

Re: asian 70% carb diet "paradox"

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On Feb 15, 9:46 am, "TC" <tunder...@xxxxxxxxxxxxx> wrote:

<http://www.ajcn.org/cgi/content/abstract/34/2/184>

Comparison of serum glucose, insulin, and glucagon responses to different types of complex carbohydrate in noninsulin-dependent diabetic patients

PA Crapo, J Insel, M Sperling and OG Kolterman

We have studied the acute effects of oral ingestion of dextrose, rice, potato, corn, and bread on postprandial serum glucose, insulin, and glucagon responses in 20 diabetic subjects with nonketotic, noninsulin requiring fasting hyperglycemia. The carbohydrate loads were all calculated to contain 50 g of glucose. The data demonstrate that 1) dextrose and potato elicited similar postprandial serum glucose responses whereas rice and corn elicited lower responses, with bread intermediate; 2) postprandial insulin responses were relatively flat but rice ingestion led to significantly lower insulin responses than did potato; 3) urinary glucose excretion during the 3 h after carbohydrate ingestion was greatest following dextrose and least after rice and corn. In conclusion, there is a range in the magnitude of postprandial hyperglycemia after ingestion of different complex carbohydrates in diabetic patients with fasting hyperglycemia and emphasis on the use of the less hyperglycemic starches could be of therapeutic value in controlling hyperglycemia.

TC

http://www.westonaprice.org/traditional_diets/japan.html

Inside Japan: Surprising Facts About Japanese Foodways
By Sally Fallon and Mary G. Enig, PhD

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Japan is presented to the American public as a nation benefitting from

all the dietary paradigms deemed politically correct. Their diet is low in fat, high in carbohydrates, devoid of dairy foods and rich in soy foods, we are told, and for this reason the Japanese enjoy the longest life-span in the world, with much lower rates of heart disease, osteoporosis, breast and prostate cancer than the US.

These are partial truths and the relationship between diet and disease in Japan is more complex than we are led to believe. Close examination of the traditional Japanese diet proves that, although very different from Western diets, Japanese cuisine embodies all the principles of nourishing traditional foodways. It is rich in fat-soluble vitamins from seafood and organ meats and in minerals from fish broth, and contains plenty of lacto-fermented foods. Japanese preparation techniques eliminate most of the antinutrients in grains and legumes. As long as the Japanese get enough to eat, their diet is a healthy diet in surprising ways.

Staples

Rice is the main carbohydrate food in Japan, consumed with every meal. For the poor, it is the chief source of calories. However, the real basis of the Japanese diet is not rice but fish, consumed at more than 154 pounds per person per year¹—almost one-half pound per day. This is about the same amount by weight as rice, but in terms of calories, fish provides a greater amount for most of the Japanese.

Fish consumed in Japan come from waters surrounding the island nation and from around the world. Japan imports millions of dollars worth of shrimp, salmon, trout and tuna every year. In addition, carp is farmed in fresh inland waters.

Fish is usually eaten fresh—even delivered to the door by fishmongers—but it is also consumed in salted, dried and pickled form. Fresh fish is grilled or baked and also eaten raw (sashimi). Generally there are two fish courses at each meal, one of cold fish and one of hot.

A typical fish dish is hoshizakana, which is fish that has been marinated for 20 hours in a mixture of soy sauce and sweet white wine, then hung up for one day to dry. Then it is baked in the oven and served plain, without any sauce.²

Soups made of fish, including the organs and bones, are considered strengthening foods and good for anemia. Carp soup is traditionally given to women after childbirth. It is made from the whole carp, including the head, bones, eyes and all the organs except the gall bladder, and cooked four to eight hours with barley miso and burdock root. It is eaten four days in a row after the birth of the child, even longer if the mother has difficulty producing plentiful milk.³

The Japanese also eat many other animal foods including beef, pork, chicken, duck and eel. Beef consumption has climbed in recent years, some of it locally raised but much of it imported. The famous Kobe

beef is tender and full of fat. The Japanese even import large quantities of beef offal.⁴ Consumption of beef liver, tripe and other organ meats is commonplace. Various organ meats are usually served at specialty restaurants. Eel served at restaurants is often accompanied with a soup containing eel innards.

Beef, pork and chicken are usually grilled and served with a sauce that contains soy sauce along with other ingredients such as merin (a sweet wine), sake (rice wine), vinegar or sugar.

Soy beans are a distinguishing feature of the Japanese diet, particularly fermented soy sauce used in most prepared dishes. Almost without exception, Japanese sauces and marinades are based on soy sauce. But it would be a mistake to call soy a "staple" in the Japanese diet, in the way that fish and rice are staples. Dietary surveys indicate that the Japanese consume an average of about 1/4 cup of soy products per day, including the ubiquitous soy sauce.⁵ Other soy foods include tofu, a precipitated product, and fermented soy foods such as miso, tempeh and natto. Until recently, these foods were produced at home or by artisans. They are added in small amounts to soups or used as seasonings. Natto has such a strong smell that restaurants serving it have separate natto-eating sections so that non-natto eaters can be spared the overpowering odor.

Almost all the soybeans used in Japan today are imported and there is a big demand for organic, non-GMO soybeans.

A typical recipe for homemade miso calls for 5 kg soy beans, a whopping 3 kg salt and 8 wafers of malted rice (about 1" by 5" by 10" each).⁶ The beans are cooked, mashed, mixed with the malted rice and salt and formed into balls. The balls are put into a big bucket lined with a thick plastic bag. The bag is then closed and a 5 kg weight put on top. Six months later the miso is ready.

A 1935 recipe for tofu calls for soaking dry soybeans in water for a day, pounding them with a stone mortar, straining into square molds and mixing with brine.⁷ They are then boiled until they become hard and firm.

The Japanese recognize that soybeans need careful processing to remove naturally occurring toxins. When they eat beans that are simply cooked, they use small red ones called azuki. A dish of cooked rice and red beans is made for festive occasions, such as weddings and births. Red beans are also used to make sweet cakes.

The Japanese are said to avoid milk products but the statistics prove otherwise. Average consumption of dairy foods in Japan is about 186 pounds per person per year, more than the total for fish.⁸ This is only one-third the amount consumed in the US, but it is not negligible. Dairy products used in Japan include milk, yoghurt and butter. Japan has a small dairy industry but also imports milk

products from Australia and New Zealand.

In general, the Japanese do not like sugary desserts. But they enjoy pounded rice (mochi) covered with sweet bean paste. They also enjoy mashed sweet potato or chestnuts covered with breading.

Noodles made with wheat flour, egg yolks and salt are an important feature in the Japanese diet. They may also be made with rice, sweet potato or buckwheat. Noodles are usually eaten with chicken or duck, sometimes with lobster and often in broth.

A great variety of vegetables and fruits are sold in the shops and markets. Favorites include daikon radish, eggplant, bamboo shoots and many types of mushrooms. Most vegetables are consumed cooked, not raw. Instead of salads, boiled spinach or watercress is served cold and seasoned with soy sauce.

The Japanese diet may seem monotonous to Westerners, but the Japanese actually put a great emphasis on variety. In nutrition classes, Japanese children are taught to eat thirty different foods a day, and to aim for 100 different foods a week.⁹

Making Broth

A fundamental component of the Japanese diet is fish broth, made in a variety of ways. Japanese chefs take much pride in developing an individual style with broths. Fish soup made from arajiru, the discarded portions of the fish such as the head and bones, was traditionally a common breakfast food. (The meat is deftly removed from the head with chopsticks, especially the meat behind the eye, which is extremely rich in vitamin A.) Usually, however, fish stock is made with dried sardines (niboshi) or dried bonito flakes or powder (katsuobushi). In the old days, the bonito could be purchased as a block of dried fish. The block was shaved into flakes with a "shaving box," a wooden box with a thin slot lined with a blade. The block of dried fish was run along the blade and the shavings would fall into a drawer inside the box. When the desired amount of shavings had been produced, the drawer was pulled out and the contents dumped into a pot of boiling water.

Sometimes broken-up chicken bones are added to the stockpot. The broth is transformed into soup with the addition of vegetables, chicken, pork, tofu or eggs.

Other nourishing broths are made with dried kelp (kombu) or dried shiitake mushrooms. The mushrooms are placed in a pot of water and just before the water comes to a boil, the mushrooms are taken out and the dried sardines or bonito flakes are added.

Brain Foods

Egg consumption in Japan is higher than in America (40 pounds per person per year, versus 34 in the US).¹⁰ The Japanese consider eggs to

be a brain food. The story is told of a woman whose husband was killed during the war. She had an infant son and throughout the following years she gradually sold off all of her furniture to provide her boy with one egg per day, "so that he could go to college." The boy grew up to be an intelligent child and, in fact, did go to college in the postwar years. Eggs are consumed as omelets, custards and in soups. They are also an important ingredient in noodles and batters.

Another brain food in the Japanese diet is seaweed, added to soups and used for wrapping sushi. It is also served as a vegetable. Agar-agar, a gelatin-like product used extensively in Japan, is derived from seaweed.

Seaweed provides an abundance of minerals, particularly iodine so vital for normal thyroid function. Normal thyroid function is, in turn, vital for normal brain function. It is the presence of adequate iodine in the traditional Japanese diet that makes it possible for the Japanese to consume soy products on a daily basis without adverse effects on the thyroid gland.

Fats and Oils

The Japanese have traditionally used a variety of fats and oils. Delicious tempura-vegetables and fish dipped in batter and then deep fried-was cooked in sesame oil, rapeseed oil, whale oil, lard or beef tallow. That was in the olden days. Today, the Japanese are more likely to fry in cheap commercial vegetable oils. But even today, lard is available at the grocery stores in squeezable bottles and skillets in the better restaurants are greased with beef fat and lard. Use of shortening and margarine is rare.

Since World War II, the pattern of lipid intake has changed markedly in Japan. There has been a threefold increase in the intake of saturated and monounsaturated fatty acids, a reflection of increased prosperity that has allowed the Japanese to subsist on more than fish heads and rice. Unfortunately, with the advent of cheap vegetable oils and processed foods, there has also been an increase in omega-6 fatty acids along with a lowering of the levels of omega-3 fatty acids. In a milestone review, published in 1997,¹¹ Japanese investigators blamed the increase in cancer, heart disease, inflammatory disease such as asthma and allergies, and even behavioral problems in Japan not on increases in saturated fat, but on increases in omega-6 vegetable oils. "Decreasing the n-6/n-3 ratio of foods is recommended for the suppression of ageing, carcinogenesis and atherosclerosis," they said. "This is because n-3 fatty acids suppress but n-6 fatty acids stimulate ischaemia/inflammation which causes increased free radical injuries. We suggest that a relative n-3 deficiency as evidenced by the very high n-6/n-3 ratios of plasma lipids might be affecting the behavioral patterns of a significant part of the younger generations in industrialized countries."

Fermented Foods

Fermented vegetables in the form of pickles are served with all traditional Japanese meals. They range from pickled cabbage to eggplant to daikon radish. Pickled foods are an important adjunct to a diet that includes raw fish because they help protect against intestinal worms, which can be a frequent problem in Japan. One folk custom is to consume pickled daikon radish with sushi and sashimi, to "neutralize toxins." Daikon radish is one of the best vegetables for supporting the growth of protective lactobacilli.

A typical recipe for pickling lettuce, cucumber and turnips calls for sprinkling them with salt and allowing them to stand for about two days.¹² This combination is eaten as a separate course with rice. Pickled melon is prepared by covering melon slices with sake (rice wine) and merin (a sweet wine) and sprinkling them with salt. It is allowed to stand for five days and then eaten as the last course of a meal.

In the mountainous regions where salt was not available, ingenious methods for producing pickles evolved. One of these is sunki or pickled leaves of a type of turnip.¹³ The leaves are boiled and then inoculated with zumi, a small wild apple, and fermented for 1–2 months.

An interesting fermented fish product called kusaya comes from the island of Izu. Mackerel and similar fish are soaked in a brine or "kusaya gravy" that is used over and over again because salt was a rare material. After soaking, the fish is dried. In the unused period, the "gravy" was kept alive by adding just one fish fillet. Kusaya is distinguished from other dried fish by its strong, unique, peculiar odor. "If you broil kusaya in your house, the odor will not leave for three months."

The typical Japanese dish of sushi originated in funazushi, a type of round shellfish from Lake Biwa in the Shiga prefecture of Japan. The shell fish was cleaned, salted, washed and fermented for 4–12 months. During fermentation, funazushi develops several kinds of organic acids such as lactic acid, acetic acid, propionic acid and butyric acid, all of which contribute to its distinctive sour taste and peculiar odor. The pickled crustacean was sliced and served on rice. In former times, it was said that if you could enjoy funazushi, you were recognized as a gourmet. Once an important dish in the area around Lake Biwa, the catch of the shellfish is decreasing year by year, due to water pollution, introduced species and shoreline destruction, thus making funazushi a rare and expensive food.

The main fermented drink in Japan is a rice drink called amazake, prepared by boiling a block of malted rice until it becomes soft and drinkable. Salt and sugar are added to taste. In winter, amazake can be bought from vending machines.

Surprisingly, a fermented milk drink is sold in Japanese vending

machines right next to Coke or Pepsi. Unfortunately, the first ingredient listed is sugar.

Beverages

All meals in Japan are served with a weak green tea, made with one teaspoon of tea to six teacups of water. Black tea, coffee and milk are also common beverages. Milk is available to school children and is recognized as a healthy food, one that helps Japanese children grow taller than their ancestors.

The Japanese have interesting ideas about beverages. On a hot day, most Japanese people, especially older Japanese, prefer hot green tea to anything cold. They say they want something the same temperature as their body or that something cold will make them sweat more. In winter time, they often add ginger to warm drinks as ginger is said to be warming. Water is avoided as it is said to make one fat!

Beer is a common beverage, and also recognized as one that causes weight gain. Sumo wrestlers, who can weigh as much as 500 pounds, put on weight by consuming large quantities of beer, as well as lots of rice and a nourishing stew called chankonabe.

Factory vs. Traditional Foods

While the Japanese diet is held up as the paradigm of natural eating, Japan is also home to the world's quintessential imitation flavor, MSG. Originally extracted from seaweed, MSG or monosodium glutamate activates glutamate receptors on the tongue and tricks the body into thinking it has eaten meat. Today most of the world's MSG is produced by Ajinomoto, a Japanese company, through a chemical process. It is no longer derived from a natural food. MSG is used to make cheap soy sauces, thus driving out artisanal producers who traditionally took great care and up to three years to produce the delicious fermented elixir. Factory-produced soy sauce can be turned out in the space of three days and contains, besides neurotoxic MSG, many carcinogens.

MSG was used to flavor Japanese rice rations during the war and it is said that Americans who loved the taste of these rations helped introduce the flavoring into the US. Today it is found in almost all processed foods, including those now manufactured in Japan. Yet health-conscious Japanese recognize the dangers and the more expensive noodles and processed foods there are labelled "No MSG."

Many Japanese also recognize the dangers of McDonald's and other fast foods that are making inroads in Japan, and they deliberately adhere to traditional foodways. Some housewives still make all traditional foods at home, from amazake to miso. Typical of foods still produced by housewives and artisans are various preparations of the famous umeboshi plum. The plum trees grow in the region of Mito Ibaraki where a park is home to 2000 plum trees, attracting three million visitors per year. Each year thousands of Japanese ladies gather the famous umeboshi plums to make all sorts of plum delights, including salty

pickled plums. Well-aged pickled umeboshi plums are a great delicacy—some of them are fermented for as long as 30 years!

Presentation Is Everything

The manner in which food is presented in Japan is always attractive and distinctive, usually with handsome serving dishes and a great sense of proportion and harmony. Meals are often served with elaborate ceremony. On ceremonial occasions and at banquets, a number of bowls and dishes are set before each guest, so that he may have a wide choice. Those dishes not partaken of are carefully packed in decorated boxes and presented to the guest as he leaves.

Even lunch boxes are an art form in Japan, containing beautifully decorated foods such as large prawns, rice rolled in seaweed, fish and pieces of fruit. One company in Japan prepares as many as 50,000 of these lunch boxes per day.¹⁴ Many Japanese mothers get up very early to make lunch boxes containing neatly arranged portions of fish, meat, rice balls, pickles, and fruit for their children and husbands.

The Japanese Paradox

The Japanese suffered greatly before and during World War II. There were many food shortages, particularly of fats and animal foods. TB was common. Many Japanese lived almost entirely on rice during the war.

It was during the postwar years that the American researcher Ancel Keys wrote his famous Seven Countries Study in which he included groups from the Japanese districts of Tanushimaru and Ushibuka. He noted that the Japanese in these two regions had very low levels of serum cholesterol, consumed a diet extremely low in saturated fat and cholesterol and had low rates of coronary heart disease. It was primarily the Japanese data that allowed Keys and others to conclude that consumption of saturated fat and cholesterol caused heart disease.

Keys has been criticized for omitting from his study many areas of the world where consumption of animal foods is high and deaths from heart attack are low, including France. This is the so-called French paradox, one of many. But there is also a Japanese paradox. In 1989, Japanese scientists returned to the same two districts that Keys had studied. In "Lessons for Science from the Seven Countries Study,"¹⁵ they noted that per capita consumption of rice had declined while consumption of fats, oils, meats, poultry, dairy products and fruit had all increased. Between 1958 and 1989, protein intake rose from 11 percent of calories to about 15 percent and fat intake rose from a scanty 5 percent to over 20 percent. Mean cholesterol levels increased from 150 in 1958 to 188 in 1989. During the period, mean body mass gradually increased, with overweight rising from 8 percent to about 13 percent of the population. High blood pressure became more common while the percentage of smokers decreased from 69 percent in 1958 to 55 percent in 1989.

During the postwar period of improved nutrition the Japanese average height increased three inches and the age-adjusted death rate from all causes declined from 17.6 to 7.4 per 1000 per year. Although the rates of hypertension increased, stroke mortality declined markedly. Deaths from cancer also went down in spite of the increased use of animal foods.

The researchers also noted—and here is the paradox—that the rate of myocardial infarction (heart attack) and sudden death did not change during this period, in spite of the fact that the Japanese weighed more, had higher blood pressure and higher cholesterol, and ate more fat, more beef and more dairy.

Misconceptions

Misconceptions about the state of health in Japan abound. It is true that the Japanese have lower rates of cancer than the US, although they are by no means cancer-free. For all types of cancer, the death rate for Japanese males is 149.8 per thousand versus 163.2 per thousand in the US. For Japanese females total cancer deaths are 78.1 per thousand versus 109.7 per thousand for the US.¹⁶ Japanese have low rates of lung cancer (even though they smoke far more than Americans) and low rates of breast, prostate, reproductive, colon and rectal cancer compared to the US. This is said to be due to the fact that they consume more soy and less meat, fat and dairy than Americans. But cancer rates went down in Japan during the period when consumption of animal foods went up. And the Japanese actually consume far less soy than Americans because even today, they do not consume much partially hydrogenated soybean oil. In fact, the most likely explanation for high levels of breast and prostate cancer in the US compared to Japan is the high levels of trans fatty acids from partially hydrogenated soybean oil in American convenience foods.

Fresh fish, rich in vitamin A and omega-3 fatty acids, is one component of the Japanese diet that protects them against lung cancer. A study carried out at the Cancer Centre Hospital in Aichik Mapan looked at the diets of more than 4,000 healthy people and another 1,000 with lung cancer.¹⁷ They found that both men and women who ate large amounts of fresh fish were significantly less likely to develop lung cancer. A diet that included salted or dried fish in place of fresh fish did not confer the same protective qualities.

The Japanese do suffer from very high rates of stomach cancer, and relatively high rates of cancer of the pancreas, liver and esophagus, the so-called Asian types of cancer. There are many explanations for this trend, none of them proven. The most common theory is that the use of highly salted foods such as soy sauce and salted fish is the cause of stomach cancer. But other dietary components are equally suspect, including high levels of irritating talc present in white rice and carcinogens in modern processed soy sauce. A final explanation is the widespread use of microwave ovens by modernized

Japanese. Japan was the first country to adopt the microwave, which seemed to many Japanese housewives a safer and more sensible way to cook food in tiny Japanese kitchens than the old-fashioned gas burner or stove.¹⁸

Japan has many lessons to teach us about the risk of generalization in scientific studies. All claims about heart disease in Japan should be viewed with skepticism because the Japanese consider it shameful to die of heart disease but honorable to die of stroke. Predictably, deaths reported as due to stroke are much higher than deaths reported as due to a heart attack.

Japanese women are said to be free of hot flashes but some investigators believe that hot flashes are "under-reported," due to the shyness of Japanese women. Soyfood promotion material states that "there is no word for hot flashes in Japan" without acknowledging that there is no word for hot flashes in English either. We use two words to describe the condition and it is likely that Japanese ladies use some sort of euphemism.

Another claim is that the Japanese do not suffer from osteoporosis. But according to a 1998 study carried out by the Tokyo Institute of Gerontology,¹⁹ Japanese women have much higher rates of osteoporosis than American women—one in three versus one in eleven. Furthermore, they found that bone mass deterioration begins much earlier in Japanese women, at age 20 versus age 34 in the US.

According to the statistics, the Japanese have the longest life-span in the world. Built into those numbers is a very low rate of infant mortality compared to the US. The Japanese were one of the first countries to practice widespread birth control and they deliberately keep their families small. Great care and attention is lavished on children, starting with the mother's diet during pregnancy, and outright poverty in Japan is rare. When the high infant mortality rate in America is discounted, American men have life-spans equal to Japanese men and American women have longer life-spans than Japanese women.²⁰

Stress-Free Living?

In his doctoral thesis about coronary heart disease in Japanese emigrants, British physician Dr. Michael Marmot also described a Japanese paradox.²¹ Dr. Marmot discovered that when the Japanese in Hawaii maintained their cultural traditions, they were protected against heart attacks, even though their cholesterol increased as much as in Japanese emigrants who adopted a Western life-style and who died from heart attacks almost as often as did native-born Americans. The most striking aspect of Dr. Marmot's findings was that emigrants who became accustomed to the American way of life, but preferred lowfat Japanese food, had heart disease twice as often as those who maintained Japanese traditions but preferred high-fat American food.

Dr. Marmot proposed the theory that certain factors in the traditional Japanese culture protected the Japanese from heart attacks in spite of a high-fat diet. He noted that the Japanese place great emphasis on group cohesion, group achievement and social stability. Members of the stable Japanese society enjoy support from other members of their society and thus are protected from the "emotional and social stress" that Marmot believed to be an important cause of heart attacks. The Japanese traditions of togetherness contrast dramatically with the typical American emphasis on social and geographic mobility, individualism and striving ambition, said Dr. Marmot.

But is life less stressful among the traditional Japanese? "Group cohesion" and "group achievement" can also translate into unrelenting pressure and stress. Is the traditional Japanese family man, striving to perform and bring honor to his family, under less pressure than the westernized Japanese bloke who has decided to chuck it all and hang out on the beaches? And is the Japanese-American living under America's wide open skies, where opportunity abounds, under more pressure than his relatives in Japan, where opportunities are fewer and where crowding is commonplace? The Japanese people, including school children, work long hours, travel miles to school and work and often have only one day a week free. The pressure on children to do well in school is intense and the suicide rate among Japanese young people is among the highest in the world.

What Dr. Marmot's study really tells us is that increased animal fat in the Japanese diet protects them from heart disease in spite of their stressful life-style, not the reverse. High rates of heart disease among Americans should be blamed on processed foods based on vegetable oils, not animal fats and a high-stress life style.²²

Saturated Fat

Saturated fat from animal sources is said to be the enemy in the American diet. Researchers espousing this dogma have consistently ignored evidence that saturated fats actually protect against heart disease and cancer. The many studies of the Japanese also ignore two very important sources of saturated fat in their diet.

One of these sources is spam, a canned pork product provided to American soldiers during the war. Americans may have loved the taste of Japanese rice rations, but the Japanese loved our rations even more. Spam provided exactly those dietary components that had been missing through the years of poverty and privation—animal protein and fat. In a nation that has been unusually resistant to foreign influence, spam was quickly embraced and transformed into a popular snack food. Spam musubi consists of a slice of spam soaked in soy sauce on top of a bed of rice and wrapped in seaweed—a convenient morsel resembling sushi. Spam musubi can be purchased in local convenience stores, including 7-11 stores, in Hawaii. In fact, spam consumption in Hawaii is higher than the total spam consumption in all the other 49 states combined due to its popularity among Japanese

Americans.

The other source of saturated fat in the Japanese diet is . . . white rice, a refined carbohydrate that the body efficiently turns into saturated fat. As long as the diet is rich in fat-soluble vitamins from fish and organ meats, and minerals from broth and seaweed, white rice can be consumed without adverse effects. In fact, for the Japanese, it is beneficial, providing the substrate for saturated fats that the diet still lacks. Macrobiotic proponents claim that the traditional Japanese diet was based on whole brown rice, not refined white rice. It is said that the first Samurai warriors ate brown rice while the rest of the nobility ate white rice. Then the samurai slowly "softened" and started eating white rice. But the true explanation for the use of white rice may be somewhat different. Brown rice that is not soaked and fermented, as was done traditionally in India, may block mineral absorption and cause intestinal problems. The Japanese prefer the taste and texture of white rice and this preference may reflect a profound intuition that when rice is consumed on a daily basis, it should be refined not whole, unless a long and careful preparation is observed.

The Modern Challenge

The challenge for the Japanese, like the challenge for all countries in the process of modernization, will be to resist the temptations of processed foods. But Japan faces an additional challenge and that is to resist the advice of meddling American health researchers who are telling them to eliminate vital components of their traditional diets—beef, pork, lard, tallow and even white rice. Better to pay attention to a few problematic additives such as talc in rice and impurities in salt, and to protect artisanal food protection from the cutthroat policies of the food processing industry.

And one more piece of advice to the Japanese: throw out the microwave.

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SIDEBAR ARTICLES

Japanese Meals

Recipes of All Nations, published in 1935, gives the following menus for typical Japanese meals, although dietary habits of modern Japanese have suffered from western influences since World War II. Today a high percentage of urban Japanese have English–style white bread for breakfast.

Breakfast: Fish broth and vegetable soup with rice; omelet, baked fish, seaweed and pickles

Lunch: Egg or rice soup, fish, chicken, vegetable dish and fruit

Dinner: Broth soup with pieces of meat and vegetables, raw fish with grated horseradish, lobster with lettuce and cucumber salad, hot fish, cold noodles, vegetable soup and rice, fruit.

The French Paradox

Foods Eaten per Person per Year (in Pounds)

Japan France US

Cereals 232 188 150

Potatoes & Starches 82 168 69

Sugars 47 75 155

Total Carbohydrates 361 431 374

Meats 84 239 258

Re: asian 70% carb diet "paradox"

Eggs 40 31 34

Fish 157 40 16

Dairy Foods 186 788 576

Total Animal Foods 467 1098 884

High consumption of animal foods compared to the Japanese is said to be the cause of heart disease in America. But the French consume much higher levels of animal foods and have much lower rates of heart disease. Americans consume much higher levels of sugar.

TC

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