# An Introduction to the Whole-Plant-Food, SOS-Free Diet

What it is, why TrueNorth Health Center promotes it, and the details of how to eat it.

by Alan Goldhamer, D.C. and Toshia Myers, Ph.D.

he TrueNorth Health Center (TNHC) in Santa Rosa, California serves an exclusively wholeplant-food diet that is free of added salt, oil and sugar (SOS), which is called the SOS-Free Diet.

The SOS-Free Diet—influenced by the principles of Natural Hygiene—aims to provide optimal nutrition to prevent and reverse disease. Appropriate amounts of sleep, sun exposure, and physical activity, as well as stress management, support the health-promoting benefits of this way of eating.

The SOS-Free Diet is composed of 70-75% carbohydrates, 10-12% protein, and 15-18% fat, with trace amounts of naturally occurring sodium. It is also free of processed vegan foods and recreational drugs, including caffeine, nicotine, alcohol, and marijuana. Supplementation with vitamin B12 is necessary.

### Why Eat the SOS-Free Diet?

This diet promotes health by eliminating animal foods and providing adequate quantities of nutrient-dense plant foods that are high in fiber, unsaturated fatty acids, phytochemicals, vitamins, and minerals. Epidemiological studies and meta-analyses have identified correlations between plant-based diets and reduced risk (and, in some cases, reversal) of obesity, cardiovascular disease, type II diabetes, metabolic syndrome, some types of cancer, arthritis, and kidney dysfunction when compared to omnivorous diets. Although research has not yet conclusively proven how plant-based diets prevent and reverse disease, the nutrients in plant foods are thought to improve health by lowering levels of cellular inflammation and oxidative stress, and positively affecting gut bacteria composition and metabolites.

The SOS-Free Diet also eliminates added salt, oil, and sugar, including refined carbohydrates. These substances increase the pleasurable qualities of food and contribute to a cycle of overconsumption, otherwise known as the "Pleasure Trap." Completely removing them from the diet can potentially reduce the desire to overeat, especially for people who are particularly susceptible to the addictive qualities of highly processed food.

There is little doubt that diets high in sodium, sugar, and fat—especially when combined—lead to chronic degenerative diseases. High-salt diets have been shown to cause spikes in blood pressure, as well decrease arterial functioning and antioxidant activity. Additionally, a recent study showed that high-salt diets negatively affect gut microbiota and immune cells, and implicates high-salt diets in autoimmunity. High-fat diets are associated with increased risk of several diseases, including cardiovascular disease, diabetes, and cancer. Studies also suggest that oil consumption impairs endothelial cell function, which is thought to contribute to cardiovascular disease. Diets high in processed sugars increase inflammation, and have been associated with increased risk of nonalcoholic fatty liver disease, cardiovascular disease, cancer, and diabetes.

Despite decades of anecdotal clinical evidence and a handful of published case reports, there is little clinical research on the health effects of the SOS-Free or similar diets. Conducting rigorous clinical nutrition research in free-living humans is difficult, but evidence-based knowledge is necessary to substantiate claims. To this end, the TrueNorth Health Foundation is currently conducting a preliminary study on six-month SOS-Free Diet adherence



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rates following an in-patient intervention, as well as the effect of the diet on biomarkers of metabolic health and inflammation. This study will provide data necessary to design larger randomized, controlled studies on the health effects of SOS-Free Diet adherence.

# How to Eat the SOS-Free Diet?

Serving sizes suggested are based on a daily caloric intake of 1,500-3000 kcal. Let's break it down.

### Foods included on the SOS-Free Diet:

• Vegetables: 10-30+ servings per day (serving size = ½ cup nonleafy or cooked leafy; 1 cup raw leafy). Large amounts of vegetables that are dense in nutrients and low in calories. At least two of the servings should be dark leafy greens. Eat them raw, steamed, baked, or occasionally blended.

Suggested vegetables include: kale, swiss chard, collards, purslane, lettuces, spinach, arugula, mustard greens, sorrel, watercress, herbs, carrots, beets, sweet potatoes, yams, white potatoes, purple potatoes, broccoli, cauliflower, brussels sprouts, cabbage, bok choy, green beans, squashes, peppers, mushrooms, watercress, artichoke, radishes, sprouts, celery, asparagus, cucumber, onion, tomato, zucchini, sea vegetables.

• Fruits: 4-10+ servings per day (serving size = 1 mediumsized fruit; 1 cup chopped; ¼ cup dried). Fresh and frozen fruits; limit dried fruits. At least one of the servings should be of berries. Limit avocado to ½ per day.

Suggested fruits include: banana, apple, raspberries, concord grapes, acai berries, apricots, cherries, melon, strawberries, blueberries, raspberries, blackberries, pineapple, clementine tangerines, nectarines, tangerine, oranges, lemons, limes, grapefruit, honeydew, kiwifruit, plums, pomegranates, prunes, papaya, peaches, mango, pears, watermelon, avocado.

• Whole Grains: 0-10+ servings per day (serving size = ½ cup cooked grains; 1 cup cold cereal; 1 whole grain tortilla or bread slice). Gluten-free whole grains; best if they are intact (e.g., cooked whole-grain brown rice vs. wholegrain brown rice pasta).

Suggested grains include: gluten-free oats, buckwheat, quinoa, brown rice, corn, wild rice, millet, amaranth, teff.

• Legumes: 0-5+ servings per day (serving size = ½ cup cooked; 1 cup fresh peas or sprouted lentils). Legumes can be eaten cooked or blended into soups, spreads, or dips.

Suggested legumes include: black beans, kidney beans, garbanzo (chickpeas), pinto beans, lima beans, butter beans, mung beans, cannellini beans, edamame, tempeh, beluga lentils, red lentils, green lentils, black-eyed peas, split peas.

• Nuts and Seeds: 1 ounce per day (1 ounce = ¼ cup). A small amount of nuts and seeds goes a long way. Can be eaten whole or as a nut or seed butter.

Suggested nuts and seeds include: almonds, walnuts, cashews, pecans, hazelnuts, pistachios, flax seeds, pumpkin seeds, sesame seeds, chia seeds, hemp seeds, sunflower seeds.

**Foods to avoid:** All animal products, including meat, fish, fowl, eggs, and dairy; added sugar, salt, and oil; and refined grains and other processed foods should be completely avoided.

**Micronutrients:** By including a variety of in-season produce and foods of all colors, the SOS-Free Diet should contain all essential nutrients, with the exception of vitamin B12. Therefore, it is not recommended to take supplements other than 1000 mcg of methylcobalamin (Vitamin B12) unless a specific deficiency arises. Small amounts of sea vegetables (e.g., wakame, dulse, nori, kelp) and regular sun exposure are recommended to obtain adequate amounts of iodine and vitamin D, respectively.

**Caffeine, alcohol, tobacco, and other drugs:** The SOS-Free Diet does not allow for the use of alcohol, nicotine, caffeine, or other recreational drugs. Whenever possible, it is also important to avoid exposure to environmental toxins, including over-the-counter or non-maintenance prescription drugs, pesticides, herbicides, volatile organic compounds (VOCs), radiation, and heavy metals.

**Where to buy food:** Shopping at the grocery store is simplified on the SOS-Free Diet since most of the foods can be found in just a few areas:

• **Produce section:** Enjoy a wide variety of fresh fruits and vegetables. Fruits are great for snacks, breakfast (e.g. as a topping



on oatmeal), as a dessert, or squeezed over salads and entrées (think lemons and limes). Fresh vegetables are great raw in tossed salads, steamed, or put into soups or other dishes. Fresh herbs are also found in this section and give great flavor to meals.

- **Bulk section:** Whole grains, beans, lentils, seeds, and nuts are found here. Parboiled or microwave-ready SOS-free brown rice or other whole grains are a convenient alternative. A small amount of nuts and seeds is healthful, but use sparingly, as they are calorically dense.
- Frozen section: Frozen fruits (especially berries) and vegetables are a convenient and cost-effective option.
- **Canned foods:** Salt-free beans and lentils are convenient. Salt-free tomato products are especially great when tomatoes are not in season.
- Other: Flavor can be added to foods using vinegars, citrus juices, spices, fresh herbs, salt-free mustards, and SOS-free salad dressings.

Other places to buy foods include ethnic grocers, farmers' markets, CSAs, and online.

**Cost:** Healthy eating is often less expensive than buying processed foods and eating out. Stick to the shopping guidelines above, and consider frozen fruits and vegetables, whole grains and legumes from the bulk section, salt-free canned products, and community supported agriculture. Buy produce that is in season; it is often on sale and tastier than produce not in season.

**Buying organic:** It's great if you can afford organic, but don't let concern for pesticides stop you from sticking to the SOS-Free Diet. Do what fits your budget. The benefits of eating conventionally grown fruits and vegetables far outweigh the risks from pesticide exposure.

**Eating out at restaurants:** Many restaurants now offer vegan options, but few offer SOS-free, whole-plant-food options. Fear not: with a little planning, you can greatly minimize the harm from eating at restaurants. That being said, the less you eat out, the better. If you do eat out, remember to:

- **Plan Ahead:** Check the menu ahead of time and look for steamed or baked options. Asian and Mediterranean restaurants are best. Call ahead to make sure a plate of steamed vegetables with plain brown rice is an option.
- **Prepare for the Worst:** Almost all restaurants offer salads that can be served without animal products

# **Two-day SOS-Free-Diet Meal Plan**

Here is a two-day SOS-Free Diet meal plan. The recipes for this meal plan (with photos and nutrient breakdowns) will be linked on the NHA website.

Two-day SOS-Free-Diet Meal Plan					
Meal	Day 1	Day 2			
Breakfast	Steel-Cut Oatmeal	Banana and Flaxseed Polenta			
Lunch	Wild Rice and Spinach with Avacado and Grapefruit Salad and Steamed Asparagus and Artichoke Hearts	Tu-No Salad with Corn Tortillas and Roasted Garlic Mashed Potatoes			
Dinner	Beefless Stew with Creamy Coleslaw and Fruit Salad with Fresh Mint	Yellow Curry Lentils with Cider Steamed Swiss Chard and Cilantro Buttered Corn			
Snacks	None	1 pear, 1 orange, 1 apple and 1/2 oz. walnuts			

Servings				
Food Type	SOS-Free Guideline	Day 1 Servings	Day 2 Servings	
Vegetables	10-30 +	13	11	
Fruit	4-10 +	4.5	4.5	
Grains	0-10 +	2.5	3	
Legumes	0-5 +	0	3.5	
Nuts & Seeds	1-2 oz.	1 oz.	1 oz.	
Avocado	≥ 1/2	1/2	1/4	

<b>Macronutrient Ratios</b>				
Nutrition Info	SOS-Free Guideline	Day 1	Day 2	
Total Calories	1,500 +	1,520 kcal	2,007 kcal	
Carohydrates	>70%	73%	73%	
Protein	10-12%	10%	12%	
Fat	15-18%	17%	15%	

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# Can a Whole-Plant-Food Diet Help Lupus?

**Reports show that fasting and plant-food diets can improve symptoms** of autoimmune conditions, but TrueNorth wants to get more specific by Matthieu Bonjour M.D., Alan Goldhamer, D.C., Toshia Myers, Ph.D.

he TrueNorth Health Center has specialized in treating patients with water-only fasting and an exclusively whole-plant-food diet for 35 years. Clinicians and researchers at TrueNorth Health are

interested in the effects of water-only fasting followed by long-term adherence to an exclusively whole-plant-food diet free of salt, oil, sugar, and gluten on lupus disease activity. Lupus, or systemic lupus erythematosus (SLE), is an autoimmune disease in which the immune system produces antibodies that attack healthy tissue. Lupus is particularly devastating because it can

damage any organ as well as multiple organs at the same time.

Although lupus survival rates have increased over the last 50 years, long-term morbidity from disease progression and adverse treatment effects can result in physical disability and psychosocial challenges that impact one's quality of life and ability to work. This disease leads to substantial direct and

indirect cost to individuals and society, which disproportionately affects disadvantaged populations. Costs are driven by disease activity and disease damage.

Diet is emerging as a cost-effective treatment for chronic inflammatory conditions, including autoimmune disorders such as lupus. There are reports showing that fasting and plant-food diets improved clinical symptoms of rheumatoid arthritis, another autoimmune condition. There

have been a number of studies on the effects of individual dietary components, especially those found in plant foods, on lupus.

Only three published case reports exist that describe dietary intervention beyond specific nutrient supplementation on lupus patients. These reports showed that patients had positive improvements after implementing dietary changes (research in animals further supports these findings).



**Causes, Side-effects, and Treatments** 

Why a person gets lupus is not fully understood, but environment, epigenetics, gut health, and inflammation have all been connected to its disease risk and/or progression. The

biological mechanisms that regulate lupus are also complex and poorly understood. This complexity makes it difficult to treat lupus and has made it difficult to find effective treatments.

Since lupus can affect any organ, it causes a wide spectrum of clinical manifestations, depending on the damaged tissue. Symptoms may include extreme fatigue, fever,

joint pain, skin rashes, photosensitivity, shortness of breath, and chest pain. When clinical symptoms are present, laboratory tests—including complete blood count, electrolyte analysis, kidney and liver function tests, markers of inflammation, and more specific measures of autoantibodies (anti-nuclear, anti-dsDNA, etc.)—can be performed to substantiate the find-

"Lupus is particularly devastating because it can damage any organ as well as multiple organs at the same time." ings. There are currently no tests available that can definitively diagnose lupus, so it is diagnosed using a combination of clinical evidence and laboratory results.

Unfortunately, there is currently no cure for lupus. It is conventionally managed using treatments such as corticosteroids, antimalarials, and cytotoxic/immunosuppressive drugs that primarily act by reducing inflammation and immunological responses through nonspecific mecha-

nisms. These treatments manage the disease to varying degrees, but at the cost of patients having a higher vulnerability to infectious diseases and risk of other serious side effects.

The treatment relies on a discussion with your doctor, which takes into account the clinical and biological manifestations, risks and benefits, and affordability. Despite existing treatments and decades of active research, there remains an important need for effective therapies with low risk of adverse events.

### Participate in a case series:

We are looking for a few motivated lupus patients to participate in a case series to thoroughly monitor how this intervention will impact the course of their condition. No compensation will be provided. If you are interested in participating in this series, please contact us by October 19, 2019 at <u>thresearch@truenorthhealth.com</u> or call (707) 586-5555, extension 1142.

To request a referenced copy of this article, please email: info@healthscience.org



**Dr. Matthieu Bonjour, M.D.** is a second-year medical resident from France. He chose the specialty of internal medicine to take a multidimensional approach to complex chronic disease, with a particular focus on autoimmune conditions. He is passionate about finding solutions based on the highest levels of scientific evidence, while taking a holistic approach to

improving quality of life and reversing and preventing these diseases. He was co-author of a <u>study</u> conducted at Cochin Hospital in Paris on systemic lupus erythematosus treatment in medical school.



**Dr. Alan Goldhamer** is the founder of TrueNorth Health Center in Santa Rosa, California, which provides medical and chiropractic services, psychotherapy and counseling, and massage and body work. TrueNorth has become one of the premier training facilities for doctors wishing to gain certification in the supervision of therapeutic fasting. After completing his chiropractic

education at Western States Chiropractic College in Portland, Oregon, Dr. Goldhamer became licensed as an osteopathic physician in Australia. He is the author of *The Health Promoting Cookbook* and co-author of *The Pleasure Trap: Mastering the Hidden Force That Undermines Health & Happiness.* 



**Dr. Toshia Myers** is the research director at the TrueNorth Health Foundation in Santa Rosa, California. TrueNorth's aim is to conduct and facilitate rigorous, peer-reviewed research on the health effects of therapeutic water-only fasting and an exclusively plant-foods diet. Dr. Myers obtained a Ph.D. at Columbia University in New York and completed postdoctoral training at

the Centers for Disease Control and Prevention in Atlanta, Georgia and University of Copenhagen in Denmark. She has published her research in the journals *Developmental Cell*, *Proceedings of the National Academy of Sciences*, and *Stem Cell Reports*.

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and dressing. Eating before you arrive is a great way to enjoy the company of others while helping to avoid the dietary pleasure trap.

**How to flavor food:** There are many ways to make food taste delicious: fresh herbs (e.g., basil, parsley, mint, cilantro), spices, vinegars, citrus juices, and SOS-free condiments (mustard, ketchup, etc.) and dressings.

# Weight loss tips:

- Start meals with a large plate of raw or steamed vegetables (e.g., a huge salad, vegetable soup).
- Avoid dried fruit, fruit juices, non-intact grains (e.g., brown rice pasta, corn tortillas), and trigger foods.
- Only eat the recommended daily serving size of nuts and seeds (one ounce) or avocado (one half).
- Wait until you are hungry before eating.
- Engage in daily moderate activity (e.g., walking 30 min.).

# **Time-saving tips:**

- Cooking large amounts of grains, legumes, soups, dressings, and other simple recipes to last the week is one of the best ways to achieve success in sticking to healthy eating.
- Prepare fresh storable items, such as homemade hummus, dressings, fresh herbs, and soups and stews so healthy options are always on hand.
- Wash, chop, and shred vegetables ahead of time.

**Macronutrient ratio:** A macronutrient ratio describes the percentage of calories that come from carbohydrates, proteins, and fats. Following the SOS-Free Diet, one should aim for 70% or more of calories to come from carbohydrates, 10-12% from protein, and 15-18% from fat. For comparison, the standard American diet has a macronutrient ratio of 50% calories from carbohydrates, 15% from protein, and 35% from fat.

See Dr. Alan Goldhamer and Dr. Toshia Myers bios in top right-hand column.

To request a referenced copy of this article, please email: info@healthscience.org