COMMENTARY

Nutrition, Nonthermally-Prepared Food and Nature's Message To Man

A Method of Predicting Nutrient Compatibility?

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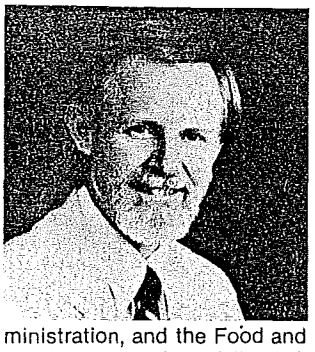

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ABSTRACT

Patients consider nutrition, reproduction, and child rearing essential ingredients in life. Concerning nutrition, Pottenger showed that cats eating nonthermally-prepared foodstuffs were healthier, better formed and behaved, had stronger progeny, and a sevenfold increase in manure fertility than those eating thermally-

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prepared foods. To verify these findings, two of the writers tested the effect of a raw diet on their own physiology and behavior for five and three years, respectively. Weight, evacuation, serum cholesterol, and serum lipids normalized, but at times asthma, mental dysfunction, and other negative effects were noted due to nutrient incompatibility. Ancient writings and modern investigation show that the incompatibility of many foods on the human system can be predicted through physical, sensorial and verbal characteristics associated with natural foodstuffs. At the same time, these ancient texts suggest foods that are both bio-compatible and nutritious.

INTRODUCTION

Occasionally patients make matter-of-fact statements that are simple, true, and useful. A bricklayer once astutely remarked that three essential things in life are: nutrition, reproduction, and raising one's children. As Price demonstrated with his observations on alteration in human body habitus and behavior occurring with dietary changes, nutrition significantly affects reproduction and child raising (Price, 1972). In fact, nutrition's effects are physiological, behavioral, and environmental. Exemplifying this is a ten-year study during which Pottenger fed part of his colony of 900 cats pasteurized milk, cooked meat, and codliver oil, noting that they were sick, skeletally malformed, and homosexual in behavior. Furthermore, their feces and urine grew beans 6-8 inches high in the soil of their pens. By comparison, cats fed raw milk, raw meat, and codliver oil were healthy, well formed, and normal in behavior. Their urine and feces grew beans 4 feet tall in their pen's soil (Pottenger, 1946; Pottenger & Simonsen, 1939; Pottenger & Simonsen, 1939).

Upon observing a film of the Pottenger cats as well as talking with reputable physicians and others who had actually seen these tests, we were reassured that Pottenger had really ascertained the things he reported. In our opinion Pottenger's observations of the laws of thermally and nonthermally-treated bioplasms are valid and of even greater practical consequence than Mendel's observations of some of the laws of genetics, primarily because Mendel described plant inheritance for a number of generations, but his discovery had little effect on soil productivity. Pottenger, by contrast, described somatic, behavioral, and topsoil biomass transformations as well as alterations of a mammal's fertility and 8 generations of inheritance. The unquestionably important finding of a sevenfold increase in the fertility of manure obtained from animals eating raw food suggests guidelines for feeding farm animals and eventually utilizing human solid and liquid waste for humus reconstruction.

The laws of thermally and nonthermally-treated bioplasms derived from these animal studies may be stated as follows:

1. Cooked foods injure the behavioral and somatic expression of mammalian inheritance of animals ingesting them.
2. Cooked foods injure the germ plasms of animals ingesting them.
3. Mammalian injuries induced by cooked foods require 4 generations of a raw food diet to correct.
4. Cooked foods reduce the fertility of manure derived therefrom to approximately 1/7 of that derived from non-cooked foods, thereby injuring soil and plants as well as animals (See Figures 1 and 2).

Figure 1 shows the natural biogenic food chain. Figure 2 depicts the biogenic food chain altered by cooking food. The natural cycle maintains health in animals, plants, and soil, whereas the altered cycle impairs health in all three. Pottenger's studies, graphically showing the effect of the altered cycle in cats, soil, and plants, are summarized in his own

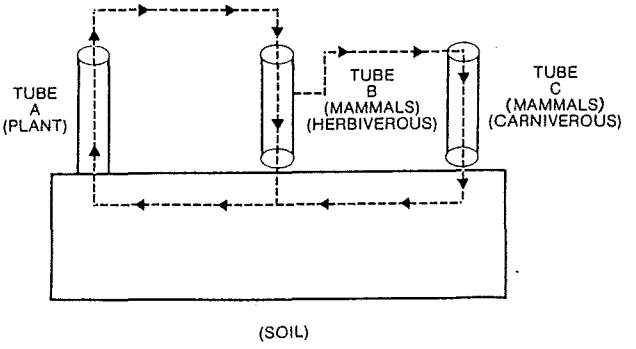

Figure 1. Schematic representation of correct plant/mammal biogenic food cycle. Tube A represents plants; tube B represents mammals; the wet sponge represents the topsoil transport system. The result is maintenance of soil, plant and animal health.

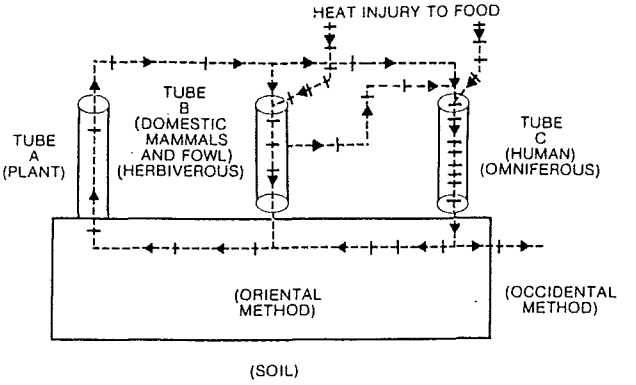

Figure 2. Schematic representation of present plant/human biogenic food cycle. Oriental method represents nightsoil recycling despite theorized reduction in fertility. Occidental method represents non-use of human manure for soil fertilization. The result is injury to soil, plant and animal function.

words as follows: "The principles of growth and development are easily altered by heat and oxidation, which kill living cells at every stage of the life process, from the soil through the plant, and through the animal. Change is not only shown in the immediate generation, *but as a germ plasm injury which manifests itself in subsequent generations of plants and animals.*"

METHODS

Obviously there are differences between cats and human beings; therefore, the first two writer-subjects in our study lived on a 100% nonthermally-prepared diet for 5 and 3 years respectively to test its effect on their physiology and behavior. The foods consumed were recorded and their effects noted. Specific dietary constitutents, amounts, meal intervals, combinations of foodstuffs, nutrient content, compatibility, and methods of preparation were considered. Numerous specific items were tested many times to verify response consistency. Only results of 90% or greater reproducibility are reported.

RESULTS

Weight control was easy, as was evacuation. Serum lipids, cholesterol, and serum urea nitrogen dropped from high middle to low normal values (See Table I). The female, however, became disheartened, fatigued, weak, and irritable when her carbohydrate intake fell below 50 grams per day, and she felt cold when fats and oils were below 35 grams a day. The male became ill-humored, passive, and judgmentally as well as mentally compromised when his carbohydrate intake fell below 60 grams a day. His hands and feet became cold when less than 40 grams of oil were ingested daily. (More oils were necessary to maintain thermal equilibrium in winter than in summer.) In addition, the male subject tolerated raw nonfat goats' milk better than nonfat cows' milk but nonfat cows' milk better than whole goats' milk. Furthermore, his mental processes were disrupted whenever he eliminated milk entirely without an adequate replacement.*

Regarding fiber in the diet, the effectiveness of raw fiber was different from that of cooked fiber; physical properties as well as quantity seemed to be important (Horowitz & Slowie, 1973; Burkitt, 1972; Burkitt, et al, 1974, Ershoff, 1974; Heaton, 1973; Trowell, 1973; Trowell, 1974; Eastwood & Mitchell, 1974; Cleave & Campbell, 1966). Stools on a mixed raw diet were large, frequent, soft, and bouyant. The same diet, when cooked, produced smaller, firmer stools that sank.

Proper raw food selection, however, was very difficult. At first the serious blunder was made of thinking one could eat, in quantity, foods that were usually ingested raw. Indeed, the problem of naturally occurring toxins and allergens in raw foodstuffs had not adequately been considered (Feingold, 1974; Toxicants..., 1966; Toxicants..., 1973; Smith, 1976). After deacclimatization from a standard American diet, the subjects gradually became very sensitive to certain foods and food groups. For example, because of symptoms of asthma, mental abberations, gingivitis, and tooth decay, juices and fruits were almost entirely eliminated from the diet (See Table II).

The subjects felt, nevertheless, that the human nose, though disparaged by anthropologists, was most helpful. When deacclimatization was at the stage where a wrong food item could cause shortness of breath or decreased ability to concentrate, the olfactory character of the foodstuff gave a biofeedback preview of its later effect. Furthermore, a combination of complex carbohydrate, oil, and protein at the same feeding seemed to promote better function and feelings of well being than when eaten at separate feedings. Green leaves, seeds, and carbohydrate-laden roots were found to be moderately agreeable. Sunflower, pumpkin, and sesame seeds were greatly preferred to nuts, but needed to be soaked in water for 12-14 hours or ground into meal, moistened and made into air-dried wafers to help deactivate the phytate, trace-mineral bond in order to be tolerated. Sprouting made dry grains and legumes more chewable and palatable while roots such as sunflower artichokes and yambean (jicama) were more agreeable when peeled, cut, and dried than when fresh. In addition, the male appeared to tolerate no fats, fewer sweets, and spices but more seed-oil than the female. In fact, because of untoward effects, spices, salt, and herb seasonings were entirely eliminated.

TABLE 1
Changes in Weight, Ease of Defecation, and Biochemical Measurements Attributable to Test Diet

	Weight	Defecation	Cholesterol	Triglycerides	Serum Urea Nitrogen
Subject 1					
Pre-Diet	80 kgs	Slight Difficulty	178 mg%	119 mg%	19 mg%
End of Diet	68 kgs	Easy	154 mg%	91 mg%	7 mg%
Subject 2					
Pre-Diet	48 kgs	Moderate Difficulty	172 mg%	68 mg%	11 mg%
End of Diet	45 kgs	Easy	148 mg%	42 mg%	6 mg%

*His colleagues were most tolerant and friendly to him during the test. The writers compliment them on their helpfulness and restraint.

TABLE II
Symptoms Attributable to Ingestion of Representative Raw-Food Items. Most Symptoms were Dose-Related

Food Items	Symptoms
1. **Fresh fruits**	
A. Very sweet: (date, fig, grape...)	Asthma, gingivitis, hallitosis, tooth decay, cognitive dysfunction*, arthralgias.
B. Mild — moderately sweet: (Pear, peach, apricot, banana, mango, orange, plum, tomato, cherry, berries, pomegranate...)	Asthma, gingivitis, cognitive dysfunction, indigestion, aphthous ulcers, seborrhea, eczema, depression.
C. Sour: (lemon, lime, grapefruit, pineapple...)	Aphthous ulcers, arthralgias, tooth decay, gingivitis, seborrhea.
2. **Fruit juice** (orange, apple, tomato, berry...)	Indigestion, cognitive dysfunction, asthma.
3. **Dried fruits**	
A. Very sweet: (date, fig, raisin, pear...)	Asthma, tooth decay, gingivitis, cognitive dysfunction
B. Moderately sweet: (apricot, prune, peach...)	Asthma, tooth decay, gingivitis, cognitive dysfunction
4. **Melons** (Watermelon, cantelope, papaya, honeydew, casaba...)	Indigestion, cognitive dysfunction, nightmares, delusions, hallucinations.
5. **Vegetables**	
A. Root: (carrot, jicama, turnip, radish, onion...)	Cognitive dysfunction, indigestion, mouth paresthesias, decreased ambition.
B. Leaf: (romaine, bunching lettuce, head lettuce, cabbage, chard...)	Cognitive dysfunction, mild indigestion.
C. Fruit: (squash, eggplant, cucumber, okra, green pepper...)	Indigestion, cognitive dysfunction.
6. **Vegetable juices** (carrot, celery, parsley...)	Anger, cognitive dysfunction.
7. **Tubers**	
A. Sweet potato, yam, white potato...	Severe mouth paresthesias, pharyngeal burning, indigestion, diarrhea.
B. Jerusalem artichokes** (whole and fresh)	Mild indigestion.
8. **Nuts** (pecan, almond, filbert, cashew, Brazilnut, pignolia, macadamia, nut butters...)	Anger, cognitive dysfunction, nightmares, delusions, hallucinations, indigestion.
9. **Sesame seeds** (whole and butter)	Indigestion, dental pain.
10. **Pumpkin seeds**	Indigestion, fatigue, feeling of coldness.
11. **Sunflower seeds**** (whole and butter)	Mild mouth paresthesias.
12. **Grains** (oats, barley, millet, wheat, rye, corn, flours, meals...)	Cognitive dysfunction, indigestion, arthralgias.
13. **Legumes** (lentil, mung bean, soy, alfalfa, peanut...)	Cognitive dysfunction, indigestion.
14. **Carob**	Cognitive dysfunction, indigestion, arthralgias.
15. **Avocados**	Eczema, cognitive dysfunction, indigestion, nausea.
16. **Olives**	Severe mouth paresthesias, cognitive dysfunction.
17. **Salad oils** (olive, soy, safflower, corn...)	Overheated feeling, pharyngeal burning.
18. **Honies** (clover, sage, tupelo, orange, avocado, carob, buckwheat, wild, dessert...)	Tooth decay, dental pain, pharyngeal burning.
19. **Eggs** (chicken, quail, pheasant, dove...)	Nausea, cognitive dysfunction.
20. **Cheeses** (hard, cottage...)	Feet paresthesias, cognitive dysfunction.
21. **Creams** (fresh, butter, sour...)	Cognitive dysfunction, lethargy, overheated feeling.
22. **Whole milks** (cow, goat)	Cognitive dysfunction, nasal congestion, white areas on fingernails, eczema.
23. **Fresh and Cultured Non-Fat Milks** (yogurt, buttermilk, pima...)	Cognitive dysfunction, nasal congestion.
24. **Herb seasonings** (oregano, sage, rosemary, thyme...)	Nightmares, cognitive dysfunction.
25. **Spices** (ginger, pepper, nutmeg, cinnamon, cumin, mace...)	Nightmares, hallucinations, testicular pain, indigestion.
26. **Seaweeds** (kelp, laver, Irish moss, dulse...)	Indigestion, feeling of impending doom, increased body odor.
27. **Herb teas** (mint, chamomile, valerian, linden...)	Cognitive dysfunction, nightmares, hallucinations.
28. **Rose hips** (tea and tablets)	Arthralgias, nightmares, delusions, hallucinations.
29. **Salts** (sea, rock, flake, Indian...)	Arthralgias, hair loss, dysuria.

*Cognitive dysfunction includes memory loss, poor concentration, poor judgment, and disorganization.

**Items which were easily tolerated or could be made tolerable.

Because these observations were from such a small sampling, we interviewed 108 people living on raw diets for from 4 to 35 years. These people were uniformly thin and in moderately good to excellent physical health. One of the most startling findings was the degree which raw food items affect mental function. These interviews (together with the results reported herein and the third author's experiences of living on a raw diet for eight years, as well as the fifth author's living on a high-percentage raw diet for 15 years) leads to the conclusion that all ingested raw food items affect the feeling, thinking, and behavior of the individual either positively or negatively, depending upon the biocompatibility of the foodstuff.

Unfortunately, an optimal diet was not ascertained during the study, but observations suggest it will be nonthermally prepared, high complex carbohydrate, medium protein, medium oil, with no animal fat and a divergence between the constituents tolerated by male and female subjects (Douglass & Rasgon, 1976; Pickell, 1975; Douglass, 1975; Kiehm, et al, 1976; Kempner, 1944).

DISCUSSION

The subjects' experience recorded in Table II shows that fruit and juices caused adverse reactions. Indeed, the negative effects reported here agree with the findings of earlier medical researchers. Sanchez, et al, in 1973 reported that sugars, honey, and fruit juices decrease the phagocytic activity of white cells (Sanchez, et al, 1973). Sanchez' report, our own experiments with nonthermally-prepared foods, and the occurrence of staphylococcal infections in people on fruitarian diets suggest that juice, fruit, honey, and sugar are not well tolerated by human beings (Douglass & Douglass, 1976; Yudkin, 1972).

Despite the evidence arguing against consuming these foods, we found the willingness to forgo such taste-pleasing food groups as juices and fruits occurred only after several years of deacclimatization and observation. The unusual condition of being willing to live on 4 or 5 well-tolerated food items has been observed among some raw food advocates, but the subjects in this experiment never achieved this state during the test because they had not found the several foods that seemed sensible and agreeable.

Unquestionably, cooked food was more difficult to give up than substances thought to be addicting such as alcohol, cigarettes, and coffee. One suspects that cooked food is also addicting. Even so, a high complex carbohydrate diet containing 40% cooked food allowed adequate daily function as additional food groups were tested and evaluated after the completely raw diet was discontinued. On this diet the male subject's December, 1977 cholesterol was 114mg% and his triglycerides 42mg%.

The effect of raw and cooked diets on the fertility of human liquid and solid waste has yet to be tested. However at least one ancient text, *The Lost Books of Eden*, suggests that the people of the Miocene era destroyed the fertility of their "Edenic" food growing areas through the use of fire. Other ancient texts from India and the Middle East (The *Bhagavad Gita* and the Essene gospel) claim that cooked food leads to physical and emotional ill health in contrast with raw food which preserves life, health, and mental alertness. Accounts from Babylonian, Abyssian, Egyptian, and Hebraic cultures agree that man's health, soil fertility, and overall environment were adversely affected by eating the "fruit" of a forbidden "tree." The forbidden fruit could refer to food cooked on wood fires: the forbidden tree. Further evidence that the Edenic tree was metaphorically intended to represent early man's fire comes from the Biblical implication that early man ate garden plants before tasting the forbidden fruit and field plants afterwards. Field plants include grains, legumes, starchy tubers, and roots, all which contain large quantities of starch, which cannot be digested by humans unless cooked, thus making them negligible nutrition sources before the use of fire.

It is important to determine which nonthermally-prepared nutrients are compatible. Again, early cultures and their writings provide important clues helpful in choosing compatible foods. *The Lost Books of Eden* suggest that one can predict the compatibility of a food by examining its physical and sensorial qualities as well as its name.

Using this idea as a hypothesis whose validity should be tested, we discovered that in fact the appearance of a food, its odor, and attendant nomenclature provide a great deal of information to help us predict whether a food will be compatible or not. For example, the bad-tasting fruit of an eastern United States thorned relative of the deadly nightshade plant is poisonous, as the name implies. The nightshade's bitter taste and thorny appearance additionally warn us of its dangers. But what warnings have we that cows' milk can be equally harmful, since it can contain tuberculosis, brucellosis, and atherosclerosis-associated bovine xanthine oxidase? (Whereas boiling, powdering, and pastuerizing decrease infectuous pathogenicity, they make specific essential amino acids and other nutrients biologically unavailable.) If we regard the milk's container, the cow, as a horned, sharp-hoofed, strong, and potentially dangerous animal, we are thus warned of the potential pathogenicity of milk. Milk has caused so many allergenic and related diseases that we suspect it should be totally omitted from the diet after an infant is weaned.

Investigation confirmed the ancient notion that biologically incompatible foods identify themselves

physically and sensorially. Furthermore, that the Miocenic people assigned names to foods and plants in order to reflect their effects upon people seemed equally supportable, even to the extent that perhaps this process has been going on through the ages among peoples everywhere. The investigators in this study on an empiric basis found that citrus and mangoes are harmful because they cause gingivitis, eczema, aphthous stomatitis, and arthralgias. Pistachios and cashews were stopped because of mouth paresthesias, cognitive dysfunction, and pharyngeal burning (See Table II). Several months after making these findings, the investigators noticed that the 1976 *Encyclopedia Brittanica's* plant classification included both the thorny, citrus group and dermatalogically-poisonous sumacs (mango, cashew, and pistachio) in the rue order. Since "rue" is defined as remorse or regret, the family name identifies both the food and its negative human physiological effects.

Further, natives called this order's pomelo (grapefruit) and lime "forbidden fruit," thus indicating their knowledge of the toxic and immunological effects on those who ingest them. Our own observations of tooth damage, two cases of acute diabetes mellitus, and three deaths occurring after ingestion of rue-order products suggests that nature is demonstrating the validity of the physical, sensorial, and verbal identification hypothesis.

Furthermore, the subjects' experiences reported in Table II show that rose hips' tea and blackberry juice cause disruptions of mental and physical function. This is physically predicted by the thorns on rose and blackberry bushes. The adverse reactions to onions is sensorially predicted by this root's hot, burning taste. Fruits, bananas, and nuts, responsible for a variety of mental aberrations, from cognitive dysfunction to depression, may have given rise to such expressions as a person being described as "fruity," "bananas," or "nuts," name-coded descriptions of the biochemical reaction these foods cause clinically. In addition, the name, deadly nightshade, verbally predicted the subjects' reaction to tomatoes, potatoes, eggplant, and peppers — all relatives of this plant. Evidence thus suggests that the Egyptians' historial medical writing has merit in that an entity must be positive in all three categories to be compatible; i.e., neither toxic nor allergenic. To ignore the nature of things — appearance, smell, taste, and nomenclature — is to court trouble.

On the other hand, the reason many raw food advocates give for eating quantities of fruit despite its deleterious effects is that according to the Biblical account of human origins, pre-fire men and women ate fruit from trees (Bible: Rev. Std. Ver., 1953). Nonetheless, the Vedic texts from India say one should offer only, "a leaf, a flower, a fruit or water" to the living presence within each person (Barkas, 1975). In point of fact the Bible describes trees in gardens which bear seed or have the seed in the fruit itself. For this reason, and because most fruit-bearing trees grow in groves or orchards, we suspect that the tree referred to in the Bible is the *Helianthus*. These produce considerable wood, and thus may properly be called trees; yet they are still garden plants. (Botanists maintain *Helianthus* is the only garden tree.)

Helianthus annuus or the sunflower seed plant is the best known and can be the Vedic text's "flower" or Biblical "Plant yielding seed." *Helianthus tuberosus* or the Jerusalem artichoke is lesser known but can be the Vedic "fruit" or the Biblical "tree with seed in its fruit," as these plants grow from tubers much like potatoes. Though *Helianthus* is considered indigenous to North America, it could well have existed prehistorically in the old world and disappeared through the destructive forces of time and events before reappearing or being rediscovered by Europeans later in the new world. The many varieties of both *H. annuus* and *H. tuberosus* can also be what was referred to as "every tree that is pleasant to the sight and good for food . . ." The subjects' positive reaction to sunflower seeds and Jerusalem artichokes support this identification. The "leaf" and "water," however, are not as clearly identified, but a working hypothesis is that they are respectively dried (rather than green) Jerusalem artichoke leaves, and well water in a *Lagenaria siceraria* or other gourd container. Ground, dried Jerusalem artichokes also may be added to water. Indeed, Jerusalem artichoke is quite sweet when fresh but much more so when cut and dried. It, therefore, may be used as a sweetened aqueous solution (perhaps to deactivate seed phytate) as well as a food.

These biologically compatible, nutritious foods correlate positively in the touchstone test for physical, sensorial, and linguistic attributes as indicators of biocompatibility. Though these foods lack vitamin B_{12}, preliminary tests indicate that normal blood B_{12} levels can be maintained when raw-food eaters consume adequate amounts of fiber-containing seeds or nuts and well water. The foods symbolically mentioned in ancient texts (sunflower seeds, Jerusalem artichokes, leaves, and well water) are all highly nutritious. Sprouting could have added vitamins and made other nutrients more readily available, while specific methods of preparation could have made the foods minimally toxic. The protein, vitamin, and mineral content of sprouted sunflower seeds is excellent, as is the vitamin and carbohydrate content of Jerusalem artichokes, whose carbohydrate is inulin, not starch. A very nutritious and tasty food may be made from sunflower seeds ground into a doughy consistency, formed into small wafers, air-dried from 48-96 hours, removed from the drying screen and

stored. As mentioned earlier, drying and storing helps deactivate the seed phytates and makes the seeds taste somewhat like saltless rye crackers or cheddar cheese.

In conclusion, the experiences reported here support the modern and historical medical literature. These findings suggest that along with basic research in DNA, gene loci, and esoteric chemical reactions, medical science should also test the practical essentials of nutritional bioplasms, land fertility, and the historic relationship between man and nature. If patients, Pottenger, and the historical medical writings are correct, the healing arts can make more real progress in a short time by considering these areas than they have in the long time they were unaware of them.

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