60% alkaline to 40% acid diet is generally fine. To simplify matters, let your first morning urine pH be your guide. If you are below 6.5, increase the alkaline foods. If you are 6.5 to 7, you are in a health-promoting acid/alkaline balance.
4. If you are in an acid state, the first step is to eat more vegetables and fruits. Strive for two cups of alkalinizing vegetables at both lunch and dinner. Consider a breakfast of alkaline fruits and oatmeal. Limiting flesh foods will also go a long way toward reducing acidity. In addition, the following simple changes are especially helpful for quickly alkalinizing the body:
 - (a) Drink the juice of one half a lime or lemon in water a few times during the day.
 - (b) Add yams and sweet potatoes as well as lentils to your diet on a regular basis. All these foods help to alkalinize the body quickly.
 - (c) Make it a point to eat at least two cups of alkalinizing greens (kale, mustard, turnip, collard, endive) daily.
 - (d) Learn how to prepare seaweeds in soups and other dishes and consume daily.
 - (e) Favor the alkalinizing grains like oats, quinoa, and wild rice.
 - (f) Enjoy liberal amounts of fruits. When possible, eat plenty of watermelon and its juice along with other melons and fruits and berries. If you suffer from gas, bloating or weak digestion, favor cooked fruit and small amounts of fresh juices.
 - (g) Certain supplements like the buffered vitamin C and magnesium also alkalinize and should be used in optimum doses.
5. Be patient and persistent. Remember, your pH indicates your reserve of alkaline minerals. It can take time to build up these reserves. Do not be discouraged with a slow movement toward the ideal alkaline state (pH 6.5 to 7.5). It may have taken years to decades to get where you are; a few months to sustained repair and renewal are worth the effort and attention.

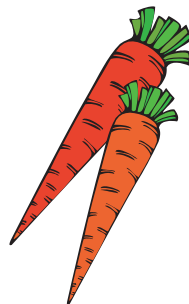
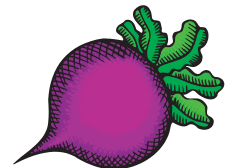


Part 2:

The Alkaline Way Program



**A comprehensive
food substitution guide
and eating plan**



Wheat-free Eating Plan

Breads, baked goods, cereals, pastas, crackers—most of them contain the most popular grain in the United States — wheat. It can be listed as durum, enriched white flour, semolina, wheat, wheat bran, wheat germ, bulgar, couscous, triticale (a cross pollination of wheat and rye that contains some wheat reactors), wheat starch, orzo, vegetable gum, vegetable starch, or modified food starch. While tasty, wheat is hard to digest and commonly causes allergic and hypersensitive reactions.

- **Is there life without wheat, even if it is only for three to six months?**
- **How easy is it to make substitutions or to find wheat-free products?**

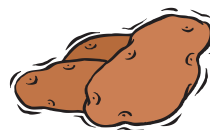
Yes, there can be an enjoyable eating life without wheat, and substitutions may be much easier than you first imagined. Most health food / gourmet shops offer wide choices. In many neighborhood grocery stores, greater choices are being offered in response to public interest. To give you some guidance in this area, we have included references as well as some flour substitutions to help you get started on your wheat-free journey.

While on this journey, it is also important for you to know that grains are commonly contaminated with molds and mold spores, insect parts, rat and mouse hairs and droppings, and when not grown organically, pesticides. There is no way to prevent this. It is a part of the process of commercial grain production and storage. While scientists continue to study the problem, we recommend that you act cautiously and avoid these contaminants wherever possible. Any of these contaminants can cause a reaction upon eating the grain in a sensitive individual. This explains why some people react only some of the time to wheat when in fact they are reacting to an avoidable contaminant. How can you avoid a contaminant? Thoroughly washing all grains and using organic grains as much as possible will help in controlling exposure to these contaminants.

Basic Substitutions for Wheat

In addition to the other non-reacting grains, root crops like sweet potatoes, baked potatoes, yams, parsnips, and winter squash are excellent starch choices for adding variety and nutrients to your meals. A list of common wheat substitutes includes:

- Rice flour-based baking mixes and bread
- Sprouted rye breads and rolls
- Grain, flour, and pasta made from quinoa, millet, rice, amaranth, and Jerusalem artichoke
- Cooked cereals: Steel cut oats, cream of rice or rye, buckwheat, corn grits, and amaranth
- Ready-to-eat cold cereals: Organic puffed rice, corn flakes, puffed millet, amaranth, and 100% oat cereals
- Corn pasta, tortillas, rice cakes, and crackers
- Oriental rice noodles and bean noodles (Check the label to make sure they are wheat free!)
- Spaghetti squash
- Commercial wheat-free breads and baking, pancake, and waffle mixes



Substitutions for Wheat Flour in Cooking:

Generally, you can use any of the following for 1 cup of wheat flour:

- ~ 7/8 cup rice flour (white or brown)
- ~ 5/8 cup potato starch flour
- ~ 1 cup soy flour plus 1/4 cup potato starch flour
- ~ 1 cup corn flour (if finely milled) or a scant cup finely ground cornmeal
- ~ 1/3 cup soy flour, 1/3 cup potato flour plus 1/3 cup rice flour
- ~ 1/2 cup soy flour plus 1/2 cup potato starch flour



Some Cooking “Pearls” of Wisdom:

- Non-wheat flours are heavier in texture and usually need up to three times as much leavener (baking soda).
- Each non-wheat flour has its own effect on a recipe. Corn flour or finely ground cornmeal is crumbly and usually needs to be mixed with another flour to hold together.
- Tapioca and potato flours are known for their holding power and may be used to replace wheat flours. Recipes that require lots of stick-together power (for example, pasta recipes), often use these “sticky” flours in addition to the main non-wheat flour.
- Oat flour is sticky but gives a chewiness to baked goods.
- Barley and rice flours are heavy but similar to wheat in flavor. They combine well with other flours in muffin recipes.
- Soy flour is heavy and should be used only in small amounts.

Alternative Choices for Wheat Flour as a Thickener in Recipes:

Use any one as a substitute for 1 tablespoon of flour

- ~ 1-1/2 tsp. cornstarch
- ~ 1-1/2 tsp. potato starch
- ~ 1-1/2 tsp. sweet rice flour
- ~ 1-1/2 tsp. arrowroot starch
- ~ 1-1/2 tsp. sago (sago palm starch)
- ~ 1-1/2 tsp. gelatin
- ~ 2 tsp. quick-cooking tapioca flour
- ~ 1 Tbs. white or brown rice flour
- ~ 1 Tbs. kudzu per cup of liquid
- ~ 1/2 Tbs. or 1-1/2 tsp. agar agar per cup of fluid



Suggestions for Wheat-free Dining:

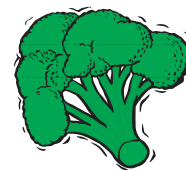
Breakfast

- Fresh vegetable or fruit juice, fresh fruit, or fruit smoothie
- Non-wheat cereal like rice, corn, barley, rye, millet, amaranth, teff and buckwheat as a fresh-cooked whole grain
- Cream of rice, rye, barley, cream of buckwheat, and corn grits can be enjoyed either as a commercial or home preparation. You can grind any of these grains to make a fresh creamed cereal. These hot cereals can be eaten thinned with water, cow, goat, rice, soy, almond, or oat milk.
- Many wheat-free cold cereals are available at the health food store and marked as “wheat-free”. These include pure rice or millet puffs, 100% oat cereals, and corn flakes/puffs.
- Pancakes, waffles, muffins, and crackers can be made using wheat-free flours or commercial baking mixes.
- Organic eggs or a vegetable omelet with wheat-free toast or almond butter on rice cakes or crackers are other ideas for breakfast variety.



Lunch and Dinner

- A basic meal of cooked low carbohydrate vegetables with beans or flesh (fish, chicken, turkey, beef, etc.), grain, or root crop
- Bean soups (lentil, black bean, etc.) with cooked vegetables and leafy greens
- Stir-fry vegetables with meat or tofu
- Seafood with wheat-free pasta
- Broiled or poached fish with root vegetables and salad
- Grain casseroles such as Indian millet with currants and sunflower seeds or roasted pecans with wild rice
- Bean dishes, such as twice-cooked beans wrapped in corn tortillas or red lentil dhal or vegetarian chili
- Poultry, such as fresh chicken-vegetable soup or baked, roasted, or stir-fry chicken with vegetables and salad
- Any meal can be spiced up with whole foods substitutes for family favorites such as baked french fries or baked sweet potato chips, vegetables with active-culture yogurt dips, or “jellos” made of agar agar or pure Knox gelatin with fruit juice.



Snacks

- Japanese rice balls filled with avocado or tuna
- Trail mix with fresh nuts and seeds
- Wheat-free muffins or crackers
- Baked corn or potato chips
- Fresh fruit
- All-natural gelatin sweetened with fruit juice
- Fresh vegetables and bean dip
- Lettuce roll-ups
- Open-face sandwich on rice cakes



“At a Glance” Alternatives for Wheat

<u>Reactant</u>	<u>Suggested Substitutes</u>
Wheat Wheat is the grain most commonly used in the United States. Unless otherwise noted, all “flours” (semolina, durum, and enriched white flour) are wheat flours.	Rice, oats, barley, millet, quinoa, corn rye, amaranth, teff, and buckwheat can be obtained as whole grains or ground as flours. If you do not react to triticale, kamut, or spelt, you may include these. Starchy roots (sweet potatoes/yams, turnips, parsnips, potatoes, yucca, and Jerusalem artichokes) can also substitute for wheat bread and pasta products. <ul style="list-style-type: none"> Commercial wheat-free breads are available at food co-ops, health food stores, and specialty markets.

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Gluten-free Eating Plan

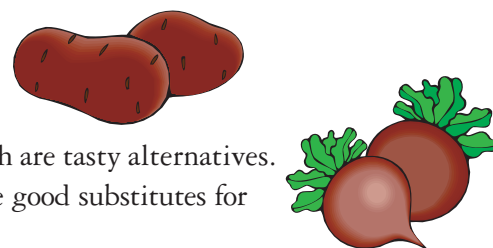
What Is Gluten?

Gluten is a substance high in insoluble protein found in many grains including wheat, spelt, kamut, rye, barley, oats, and triticale. Corn and rice have a different kind of gluten. They do not need to be avoided unless you have tested to be hypersensitive to them and are generally referred to being gluten-free. Gluten is a type of substance in wheat flour that acts like glue and binds the mixture together. When leavening agents such as baking soda, baking powder, or yeast are used, gluten traps the bubbles created by the leavening agent and causes the bread to rise. Flours with little or no gluten cannot trap the bubbles, causing the product not to rise well and possibly become soggy, heavy, and flat.

Basic Substitutions for Gluten

What complex carbohydrates are good alternatives to gluten?

- Grains like wild rice, millet, quinoa, teff, buckwheat, and amaranth are tasty alternatives.
- Flour from beans, seeds, nuts, corn, potato, chestnut, and tapioca are good substitutes for flours with gluten.
- Various high complex carbohydrate tubers and vegetables make a satisfying substitute for grains. These include sweet potatoes and yams, white and red potatoes, parsnips, turnips, winter squash, yucca, spaghetti squash, taro, and Jerusalem artichoke.



Some Cooking “Pearls” of Wisdom

Gluten-free flours cannot be easily used to make yeast breads, but baking powder can be used instead of yeast. Substitution for gluten is easiest in cakes, pie crusts, and pancakes. When you try gluten-free bread, it is difficult to duplicate the shape and texture. In smaller muffins and cakes; however, rice or potato flours may be substituted for wheat with baking powder as the leavener. Baking powder’s ability to hold the rise is related to the size of the pan, so use smaller pans in gluten-free baking.

Suggestions for Gluten-free Dining

Breakfast

- Polenta French toast with berry syrup
- Organic corn flakes, puffed rice, or puffed millet with choice of milks or juice
- Cream of rice, cream of buckwheat, amaranth, or corn grits with appropriate milk, sweetener, or fruit
- Miso soup with vegetables and rice



Lunch and Dinner

- A non-gluten grain (wild or brown rice, corn, buckwheat, millet, or quinoa) with vegetables (sautéed, stir-fried, or steamed) with dressing if desired
- Any variety of bean soups (split peas, lentils, chickpeas) or chili with alkaline vegetables
- Fish with vegetables and a baked root crop or a non-gluten grain
- Hummus, rice, and alkaline vegetables
- Corn tacos with refried beans



Snacks

- Baked or oven-fried sweet potatoes/yams
- Fresh nuts and seeds
- Fruit and crunchy raw vegetables with bean dip or yogurt
- Nut butters like almond and cashew with gluten-free crackers like rice
- Hummus or baba ganoush with crackers and vegetables



“At A Glance” Alternatives for Gluten

<u>Reactant</u>	<u>Suggested Substitutes</u>
Gluten Gluten is a protein-rich substance found in cereal grains including wheat, rye, barley, oats, spelt, kamut, and triticale.	Millet, quinoa, teff, amaranth, and their flours, along with seed and root crop flours, are smart alternatives. Most people do not react to the gluten-like molecules in corn and rice.

Selected References for Gluten-free Eating

1. Celiac Disease Foundation, *Guidelines for a Gluten-Free Lifestyle*, 4th Edition. California, 2006.
2. Celiac Sprue Association. *CSA Cooperative Gluten-Free Commercial Products Listing*, 2nd Edition, Nebraska, 1996.
3. Fenster, Carol, Ph.D. *Special Diet Solutions*. Savory Palate, Inc., Littleton, CO, 1998.
4. Gluten-free Pantry Inc. *Summer Catalog. Gourmet Baking Mixes by Mail*. Glastonbury, CT. Web site: www.glutenfree.com; phone: 860-633-3826.
5. Hagman, Bette. *The Gluten-Free Gourmet Cooks Fast and Healthy*. Owl Books, 2000.
6. Hills, Hilda Cherry. *Good Food - Gluten Free*. ISBN-10: 0879831030. McGraw Hill, Inc., 1998.
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8. Fenster, Carol. *Special Diet Celebrations*. Savory Palate, Inc., Littleton, CO, 2003.
9. Korn, Danna. *Living Gluten-Free For Dummies*. ISBN-10: 0471773832, For Dummies, 2006.
10. Koeller, Kim and La France, Robert. *Let's Eat Out!: Your Passport to Living Gluten And Allergy Free*. ISBN-10: 0976484501, R&R Publishing, 2005.
11. *Triumph Dining and Gluten-Free: The Essential Gluten-Free Grocery Guide* (Winter 2007/Spring 2008). ISBN-10: 0977611116. Triumph Dining; 1st Edition, 2007.

Corn-free Eating Plan

Corn is a favorite food for many of us and is found in so many forms in so many products. It is also one of the most common food allergens. Corn is found in corn flour, corn syrups, mannitol, sorbitol, fructose (sweeteners), corn starch, maltodextrin, and zein. (Zein is a common coating for medications and supplements. Substitute for zein-coated medications or supplements or have a compounding pharmacist make what you need free of zein.) Corn in its various forms is used in the manufacture of many foods and vitamins/medications.

Basic Substitutions for Corn

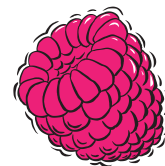
- Other grains like wheat, rice, barley, buckwheat, millet, etc. can substitute for corn.
- Substitute sweeteners for corn syrup include Sucanat®, molasses, maple syrup, Stevia, fructose, raw honey, agave, date sugar, or vegetable glycerin.
- Corn starch is a widely used thickening agent, and arrowroot, kudzu, potato starch, and agar agar serve as good substitutes, especially for puddings and sauces.
- If you are reactive to corn and/or corn sugar and you enjoy a social drink, try tequila, 100% potato vodka, or Silverado 100% grapeseed vodka to avoid the corn that is found in most other forms of alcohol, beer, and wine (except for Cru and Grand Cru wines).
- High-carbohydrate vegetables like squash, sweet potato, yam, parsnips, yucca, and turnips can also serve as substitutes for corn.

NOTE: If you have a Glucose Tolerance Test (GTT) planned and you have tested reactive to corn, the test should be done with a corn-free source. For example, 3 tablespoons of raw honey equals the amount of sugar in 1 Glucola™ (GTT drink). The honey can be dissolved in 4-6 ounces of water.

Suggestions for Corn-free Dining

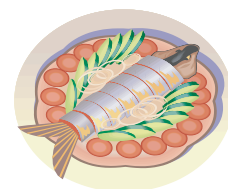
Breakfast

- Fresh vegetable or fruit juice or fresh fruit with yogurt
- Non-corn cereals like cream of rice, wheat, oatmeal, rye, buckwheat, cream of barley, or any corn-free cold cereal like amaranth
- A variety of corn-free baking mixes to make pancakes, waffles, and muffins
- Organic eggs or vegetable omelet
- Puffed rice, puffed millet, puffed wheat, or other corn-free cereal with dairy or dairy substitute milks



Lunch and Dinner

- Seasonal steamed vegetables with a small amount of flesh protein, such as chicken, fish, turkey, lamb, or duck
- A variety of vegetarian casseroles based on tofu or beans and vegetables
- Bean soups and stews
- Stir-fry vegetables with meat or tofu
- Avocado with rice and steamed vegetables



Snacks

Remember to avoid commercial juices, candies, baked goods, ice creams, pudding (sweetened with corn syrup) or commercial soups, gravies, etc. as these are highly likely to contain some corn component.

- Pretzels or baked potato chips
- Rice crackers with nut butter
- Fresh fruit
- Slice of avocado with crackers
- Vegetables with yogurt dip



“At A Glance” Alternatives For Corn

<u>Reactant</u>	<u>Suggested Substitutes</u>
<p>Corn</p> <p>Corn is used in many forms such as maize flour, corn sugar, corn starch, and corn oil. Corn in all its many forms is a common food additive.</p>	<ul style="list-style-type: none"> • Other grains like wheat, rice, barley, millet, quinoa, teff, and triticale flours can be used in place of corn. • Honey, maple syrup, rice syrup, rice or barley malt, Sucanat®, molasses, Stevia, and agave can substitute for corn sweetener. • Corn thickener can be replaced by kudzu, arrowroot, agar agar, natural gelatin, and a variety of flours.

Selected References For Further Reading on Corn Substitution

1. Hurt, Jones Marjorie. *The Allergy Self-Help Cookbook*. Rodale Press, 2001.
2. Martin, Jeanne Marie. *The All-Natural Allergy Cookbook*. Harbour Publishing, ISBN # 1550170449, 1997.
3. Shattuck, Ruth. *The Allergy Cookbook: Tasty, Nutritious Cooking Without Wheat, Corn, Milk and Eggs*. ISBN-10: 0451165179; ISBN-13: 978-0451165176. Signet, May 1986.
4. Reno, Liz, MA and De Vrais Joanna, MA. *Allergy Free Eating*. Celestial Arts, 1995.
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7. Gioannini, Marilyn. *The Complete Food Allergy Cookbook*. Prima Health, 1997.

Dairy-free Eating Plan

Dairy is found in many of the foods we eat, often in hidden forms. Dairy includes all foods made with any component from cow's milk. Cow's milk, butter, buttermilk, yogurt, cow milk cheeses, keiffer, and any foods that contain the milk proteins, casein and whey, all need to be substituted in your eating. If you are sensitive to one cow dairy food, you can easily become sensitive to another. We suggest you avoid all cow dairy foods while following your program. The one exception to this is organic ghee or clarified butter. There are many non-dairy products on the market to help you through the healing period. True, there are many foods you can choose, but also exercise caution here; many of the non-dairy items contain casein or whey. Examples of non-dairy items that expose you to the dairy antigen include Cool Whip, Coffee Mate, Irish Cream, Mocha Mix, and Lady Lee brand non-dairy creamer. Many cheeses, like soy or rice cheese, often contain the dairy protein, casein. Close label reading will be very important when choosing foods. Avoid all sources of cow dairy to speed your healing.

Basic Substitutions

Are there tasty foods you can prepare without dairy in them? Yes! Like wheat, dairy products are a staple of most of our meals and snacks. Health food stores used to be the source for alternatives to dairy foods, but neighborhood stores are now carrying more of these products.

- Milk products provide texture and a rich flavor and are sometimes used to bind sauces or custards. Substitutions are relatively easy. Instead of milk or cream in a baked recipe, try water, fruit juice, or even vegetable soup stock, which is especially good in breads.
- In sauces, a common substitution is sautéed pureed onions, carrots, and/or turnips.
- In addition, a wide variety of cow milk substitutes are commercially available; they include goat, soy, rice, almond, and oat milk. While nut milk may sound “nutty” if you are unfamiliar with it, this milk is quite tasty and easy to prepare. In addition to its uses in cooking, nut milk can be poured over cereal or enjoyed as a beverage.

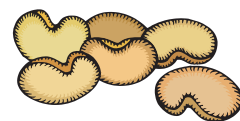
Alternatives to Cow's Milk

- Rice milks are available in health food stores packaged in quart packages as well as handy 8 oz. cartons (easy to pack in children's lunches) and frozen as ice cream. **Caution:** *Some rice milks may contain dairy proteins (check the label).*
- Amazake is a cultured rice drink that is very sweet and has a milkshake-like consistency. It can be bought flavored with ground almonds, vanilla, carob, fruit, or other natural flavorings.
- Many commercial brands of soy milk are available, both on the shelf and in the cold case. Tastes vary; sample a variety for preference.
- Commercial oat milk is now available as a milk substitute.
- Almond milk can be also found in most health food stores.
- Goat milk



Easy Recipes for Nutritious and Wholesome Nut Milks

- **Almond milk**
1 cup raw almonds or almond meal (ground almonds) in 1 quart water
1Tbs. of cold-pressed oil or melted ghee (clarified butter) is optional.
Blanch almonds (pour boiling water over nuts). After one minute, remove almonds from water and cool. Once cool, slip skins off with fingers. Blend blanched, skinned almonds, oil or ghee, and 1 cup of the water you used to blanch the almonds in blender until smooth (about 3 minutes). Gradually add the rest of the water. Strain if desired.
- **Almond-coconut milk**
Follow directions for almond milk using part almonds and part raw or flaked (unsweetened) coconut.
- **Almond-cashew milk**
Follow directions for almond milk using equal parts of almonds and cashews.
- **Almond-sesame milk**
Follow directions for almond milk using equal parts of almonds and hulled sesame seeds. Blend until smooth, then strain.
- **Other nut milks**
1 cup raw cashews, Brazil nuts, pecans, walnuts, or a nut mixture in 1 qt. water
1 Tbs. cold-pressed oil or melted ghee (optional). Blend well (about 3 minutes) until very smooth. Chill.
- **Coconut milk**
1 cup fresh shredded coconut in 1 cup water or fresh coconut milk. Whip in blender until smooth. Strain well or use in cereal unstrained. Coconut milk can be added to other nut milks: Coconut-almond, Coconut-sesame, and Coconut-cashew.



Alternatives to Butter and Cheese

1. Non-dairy margarines without unhealthy fats and preservatives and clarified butter or ghee are available in health food stores and in some neighborhood stores.

Ghee is not difficult to make, as described below from the article, *Liquid Gold*, by Beatrice Trum Hunter:

- Place a pound of good-quality (grade AA) unsalted butter in a heavy saucepan. Allow the butter to melt either on top of the stove or in the oven.
- Stir occasionally and bring the butter to a slow boil.
- When a layer of foam covers the surface, lower the heat and continue to cook undisturbed for about 1 hour on top of the stove or slightly longer (1-1/4 to 1-1/2 hours) in the oven.
- By then, the butter will have separated. Under the layer of solid white surface foam will be amber-colored clarified butter (ghee), and at the bottom of the saucepan there will be some sediment.
- What has occurred is that the water has evaporated, and the protein solids have separated from the original butter.
- Without shaking the saucepan, use a fine-mesh wire skimmer to carefully skim off as much foam as you can from the surface.
- Strain the clear liquid ghee through several thicknesses of cheesecloth to remove the remaining foam. Discard the foam.
- Ladle the clarified ghee into a clean glass jar or crock with a tight-fitting lid.
- Refrigerate or freeze the ghee. At low temperatures, the ghee will become solid. Properly clarified, ghee has a long shelf life.
- One pound of butter will yield about 1-2/3 cups of ghee (about 3/4 pound). It is possible to make ghee from salt butter but the salt will mask the delicate flavor of the finished product.

Use ghee as you would use butter or oil for sautéing, braising, or in combination with cooked vegetables, legumes, and casseroles. Ghee can be heated to a higher temperature than most oils or fats without the problems of bubbling and smoking. The water, which normally bubbles at 212°F, has been removed in clarifying the butter. The protein solids, which generally reach a smoking point at about 250°F in fats and oils, also are removed in making ghee.

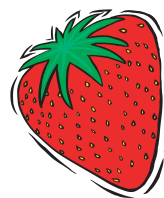
If you wish, you can make seasoned ghee for special dishes. When you melt the butter, select some aromatic substance to your liking. This might be a piece of peeled, sliced, fresh ginger root, two tablespoons of cumin seeds, two tablespoons of whole cloves, or other flavoring substances you enjoy. Whatever you use needs to be strained out of the ghee when you pour it through the cheesecloth. Like butter, ghee is a good source of vitamin A. In *Milk and Milk Products in Human Nutrition*, a publication of the Food and Agriculture Organization of the United Nations, it is stated that the nutritive properties of ghee are superior to other animal and vegetable fats. Also, research has shown that ghee does not raise the blood cholesterol.

2. When recipes call for ricotta cheese, cottage cheese, yogurt, or sour cream, tofu is an excellent substitute. Crumble firm tofu and season it with a dash of soy sauce to make dairyless ricotta or cottage cheese. Blend soft tofu with a small amount of water and a teaspoon of lemon juice to make dairyless yogurt or sour cream. Select Romano (sheep) or goat cheese for the majority of your cheese choices. Yeast cheese, a nutritional yeast product grown on molasses, is a yellow, flaky powder that smells like chicken soup mix. Sold in health food stores, this “cheese” could be added to cooking for flavor.

Suggestions for Cow Dairy-free Eating

Breakfast

- Fresh vegetable or fruit juice or fresh fruit
- Any of the hot whole grain cereals, such as cream of rice, oatmeal, cream of wheat, or cream of barley served with goat rice, soy, almond, or oatmeal milk
- Any of the cold cereals with appropriate milk substitutes
- Whole grain pancakes, waffles, or muffins made with the milk substitute of choice like goat's milk
- Organic eggs or vegetable omelet, again made with non-dairy milk



Lunch and Dinner

- A basic meal of cooked low carbohydrate vegetables, beans or flesh (fish, chicken or turkey), grain, or root crop
- Bean soups (lentil or bean of choice) with cooked vegetables
- Stir-fry vegetables with meat or tofu
- Seafood with wheat-free pasta
- Broiled or poached fish
- Grain casseroles like Indian millet with currants and sunflower seeds or roasted pecans with wild rice
- Bean dishes, such as twice-cooked beans wrapped in corn tortillas or red lentil dhal or vegetarian chili
- Poultry, such as fresh chicken-vegetable soup or baked, roasted, or stir-fried chicken
- Any meal can be spiced up with a whole foods substitute for family favorites, such as baked french fries or baked sweet potato chips, vegetables with active-culture yogurt dips, and “jellos” made of agar agar or pure Knox gelatin with fruit juice sweetener if desired.



Snacks

- Fresh fruits
- Fresh nuts and seeds
- Rice or other whole grain crackers with almond butter
- Hummus and crackers or rice cakes
- Soy yogurt
- Goat yogurt with fruit
- Vegetables with wholesome dips (made from eggplant, avocado, lemon juice, garlic, and your choice of herbs)



“At A Glance” Alternatives for Cow Dairy

<u>Reactant</u>	<u>Suggested Substitutes</u>
<p>Cow Dairy</p> <p>Dairy includes all items made with or from cow's milk, including butter and all types of cheese. The cow milk proteins include casein, lactalbumin, and lactoglobulin.</p>	<p>Milks made of rice, soy, oats, or nuts, such as almond, Brazil, or pine nuts are alternatives. Other options include coconut milk, goat's milk, goat/sheep cheeses, and their yogurts.</p> <ul style="list-style-type: none"> • Fruit juice in place of milk works in many recipes. • Blenderized banana and almonds or cooked potato are cow milk substitutes. • Soft tofu blended with water and lemon and/or sea salt is an excellent substitute for soft cheese. • Cooked, blended beans with lemon juice and seasoning make a tasty cream cheese alternative.

Selected References for Dairy-Free Cooking

1. Hurt, Jones Marjorie. *The Allergy Self-Help Cookbook*. Rodale Press, 2001.
2. Martin, Jeanne Marie. *The All-Natural Allergy Cookbook*. Harbour Publishing, ISBN # 1550170449, 1997.
3. Shattuck, Ruth. *The Allergy Cookbook: Tasty, Nutritious Cooking Without Wheat, Corn, Milk and Eggs*. ISBN-10: 0451165179; ISBN-13: 978-0451165176. Signet, May 1986.
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6. Kidder, Beth and Friedman, Harold M. *The Milk-Free Kitchen: Living Well Without Dairy Products*. ISBN-10: 0805018360, Owl Books, 1991
7. Coss, Linda Marienhoff. *What to Eat: The Milk-free, Egg-free, Nut-free Allergy Cookbook*. ISBN-13: 9780970278500, Plumtree Press, 2001.
8. Zukin, Jane. *Dairy-free Cookbook*. ISBN-10: 1559580887, Prima Lifestyles, 1991.
9. Hills, Cherry Hilda. *Good Food, Milk Free, Grain Free*. ISBN-10: 0879832010. Mc-Graw Hill, 1999.
10. Lanza, Louie and Morton, Laura. *Totally Dairy-Free Cooking*. ISBN-10: 0688169090, Morrow Cookbooks, 2000.

Yeast-free Eating Plan

It is wise to substitute for the yeasts to which you react while you are resetting your internal immune responses. If you react to any of the following, substitute as suggested below:

- Baker's yeast, used as a leavening agent in all "risen" baked goods and many crackers.
- Brewer's yeast, also known as nutritional yeast, is used in all alcohol and vinegar production (except for Brach's organically prepared apple cider vinegar as noted below) and some nutritional supplements. Avoid all sources of brewer's yeast during your period of substitution.
- While following your program, you will need to shift your attention to unprocessed/unrefined foods. Those of you sensitive to the fungus (yeast) *Candida albicans* are often sensitive to a range of fungi, and you will do best avoiding yeast exposure as much as possible since candida yeast commonly contaminates commercial yeast sources.

Alternatives to Baker's Yeast

Baking soda and baking powder, preferably aluminum free, can be used to replace yeast as a leavening agent. Some cooks recommend buffered vitamin C in recipes as a substitute for baker's yeast.

Alternatives to Brewer's Yeast

In this case, it is important to avoid alcoholic beverages and vinegars. The one vinegar that is available that does not contain exposure to brewer's yeast is Brach's organic apple cider vinegar. This vinegar is made in a natural fermentation process that does not involve brewer's yeast. High-quality, hypoallergenic vitamins and minerals containing no yeast, corn, soy, dairy, or gluten must be selected when choosing supplements.

Suggestions for Yeast-Free Dining

Breakfast

- Fresh vegetable or fruit juice or fresh fruit with yogurt
- Whole cooked grains like rice, corn, barley, rye, millet, amaranth, oat, or buckwheat. Commercial preparations of cream of rice, rye, and barley as well as corn grits are available. Also, you may home grind any of these grains to make a fresh creamed cereal. These hot cereals can be eaten thinned with water or taken with cow, goat, rice, soy, almond, or oat milk.
- Many cold cereals are available at the health food store. These include pure rice, millet, or wheat puffs; 100% oat cereal; and corn flakes.
- Organic eggs or a vegetable omelet.



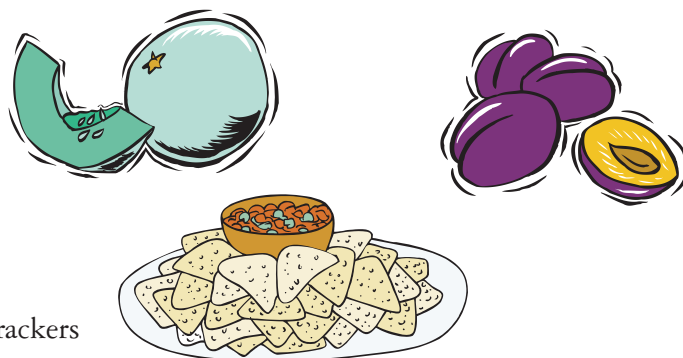
Lunch and Dinner

- A basic meal of cooked low carbohydrate vegetables, beans or flesh (fish chicken, turkey, beef, etc.), grain, or root crop
- Bean soups (lentil, black bean) with cooked vegetables
- Stir-fry vegetables with meat or tofu
- Seafood with whole grain pasta (wheat-free pasta is easier to digest)
- Broiled or poached fish
- Bean dishes like vegetarian chili
- Poultry, such as fresh chicken-vegetable soup and baked, roasted, or stir-fried chicken
- Any meal can be spiced up with whole foods substitutes for family favorites, such as baked french fries or baked sweet potato chips, vegetables with active-culture yogurt dips, and "jellos" made of agar agar or pure Knox gelatin with fruit juice as optional sweetener.



Snacks

- Japanese rice balls filled with avocado or tuna
- Trail mix with fresh nuts and seeds
- Baked corn or potato chips
- Fresh fruit
- All-natural gelatin
- Corn chips or potato chips with salsa
- Hummus or baba ganoush with vegetables or crackers



“At A Glance” Alternatives for Yeast

Reactant	Suggested Substitutes
<p>Yeast: Baker’s and Brewer’s</p> <p>Yeast is regularly used to flavor foods in leavening (baked goods) and fermented foods.</p> <p>Baker’s Yeast:</p> <p>Baker’s yeast is a high-yield yeast strain used primarily in leavening bakery products, including breads, rolls, bagels, and other bread dough such as pizza.</p> <p>Brewer’s Yeast:</p> <p>Brewer’s yeast is commonly used in fermented foods like all alcoholic beverages (wine, beer, and hard liquor). It is also used in the making of vinegar (wine, apple, Balsamic, etc.) and found in salad dressings and pickled foods. Other foods including sauces, gravies, soups, bouillons, protein drinks, frozen entrees, vegetarian hot dogs and patties, etc. may include Brewer’s yeast as a flavoring agent. Alcohol in beverages, medications and flavoring agents are also a source of exposure for yeast.</p>	<p>Herbs and spices can replace yeast as a flavoring agent. Baking soda and powder (brands without aluminum are better choices) and buffered vitamin C can replace yeast as a leavening agent.</p> <ul style="list-style-type: none"> • Yeast-free crackers (check the label to be sure) include rice cakes, matzo, rye crackers, corn tortillas, and popcorn cakes. Some commercial yeast-free crackers are Wasa light and organic rye, Kavli™ and Lavoosh™, Nature’s Hilights, as well as rice crackers. Commercial yeast-free breads include rice bread, Essene sprouted-grain breads, macrobiotic breads, etc. • Salad dressings with oil and lemon are a good substitute. Also, Bragg’s Organic Apple Cider Vinegar is a yeast-free, non-brewed vinegar.

Selected References for Further Reading: Yeast-Free Eating

1. Crook, W.G. and Jones, M.H. *The Yeast Connection Cookbook*. Professional Books: Jackson, TN, 1989.
2. DeSchepper, Luc. *Candida - Diet Against It*. ISBN-10: 0572026617. Foulsham, 2006.
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4. Gustafson, Helen and O’Shea, Maureen. *The Candida Directory & Cookbook*. Berkeley, CA: Celestial Arts Publishing, 1999.
5. Lewis, Sondra K. *Allergy & Candida Cooking - Rotational Style*. Canary Connect Publ., Coralville, IA, 1996.
6. Martin, Jeanne M and Rona, Zoltan. *The Complete Candida Yeast Guidebook*. Rocklin, CA: Prima Publishing, 2000.
7. Trickett, Shirley. *Recipes For Health: Candida Albicans*. Thorsons Publishing, 1995.
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9. Rockwell, Sally. *Coping with Candida Cookbook*. ISBN-10: 0916575004. Diet Design, 1991.
10. Connolly, Pat. *The Candida Albicans Yeast-Free Cookbook*. ISBN-10: 0658002929. McGraw-Hill, 2000.

Egg-free Eating Plan

Eggs are versatile and one of nature's most perfect proteins, but nature has also been kind enough to give us available alternatives.

Basic Substitutions for Egg Yolks

The best substitute for egg yolks is arrowroot powder. Arrowroot is a tuber grown in the Caribbean. It is dried and powdered and looks and acts like cornstarch, minus some odor and flavor. It is sold in natural food stores and in many supermarkets in the spice section. In a custard or sauce, substitute two tablespoons of arrowroot per egg yolk. Mix arrowroot in cold water only. It lumps immediately upon contact with heat. Arrowroot yields the same smooth texture as egg yolk, but is thinner and tastes less rich. Commercial eggless mayonnaise is available in health foods stores. Duck eggs and goose eggs do not cross react with chicken eggs and are another alternative.

Basic Substitutions for Egg Whites

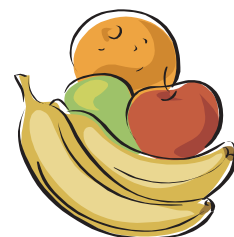
If you are reactive to egg whites, here are three suggestions while baking:

- Reduce the amount of space the batter needs to rise. If a cake recipe calls for egg whites, make two smaller cakes or muffins.
- Add two tablespoons of lemon juice or vinegar to the batter to raise its chemical activity, which helps make it lighter.
- Triple the amount of baking soda or powder. Baked goods are slightly heavier without egg whites, so avoid recipes that depend heavily on them for texture, such as soufflés or angel food cake.

Suggestions for Egg-Free Dining

Breakfast

- Fresh vegetable or fruit juice or fresh fruit with yogurt
- Whole cooked cereals like rice, corn, barley, rye, millet, oatmeal, buckwheat, quinoa or amaranth. Commercial preparations of cream of rice, rye, and barley and corn grits are available. Also, you may home grind any of these grains to make a fresh creamed cereal. These hot cereals can be eaten thinned with water or taken with cow, goat, rice, soy, almond, or oat milk.
- Many cold cereals are available at the health food store. Examples include pure rice or millet puffs, 100% oat cereal, corn flakes, spelt flakes, flax, Kamut®, and kasha.



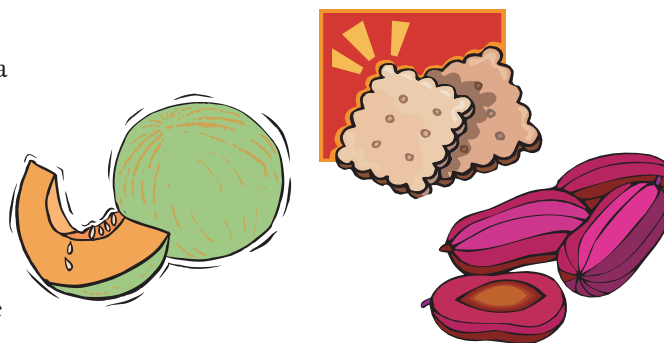
Lunch and Dinner

- A basic meal of cooked low carbohydrate vegetables, beans or flesh (fish, chicken, turkey, beef, etc.), grain, or root crop
- Bean soups (lentil, black bean) with cooked vegetables
- Stir-fry vegetables with meat or tofu
- Seafood with pasta and vegetables
- Broiled or poached fish
- Grain casseroles, such as Indian millet with currants and sunflower seeds or roasted pecans with wild rice
- Bean dishes, such as twice-cooked beans wrapped in corn tortillas, red lentil dhal, or vegetarian chili
- Poultry, such as fresh chicken-vegetable soup or baked, roasted, or stir-fried chicken
- Any meal can be spiced up with whole foods substitutes for family favorites, such as baked french fries or baked sweet potato chips, vegetables with active-culture yogurt dips, and “jellos” made of agar agar or pure Knox brand gelatin with fruit juice as an optional sweetener.



Snacks

- Japanese rice balls filled with avocado or tuna
- Trail mix with fresh nuts and seeds
- Whole grain muffins or crackers (wheat-free are easier to digest)
- Baked corn or potato chips
- Fresh fruit
- All-natural gelatin sweetened with fruit juice



“At A Glance” Alternatives for Egg

Reactant	Suggested Substitutes
Egg Eggs from chicken are the item tested. You can be sensitive to either egg white, yolk, or both.	To replace the binding effect of egg yolks, you can use arrowroot, ground flax, and other fruit pectins, like apricots or guava. The leavening effect of egg whites can be replaced by baking soda, baking powder, and buffered vitamin C powder.

References for Further Reading: Egg-Free Eating

1. Fenster, Carol, Ph.D. *Special Diet Celebrations*. Savory Palate Inc. 1999.
2. Hurt, Jones Marjorie. *The Allergy Self-Help Cookbook*. Emmaus, PA: Rodale Press, 2001.
3. Martin, Jeanne Marie. *The All-Natural Allergy Cookbook*. Harbour Publishing, ISBN # 1550170449, 1997.
4. Shattuck, Ruth. *The Allergy Cookbook: Tasty, Nutritious Cooking Without Wheat, Corn, Milk and Eggs*. ISBN-10: 0451165179; ISBN-13: 978-0451165176. Signet, May 1986.
5. Reno, Liz, MA and De Vrais Joanna, MA. *Allergy Free Eating*; Celestial Arts, 1995.
6. Yoder, Eileen Rhude. *Allergy-Free Cooking: How to Survive the Elimination Diet and Eat Happily Ever After*. ISBN-10:0201097974. Addison-Wesley:New York, 1987.
7. Sass, Lorna. *Great Vegetarian Cooking Under Pressure: Two-hour Taste in Ten Minutes*. William Morrow and Co., 1994.
8. Beckwith, Donna. *The Egg, Dairy and Nut-free Cookbook*. ISBN# 1412038731.Trafford Publishing, 2004.

“At A Glance” Alternatives for Soy

Reactant	Suggested Substitutes
<p>Soy</p> <p>Soy is another food found in many forms such as the bean itself, soy flour, soy oil, soy seasoning, and soy protein. Soy is a common “hidden” food additive and is used in many forms such as the bean itself, as flour, milk, oil, as cheese called tofu, as miso (the fermented soy paste) and as soy sauce/tamari in the form of seasoning. Textured soy protein is a common meat substitute.</p> <p>Some ‘hidden sources’ include: vitamin supplements with ‘amino acid chelates’ or ‘mineral chelates’, hydrolyzed vegetable protein, soy lecithin and soy isolate in commercial foods, natural flavoring (soy can be used as a carrier protein). Soy can also be found in products like soaps, printer’s ink, fertilizers, paints and linoleum. Careful scrutinizing of labels and products is very necessary.</p>	<ul style="list-style-type: none"> • Soy bean has many bean substitutes (kidney, black, pinto, chickpeas, etc.). • Soy sauce can be replaced by sea salt and vegetable cubes with brand names such as Vogue, Frontier, Morga (Swiss), Steinbach (German), and Rapunzel (British). It can also be substituted by adding wine, and/or mushroom broth. Vegemite® by Kraft Foods is also a suitable substitute. <p>Note: Most vegetable cubes use yeast or MSG as ingredients, so read the label carefully or consult a nutritionist before choosing the specific brand.</p> <ul style="list-style-type: none"> • Soy protein can be substituted by fresh meats, fish, beans, and vegetables. • Alternative oils are plentiful. If you react to soy oil, avoid fried fast foods or fried restaurant-prepared foods since soy oil is likely to be a part of the vegetable oil used.

“At A Glance” Alternatives for Sugar

Reactant	Suggested Substitutes
<p>Sugar</p> <p>Sugar is the most common food additive used in this country. Many processed foods contain sugar in the form of cane sugar, beet sugar, or corn sugar also called corn syrup or high fructose corn syrup. These foods include beverages, candy, ice cream and ices and baked goods, peanut butter, beer and most alcohol, hams, juices, and canned foods. It may also be found in medications, lozenges, vitamins, and cosmetics. Terms like sucrose and dextrose can also signify the presence of sugar. Reading labels carefully is therefore very important. <i>The Alkaline Way</i> suggests limiting the intake of sugar as far as possible even if you are not sensitive to it.</p>	<p>Choose amongst those to which you do not react:</p> <ul style="list-style-type: none"> • Honey, maple syrup and maple sweeteners, barley and rice malt, fruit juice concentrate, date sugar, fig concentrate, and carob are among the alternatives. • Sucanat® brand of evaporated whole cane juice is an additional alternative. • Stevia and agave are also natural substitutes for sugar as a sweetener.

“At A Glance” Alternatives for Hydrogenated Oil

Reactant	Suggested Substitutes
<p>Hydrogenated Oil</p> <p>Liquid oils made solid by the addition of hydrogen are called “hydrogenated”. These oils contain unnatural “trans fatty acids”. Hydrogenated oils are polyunsaturated oils, which have been processed with hydrogen, causing hydrogen atoms to attach to the unsaturated sites in the fatty acids. This results in the formation of unhealthy trans-fatty acids and produces a more stable fat at higher temperatures and a solid fat at room temperature.</p> <p>Hydrogenated oils are unhealthy fats that are associated with cardiovascular disease, high cholesterol and blood lipids (fats), and an increased risk of cancer. They interfere with the normal metabolism of essential fatty acids and can contribute to fatty acid deficiencies despite a high-fat intake in the diet. They are best eliminated from your diet completely even if you are not reactive to them! Hydrogenated oils also contain residual nickel compounds from the hydrogenation process making it even more a reason to avoid it.</p> <p>Hydrogenated oils are listed as “hydrogenated” or “partially hydrogenated” soybean oil, vegetable oil, corn oil, etc. They are in margarines, processed vegetable oils, mayonnaise, commercial peanut butter, baked goods, chocolate, and some carob products, all of which should be avoided. The use of hydrogenated oils in processed food and food processing is extensive.</p>	<p>Fresh cold and expeller pressed oils from sunflower seeds, safflower, olives, grape seeds, peanuts, sesame and flax seed, soy, almonds, and walnuts are alternatives. Canola oil is also an alternative. Close label reading is important.</p>

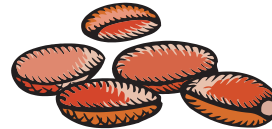
Healthful Enhancements

Recipes for Fat-Free Dressings and Sauces

Many of our foods taste so much better when topped with a tasty dressing or sauce, particularly ones that do not pack in unwanted fat calories! Here are some tried and tasty recipes for oil-free salad dressings for your eating pleasure.

Almond Green Goddess Dressing

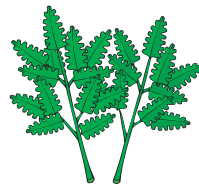
- 1 cup of almonds pre-soaked for 8 hours
- 2 cups purified water or light vegetable stock
- 1/2 bunch of parsley, chopped
- 2 scallions, chopped
- 2 cloves garlic
- juice of 2 lemons
- Tamari (wheat free), Braggs™ or Dr. Bronner's™ liquid aminos or sea salt to taste



Pour 1 cup of water or stock into blender and add lemon juice, parsley, garlic, and seasoning. Blend well. Add 1/4 of the almonds and blend. Slowly add remaining almonds and water and continue blending until you have a smooth, creamy dressing. Refrigerate before serving.

Sunflower Dressing

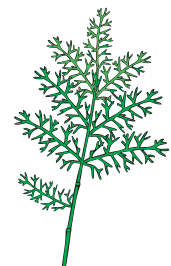
- 1 cup sunflower seeds
- 1 cup spring water
- juice of 2 lemons
- 2 scallions, chopped
- 1/2 bunch of parsley, chopped
- 2 Tbs. fresh tarragon or 1/2 tsp. dried thyme
- 2 cloves garlic
- Kelp or Braggs™ 'liquid aminos' to taste



Place half of the sunflower seeds in blender. Add remaining ingredients and blend. Add remaining sunflower seeds while blending. If dressing is too thick, add additional water. Refrigerate before serving.

Dill Tahini Dressing

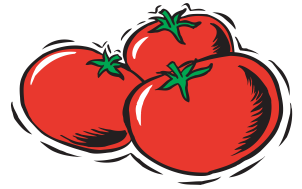
- 1 cup tahini, raw
- 1/3 cup fresh lemon juice
- 1/4 cup tamari, Braggs™ liquid aminos, or sea salt to taste
- 2 Tbs. fresh minced dill or 1/2 tsp. dried dill
- 1 Tbs. garlic powder
- purified water or light vegetable stock



Mix tahini and lemon juice and blend. Add dill, garlic, and seasoning. Blend while adding water or stock until desired creamy consistency is obtained. Refrigerate before serving.

Curried Pumpkin Dip

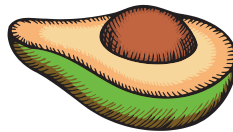
- 2 cups grated pumpkin or butternut squash
- 1/2 avocado, sliced
- 1 small tomato, chopped
- 1 celery stalk with leaves, sliced
- 2 scallions, chopped
- 2 Tbs. Tamari, Braggs™ liquid aminos, or sea salt to taste
- 2 tsp. curry powder
- 2 Tbs. lemon juice
- 1/2 cup purified water



Put water in blender and add vegetables. Blend until smooth. Add lemon juice and curry powder and season to taste. Add additional water if too thick. Refrigerate before serving.

Spinach Dip

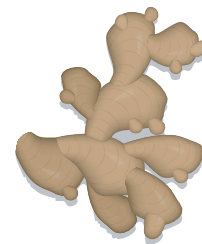
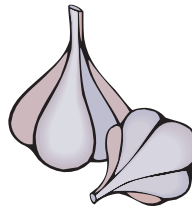
- 1-1/2 cups spinach
- 1 ripe avocado, sliced
- juice of 1 lemon
- 1/2 cup purified water
- 1 tsp. dried mustard powder
- 2 Tbs. fresh basil or 1/2 tsp. dried sea salt to taste



Add water and avocado to blender. Blend until smooth. Add remaining ingredients. Adjust seasoning to taste. Refrigerate before serving.

Hank's Pesto Sauce

- 2 oz. fresh ginger (peeled)
- 8 large cloves garlic
- 1/2 bunch of parsley
- 1 cup organic sesame oil (e.g., Spectrum Naturals™ or Flora™ brand)
- sea salt to taste



Add ginger, garlic, and parsley to food processor and chop into fine bits. Marinate the chopped vegetables in the sesame oil for 10-20 minutes and add sea salt to taste.

If you would like to suggest additional cookbooks or Web sites that offer wheat, gluten, corn, dairy, yeast, egg, and sugar-free recipes, please fax them to:

**Health Studies Collegium
44621 Guilford Drive, Suite 150
Ashburn, VA 20147
Tel: 800.328.7372 • Fax: 703.450.2997**

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**Until one is committed,
there is hesitancy,
the chance to draw back,
always ineffectiveness.**

**Concerning acts of initiative (and creation)
there is one elementary truth,
the ignorance of which kills countless ideas
and splendid plans:**

**That the moment one definitely commits oneself
then Providence moves too.**

**All sorts of things occur to help one
that would otherwise never have occurred.**

**A whole stream of events issues from the decision,
raising in one's favor all manner
of unforeseen incidents and meetings
and material assistance
which no one could have dreamt
would come their way.**

**Whatever you can do, or dream you can, begin it.
Boldness has genius, power, and magic in it.**

Begin it now.

Goethe

Autoimmune-related conditions / symptoms for which LRA by ELISA/ACT® tests can be helpful

Common Symptoms	Diagnoses and Syndromes	
Muscle Aches	Asthma	Irritable Bowel Syndrome (IBS)
Joint Pain	Biliary Cirrhosis, Primary	Lupus Erythematosus (SLE)
Fatigue	Chronic Fatigue Immune	Multiple Sclerosis (MS)
Inflammation	Deficiency Syndrome (CFIDS)	Myasthenia Gravis
Dizziness	Crohn's Disease	Neutropenia (Autoimmune /
Bloating / Water Weight	Dense Deposit Disease	Immune Complex)
Insomnia	Diabetes, Type 1	Pemphigus Vulgaris
Depression	Diabetes, Type 2	Pneumonitis / Bronchitis
Heart Palpitations	Discoid Lupus	(Allergic)
Migraine Headaches	Eczema	Polymyositis/Polymyalgia
Weight Management	Enteropathy	Psoriasis
Skin Rashes	Fibromyalgia	Rheumatoid Arthritis
Sinusitis	Glomerulonephritis	Rhinitis (Delayed Immune)
Rhinitis	Hepatitis, Chronic Active	Sinusitis (Delayed Immune)
Respiratory Conditions	Hyperthyroidism (Grave's)	Thrombocytopenia
Poor Concentration	Idiopathic Thrombocytopenia	Thyroiditis (Hashimoto's)
Hives	Purpura	Ulcerative Colitis
Addison's Syndrome	Infertility (Autoimmune)	Vitiligo
Anemia, Hemolytic		
Anemia, Pernicious		

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