# **MODERN NUTRITION**

(Summarized by Phuong T. H. Nguyen, July 29, 2025)

#### **BACKGROUND**

Most non-communicable diseases today such as cardiovascular disease, stroke, diabetes, sleep apnea, liver disease, kidney disease, cancer, Alzheimer, susceptibility to infection or long-term symptoms after acute infections such as COVID... are related to Metabolic syndrome (the most prominent public health threat of the 21st century with 5 typical signs: high blood pressure, high blood sugar, high triglycerides, low good cholesterol (HDL), and excess belly fat) and all originate from the current state of humanity eating more than necessary, living unnaturally, eating too much processed food that has lost most of its nutrients but is full of harmful chemicals, and being exposed to all kinds of stress and artificial environmental pollution. With its special structure, the heart is the only organ that cannot contract cancer and will stop functioning after about 2-2.5 billion beats. In addition, the number of divisions (self-reproductions) programmed in the genes of every other cell in the body is also limited and constant. These two fixed factors establish the foundation for the human natural lifespan. Below is a modern, scientific, simple, healthy, and inexpensive diet that would be suitable for all demographics, rich or poor, spanning all professions across the globe and capable of helping us live healthily until the end of our natural lifespans without having to worry about the above-mentioned modern diseases. This diet also helps to maximize longevity by not wasting heart beats through unnecessary or unhealthy psychological, physiological, physical, or social activities that would otherwise impose their cumulative tolls throughout life (the faster the heart beats, the shorter the lifespan). This summary incorporates the following modern medical foundations and personal experiences:

- I. The LUV (Low Uric Values) diet, presented in the book *Drop Acid: The Surprising New Science of Uric Acid* by Dr. David Perlmutter (published in 2024 in the US, a New York Times bestseller), aiming at optimal health through reducing blood Uric Acid level.
- II. The Shinya diet, presented in the book *The Enzyme Factor* by Dr. Hiromi Shinya (published in 2005 in Japan with over 2 million copies sold worldwide), aiming at optimal health through maximizing the body's enzyme reserve.
- III. The Nagumo diet, presented in the book *Being Hungry Makes You Healthy* by Dr. Yoshinori Nagumo (published in 2012 in Japan), aiming at optimal health through daily activation of the rejuvenating Survival gene group.
- IV. The writer's over 30 years' accumulated knowledge and experience in nutrition.

# **GUIDELINES**

- 1) Organic foods: Give priority to seasonal foods grown locally (on fertile soil and not in greenhouses, using organic fertilizers instead of NPK synthetic fertilizers, and free of pesticides and toxic/artificial chemicals), fresh (not spoiled, moldy, rotten, expired, or exposed to air for too long after opening the package, cutting, or cooking), raw (uncooked or unprocessed, such as fruits and vegetables...), wholesome (whole grains containing both germ and bran, whole vegetables and fruits including peel, whole fish and shrimp...), and non-GMO's. Only when organic foods are unavailable should you consume lower-quality foods in limited quantities, making sure to remove as much as possible unhealthy contents.
- 2) Manufactured foods: Do not consume artificial or manufactured foods (such as carbonated soft drinks, chewing gum, candy, chips, sausages, processed foods containing synthetic additives or preservatives, dairy products...), refined foods (such as sugar, white starch, white rice, refined cooking oil, refined salt...), or addictive substances (such as tobacco, alcohol, tea, coffee, banned substances...). Read the ingredients carefully and research the manufacturing processes before buying processed or non-organic foods.
- 3) Sweets: Do not use artificial or refined sweeteners (including sugar). The only sweets that can be consumed freely are fresh fruits, but they must be eaten as a separate meal, not with other foods, nor blended or juiced. If extra sweet taste is needed for cooking or food preparation, you can use very limited amounts of raw honey (unpasteurized, containing 85% Glucose and Fructose and 15% including many other sugars, minerals such as Zinc, Copper, Iron, Manganese, Chromium, Selenium, Magnesium, Calcium, Potassium, Vitamins such as A, B1, B2, B3, B5, B6, C, E, and Flavonoids such as Quercetin, Luteolin), natural stevia, monk fruit (which is calorie-free, cures colds, and aids digestion), maple syrup, or organic Allulose (found in figs and raisins). Otherwise, absolutely do not eat or drink sweets (including fruits) immediately before, during, or immediately after a regular protein & grain meal.

- 4) Protein: Do not consume milk or dairy products sold on the market. Avoid or minimize the use of animal meat (including eggs) due to its harmful blood-clotting fat and uric-acid-forming purine contents. Consuming limited amounts of whole fish and seafood is acceptable thanks to its good cholesterol and abundant nutrient contents, but beware of its still harmful purine contents. Plant proteins are recommended substitutes because they contain neither purines nor harmful fats and are much more economical and environmentally friendly. Except for soybeans, all other sources of plant protein (including grains, vegetables, beans, seeds, nuts, etc.) do not contain all 9 essential amino acids, so you need to combine different plant proteins in a meal to have the same quality of animal proteins while statying free of bad cholesterol and harmful purine. Plant proteins are not quantitatively inferior to animal protein in terms of amino acid contents. You need and should only eat about 0,8-1g of protein per day (whether animal, seafood, or plant) for each kg of body weight. Do not exceed this level because excess blood amino acids will increase blood acidity and gradually thin bones and teeth. Beware, however, that all beans (such as lentils, peas, chickpeas, green/red/black beans, etc.), nuts (such as macadamia nuts, walnuts, hazelnuts, chestnuts, etc.), cereals/grains, and oil seeds in pods (such as almonds, cashews, sunflower seeds, lotus seeds, sesame seeds, melon seeds, pumpkin seeds, peanuts, flax seeds, and so on...), despite being healthy sources of protein, starch, and oil, also contain toxic Lectin proteins that can cause digestive problems, vomiting, or even diarrhea, so they need to be soaked (twice, according to the author's experience) overnight to remove as much Lectin as possible before cooking or processing (such as fermenting, sprouting, stewing, boiling, or roasting) to breakdown any remaining traces of it. (Lectins are found in the highest concentrations in the outer layer of plants to protect them from being eaten by insects. See Steamed rice & bean recipe, Section 12.) Mushrooms are rich in vitamins, antioxidants, minerals, fiber, and protein, which help boost the immune system, support intestinal health, reduce the risk of metabolic diseases, and improve brain health. White mushrooms are especially rich in Vitamin D. Adequate green vegetables should always accompany proteins and grains in meals to reduce blood acidity while supplying the intestines with abundant healthy fiber.
- 5) Starch: Avoid foods containing gluten (which increases inflammation and uric acid) such as sugary foods and certain grains including wheat, rye, barley, triticale, and oats. Consume starchy roots (such as carrots, parsnips, sweet potatoes, and yams) in moderation (a few times a week) and gluten-free whole grains (such as brown rice, wild rice, millet, quinoa, amaranth, buckwheat, and sorghum) freely. Starch should always be eaten with fat, protein, and green vegetables to minimize abrupt increases in blood glucose and insulin. Avoid refined starch such as white rice, white flour, and grains or beans that have had the bran and germ removed (See <u>Steamed rice & bean recipe</u>, Section 12).

  6) Fats: Absolutely do not use saturated fats (which solidifies at room temperature), animal fats (especially shortening), butter, margarine, or any refined cooking oils sold on the market, which have been oxidized and/or contain abundant trans fat (a toxic artificial fat causing severe inflammation) due to the refining process. Regular consumption of fresh avocados, steamed/stewed whole fish and seafood (containing beneficial fats), and steamed whole grains, beans, oil seeds, and nuts should provide abundant healthy essential fats for the body. Raw extra virgin olive oil, sesame oil, and fish oil may be used in moderation only if necessary, but without frying or exposing them to air for too long.

Occasionally take fish oil supplements (Omega-3 fatty acids) if needed, but make sure they are free of synthetic

additives.

- 7) Spices: Avoid using foods containing synthetic additives (such as MSG, borax, and other chemicals in the lists below) or high levels of pesticides, growth stimulants, antibiotics, preservatives, etc. Read the ingredients carefully when buying processed or frozen foods. Sea salt may be used in limited quantities but must be stored in air-tight containers and used up as soon as possible to minimize oxidation, which creates extremely toxic strong acids. Regular consumption of more than 11g of salt/day may lead to fatty liver and diabetes. Fish sauce, soy sauce, or any type of sauce or spice mixture may be used in limited quantities as long as it is naturally brewed or produced and contains only natural ingredients, water, salt and yeast, without synthetic additives such as MSG (MonoSodium Glutamate or Flavour Enhancer), preservatives, stabilizers, emulsifiers, synthetic flavors, food coloring, baking powder, etc. Feel free to use any natural spices (the fresher the better), including onions, garlic, chives, ginger, pepper, chili, mustard, and especially turmeric (a member of the ginger family containing Curcumin, a phytochemical (Polyphenol) with antioxidant and anti-inflammatory properties). Squeeze abundant lemon juice to cooked or prepared dishes just before serving to add Vitamin C to the diet while enriching food taste.
- 8) Naturally fermented/cultured foods: Such as kimchi, pickles, mayonnaise, kombucha mustard, horseradish sauce, fermented hot sauce, relish sauce, fermented salsa sauce, etc., are rich in enzymes and probiotics and should

be consumed regularly if not daily, as long as they do not contain synthetic additives. Probiotics reduce inflammation and improve the metabolism of sugar and uric acid. Foods rich in prebiotics (fiber) such as artichokes, asparagus, bananas, garlic, barley, potatoes, onions, shallots, beans, blueberries, apples, flaxseeds, cocoa, nuts, seaweed, vegetables, bran, etc, should be consumed every meal. Inulin fiber in garlic, onions, bok choy, asparagus, etc, slows down the release of sugar in the body, promotes good intestinal bacteria growth, and inhibits the Xanthine Oxidase enzyme essential for producing uric acid. In case of digestive problems, take supplements of enzymes, coenzymes (such as Q10), and as many strains of probiotics as possible on an empty stomach right before meals (make sure they're free of synthetic additives)

- **9) Drinks**: Avoid distilled water and all unnatural drinks (including fruit juices/blends), except for organic cocoa drink (containing no synthetic/refined additives) and burdock tea (which is non-addictive and effective in treating inflammation and allergy symptoms, contains abundant Saponin that neutralizes fat, enhances digestion, absorbs starch and protein, eliminates excess cholesterol, and also contains extremely strong antioxidant Polyphenol, making burdock difficult to decompose in soil). Drink water in moderation when thirsty (do not force yourself to drink) or at least 3 times a day on an empty stomach, whether thirsty or not (in the morning when you wake up, 30 minutes before lunch, and 30 minutes before dinner), so to maintain a very light urine color, keep your throat moisted (not feeling dry or thirsty) all day long, and urinate no more than 5-6 times a day (a sign of excess water). Water includes filtered water (filtered of impurities, bacteria, heavy metals, chemicals, etc.) natural mineral water, and alkaline water (7.5 < pH < 8.5). Waiting until you are thirsty to drink is already too late, for harmful cumulative effects have already taken place in the body. Refrain from drinking water immediately before, during, and immediately after eating to avoid diluting gastric juices, hindering digestion. Drink water at 20°C or higher and avoid drinking ice cold water.
- 10) How to prepare and store food: Eat fresh and wholesome foods wherever possible (including leaves, peels, roots, bulbs, bran, germ, skin, shells, bones, heads, fat, etc.): Leaves contain abundant minerals and vitamins; Peels/shells contain antioxidant polyphenols: Roots contain starches and enzymes: Fish skin contains injury-healing substances and, right below it, DHA (DocosaHexaenoic Acid) and EPA (EicosaPentaenoic Acid), preventing atherosclerosis. Fats in fish and seafood are beneficial while those in animals are harmful. Other parts of fish and seafood, including heads, organs, and bones, etc, all contain nutrients the body needs. Eating whole foods ensures a comprehensive supply of beneficial nutrients (including even those possibly still unknown) in their natural proportions. Eating fruits with peels/skins helps with anti-oxidation, rejuvenation, and increased immunity, for most vitamins and antioxidants are located just under the skin to protect plants from being oxidized or rotten. Eat immediately after cutting or cooking and avoid chopping ingredients to minimize food exposure to air and oxidation (decomposition). If cooking is necessary, only boil until just cooked, simmer in water (boiling water keeps the temperature within 100°C, limiting the destruction of nutrients), smoke (smoke is both antiseptic and anti-oxidant), or roast at low temperatures. Absolutely do not fry, deep-fry, or stir-fry (oil boiling at high temperatures will destroy all nutrients and create toxic trans fats). Do not use microwave ovens and only use low heat when cooking. Only prepare enough foods for each meal. Leftovers, if any, must be covered (to reduce contact with oxygen in the air), refrigerated (to slow down the oxidation process), and eaten as soon as possible. Freezing food will gradually decompose its nutrients and should only be a temporary way of preservation. Meat and fish frozen for over 2 months must be discarded. Do not eat foods that are spoiled, expired, or exposed to air for too long.
- These two groups cannot afford to starve. Premenopausal women in general only accumulate subcutaneous fat (harmless) and not visceral fat (harmful), so fasting therapy will not be necessary for this group until menopause.] Only have meals when hungry until 60-80% full, and do not snack (Eating 60% full is best and should prolong life by 1.5 times in the long run; Only eat 80% full if you did not consume enough calories the day before). The feeling of hunger activates the process of autophagy, detoxification, and rejuvenation in cells. Fast for at least 12 hours everyday, just drinking enough water. This fasting period can be gradually increased to 16 hours (optimal for working age) or even 20 hours daily (depending on living conditions and work demands) after 4 months, when the body begins to enjoy the very real, obvious, and stable benefits of fasting. The feelings of hunger, discomfort, and cravings, and the urge to return to old harmful overeating habits should only be present for about a week. Starting the 2nd week, the new health regimen will gradually be accepted by the body with joy, satisfaction, and no more struggling. During the daily fasting period, moments of low-energy feeling may emerge. Simply sleep for about 10-15 minutes to allow the body to switch to

burning visceral fat, and you will feel great again.

**12) Meals**: Depending on how hard, dry, chewy, or soft the food is, chew 7-75 times (or until the food is well ground and mixed with saliva) to complete the first stage of digestion before swallowing. Chewing thoroughly also helps bones and jaw muscles develop well, keeps teeth straight, helps blood circulation in veins, activates brain cells, stabilizes nerves, increases concentration, and stimulates the secretion of the rejuvenating & anti-aging hormone Parotin. Chewing also helps secrete saliva to wash away oral bacteria, remove dental plaque, eliminate bad breath, moisturize the throat and digestive tract, and finally join the blood stream and increase blood circulation. The maximum food size absorbable by the intestinal wall is 15 Microns. Once further broken down by the stomach, food larger than 15 Microns will rot and produce toxins in the intestines before being excreted. Chewing thoroughly will save the amount of food that would have been wasted, along with the energy that would have been lost to process and eliminate the harmful resulted products. Chewing thoroughly also increases blood sugar while eating, thereby suppresses appetite, prevents overeating, and helps to lose weight. Chewing thoroughly also kills right in the mouth parasites (of usually 4-5mm in size) living in meat, fish, vegetables, etc. Foods with a firm textures require thorough chewing for swallowing and are thus better than soft ones. Drink water at least 30 minutes before meals and refrain from doing so right before, during, or right after meals.

\* Regular meals = 35% (green vegetables & avocados/nuts/oil seeds) + 50% whole grains + 15% protein

	Average contents					
	Protein	Starch	Fat			
Beans	20-30%	26-53%	1-3%			
Grains	7-12%	65-75%	2-6%			
Oil seeds	6-45%	1-45%	18-57%			
Seafood	20-30%	0	0,5-12%			
Meat	20-30%	0	3-30%			

(beans/fish/seafood/eggs). Start your meal with fresh green vegetables. Do not eat anything else after a meal (especially sweet desserts) until feeling hungry again (in 4-6 hours). As a rule of thumb, a healthy regular meal only needs to have 3 main components: (1) 35% vegetables and fat, (2) 50% starch, and (3) 15% protein, all of which should be eaten as wholesome, as fresh, as much plant-based and little animal-based, and as little cooked or processed as possible.

- \* <u>Fruit meals</u>: You can combine different types of fresh fruit in a fruit meal except melons (including watermelon, honeydew, cantaloupe, green melon, yellow-fleshed cantaloupe, etc.), which must be eaten as a separate meal. Do not eat anything else until feeling hungry again (in 1-2 hours).
- \* Based on the above guidelines, meals can be flexibly arranged during the day according to your own work schedule/nature, preference/convenience, changing health status, and/or dietary needs. In general, you should eat at least 1 regular meal and 1 fruit meal a day outside the fasting period. If working part/full-time, you may eat 2 regular meals and 1 fruit meal, or even 3 regular meals and 1 fruit meal a day if needed. Fruit meals are also allowed during the daily fasting period, only when feeling hungry or low-energy. Multivitamin and multimineral supplements (only those free of synthetic additives) can be taken with regular meals only in case of shortage of organic/natural food in your diet (no more than 1-2 pills/week).
- \* <u>Steamed rice & bean recipe</u>: Mix 1.5 cups of a mixture of 3 types of beans (such as green/black/red beans, chickpeas, peas, lentils, etc.) with half a cup of nuts, oil seeds, or a mixture of them (such as almonds, cashews, sunflower seeds, lotus seeds, sesame seeds, melon seeds, pumpkin seeds, peanuts, etc.) and soak them overnight in a meshy sieve dipped near the top surface of a deep pot filled with water so to allow the toxic Lectins to



settle to the bottom (see picture). Discard the soaking water the next morning and repeat the process for another 3-4 hours. Also separately do the same with 4-5 cups of brown rice (only husked, keeping bran and germ) or a mixture of 2 types of brown grains (such as rice, wild rice, millet, quinoa, barley, sorghum, etc.). Drain off all soaking water, rinse, then pour the soaked ingredients into a rice cooker, mix them well, add one line of water for each cup of ingredients (6-7 lines in total), and push the "Cook" button as if cooking rice normally. (This dish already contains protein, starch, fat, and fiber and only needs green vegetables to form a balanced meal.)

**13) Medicines, food additives, addictive substances**: All Eastern and Western medicines are toxic. Except for antibiotics, all other drugs only aim to quickly relieve the symptoms without eliminating the underlying root causes of diseases and should be avoided if other options are available. Most non-communicable diseases today can be gradually cured by this diet over time. Even fevers should only be cooled down by wearing thin clothes, applying cold compresses to the forehead, neck, armpits, and groin, turning on the air conditioner, and drinking twice as much water

as usual to avoid heat shock and dehydration (the higher the body temperature, the more effective the immune system). Antipyretics should only be taken when the body temperature starts to exceed 39°C, for at 40°C, proteins in your blood will dissolve, forming blood clots that block blood vessels, leading to coma. Carefully research on food production processes, read the ingredients carefully, and avoid buying foods containing synthetic additives or known hidden harmful by-products. Do not use tobacco, banned substances, alcohol (except possibly red wine, which may be used in limitation only if necessary, thanks to its rich content of antioxidant polyphenols), coffee, and tea. (Tea contains abundant Catechin that will form Tannin, an acrid-tasting substance that is easily oxidized when exposed to air or high temperature and transforms into Tannic Acid, which hardens proteins, thins the stomach lining, causes gastritis, and damages DNA, easily leading to stomach cancer.)

- 14) Eat a variety of foods: Because all foods contain both useful nutrients and unneeded or unwanted substances, changing your menu regularly will give the body sufficient time to eliminate or purify the harmful effects caused by each type of food. Always monitor your body's reaction to foods, identify those that you may be allergic to or have difficulty digesting (such as dairy products, soy, gluten, etc.) to abstain if necessary, and experiment with changing ingredients, dosage, and cooking methods to optimize your health. Eat and drink in a way that suits your health conditions, nature, age, lifestyle, and environment. Although the guidlines presented here are scientific and should be healthy for most people, flexibility and creativity are still needed when applying them, for no one is identical to another. Occasionally eating against the guidelines may also be useful in testing the body's resilience and ability to detoxify, recover, and adapt. On the other hand, regularly following this diet will help the body get the nutrition and rest it needs to purify and maintain stability and balance.
- 15) Sleep, exercise, air, sunlight, and body temperature: 7-9 hours of sleep is essential every night. A 20-to-30-minute nap is also recommended following regular meals, and a 5-to-10-minute, when feeling tired. Deep sleep (Non-REM or Non-Rapid Eye Movement) will help lose weight, tone muscles (saving the effort of exercising), maintain beautiful and healthy skin, and prevent cancer. Move around or do light work regularly during the day, at least a few minutes every hour. Take a 10-to-15-minute walk in the gentle morning sun every day if possible, but do wear sunglasses and cover your skin well against strong sunlight during the rest of the day. Refrain from playing strong sports or doing strenuous exercise, which would cause more harm than good healthwise. Air is free food. Being partially aware of one's breathing during daily activities will ensure adequate oxygen intake for physical endurance and mental well-being. This implies not to get carried away by anger or other excessive passions/emotions, which deprives the body of otherwise better used energy, in light that the brain already consumes about 25% of the body's total energy consumption even during sleep.) Also beware of overbreathing, which will lead to hyperventilation (oxygen intoxication). Regular showers should make breathing through the skin easier. The optimal body temperature is 37-37.5°C, below which immunity deteriorates quickly, increasing overall health risks.

### 16) Simple cures and preventive measures:

- 5 minutes' daily breast massage (while following this diet) will help blood and lymph circulation and reduce the risk of breast diseases and cancer.
- Pressing and rubbing the abdomen clockwise (the direction of stool movement in the colon) will help stimulate bowel movement.
- Regular scalp massage should help blood circulation and reduce gray hair.
- Going to bed at night with an empty stomach (while following this diet) will eventually cure sleep apnea (caused by the trachea's automatic constriction to prevent food reflux otherwise, while sleeping) and reduce the risk of obesity (caused by the body's secretion of abundant insulin to convert everything into fat otherwise). For the same reasons, babies should not be breastfed just before bed. If sleep becomes difficult at night due to hunger, a light snack of fresh fruit should help. Drinking alcohol before bed may also easily lead to sleep apnea and reduce blood oxygen levels (PO2), which may easily cause myocardial infarction or even death in people with arteriosclerosis or coronary artery stenosis.
- For the obese, drinking 1.5L/day of 20°C water will burn a significant amount of calories.
- The disruption of oxygen entering the blood (caused by toxic products in the intestines) can lead to menstrual cramps, headaches, back pain, stiff shoulders, and chronic fatigue. This diet will help detoxify the intestines and eliminate the symptoms.
- Salt, refined sweeteners (including sugar), and uric acid all cause erectile dysfunction. Alcohol, tea, and coffee

hinder erection by constricting blood vessels. Diabetes also leads to erectile dysfunction in men and increases infertility in women. This diet will eliminate or reduce the above sources of erectile inhibition. Drink 500mL of water 1 hour before sex to hydrate the bladder, which will stimulate the prostate and improve erection.

- Excess cholesterol will increase the amount of male hormone Androgen (known as the fighting hormone, which darkens the skin and thickens hair) secreted by the adrenal gland, causing subcutaneous fat build-up under stress, acne, scalp dandruff, hair loss, and/or smelly armpits, foot soles, and/or skin. Fasting will help reduce and eventually eliminate the above symptoms, resulting in more beautiful and non-smelly skin.
- Cutting out all foods containing milk or dairy products will permanently cure common allergies in just a few weeks. Dairy consumption has also been linked to Crohn's disease, leukemia, osteoporosis, and diabetes
- This diet will significantly improve and eventually cure all diseases related to metabolic syndrome, as well as many common aging symptoms such as urinary disorders, gastric reflux, blurred vision, and even snoring, while helping lose weight and significantly increase physical and mental health and endurance, without the need for medications. It is worth noting that this wonderful health and quality of life is more affordable in terms of money, effort, and time than the world's common harmful lifestyle and diet today.
- Brush and floss your teeth immediately after eating and go for professional dental hygiene upon the appearance of dental calcium deposits or tartar. This will not only help protect your teeth, jawbones, and gums for life and avoid bad breath, receding gums, and tooth loss in old age, but also prevent many potential diseases caused by gum infection spreading to other organs in the body. Do not use your teeth to bite or break hard, brittle objects such as ice, crab shells, nut shells, etc., which may permanently crack and damage the protective dental enamel layer.

#### IMPORTANT HEALTH INDICATORS

- **BMI** (<u>Body Mass Index</u>) = Weight (Kg) : Square height (m2); Normal = 18,5-23 Kg/m2; Underweight < 18,5; Overweight > 23; Obesity > 30
- **Waistline**: Optimal: Male < 100cm, Female < 88cm; Otherwise: Excess visceral fat, risks of heart disease, diabetes, cancer, etc.
- **Blood pressure**: To be taken on bed upon getting up; Optimal < 120/80 mmHg; Normal High < 129/84; High blood pressure 1<sup>st</sup> stage < 139/89; High blood pressure 2<sup>nd</sup> stage > 140/90; High risk > 180/120
- **Blood sugar/glucose level**: To be tested in the morning, before meal or exercise; Normal 80-100 mg/dL (about 1 tea spoon); Pre-diabetes 101-125; Diabetes > 126
- Blood Triglyceride level: Normal < 150 mg/dL; Normal High 150–199; High 200–499; Very High > 500
- Blood HDL (Good) Cholesterol level: Ideal > 60 mg/dL; Low: Male < 40, Female < 50
- **Blood Uric Acid level**: To be tested in the morning, before meal or exercise; Optimal < 5,5mg/dL; Normal < 6,5; Normal High < 7,2; Alert > 7,5
- **Blood CRP** (*C-Reactive Protein*) **level**: Is an indicator of the body's level of inflammation; Ideal < 0,3mg/dL; Acceptable < 0,5; Alert > 1
- Blood Calcium level: Normal: 8,8-10,4 mg/dL

#### URIC-ACID-REDUCING SUPPLEMENTS

- **Quercetin** (Prebiotic): Is a Flavonoid (flavor/pigment compound) belonging to the Polyphenol family with antioxidant, anti-inflammatory, immunoregulatory, and disease-preventing properties, helps control mitochondrial activities, inhibits the formation of harmful AGE compounds that age the body from inside out, inhibits the Xanthine Oxidase enzyme necessary for the production of Uric acid, reduces blood pressure, and reduces blood LDL level. Found in cocoa, blueberries, red tomatoes, apples, berries, onions (purple onions, onions, chives ...), celery, broccoli, broccoli seeds/sprout, large leafy green vegetables, dill...
- **Luteolin** (Prebiotic): Is a Flavonoid belonging to the Polyphenol family with antioxidant, anti-inflammatory, cardiovascular, neuroprotective, and potential anti-cancer properties, inhibits the Xanthine Oxidase enzyme necessary for the production of Uric acid, prevents Beta-cell dysfunction in the pancreas. Found in chrysanthemum, green peppers, celery, citrus fruits, broccoli, thyme, mint, rosemary, oregano...
- **DHA** (DocosaHexaenoic Acid): Is the best Omega-3 fatty acid to fight against Fructose, prevents metabolic dysfunction caused by Fructose, reduces inflammation in the brain and throughout the body, increases BDNF nutrients

in the brain for new nerve cells, and reduces intestinal inflammation. Found in fish oil and seaweed. The body needs 200-300mg/day.

- **Vitamin C**: Is a powerful antioxidant necessary for growth, development, and repair of all tissues and helps heal wounds, absorb iron, maintain the immune system, control gout, and lower serum uric acid level (through increasing urinal excretion and renal reabsorption of uric acid). Abundant in citrus fruits.
- **Chlorella** (Platelet algae, a prebiotic): Is a single-celled freshwater algae having Uric-acid-reducing (especially Chlorella Vulgaris) and anti-inflammatory effects and helps reduce weight, blood sugar, C-reactive protein, and triglycerides, increase insulin sensitivity, improve liver enzymes and function, and treat depression (which is gradually being considered an inflammatory disorder). Is also known for supporting the body's detoxification process, binding heavy metals, pesticides, and other harmful compounds in the blood and removing them from the body.

## RELEVANT MEDICAL INFORMATION

- **Signs of good health**: Are healthy skin, slim waist, and healthy intestines. Body aging is a sign of poor health and evidence of visceral fat formation and metabolic syndrome.
- **Enzymes**: Are Protein-based catalysts participating in all life activities, from thinking, breathing, heartbeat, immunity, to muscle movement. Works most effectively at 37-40°C body temperature. Abundance of enzymes is also a sign of good health. This diet will ensure a stable and abundant supply of enzymes throughout the natural lifespan.
- **Uric Acid**: Comes from only 3 sources: fructose, alcohol, and animal purine (molecules containing C and N that give MSG its craved Umani taste and are found in DNA/RNA, tissues, red meat, organs, oily fish such as anchovies, sardines, herring, seafood, etc.). Activates fat production, which will lead to an increased waistline and a fatty liver even when not obese. Is a related indicator and a warning sign of all diseases related to metabolic syndrome. This diet will help maintain a safe and stable blood Uric acid level.
- **Survival gene group**: Is activated only when we are hungry, cold, or in Non-REM sleep mode to rejuvenate the body, prevent aging, and recover from illness. This diet will help activate the Survival gene group every day to keep the body young, beautiful, and healthy throughout its natural lifespan.
- **Insulin**: Is a hormone secreted by the pancreas in response to increases in blood glucose level to allow glucose to enter cells (without insulin, glucose will accumulate in the blood).
- **NO (Nitric Oxide)**: Naturally produced by the body, it dilates blood vessels, reduces blood pressure, increases blood circulation, makes it easier for Insulin to reach cells and allows Glucose to enter cells and creates Glycogen (a storage form of Glucose). NO also participates in preventing the formation of Tau protein, an indicator of Alzheimer disease. Uric acid and salt both reduce NO, leading to Insulin resistance, high blood pressure, heart disease, diabetes, erectile dysfunction, and impaired neurotransmission (causing cognitive disorders).
- Glucose: Is a simple sugar (monosaccharide) in the blood (also known as blood sugar or blood glucose), which will be converted by the Glucokinase enzyme into ATP energy used in cells. Excess glucose is stored in muscle and liver cells as Glycogen, or converted into fat (usually Triglyceride) and stored in fat cells. The body extracts glucose from fat or protein through the Gluconeogenesis process when needed. Glucose causes insulin resistance when continuously introduced into the blood, causing insulin levels to spike constantly, forcing cells to adapt by reducing sensitivity to insulin, causing the pancreas to pump in more and more insulin, leading to type-2 diabetes (Glucose unable to enter cells will accumulate in the blood and cause severe inflammation). Also, when Glucose molecules are attached to proteins, fats, or amino acids (especially during frying, baking, or grilling), the glycolysis reaction creates stable glycation compounds AGE (Advanced Glycation End), which makes tissues and cells stiff, inflexible, and aged, causing inflammation throughout the body, leading to many chronic diseases (Western diets consume a lot of AGE). High blood glucose (no matter how mild or transient) will cause the following harmful effects: (1) Create excess free radicals that reduce the amount of antioxidants in the body, leading to a state of oxidative imbalance, increased Uric Acid, and decreased NO; (2) Oxidize free fats in fat cells, increasing inflammation; (3) Oxidize LDL (Low-Density Lipoprotein or bad cholesterol), increasing the risk of plaque buildup in blood vessels; (4) Damage and disrupt the ATP energy production function in cells. Consistent high blood glucose levels may not be as bad as blood sugar swings (large fluctuations), which create free radicals that damage tissues, blood vessels, and the entire nervous system, causing inflammation to spread throughout the body. Diet, health, exercise, sleep, stress... all impact blood sugar.
- Fructose: Is the sweetest sugar among all natural carbohydrates and the number-1 killer of the 21st century, similar

to cigarettes and margarine of the 20th century. It activates the body to increase Uric acid and store fat, leading to high blood fat, non-alcoholic fatty liver disease (NAFLD), high blood pressure, impaired glucose tolerance and metabolism, obesity, insulin resistance, diabetes, gout, metabolic syndrome, etc. Natural fructose in plant sources such as fruits, honey, agave nectar, and vegetables (such as broccoli, artichokes, asparagus, okra, etc.) is safe and does not increase Uric acid thanks to its low content, slow absorption, and other adjacent substances that have the effect of compensating or counteracting the increase in Uric acid and of stimulating excretion, such as Potassium, Flavonoids, fiber, Vitamin C... Processed fructose sources such as Sucrose, Dextrose, sugar Glass, High-Fructose Corn Syrup (HFCS, the sweetest and cheapest of refined sugars), canned fruit juices, etc., all increase Uric Acid and are very harmful. Fructose participates in the energy storage process and is converted into Glucose by the Fructokinase enzyme in the liver, depleting ATP and increasing Uric acid uncontrollably (causing harms at the cellular level), forcing the body to immediately switch to energy storage mode and create more and more fat (especially liver fat) through the Lipogenesis process. Fructose stimulates the taste buds as well as activates hunger signals, making us crave food and drink indiscriminately even though we don't really need more energy. This indirectly increases insulin resistance (due to excessively high blood glucose), causing inflammation, mental illness, cognitive decline (including ADHD or Attention Deficit HyperActivity Disorder), heart disease, and Alzheimer disease (which tends to be considered type-3 diabetes, through which Insulin - a substance that nourishes and stimulates nerve cells - is disrupted, leading to insulin resistance that forms harmful protein plaques instead of normal nerve cells in the brain). Sucrose, a double sugar (disaccharide) found in sugar cane and sugar beets, is broken down in the small intestine by the Sucrase enzyme into Fructose and Glucose (simple sugars). The conversion of Fructose to Glucose (occurs mainly in the liver, sometimes in the brain) depletes NO and causes brain inflammation, leading to suicidal thoughts, cancer, stroke, infertility, chronic liver and kidney disease, erectile dysfunction, avoidable blindness, and other diseases related to Uric acid.

- Free Radicals: Are atoms or molecules that have lost a negative electron in their outer shells, become imbalanced in electrical charge, and thus tend to steal negative electrons from other molecules, continuously forming a new chain of free radicals and rendering cells unstable and unable to function normally. Superoxide, Lipid Peroxide, Ozone, Hydrogen Peroxide, Hydroxyl... are among very dangerous free radicals, some of which may destroy cells' membrane, as well as DNA. Free radicals can be internally produced from metabolic processes, such as that of converting fat into energy, which produces Ketone, an extremely strong oxidant that is often excreted through urine, sweat, or even respiration if not too much. Excess Ketone in the body will increase blood acidity, leading to the very dangerous "Ketone Acidosis" disease. Free radicals are also produced by external factors such as alcohol, tobacco, fatty foods, sugar, salt, food additives, tea, coffee, toxins in cosmetics, injuries, infections, stress, overwork, lack of sleep, staying up late, environment (dust, UV rays in sunlight, chemicals, radiation, X-rays, electromagnetic waves...), etc. A limited amount of harmful free radicals also plays an indispensable role in eliminating bacteria, viruses, and molds that invade the body. The body is also equipped with powerful antioxidant enzymes such as Catalase, SOD (Super-Oxide Dismutase, which normally decreases sharply after the age of 40), Glutathione Reductase, Glutathione Peroxidase, etc., and non-enzymatic antioxidants such as Vitamins A, E, C, coenzyme Q10, betacarotene, selenium, etc. to neutralize free radicals. Free radicals are the biggest enzyme consumers in our bodies.
- **Skin**: Has 3 layers (from outside inward): Epidermis, dermis, and hypodermis. The outermost part of the epidermis is a horny layer about 0.02mm thick that retains moisture and blocks foreign microorganisms or substances. As this layer can be easily damaged (even with a fingernail), allowing bacteria to penetrate and causing inflammation and redness, avoid scrubbing the skin too hard. All skin whitening cosmetics contain chemicals that exfoliate the horny layer and stimulate new growth, which makes the skin look young and beautiful immediately but at the same time become very weak in retaining moisture, blocking foreign matters, and protecting the skin from ultraviolet rays, causing it to be much more susceptible to damage and dark spots than before.
- **Excretion**: The body's toxins are excreted through feces, urine, and sweat. Urine contains about 2% Urea (the kidneys' blood filtering residue) and small amounts of chlorine, sodium, calcium, magnesium, phosphoric acid, creatinine, uric acid, ammonia, hormones, etc. Sweat contains salt, secreted from sweat glands, and has a composition similar to urine but at a much lower concentration. Sweat mainly regulates body temperature but is also the only way to excrete heavy metals accumulated in the body. Toxins in the system are transferred to the liver for detoxification and then to the kidneys or intestines (through the blood or bile) for excretion. Food takes about 24 hours (48 hours if

constipated, which is very harmful) to pass through the body.

- Cancer: A tumor is a part of an organ where the number of cells increases abnormally and hardens into a mass. It is benign if it develops into a size less than 1 cm in diameter and does not spread to other areas. Otherwise, it is malignant or cancerous. Cancer is not a disease that causes local damage but one that invades the whole body. Toxins accumulated in the body through unhealthy daily habits will stick to cells throughout the body like time bombs. Among those countless bombs, which one explodes first depends on the genetic factors and living habits of the individual. For example: Cells making up the liver, the body's detoxification organ, will be at higher risk of developing into tumors from the habit of consuming alcohol or pesticides; Similarly, the stomach, from drinking tea or taking stomach medicine; the lung, from cigarettes; and the colon, from meat. Enzymes can help enhance the body's immune system to inhibit cancer cells unless depleted (as in the final stage of cancer), when full recovery becomes much more difficult.
- Intestinal tract: While the stomach medium is highly acidic, the intestinal one is mildly alkaline, thanks to the highly alkaline pancreatic juice secreted by the pancreas into the duodenum at the beginning of the small intestine and mixed with food. The intestinal functions include transportation, digestion (breaking down protein into amino acids, carbohydrates into glucose, and fats into fatty acids and glycerol), absorption of nutrients (followed by their release into the blood stream), immunity, and control of the body's water (the large intestine absorbs salt and water and, with the help of beneficial bacteria, produces vitamins from waste). The intestine contains hundreds of trillions of microorganisms categorized into about 300 types, including beneficial bacteria (accounting for about 20%, such as Bifidus), harmful bacteria (accounting for about 30%, such as Clostridium), and opportunistic (or intermediate) bacteria (accounting for about 50%), which will side with the dominant bacteria to decide the outcome (good or bad) of the digestive process. The only way to prevent intermediate bacteria from becoming harmful is to eat fermented foods, which contain large amounts of enzymes. Fermented bacteria both preserve food (by preventing the growth of other microorganisms) and supplement nutrients, making the food tastier and easier to digest. Intestinal microorganisms produce about 3,000 types of enzymes. Beneficial bacteria produce antioxidant enzymes to neutralize free radicals. Harmful bacteria produce oxidants to breakdown indigestible food through an abnormal fermentation process resulting in toxic and smelly gases and stimulate the intestines to excrete the toxic gases and feces. (This makes both beneficial and harmful bacteria indispensable.) About 60% of the body's white blood cells live in the intestines, producing large amounts of free radicals when fighting harmful bacteria, viruses, or cancer cells. Lactic bacteria in the intestines will eliminate these free radicals. As the intestines function independently of the brain (are controlled by the parasympathetic nervous system without instructions from the brain), they are also often called the "second brain" and operate more efficiently when you are sleeping and relaxing.
- **Inflammation**: Is an innate immune mechanism of tissues against harmful stimuli (such as microorganisms, chemical and physical agents, damaged cells, etc.) to eliminate them (the stimuli), clear dead cells, and restore the tissues. Inflammation has the effect of dilating blood vessels, increasing circulation, and enabling leukocytes to gather and penetrate through the blood/lymphatic vessel walls, giving rise to 5 signs including pain, redness, swelling, heat/fever, and dysfunction. Inflammation causes the adrenal glands to secrete more Cortisol hormone (to reduce inflammation) and the damaged tissues to produce the Histamine amino acid (which causes allergies). Inflammation is always a systemic reaction, despite its usual expression under local signs.
- **Cells**: The body has about 60 trillion cells, which are continuously replaced (recycled or rejuvenated) thanks to the food supply absorbed by the digestive system every day. About 50-70 billion cells die in adults every day. Cells combine the following 3 systems to protect themselves and life: (1) Lysosomal (Processes & recycles waste); (2) Intracellular immune system; and (3) Autophagy. If systems (1) and (2) are ineffective, cells will self-destruct to protect the life of other healthy cells. What prevents cancer cells to self-destruct is the presence of large amounts of free radicals and oxidants in the body, arising from today's unnatural and unhealthy diets and lifestyles. Caspase is an important enzyme for cell autophagy.
- **DNA and Genes**: DNA records the evolutionary history of life. This history is repeated during gestation, the process of eggs developing into embryos and then complete organisms. A gene is a specific segment of the DNA sequence, containing information to create a specific type of protein or RNA molecule (RNA is the single-stranded version of double-stranded DNA, containing the Nucleotide U instead of T, and the sugar Ribose instead of Deoxyribose). Each gene can be turned on/off depending on the function of the cell in the tissue or organ. The on/off state of a gene is not

necessarily fixed throughout life but can change depending on the environment and the individual's ability or needs (even this change requires enzymes). The human genome has about 3 billion DNA molecules (i.e. 3 billion A-T and C-G nucleobase pairs, with infinite arrangements), constituting about 20,000-25,000 protein-producing genes, as well as many other pseudogenes and non-functional RNAs.

- **Liver**: Processes and stores nutrients and energy before returning them back to the blood stream, support immunity, produces bile for digestion and fat absorption, decomposes toxins from the blood and send the residues down the intestines through the bile duct for excretion in the stool. Decomposes excess alcohol (not fully absorbed in the stomach) into Acetaldehyde (a strong poison to the body) before gradually decomposing it into vinegar and then into water and CO2 (This process also continues to produce many free radicals). As long as Acetaldehyde is not completely decomposed in the blood, the body will be in a "drunk" state, accompanied by headaches and nausea if too much, due to its toxicity. A healthy liver only contains about 3-5% of the fat being processed. Fatty liver contains more than 30% fat
- **Sleep**: Is the body's largest metabolic activity. Helps control hunger, food intake, metabolic rate, body weight, immunity, and uric acid level. Helps us be creative, gain insight, make good decisions, cope with stress, process information, learn fast, and organize, store, and remember memories effectively. Adults who sleep 7-8 hours/day have the lowest mortality rate (ideal). Sleeplesness will cause inflammation, cardiovascular disease, cancer, sexual dysfunction, and depression, reduce hormones, immunity, and glucose regulation (causing obesity, insulin resistance, metabolic syndrome, diabetes, etc.), destroy healthy metabolism (causing memory loss, brain fog, confusion, dementia, Alzheimer disease, etc.), and reduce life expectancy. Sleeping too much also triggers an increase in inflammatory substances, shrinks brain volume, and increases the risk of dementia. Sleep is a continuous series of approximate-90-minute cycles of alternate non-REM (deep) and REM (Rapid-Eye-Movement) sleep. Non-REM sleep mainly helps the body recover and refresh (rejuvenate) while activating the Glymphatic system (washing and rinsing) to help the brain remove waste (including beta-amyloid protein related to Alzheimer disease) and transport nutrients. REM sleep mainly helps consolidate memory. The supporting muscles with soft tissue in the throat such as the tongue and palate will relax maximally and narrow down the airway during sleep, causing Obstructive Sleep Apnea (OSA) in obese people (as a result of the heavy neck pressing down and blocking the airway), which indirectly raises the risk of dementia. 7-9 hours of sleep is essential every night. The Melatonin hormone causes sleepiness while Serotonin initiates sleep. Lack of Vitamin D and Magnesium may cause insomnia. Tryptophan (1 of the 9 essential amino acids that must be absorbed through food everyday) promotes natural sleep and is found in cheese, eggs, and nuts (especially almonds).
- **Salt**: Is already adequately available in natural animals/plants and needs not be added to food. Excess salt is absorbed first into the blood stream and increases its osmotic pressure, causing water to be continuously absorbed from other parts of the body and increase blood pressure. Increased blood pressure causes blood cells to collide more with the blood vessel walls, leading to damaged blood cells and gradual hardening of the blood vessel walls, which in turn causes poor blood circulation, faster heart beats, and even higher blood pressure (vicious cycle). The maximum allowable daily salt intake for adults is 10g for men, 8g for women, and 6g for those with high blood pressure.
- **Calcium**: Is already adequately available in natural animals/plants and needs not be supplemented to the daily diet. What is needed is to frequently walk, carry weight, and chew foods thoroughly to stimulate bones and teeth to absorb calcium. When blood calcium decreases, calcium will be drawn from bones and teeth to compensate. Reasonable exercise combined with a healthy diet will replenish calcium for them.
- **Blood fats** (Lipids): Consists of 2 main types: (1) Cholesterol: Including HDL (good) and LDL (bad); (2) Triglyceride: High blood Triglyceride levels can lead to risks of cardiovascular diseases such as atherosclerosis, myocardial infarction, and stroke. Triglyceride is also the main component in visceral fat (used first) and subcutaneous fat (long-term storage), accounting for 95% of total body fat.

# HÓA CHẤT BẢO QUẢN THỰC PHẨM THÔNG DỤNG

	Chất báo quán	Dùng trong thực phẩm	Chất báo quán	Dùng trong thực phẩm
S	Ascorbic acid (Vit. C)	Sản phẩm trái cây, thực phẩm chua	Potassium Sorbate	Phó mát, mật đường, bánh
Á	Diid	03	Descripcio acid	bông lan, thịt chế biến sẵn
A	Benzoaic acid	Sản phẩm trái cây, thực phẩm chua, bơ thực vật	Propionic acid	Bánh mì, bánh nướng khác
Ιτ	T Butylparaben Thức uống, xốt trộn rau sống, gia vị		Propylparaben	Thức uống, bánh ngọt giống
			, , ,	bông lan, gia vị
	Calcium Lactate	Ö liu, phó mát, tráng miệng đông lạnh	Sodium benzoate	Sản phẩm trái cây, thức ăn
				chua, bơ thực vật
T	Calcium Propionate	Bánh mì, bánh nướng khác	Sodium diacetate	Bánh nướng
<u>ا</u> ا	Calcium Sorbate	Phó mát, mật đường, xốt madone, bơ	Sodium erythorbate	Thịt nguội
R		thực vật		
,	Citric acid	Thực phẩm chua	Sodium nitrate	Thịt cá nguội
Ù	Heptylparaben	Thức uống, xốt trộn rau sống, gia vị	Sodium nitrite	Thịt cá nguội
	Lactic acid	Ô liu, phó mát, tráng miệng đồng lạnh	Sodium propionate	Bánh mì, bánh nướng khác
N	Methylparaben	Thức uống, xốt trộn rau sông, gia vị	Sodium sorbate	Phó mát, xốt madone, thịt
				chế biến sẵn
G	Potassium Propionate	Bánh mì & các loại bánh nướng khác	Sorbic acid	Phó mát, sản phẩm trái cây,
				mật đường
	Ascorbic acid (Vit. C)	Sản phẩm trái cây, thức ăn chua	EDTA (ethylenediamine	Xốt trộn rau sông, bơ thực
ĊН		L	tetraacetic acid)	vật, rau hộp
ÓN	BHA (butylated	Bánh nướng, ngũ cốc, mỡ, dâu	Propyl gallate	Ngũ cốc, quả vặt, bánh ngọt
G	hydroxyanisole)	L		
	BHT (butilated	Bánh nướng, ngũ cốc, mỡ, dâu	TBHQ (Tertiary butyl	Quà vặt, mỡ, dâu
ΗƯ	hydroxytoluence)		hydroquinone)	1 - 1 - 1
	Citric acid	Trái cây, quả văt, khoai tây ăn liền	Tocopherols (Vit. E)	Dâu & chất béo

Tham khảo: Tài liệu bệnh viện Mount Sinai, Toronto, Canada

# HÓA CHẤT PHỤ GIA THỐNG DỤNG TRONG THỰC PHẨM

Hoa chat	Dung trong thực pham	Cong dụng	Hoa chat	Dung trong thực pham	Cong dung
Acetic acid	Dām, xốt xá lách, các loại xốt	Giữ độ chua	lodine	Muōi	Chất bố
	Tráng miệng trái cây/gelatin	Làm trắng	Iron	Sản phẩm ngũ cóc	Chất bố
	Nhân bánh, xốt trộn xà lách, gelatin	Giữ độ chua	Iron Ammonium Citrate	Muối	Chống đóng cục
	Thức ăn chế biển sắn		Karaya gum	Tráng miệng đồng lạnh, chè sửa	Làm đặc
	Phó mát	Màu	Lactic acid	Sản phẩm sửa	Giữ độ chua
	Nhân bánh, chè sữa	Làm đặc	Larch gum	Nhân, tráng miệng	Làm đặc
	Sản phẩm trái cây	Chất bồ	Lecithin	Xôt madone	Hòa dấu & nước
	Thức ngọt ít năng lượng		Locust-bean gum	Kem đồng lạnh	Làm đặc
	Bánh nướng		Maltol	Nước ngọt vị dâu/trái mâm xôi	Thêm vị
Benzoil peroxide	Bánh bột, bánh nướng		Mannitol	Bánh nướng, tráng miệng đồng lạnh	Chông đặc, chất ngọt
	Bơ thực vật	Chất bố, màu	Modified food starch	Nhân bánh, xốt thịt, các loại xốt	Làm đặc
Calcium alginate	Bánh nướng	Làm đặc	Monocalcium phosphate	Bánh nướng	Bột nối
Calcium bromate	Bánh nướng	Làm trắng	Monoglycerides	Bánh nướng, kem đồng lạnh	Hòa dâu & nước
Calcium phosphate	Bánh nướng, bột trộn sắn	Bột nổi	Monosodium glutamate (MSG)	Thức ăn Tàu, thịt đồng lạnh	Thêm vị
Calcium Silicate	Bột thực phẩm, muối ăn	Chông đóng cục	Niacinamide	Bột mì, gạo, ngữ cốc	Chất bố
Caramel: đường thắng	Bánh nướng, kem đồng lạnh		Pectin	Mút, đồng sương	Làm đặc
	Kem đồng lạnh		Phosphates	Thức uống chua, trắng miệng gelatin	Cải thiển đồ chua
Carrageenan	Tráng miệng đồng lạnh, chè sửa	Hòa dấu & nước	Phosphoric acid	Nước ngọt, trắng miệng	Cải thiển đổ chua
	Thực phẩm màu vàng	Màu	Polysorbates	Nhiều thực phẩm chế biến sắn	Hòa dấu & nước
	Thực phẩm nhiều chất xơ	Làm đặc	Potassium alginate	Tráng miệng đồng lạnh	Làm đặc
Citric acid	Trái cây hộp, thức uống	Giữ độ chua	Potassium bromide	Bánh nướng	Làm trắng
Citrus red no. 2	Thực phẩm màu đỏ hay vàng	Màu	Potassium lodide	Muôi	Chất bố
Com syrup: mật bắp	Nhiều loại thực phẩm	Chất ngọt	Propylene glycol	Bột làm bánh trôn sắn, bánh nướng	Chông khô
	Câm dùng tại Mỹ	Đường hóa học	Riboflavin	Bốt mì, gạo, nuối	Chất bố, màu
	Đồng sương, bánh nướng,		Saccharin	Thực phẩm ăn kiến ít năng lượng	Đường hóa học
•	Nước cốt trái cây	Chất ngọt	Silicon dioxide	Thực phẩm sây	Chông đóng cục
Diglycerides	Kem đồng lạnh, bơ đậu phông	Hòa dấu & nước	Sodium acetate	Thực phẩm chua	Giữ đổ chua
	Bột trộn sắn, thức ăn chế biến sắn	Hòa dầu & nước	Sodium alginate	Sản phẩm sốcôla	Làm đắc, làm sắn
sulfosuccinate		, thêm vị	Sodium aluminum sulfate	Bánh nướng	Bột nối
Disodium guanylate	Thịt hộp, sản phẩm thịt	Thêm vị	Sodium bicarbonate	Cacbonat natri	Bột nối
FD&C Blue #1: Phâm	Thực phẩm, thuộc men, mỹ phẩm	Màu	Sodium calcium alginate	Tráng miệng, đồng sương	Lầm đặc
	Thực phẩm, thuộc men, mỹ phẩm	Màu	Sodium citrate	Thức ăn chua	Giữ đổ chua
FD&C Yellow #5: Phâm	Thực phẩm, thuộc men, mỹ phẩm	Màu	Sodium stearyl fumarate	Bánh nướng	Làm trắng
	Sản phẩm ngũ cốc, các thức khác	Chất bố	Sorbitan monostearate	Bột làm bánh trôn sắn	Hòa dâu & nước
	Trái cây, keo, các thức ngọt khác		Sorbitol	Thực phẩm tiểu đường 0 có đường	Chất ngọt thiên nhiên
		nhiện tiểu châm			tiểu chẩm
Gelatin	Tráng miệng, sản phẩm đóng hộp	Làm đặc .	Tagetes	Thực phẩm màu vàng	Màu .
	Nước cốt trải cây, các thức ngọt	Chất ngọt	Tartaric acid	Nhần bánh, thức ăn chua	Giữ đồ chua
Glycerine	Thực phẩm để nướng, xác dừa	Chống khô	Thiamine	Bánh mì, ngũ cốc, bột mì	Chất bố
Glycerol monostearate	Bột làm bánh trộn sắn, bánh nướng	Chông khô	Titanium dioxide	Kem bánh, thực phẩm trắng	Màu
	Xốt thít, các loại xốt, thức ăn gia súc	Làm đặc	Tocopherols (Vitamin E)	Bánh nướng, sữa, ngũ cốc	Chất bố
	Đô khổ trôn sắn, thực phẩm có mở		Trogacanth gum	Chè sữa, các loại xôt, bột trôn sắn	Làm đắc
	Các loại xốt, tráng miệng đồng lạnh		Ultramarine blue	Nhiều thực phẩm	Màu
	Thực phẩm màu trắng		Xylitol	Sinh tổ không đường cho trẻ em	Chất ngọt (không tốt)
	Thịt chế biển sắn, nước lèo	Thêm vi	Yellow prussiate of soda	Bánh nướng, bột trộn sắn	Chẳng đồng cục

Tham khảo: Tái liệu bệnh viện Mount Sinai, Toronto, Canada