Eating Animals

Would George Ohsawa and Michio Kushi Be Vegan Today?



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Foreword by Martha C. Cottrell, M.D.

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Third edition

Foreword

This powerful, scholarly, and comprehensive work is based on George Ohsawa's perspective of the 7 Levels of Judgment and Michio Kushi's Levels of Consciousness. It also supports the basic principles in macrobiotic philosophy of making balance with our environment, both internal and external

Given the destruction of the environment, especially the pollution of air and water from the promotion of a meat-based diet/culture, it is most important to spread information that supports a plant-based vegan diet as a necessary behavioral change for sustaining the health of the planet and all life upon it!

In my own personal life and in my practice as a physician I have witnessed remarkable incidences of reversal of heart disease, diabetes, arthritis and even cancers through the practice of these macrobiotic principles.

According to an article written by Phiya Kushi, one of Michio Kushi's sons, Michio became vegan in his later years in order to address his own health issues resulting from years of a stressful lifestyle. He experienced great benefits from doing so, and without a doubt would encourage others to do so!

Such changes individually and globally support the current needs of the planet to make balance in the face of climate change and global upheavals politically and environmentally.

I have been personally and professionally promoting these principles since the late 70's, studying and working with Michio and Aveline. In the early 80's, along with Eleanor Levy of Boston University, we worked with a group of men with AIDS and found improvements in the T-Cell counts using these principles of macrobiotics. We took our data to the first AIDS

Conference in Paris in 1987, resulting in the book *Aids, Macrobiotics and Natural Immunity*.

My evolvement in promoting my own health and the health of my patients has been both exciting and rewarding. I invite all to seriously study the information presented in this remarkable article and to embrace this lifestyle for the sake of their own health, the health of the planet, and the health of future generations!

-Martha Clayton Cottrell, M.D.

Introduction

George Ohsawa (1893-1966) was a philosopher who taught right diet¹ as the discipline whereby humans could achieve health and happiness. He traveled to and taught in several regions and countries during his lifetime, including Africa, America, France, and India. In Japan, his school (Maison Ignoramus) attracted many Japanese students. He sent some of them to live in other countries, e.g., Belgium, Brazil,² and frequently assigned them Western names. In America, Ohsawa's most influential students were my teachers³, and Michio and Aveline Kushi—names which have become inseparable from the teaching, given their devoted efforts to put macrobiotics on our world's map.

Michio Kushi was very frank about differences on some issues between himself and his teacher.⁴ Initially, on the issue of eating animals, his teachings and Ohsawa's did not conflict. As an ideal, both Ohsawa⁵ and Kushi⁶ encouraged minimal amounts of the most primitive and least chemicalized animal-sourced foods, the ideal being no use⁷ except in circumstances of starvation or for a specific medicinal purpose.

Michio Kushi's teachings evolved over his lifetime. To quote Alex Jack: "Michio taught consistently that human beings in temperate and cold regions were a product of a small but significant amount of animal food. Hence, four of our 32 teeth are canines and designed for tearing flesh. He taught that over millions of year, humanoid ancestors consumed varying amounts of animal food, depending on the advance or retreat of the glacial ice . . . He encouraged and supported people to eat and enjoy animal food, as did he through most of his life, within moderation, so long as the quality was good and it was humanely obtained. His inclination toward vegan in later life was primarily because of the environmental and climate crisis, as well

as the corrosive soul-damaging effects of factory farming and fishing."

This level of affirmation and flexibility may have fostered misunderstanding and a growing trend, by the late 80s, towards the progressively increased use of animal-sourced food. By now, we've zipped from early teachings (e.g., occasional or weekly use of egg or wild fish, or wild fowl) to a point where some of our teachers and counselors encourage the frequent use of all animal-sourced food including mammals and their milk—attributing diseases such as cancer to the absence of these foods from our diet! Slogans (e.g., "freedom," "change") and selective quotes are cited to support facets of their position. But if we examine macrobiotics as a gestalt, it appears this trend advances in diametric opposition to the teachings of George Ohsawa and Michio Kushi, i.e., it is not a modification.

Though several senior vegan macrobiotic counselors have addressed components of this complex issue,⁸ the ongoing absence of community resolution cries for a comprehensive approach. It occurs to me that we can use a tool taught by Ohsawa and Kushi. This tool was referred to by Michio Kushi as "the spiral of consciousness" and taught by George Ohsawa as "the seven stages of judgement." I see it as our "macroscope," the lens through which we can look at a topic from seven separate-but-interrelated perspectives.

MECHANICAL - I need!

Synonyms for the word "mechanical" include automatic, involuntary, and reflexive. The word is typically associated with machinery. In the case of the human body, we are looking at a self-correcting machine with feedback loops designed to maintain homeostatic balance. This inborn awareness is independent of concepts, emotions, or ideals, i.e., we may override its wishes but we cannot block its responses.

Eating is an instinctive response to biochemical and physiological need. Animals, conventionally categorized as carnivores, herbivores, or omnivores, choose food according to essence type. However, instinct enables them to get what they need if their species-appropriate diet is not sufficient. The most common example of this adaptive behavior is called geophagy, i.e., the eating of dirt, clay, and/or sodium deposits. We observe similar adaptation when our carnivorous domestic cats and dogs instinctively eat grass, or stand next to us as we cut vegetables, waiting for scraps. Instinct also ensures that a starving animal will eat anything, contributing to isolated

accounts of deer eating mice, squirrels, and the eggs and young of groundnesting birds.¹³

Humans are essentially herbivores (as suggested by dentition, gut length, the emphasis on starch-digesting enzymes, etc.) so, barring starvation and assuming a mineral-replete plant-based diet, they will not instinctively choose to eat animal-sourced food. Are there exceptions? Decades ago, I had a macro girlfriend who moved from California to Salt Lake City with her little children. Her kids and my youngest were approximately the same age, so we used to trade off on baby-sitting. One day she expressed amazement that her kids were chowing down on miso soup, brown rice, and veggies at my house. She told me they had loved the food in Berkeley but now refused to eat it. Instead, they expressed the desire for chicken (!) that she was cooking for them. I asked her what kind of stove she had in Berkeley. It turned out that stove had used gas, whereas the one in SLC was electric. We were both amazed at the instinct of her children to refuse all food except the most yang when it was cooked on an electric stove (extreme yin).

In this section, I use animals and very young humans as examples, because adult access to instinct is typically blocked by the chatter at higher levels. Recently, an individual with whom I was working was concerned he might need some animal food, since he was feeling weak after his morning walk. As "luck" would have it, one of his macro friends had told him that he might need a little piece of fish or chicken, as he got older. When he tried a taste of tuna and experienced an almost electrical effect, he interpreted the reaction as an instinctive sign that he needed the protein in the tuna.

Not so fast! Protein requires hours of digestion before it hits the blood stream (in contrast to sodium), making it unlikely that his body had responded instinctively to protein in that tuna. I asked him to test using a slightly increased amount of salt. After four days of using miso before his morning walk, the symptoms were gone. On his own, this gentleman would not likely have recognized his body's instinctive call for sodium, chloride, and trace minerals, due to social conditioning (e.g., the opinion of friends) and intellectual dogma (e.g., protein-animal food myths).

Question: At the mechanical level, are there reasons why eating animals would make a human feel better?

Answer: Yes. Examples: 1.) All animal-sourced foods including dairy are a valuable source of salt (i.e., sodium, chloride, additional essential trace minerals) and fat. When we transition to a plant-sourced diet, we may need

to cook with increased salt and oil. 2.) Fish and seafood contain iodine. If we stop eating them, it is useful to increase sea veggie consumption and verify that our salt is full-spectrum in terms of trace mineral content. 3.) Pregnancy concentrates a mammal's nutrients in the placenta. It is common for female mammals (including some human groups) to recapture those nutrients post-delivery by eating the placenta. If this sounds gross, koi-koku would be a traditional substitute. 4.) Some animal-sourced foods may be physiologically addictive, so consumption would temporarily block instinctive craving. Dr. Neal Baranard is one researcher who contends that the digestion of dairy produces casomorphins (an opiod-like substance most concentrated in cheese). ¹⁴ (Interestingly, with the exceptions of humans and their pets, no adult mammals show any addiction to milk after weaning.)

SENSORY – I like!

This level of judgment receives and acts on information via our five senses: sight, sound, smell, taste, and touch. Looking at the use of animalsourced foods from the perspective of sight highlights the visual delight when we look at food or pictures of food that we enjoy. From the perspective of sound, we have the crackling of bacon or salmon on the grill. Smell gives us the inviting aroma of hot dogs around the campfire, or sausage at a favorite breakfast joint. Taste is the info we get from our taste buds, each containing 50-100 taste receptor cells. If we discriminate between the five tastes, i.e., bitterness, saltiness, sourness, sweetness, and umami, my take is that animal-sourced foods give us sweet and salty. (Interestingly, unlike plant-sourced foods, the longer meat, fish, egg, etc. is chewed, the more tasteless it becomes.) Touch/tactile perception is more accurately referred to as the somatosensory system. Impressions are received through sensory receptors that cover our skin and epithelial tissues, skeletal muscles, bones and joints, internal organs—just about any spot that contains nerve endings. From the perspective of touch, eating animals gives us the info called "mouth feel," the evocatively primitive experience of tearing meat from bones with our teeth, a cook's possible enjoyment while handling raw beef at the outset of food preparation, and the perceptions of satiety and warmth. That's it.

Well . . . maybe not! Every front has a back. So again, in terms of sight, I'll say that I don't miss the yellow-to-brown underarm stains on my white blouses, i.e., the ones that stopped when I stopped dairy; and I don't miss

the lower body overweight which characterized my years as a serious consumer of animals. Ditto for the heavy cover of animal hair on my legs and arms, or the simultaneous conditions of dandruff and a greasy scalp! How about odor? I'd have to say that I much prefer the smell of myself, i.e., my urine, sweat, shit, breath, since stopping the egg, fish, animal-sourced what not. Touch: When I think of the bound-up-insides sensation that characterizes, for me, even a few tablespoons of flesh food, I'm ever so thankful for the tactile sensation of easy grain and veggie elimination. (Is this gross? Not on your life! I'm thinking of Ohsawa's teachings, and Herman Aihara's caution that folks who pay lots of attention to the selection, preparation, and consumption of food, i.e., "what goes in," need to pay a little attention to "what comes out.") While we are on touch, what about the itching inside your inner ear or the full blown-earache or sore throat or sniffles or whatever which comes after that bit of sour cream or yogurt or a meal which featured the finest of wild fish? Taste: I encourage you to experiment with weeks to months of no animal-sourced food. Then eat a small serving size of whatever pleases you. The question is, do you notice the taste inside your mouth in the following hours? (I have the wild idea this taste reflects our relative inability to digest that food.)

Ohsawa associated animal-sourced food with pleasure. ¹⁵ He did not teach against the sensory level of judgment but encouraged us to respect its limits. ¹⁶ Michio Kushi stated bluntly that eating from the sensory level of judgment "will eventually spoil our health. ¹⁷

Question: At the sensory level of judgment, are there reasons why eating animals would make a human feel better?

Answer: Yes. Sensory cravings can be very powerful, especially in individuals who previously made most of their food choices on the basis of taste. The craving is temporarily blocked when we satisfy the demand. It is weakened and progressively altered by the use of analogues, e.g., rice or nut-based ize crème, cheez, etc. (Purists will argue that these foods aren't natural. If you stick with the conversation, you will be convinced that, at this time on Planet Earth, no animal-sourced food is currently natural! Anyway, these foods are transitional or used occasionally in small quantities.)

EMOTIONAL – I want!

Unlike the fundamentally physiological first and second levels, the third level of judgment reflects likes and dislikes of the heart. Attachments to a

food highlight the role it played in the familial and societal microcosm in which we were nurtured while growing up. (For years, my attachment to ice cream [specifically, coconut, coffee, pistachio, and spumoni] was my attachment to my father and ice cream cones after Bronx Zoo outings.) Our range of attachments includes foods, which marked holidays, birthdays, first dates and wedding receptions. Our happiest memories are connected to them, so their taste brings up strongly positive emotions. This is especially the case with our first food: Milk from our mom or from an animal was the first thing we tasted, and frequently the last one we give up.

These attachments link the past to the present and the individual to loved ones: Partners give food gifts such as steak dinners or boxes of chocolate; moms create menus to satisfy group cravings; "we visit our relatives' homes and eat what they are eating in order to satisfy them," and so on. These patterns are reinforced until someone breaks them, e.g., a dad decides that his sensitive male child doesn't have to enjoy rodeos or eat burgers to be macho; a mom chooses to invest emotional fervor towards safeguarding her child's health—rather than creating the same cravings which her own mom stamped on her in childhood. Or a wife could channel her cooking skills towards the hope for marital harmony and fewer quarrels—as opposed to pandering to her partner's food choices—gaining his approval while creating the next heart attack, stroke, prostate cancer, etc. 20

One last word: Choosing at this level is typically specist, i.e., we love ourselves, our families, and household pets, and are repulsed by the idea of eating or abusing humans, cats, dogs, and horses.

Question: At the emotional level of judgment, are there reasons why eating animals would make a human feel better?

Answer: Yes. Emotional cravings can be very powerful, especially in individuals who are using food to avoid dealing with psychological issues. In my pre-macrobiotic years, one of my favorite binge foods was graham crackers and milk—the snack that was always served in kindergarten at P.S. 26. Choosing it was my infantile way of re-experiencing the security and simplicity of childhood. (This craving has not surfaced in me for decades now, but if it did, I would satisfy if with vegan graham crackers and grain or nut milk.)

INTELLECTUAL - I think!

The topic of eating animals from the level of intellectual judgment, leads to issues of strength, health, and nutritional deficiencies.

I raised a vegan child who could lift a 28-pound concrete block before the age of three; now, age 31, she has never broken a bone or developed a single dental cavity. Another great example of vegan strength? In September 2013, vegan Patrik Baboumian made history with his record-breaking carry of 1212.54 pounds over a distance of 32.8 feet. What about endurance? Scott Jurek, vegan ultramarathon runner set the American 24-hour record with a run of 165.7 miles. There are many vegan athletes, some of whom have followed a plant-based diet for more than 30 years and all of who swear that vegan is their secret!

Are these folks the exceptions? Historically, the ultrarunning practiced by natives of the Americas was supported by a plant-based diet. The staple diet of the Aztecs, for example, included corn, beans, squash, chili peppers, tomatoes, limes, cashews, potatoes, sweet potatoes, peanut, and chocolate, as well as wild greens and lake algae.²¹ In the absence of horses and wheels, these groups depended on runners to relay messages and conduct trade, a history which continues today in groups such as the Tarahumara. Subsisting on corn, beans, squash, chili peppers, wild greens, chia seeds, etc., youths have been described as running 50-100 miles for pleasure, and a 55-year-old elder (Victoriano Churro) took 1st place in the Leadville Trail race in 1993, covering 100 miles in 20 hours.²² (Preferred food for running? Parched corn and chia seeds!)

Strength and endurance point to health. Let's start by looking at cancer. The death rate in Tanzania for colorectal cancers is 3.65 per 100,000. This contrasts to Hungary with a death rate of 27.3. Interestingly, the Tanzanian diet is largely based on millet, rice, sorghum, beans, cassava, cornmeal and vegetables. Animals are slaughtered only for special occasion, in contrast to the Hungarian diet, which is meat and dairy-centered. Mozambique has an even lower incidence of this particular cancer, at 0.88 cases per 100,000.²³ In this country, "just four foods, maize, manioc, beans, and groundnuts, accounted for 86 to 88 percent of calorie intakes, while animal-sourced foods "including fish, milk, eggs, chicken, and meat contributed only 1 to 2 percent of household calories.²⁴ If we consider length of human intestines and consequent increased risk for putrefaction; relative indigestibility, given a gastric acid pH as high as 5 for humans (in marked contrast to average of 1-

2 for dogs); etc., it's obvious why higher meat consumption would lead to an increased incidence for colorectal cancers

Ditto for a link between the cancers driven by hormones and the increased use of dairy, a food produced by and containing hormones: In 2002, Ganmaa Davaasambuu, a Mongolian physician, conducted a "study of cancer and diet in 42 countries." Her findings showed that the "countries with the highest consumption of dairy products suffered the highest rates of prostatic and testicular cancer. (A similar study in 2005 showed much the same results for breast, ovarian, and uterine cancers.) In 2003, the group focused on the relationship between rising rates of these cancers and increased dairy consumption in Japan. Prior to World War II, the Japanese consumed very little milk, and rates of these cancers were low. But in the 1950s, a school-lunch program that included milk was instituted nationwide. Since that time, the intake of milk has increased twentyfold, and the incidence of prostate cancer has increased twenty-five-fold."²⁵

How about heart disease? In one study, 28 obese children with high cholesterol, ages 9-18 years, were randomly assigned to follow a diet designed by the American Heart Association or a plant-based died. After 4 weeks, the children on the "plant-based diet showed major improvements in body mass index (BMI), weight, mid-arm circumference, systolic blood pressure, total cholesterol, low-density lipoprotein (LDL), or 'bad' cholesterol, and insulin. They also showed improvements in myeloperoxidase and high-sensitivity C-reactive protein, which the researchers say are two common indicators of heart disease." These findings are in line with historical precedence (e.g., the radical decrease in heart attack and stroke in Norway during WWII when "the native population subsisted on whole grains, legumes, vegetables and fruit" as well as extensive meta-analysis. 28

How about other conditions that can be eliminated when a person stops eating animal-sourced food? I know moms who have radically altered their child's health with this step, knocking out asthma, colds, dandruff, earache, headache, nightmares, seed warts, sore throat, strep throat, stomachache, tonsillitis, etc.²⁹ One mom swore that her child became much less accident-prone. Another noted more positive behaviors. Then there are the adults who have eliminated the symptoms of arthritis and fibromyalgia, lowered their blood sugar, improved kidney and liver functions, or observed the disappearance of depression and restless leg syndrome. So much good (while protecting bone density³⁰) begs the question: "Why would it be beneficial to eliminate a fairly large category of food"?

For starters: Animals are at the top of the food chain and plants are at the bottom, Plants do not eat plants, and their average life span is relatively short, i.e., for even a small animal like a sardine, life span is measured in years rather than the length of a growing season. In the context of our modern environment, these facts point to animal-sourced food as the best possible means of ingesting man-made poisons, i.e., although the bioaccumulation of environmental toxins occurs in both plants and animals, the biomagnification of this dose increases as you go from plants to animals, and then from the smaller animals to higher trophic levels, i.e., the predators. The toxins, which humans have introduced to our food supply, include the POPs (e.g., PCBs, PCDDs, PCDFs) and heavy metals (e.g., lead, mercury, arsenic, cadmium). Humans are at the top of this chain, making human breast milk the most toxic food on Planet Earth. In 2004, researchers in Poland reported "an average of 0.218 mg PCB per kg milk fat in human milk, 6 and 17 times higher than cow's milk and infant formulas, respectively." Counterintuitively, "higher (37%) content of PCB was found in the milk of women living in rural regions.³¹

Do I think mothers should stop breastfeeding their infants? Never! I have used the illustration of human breast milk to explain what happens as environmental pollution travels to the top of the food chain . . . and to encourage those who have birthed or intend to birth children to protect their offspring through wise food choices. At present, animal-sourced foods are toxic. In 2008, the World Health Organization released the following figures for the levels of PCBs in foods: animal fat: 20 to 240 mcg/kg; cow's milk: 5 to 200 mcg/kg; butter: 30 to 80 mcg/kg; fish: 10 to 500 mcg/kg; specific fish species (e.g., eel) and fish oil or fish liver: up to 10 Milligrams/kg. By contrast, vegetables, cereals, fruits, and a number of other products were found to contain less than 10 mcg/kg.³²

Okay, we get it! The animals have been poisoned. Does that impact the humans who eat them? What exactly would be the energetics of an animal, which was confused, sick, and toxic? Many of the contaminants dumped into the natural environment by humans are neurotoxins, capable of inflicting havoc in the central nervous system, impacting muscle (including heart!), etc. Others are hormone disrupters, impacting reproduction, thyroid function, sleep patterns and so on. Whatever the poison, one outcome is a given: Humans are animals. Animals make fat cells to lock up/sequester molecules of poison. So, in a functional human body, the response to poi-

son-containing foods will be weight gain in ratio to the amounts of poison consumed.³³

Yes....but what if the animals were not poisoned? In the beginning of human life on Earth up until the time of the Industrial Revolution, animal-sourced foods may have benefited humans at the level attributed to them by various systems such as Chinese medicine. However, I have my doubts. It appears that some animals have never been useful food for humans, due to a 2-3 mya (million years ago) evolutionary split between them and us. Earlier this year, researchers at UC San Diego identified the mechanism whereby the molecular amino-carbohydrate termed Neu5Gc (as contained in beef, pork, lamb and bison, whole milk, certain cheeses and fish eggs) is always inflammatory, as well as potentially carcinogenic to humans. Plants, like humans, do not contain this substance, though it has also been found at low-to-trace levels in fish, and poultry.³⁴ ³⁵ ³⁶ Studies surrounding Neu5Gc affirm the wisdom behind advice to source animal food from the most primordial animals,³⁷ and to use prep methods which "minimize their poisonous effects."³⁸

So . . . eating animals is best left to animals. On my read, this approach validates the respect shown by primitive and traditional groups who were compelled to use these foods. The same can be said for various macrobiotic teachings, e.g., how to cook animal food so as to "vegetalize" it, reasons to use the whole animal, freminders about quantity and chewing, etc. That advice was apt, but is not timely. We have passed the 50s when farmed animals began to be suspect, and arrived at a point where many species of wild animals are dying of cancer at the same rate as humans. In 2011, researchers in Egypt were attempting to figure out which prep methods best minimize PCBs in sardines (a tiny herbivorous fish). At Can you imagine?! How can we chew or yinnize/yangize this level of hazard, light years beyond our teachers' concerns and permissions? It seems all "what ifs?" are moot. In fact, it can be argued that each of our deceased teachers, were they alive today, would be absolutely vegan.

One last point at this level of judgment would be deficiencies. In alphabetical order, the purported list includes carnosine,⁴⁵ creatine,⁴⁶ DHA⁴⁷, Omega-3 fatty acids,⁴⁸ taurine,⁴⁹ tyrosine, ⁵⁰ vitamin B12,⁵¹ and vitamin D3.⁵² Personally, I see supplements as a less toxic alternative to animal-sourced foods, though their use should be coupled to a sincere effort to recover normal function.

Michio Kushi essentially summarized a responsible intellectual approach

to eating animals by citing the story of Daniel in the Old Testament as "the world's first nutritional study and scientific case control experiment." ⁵³ The account in the first chapter of Daniel highlights the superiority of a vegan diet, i.e., refusing to eat the Babylonian King's meat (extreme yang) and wine (extreme yin), Daniel and his three companions propose a 10-day test on a plant-based diet. "And at the end of ten days their countenances appeared fairer and fatter in flesh than all the children which did eat the portion of the King's meat." ⁵⁴ This balanced vegan diet apparently also supported Daniel's "understanding in all visions and dreams," ⁵⁵ and likely protected him from being eaten by lions! ⁵⁶ What are the chances??!

Question: At the intellectual level of judgment, aside from starvation or the use of explicit animal-sourced remedies, are there reasons why eating animals would make a human feel better?

Answer: 1.) Yes, intellect is frequently conscripted into service by sensory and emotional levels of judgment. 2.) Restricted use of medicinal remedies, e.g., ranshio, egg oil, and koi-koku will benefit explicit conditions.

SOCIAL - I feel for you!

The social level of judgment goes beyond family, community, and country, "to relations among humanity and other species." In its largest sense, it is best expressed by the Lakota phrase, *mitakuye oyasin*, i.e., all my relations. Each of us is, by nature, dominantly physical, emotional, or intellectual. This low level of function is enhanced when we begin to think from the perspective of the larger groups in which we have membership, i.e., all human, animal, plant and elemental (e.g., soil, water, air) cultures. This enhanced level of consciousness is critical to the topic of diet because we, as individual humans and members of collective humanity, are a contiguous part of a larger body, i.e., Organic Life on Earth. To quote Michio, "Personal health cannot be separated from planetary health."

By 1983, when I began a consistent macrobiotic practice,⁵⁹ I had at least 10 years of experience in choosing diet on the basis of intellectual theory and was typically able to override sensory and emotional whims. But reason and willpower could not block the incessant lure of "outside" food, or the yes/no internal dialogue. With the exception of pregnancy and 2 years nursing,⁶⁰ I was chronically attracted to such things as food pictures in magazines, old cookbooks, TV, ads, etc.

I woke in 1987 via John Robbbins' economic, environmental, and ethical

argument for veganism (*Diet for a New America*), and the classic *Animal Factories* (Jim Mason and Peter Singer, 1980).⁶¹ Those revelations, especially the photos in *Animal Factories* (my first glimpse of factory farmed animals), changed the conversation, assigning a new definition to "others," as expressed in the Golden Rule. For weeks after my intro to the new reality (a little like being shot in the gut or actually possessed), it was difficult to sleep. I was in a kind of agony. My "others" (family, household pets, friends, and community connections) whom I was bound to treat in the same way as I wanted to be treated suddenly included billions of animals in various states of suffering.

This visceral-emotional-intellectual sense of connection started with the animals closest to human, those who naturally live in family units and communities, and obviously possess intellect, and emotional center (permitting them to express love, grief, faithfulness, fear, etc.). But I deny that I was engaging in anthropomorphism. In fact, rather than ascribing human attributes to animals, I believe I became aware of my connection to the animals because I am one of them.⁶²

Two examples: As a female mammal, I couldn't bear the anguish of the dairy animals being separated from the calves within hours of giving birth.⁶³ Because I am at least as playful and intelligent as a dog, with a need to get up and down frequently and a horror of confined spaces, the concept of a pig in a cage too narrow to allow any change in position for 6 months just made me crazy.⁶⁴ In case you think I am being sentimental (as opposed to self-protective), I should tell you that, unlike many of my vegan friends, I believe some animals may have agreed to work with humans, e.g., to carry heavy loads, plow a field, or turn a grindstone. I also believe they may have agreed to protect humans from cold and famine, e.g., as in the legend of White Buffalo Woman.

None of that was an agreement to experience artificial insemination, branding, castration, debeaking, ear-notching, horn removal, or tail-docking. Ditto for the kidnapping and murder of their young; forced feeds containing excrement as well as fish, poultry, and mammals; or the absence of contact with a natural environment. How about 1,000 miles without food or water during transport to slaughter, or 8-41 days rocking on an animal transport ship? How about outright torture, e.g., being tossed while conscious into a vat of boiling water, or sent on a conveyor belt to the macerator, or being skinned and butchered as you blinked and writhed in agony? These practices, which rival those of the Spanish Inquisition and Isis, impact more than

80% of all farmed land animals on our planet.⁶⁸ (Though possibly below the general level of awareness, word has it that their cries are heard at the level of the stars.)

Okay, I'll stop. One of my points here is to encourage you to re-examine what you are eating. Food is cellular information.⁶⁹ When you eat a modern farmed land animal or its products, you are ingesting the cellular memory of its experience, as well as trash quality GMO feed and drugs, and the consequent diseases, which it developed during its lifetime. To give you an example of how this works, Michio Kushi attributed nightmares to the consumption of animal food, especially mammals. 70 At present, it seems unlikely that we would be ingesting any of the properties typically attributed to the food animals,⁷¹ and are more likely to be chowing down on anxiety, boredom, confusion, depression, paranoia, terror, etc., with obvious implications for individual and societal mental health. (For those of you who have bought into the idea of range-fed and sustainable, I'll help you out: The norm includes supplemental feed [i.e., the kind that turns herbivores into carnivores and, actually, cannibals], and the majority end up on feed lots, in transport trucks and at slaughterhouses.⁷² Additionally, despite your purchase cost, they are not sustainable.⁷³)

Aside from the enhanced sense of community with and compassion for animals, evaluation of this topic at the social level of judgment points to economics (e.g., the lunacy of converting 20 lbs. of grain into 1 lb. of beef⁷⁴); environmental impact (e.g., the 13 billion annual global metric tons of manure generated by the industrialized production of food animals,⁷⁵ "credited" with the creation of 100s of coastal dead zones⁷⁶ and the conversion of yet to be enumerated inland bodies of fresh water into algae ponds⁷⁷); the allocation of finite resources (e.g., Globally, though we are running out of fresh water, growing animals for food uses 33%.⁷⁸ Though we are running out of land, "livestock is the world's largest user of land resources, with grazing land and cropland dedicated for animal feed representing almost 80% of all agricultural land."⁷⁹); social impact (i.e., the link between cattle grazing, deforestation, climate change, desertification, terrorism.⁸⁰); and ethics.

I'm thinking about ethics and/or conscience and/or rights. I want to know what happened to the rights of animals. In 1998, the EU created the European Convention for the Protection of Animals kept for Farming Purposes, 81 92 out of 180 law schools in America teach animal rights law, and this topic

has generated articles⁸² and books.⁸³ Yet 70 billion land food animals are raised and killed each year globally⁸⁴ (far in excess of the actual needs of 7 billion humans) under conditions so horrific that the industry works to prevent the truth from reaching the consumer, e.g., through "food disparagement" laws in 13 states⁸⁵ and ag-gag laws prohibiting visual documentation in 5 states. Meanwhile, aside from the 6 million food animals killed per hour on planet Earth, we have the wild animals which are murdered, poisoned or trapped as potential livestock predators (e.g., the 100,000 native bears, coyotes, cougars, and wolves killed yearly by the USDA in America⁸⁶) and all the grazing animals which, perceived as competitive, are hunted, penned, or generally harassed (e.g., bighorn sheep, bison, burros, mustangs, etc., none of which harm the forage or the land as do cattle⁸⁷). And then there are the wild animals, which used to live in Earth's rainforests (with an estimated animal, plant and insect species loss of 137 daily)88. Did you know that 15% of the Amazon rainforest remains intact, 30% has been clearcut, and 55% is described as degraded?⁸⁹ Did you hear we have entered the sixth mass extinction?90 The voices of these species are distant. If we are human, we will hear them

I want to know what happened to the rights of water, e.g., to be water—a compound that contains hydrogen and oxygen (as opposed to zero oxygen with animal agriculture's "contribution" of antibiotics, heavy metals, herbicides, hormones, GMOs, zoonotic pathogens, as well as monstrous quantities of phosphorus and nitrogen). I want to know what happened to the rights of air, e.g., to be air—you know, that stuff which is supposed to be 78% nitrogen, 21% oxygen, 0.03% carbon dioxide, etc. Did you know that CO2 has inched up to 0.04%91 while the oxygen content of the atmosphere is estimated at 15% in polluted cities?93 How about the rights of soil, e.g., to perform gaseous exchange / transpiration, and absorption (e.g., allowing rain to reach the livestock depleted aquifers)94... or the sedge, soil bacteria, and wild flowers? I just can't imagine what it must be like to be suffocated under the weight of manure lagoons, some holding as much as 4.5 million gallons and the size of several football fields.95 If we are human, we will feel them.

Then there are the people, e.g., the billion who are directly dependent on the rivers and forests. These are the meek who inherited the Earth from the beginning of their recorded time, acting towards the environment as if it were sacred, as if their lives depended on it. Whatever their practices (e.g., clearing land for subsistence farming), they were in harmony with nature (and we know this from the photographic evidence of our Earth before it transitioned to a cattle ranch). I mean, can you imagine waking up one morning and finding that your supermarket, pharmacy, pet shop, fabric store, building supplies outlet, etc. were gone because your corrupt or impoverished or duped government sold your rights, diverting your river, removing your forest, and so on? Around the world, indigenous groups / land activists, fighting for their way of life, are marginalized, ⁹⁶ impoverished, and murdered. (I was amazed to learn that the death of the 73-year-old nun, Dorothy Stang, was not an isolated incident. In the Brazilian Amazon, More than 1,100 activists, small farmers, judges, priests and other rural workers have been killed in land disputes in the last two decades.")⁹⁷ They have asked for our help: "For the theft and destruction to Native communities and the planet itself to halt, those who are awake amongst the sleepwalking must speak up and resist the machine. If you do not support the system that oppresses your brothers and sisters, stop funding it, stop participating in it, and start building the future we all need."98 They are fighting for the rights of everyone⁹⁹ (as we are grieving Sunday roast or Easter ham). If we are human

As of 2012, our world was producing enough food to support 10 billion people. 100 At present, global population is "only" 7.3 billion. Stunting occurs in 1 out of 4 children (1 out of 3 in some developing countries) and a total of 795 million humans lack sufficient food. 101 The majority of starving children [82%] live in countries where food is fed to animals, which are then consumed by folks in western countries. 102 (People who give to these groups imagine they are giving charity. In fact, we are returning a fraction of what we have taken.) Ditto for water. At present, 1.7 billion people lack access to clean water. 103 Please do not imagine this has always been so, e.g., because they live in a desert or such. "Twelve percent of the world's population uses 85% of its water, and not one of the 12% lives in developing countries." 104 If we are human, we know their rights trump our tastes.

Obviously, no aware, feeling, or rational person will make food choices that support ecological devastation and social disorder. But what about humane egg or keeping a few layer hens in the back yard? For starters, this does not seem economical. In terms of water use, for example, the production of an egg (maybe 2 ounces edible) uses nearly as much water as producing 35+ounces of cabbage. (Both do contain protein.) Further, egg is far from humane, i.e., for each layer hen, hatcheries destroy a day old male

chick. This applies to free range, barn, enriched cage systems, battery eggs and backyards. Additionally, this food is intrinsically abnormal, produced by an animal, which has been engineered to create close to an egg daily (in contrast to the 160 yearly eggs which chickens produced in 1960). The From a social perspective, I think this food would be useful for families in Chad or some other country in Sub-Saharan Africa where the per capita per annum egg consumption is below 0.3 kg. If we compare that to Europe's per capita consumption at 12.7 kg egg per person per year, 108 it seems that egg may be very exclusive. (Personally, I knew I'd used up my egg allotment for this lifetime when I looked at my previous consumption from Ohsawa's concept of "eating with justice.") 109

Ditto for wild fish. It's not as if we were actually dependent (unlike Third World coastal communities), but all of us have participated in "fishing down the web," leading to our ocean's loss, over the past century, of 66-75% of its predatory species (with 54% of decline in last 40 years). Our tastes for cod, halibut, swordfish, and tuna have pretty well priced them off our dinner plates, 110 while tacitly supporting ghost fishing and bycatch (the 40% / 63 billion global pounds per year of unwanted species which are tossed back dead) 111 112—techniques which are transforming our ocean into a morgue.

All right, but what's up with the prey fish, the sardines and anchovies? Occasional individual use is obviously next to nothing when compared to the relentless conversion of little wild forage fish into farmed fish pounds. So I'd say go for it, were it not for the predicted collapse of the ocean as a functional ecosystem by 2048. Does this matter? We are dependent on our ocean, e.g., to support the phytoplankton, which manufacture 50% of our oxygen. And we are altering pH and temperature, trashing, overfishing, and poisoning this ecosystem, concurrent with our merry clearcutting of trees, those sacred beings that manufacture the other 50% of Earth's oxygen. (It seems this may end badly, considering humans have yet to devise an alternate source of oxygen.)

Question: At the social level of judgment, are there reasons why eating animals would make a human feel better?

Answer: That depends on where you live. If you are holding this pamphlet, you likely access adequate plant-sourced foods, permanent homes (with insulation or central heating in colder climates), and thermal underwear. You are not living on the Yamal Peninsula and actually dependent on reindeer, or using insects to supplement your meager diet in Sub-Saharan Africa. To take this a step further, as members of the "developed" nations, we

want to become part of the solution to a problem, which we created. Yes, this is difficult, and it's easy to think, "This one time doesn't matter," or to think of your vote on behalf of your children's future as only 1 out of 7 billion. I think it takes each drop to fill a bucket.¹¹⁴

IDEOLOGICAL - Fragments of manna!

At the sixth level of judgment we look at an issue from the perspective of philosophical, religious, and metaphysical ideologies. To quote Michio Kushi, this is the level at which we explore, "What is life? From where have we come? To where shall we go? What is the purpose of this life? Who am I? We start to reflect upon the meaning of life, seek the secret of the universe, and want to have the eternal truth revealed." 115

Many philosophers have weighed in on the issue of humans eating animals: "The greatness of a nation and its moral progress can be judged by the way its animals are treated." (Mahatma Gandhi) "People often say that humans have always eaten animals, as if this is a justification for continuing to the practice. According to this logic, we should not try to prevent people from murdering other people, since this has also been done since the earliest of times" (Isaac Bashevis Singer) "It is my view that a vegetarian manner of living, by its purely physical effect on the human temperament, would most beneficially influence the lot of mankind." (Albert Einstein)

Religion fundamentally differs from philosophy because it is believed to have originated at a level higher than Earth, e.g., Shinto means "way of the Gods," Judaic law is believed to have been given by God to Moses, etc. Many religions, including Buddhism, Christianity, Hinduism, Islam, and Judaism contain dietary teachings relative to acceptable or non-acceptable flesh foods; the prohibition of eating flesh foods on certain dates (e.g., Lent) or during specific activities (e.g., Haj); an association between flesh consumption and our carnal nature; etc. Some branches of these religions (e.g., the Essenes, Jains, Mahayana Buddhists, Mormons, Seventh-Day Adventists, etc.) require or encourage vegetarianism or veganism. These widespread teachings suggest a link between what we eat and our ability to act from the best and highest in ourselves. They also suggest that the well-being of our Solar System or Universe may be impacted by the shedding of blood on Earth, i.e., since the teaching was initiated by an extra-planetary intelligence. It is interesting to notice that a future time of world well-being is characterized as one in which animals (presumably including humans) do not kill animals: "The wolf and the lamb will graze together, and the lion will eat straw like the ox; and dust will be the serpent's food. They will do no evil or harm in all My holy mountain," says the LORD." (Isaiah 65:25)

I have been thinking about veganism and macrobiotics. It seems remarkable that all of us had teachers who were Japanese (or teachers who were taught by an individual from Japan). To the best of my studies, Japan is the only country that has a documented history of years in which the entire population was vegan, by decree of a Buddhist or Shinto ruler. During the Nara period (710-794), Emperors and empresses "frequently issued decrees banning all killing of animals." For example, in 752, Empress Koken "ordered that no animal was to be killed anywhere in Japan....and promised adequate rice supplies to support the fisherfolk whose livelihoods were to be suspended."116 Though the country did have cattle (estimated as 1 per 4,000 human population, for leather) and horses (on which military leaders rode), consumption of their flesh was taboo, and milk was used only medicinally (prior to the 20th century). As late as the 1860s, i.e., prior to the Meiji Regime's ferocious drive to Westernize Japan, rural Japanese would refuse to sell any cows to the Dutch settlers if they believed the animal would be eaten. "In fact, the cow was regarded as a member of the family and dead cows were given burials by convention."117

Metaphysics, typically defined as a branch of philosophy, explores ontology, cosmology, and epistemology. As a metaphysical approach to humans eating animals, we can look at teachings that identify our planet as part of a growing organism (i.e., our solar system and/or the Universe). In this picture, each species functions in relation to the other species, and in relation to the larger organism of which Earth is a part. The capacity of any species to fulfill multi-level functions depends on it being alive, in a naturally occurring ratio to the other plants and animals, and consuming a speciesappropriate diet. The domestication and exploitation of animals by humans for food throws off all balances. In the same vein, herbivorous animals fed an omnivore's diet cannot receive or transmit the requisite energies to benefit themselves or the body / bodies of which they are a part, nor can humans and domesticated animals be safely substituted for prior populations of wild animals. In 10,000 years, we have gone from a zoomass comprised of 1% humans and 99% wild animals . . . to a zoomass comprised of 98% humans/ domesticated animals and 2% wild. 118 This ratio, at odds with an orderly Earth and/or an Intentional Universe, is likely harmful, at the least, to all Earth beings and appears to be part of the basis for Ohsawa's teaching that "Man's work is to join God's creation." ¹¹⁹

Philosophical, religious, and metaphysical teachings come together in the teaching of karma. I can't prove that we always reap what we sow (over one or many lifetimes), or that practicing appropriate behaviors towards others is the most important way to be kind to ourselves. But, back in 1990, I was astounded to learn that the animals experience the same diseases to which humans are predisposed in the wake of flesh-food consumption (e.g., kidney disease, osteoporosis, etc.). What's more, two of the horrific illnesses most common to populations with the highest animal-sourced-food consumption seem to be literal translations—physical metaphors for the psycho-spiritual conditions that permit and rationalize the general exploitation of animals by humans

The first of these, heart disease, i.e., the absence of normal heart function, appears to be a straightforward translation of heartlessness as shown by modern humans towards everything that stands in the way of their desires. The second, cancer and/or the loss of cellular order, obviously functions as a metaphor for what we do as individuals and at the collective level when we allow the part (intent on self-aggrandizement and endless replication) to steal the resources of the whole. For example, an individual may direct all resources to satisfying those parts of themselves which have specific tastes for a category of foods or brand-name clothes, new cars, oversize houses, etc. Or someone will tacitly permit all their negative petty selves to consume the energy more ideally expended on the expression of conscience, faith, gratitude, etc. Cultural groups and/or nations fall into the same trap, e.g., they want to become modern and sophisticated, buying into the concept of GNPs and cash crops at the expense of finite fresh water resources and the indigenous diet which supported the health of the group from the beginning of recorded time. (It is interesting that cancer is frequently regarded as a teacher by those who survive it, because it helped them to review priorities and redirect resources to what really matters.)

Question: Michio Kushi taught that animal-sourced food "gives a strong horizontal orientation towards life," and "is very good for material accomplishment, production of wealth, territoriality, scientific inventions, etc." all of which are expressions of intellect. George Ohsawa taught that those foods "are avoided in order to develop men who can think." Are these teachings contradictory?

Answer: Both teachings are accurate, and in harmony with each other.

Michio Kushi was looking at intellect in terms of itself, or as a function of the levels below itself, whereas George Ohsawa was promoting intellect as a tool of the social, philosophical, and highest ("farthest periphery, the one most removed from the root center of our spiral")¹²² levels of judgment. For example, to quote Michio on one of the commonly used animal foods, "Eggs give strong analytic and reasoning abilities, charging the left brain." Scientists, mathematicians, and chess players are commonly known as "eggheads."123 It seems obvious that a chess player may need to be singleminded and ruthless. Ditto for the fact that people who eat animals are responsible for most of the "material accomplishment, production of wealth, territoriality, ¹²⁴ and scientific inventions" on Planet Earth, i.e., they are the majority. Unfortunately, this majority which uses intellect to satisfy the instinctive, sensory, and emotional quests of the human animal does not confine itself to board games. They have given us nuclear bombs, Monsanto, the BP oil spill and multiple similar examples of knowledge as a monument to itself, irrespective of damage to the whole. By contrast, we do have notable examples of humans who were incredibly intelligent and inventive while practicing a vegan diet, e.g., Leonardo da Vinci and Nicola Tesla-men who personified the terms polymath and/or Renaissance man. (No. They were not the richest or the most powerful. They appear to have worked toward alternative goals.)

SUPREME – I AM, at the junction.

Relative to the seventh level of judgment, Michio Kushi wrote, "This level is our understanding of the order of the universe and the attainment of universal love and absolute freedom.... the so-called entering into satori, nirvana, or the state of Buddha. This consciousness does not conflict with any phenomenon, embracing all contradictions in this ephemeral world...At that time, we all become our own master with nothing against us and live with the spirit of endless gratitude and love." 125

All animals (including humans¹²⁶) are born with supreme judgment. Humans lose their capacity to receive information and act from this level, due to the interference or static generated by levels 2-6. By contrast, non-domesticated animals (and human infants) exist at the union of mechanical and Supreme levels of Judgment, i.e., they are rooted in Earth and tuned to the Stars.

This concept does not deny sensory, sentimental, intellectual, or social

levels of judgment in animals (all of which have been absolutely documented). The point is that a horse may love the taste of apples, but won't eat to the point of illness (sensory); a female dolphin may grieve a stillborn calf and struggle to hold it above water, but she won't do this indefinitely (emotional); a gorilla taught sign language will use it to make legitimate requests (intellectual), ¹²⁷ and social behaviors support the needs of the individual by supporting the group and its environment. There are also myriad examples of animals assisting individuals of entirely unrelated species. 128 These profound behaviors suggest that animals may be trying to teach us to be human. or that they attempt to fill the niche previously occupied by humankind. (We have no way of knowing the stories and myths which inform the animal kingdom at the 6th level of judgment, due to our failure to bridge the language barrier. However, if we think of them as close in type to the most primitive human groups, it appears plausible that this level does exist for them, supported by the social level of judgment and opening the door to the seventh level.)

If you are tracking world news, you know that humans are living at a level beneath themselves, e.g., in terms of how we treat the environment, our myriad co-species, and each other. Here are two of the innumerable examples. Rape, dowry deaths, abduction and molestation of females in purportedly Hindu India increased 26.7% between 2012 and 2013. ¹²⁹ In 2015, Buddhists murdered over 100,000 Rohingya Muslims in Burma. ¹³⁰ Given the teachings which associate animal-sourced food with the potential for increased violence, it seems reasonable to postulate a relationship between such subhuman events and our world's increased consumption of meat and milk, coupled with decreased use of grains and pulses. ¹³² Ditto for the desecration of our Mother Earth and the progressive disrespect for females. (Did you know that India has become the world's largest exporter of beef?! ¹³³)

Is this a stretch? In terms of spiritual development, Michio Kushi taught that, "Food is the most important point, although many spiritual teachings do not talk about it." According to individuals who participated in the spiritual seminars, the menus were very simple (i.e., miso, whole grain, vegetable, and pickle 135), involving no use of animal-sourced foods or fruit. Aside from the teachings of Michio, his teachers, and his peers, there is a wealth of anecdotal accounts that support a grain-based, peaceable diet as the route to enhanced spiritual awareness. For example, some of the AIDS patients (who participated in the 1983 research with which Michio Kushi

and Martha C. Cottrell, M.D. were associated) "emphasized their spiritual awareness and growth as an integral part of the healing process," and most of the individuals in the online non-macro vegan groups demonstrate an uncommon level of empathy and sensitivity towards each other, as well as towards nature and the animals.

Hey...wait a minute. We know that Michio Kushi did not expect people to always act from a spiritual level of judgment, e.g., he gave instructions how to balance animal-sourced food consumption after the seminar was ended. I agree. I don't imagine that folks can go around in a state of genuine satori and reliably engage in 21st century business. At the same time, I actually doubt that the students at the spiritual development workshop achieved "satori, nirvana, or the state of Buddha." From what I understand, the vegan diet used during these events promoted the participants' capacity to be their best, to experience and express the seventh condition of health. Based on my experience, they would have been less inclined towards anger or fear, loving the simplest of diets, refraining from the need to be dishonest in order to protect or advance self-interest or reputation, able to affirm others, etc. 140

This level of health works at all material levels, and is exemplified by many vegan entrepreneurs, i.e., they are competent business managers, able to earn reasonable profits and contribute to social causes while acting humanely towards their employees, environment, etc. This, the best of business, creativity, exploration, etc. is enabled by the individual's sense of themselves as part a larger whole—a perspective which inevitably interferes with the more primitive expression of pure ego. (At the risk of introducing a political example, I'm thinking President Carter versus Donald Trump!)

So, if we refrain from eating animals we are more able to dine on stars? How is this fair? Didn't our teachers eat fish and meat? We honor our teachers by learning from their teachings and their mistakes. (Love calls us to great doing and undoing...) Moreover, we are charting unknown territory, living in a world they did not inhabit, and faced with choices they could not have imagined. If we combine an impartial dissection of their teachings with the reality that would have faced them on this plane in present time, it seems likely none of them would have encouraged the consumption of any animal food.

Here at the seventh level of judgment, it is our job to interpret difficulty and unhappiness as the gift or challenge through which we discover ourselves. The size of the present "gift" (e.g., world-wide wars, the collapse of ecosystems, the plight of close to 2 billion humans, the rate of species ex-

tinction, etc.) is the amazing stuff of nightmares and vision quests. I think we have made a brilliant choice by placing ourselves inside a situation where our teachers' ideal has become our imperative. Please think of it. It seems we can best meet our needs at the instinctive / mechanical / root chakra level by working through sensory and emotional attachments to a class of food which, truly and sadly, is now poisonous. 141 By doing this, we act on behalf of our children's future and with respect to our Blessed Mother Earth. In the USA alone, there are 7.5 million vegans, i.e., folks who use no form of animal food, and avoid the use of leather, silk, wool, etc. 142 Many of them are clueless when it comes to staying healthy on a vegan diet, but are pushing through on behalf of the environment, the food animals, and their children's future. In the midst of instability, darkness, and confusion, our world needs the lighthouse of macrobiotics! We have everything to offer, and all the parts. It's just a matter of bringing them forward into present time. Eating animals is so 20th century (our method of denial, our respite from reality, God in His Heaven and all right with the world). Let's get real and really shine!

Conclusion

I have given you a glimpse of how I used the seven levels of judgment in working through the issue of "eating animals." You may use this macroscope and arrive at dissimilar conclusions. Myself, ¹⁴³ Doc Maggie¹⁴⁴ and our fearless editor, Alex Jack, ¹⁴⁵ (as well as my fab vegan girlfriends, Marlene Watson-Tara¹⁴⁶ and Jane Quincannon-Stanchich)¹⁴⁷ are hoping no! We say, "Vegan is easy. Let us help you do it!"

Endnotes

- 1. Kotzsch, Ronald E. *Macrobiotics: Yesterday and Today*. Tokyo: Japan Publications, 1985. Print. The dietary teachings of George Ohsawa were those he learned from Sagen Ishizuka, M.D., a system by which foods were categorized according to their sodium to potassium ratio.
- 2. Kushi, Michio, and Edward Esko. *Natural Healing through Macrobiotics*. Tokyo: Japan Publications, 1979. 12. Print. [NHTM] Tomio Kikuchi (Brazil), Clim Yoshimi (France), Roland Yasuhara (Spain), Ave Nakamura (Germany), Shizuko Yamamoto (NYC), and Junsei Yamasaki (California, USA) are cited as examples of Ohsawa's vision. [NHTM]
 - 3. Herman and Cornellia Aihara were instructed by George Ohsawa in

1961 to move from NYC (where they were working with the Kushis) to California.

- 4. Kushi, Michio. ""A Conversation with Michio Kushi"" Web. http://222.redrat.net/blackhole/macrobiotics.htm. "My teacher in Japan, Georges Ohsawa, was also advocating diet and health. He used the words, "Zen macrobiotics" because originally in Zen, they were eating grains, vegetables, et cetera, and avoiding animal food, dairy food and sugar, and so forth. However, his presentation was a little bit too restricted. In order to adopt it into a wide universal way, we have to have much wider interpretations. So I had the so-called macrobiotic diet as the standard diet, plus environmental adaptations and individual changing and climate change and so forth, all variations. In that way, the macrobiotic movement began."
- 5. Ohsawa, Georges. Zen Macrobiotics: The Art of Longevity and Rejuvenation. 4th Edition ed. New York: George Ohsawa Macrobiotic Foundation, 1995. Print. 50. [ZM] Ohsawa taught 10 levels of diet, five of which contained no animal-sourced foods. The levels which permitted 10-30% were described as "more difficult." Due to the chemicalization of farmed animals, recommendations, as of 1960, were limited to wild birds and fish. {ZM] See also: Ohsawa, George. The Book of Judgment. 7th ed. Oroville, Calif.: George Ohsawa Macrobiotic Foundation, 1980. 42. [TBOJ] "Depending upon adequate sources of food, the vegetable is normal, logical and sure. The opposite or carnivoral way is speculative. Utilising the inferior and weaker always leads to the speculator's downfall."
- 6 Kushi, Michio. *The Book of Macrobiotics: The Universal Way of Health and Happiness*. Tokyo: Japan Publications, 1977. Print. Michio Kushi, 1977, p. 125. [TBOM] Kushi conveys Ohsawa's 10 levels of diet.

Kushi, Michio, and Aveline Kushi. *Macrobiotic Dietary Recommendations*. Rev. ed. Brookline Village, MA: East West Foundation, 1983. Print. [MDR] In Michio and Aveline Kushi's text, animal foods are the first to appear on a list of foods to reduce or avoid for better health: "Although all of these foods can be used for specific health purposes, they contain certain elements that are strengthening and others that are toxic. Therefore, they have an extreme effect on the body's energy balance and are generally best avoided."

Kushi, Michio, and Edward Esko. *The Macrobiotic Approach to Cancer: Toward Preventing and Controling Cancer with Diet and Lifestyle*. Rev. and Expanded. ed. Garden City Park, N.Y.: Avery, 1991. 25. Print. [MATC] In 1991, Kushi adjusted the animal food recommendation to 12.5%: "The opti-

mal ratio of plant to animal food is about seven to one."

Kushi, Michio, and Martha C. Cottrell. *AIDS, Macrobiotics, and Natural Immunity*. Tokyo: Japan Publications, 1990. 35; 369. Print. [AMNI] Writing in 1990, Michio Kushi and Martha C. Cottrell, M.D., advised that the dietary component from animal should "amount to less than 15% of total daily food consumption," though "this percentage may be slightly higher" for "poorer or colder regions." In the same text, Michio weighs in on chemicalized fish, already a growing concern. See also Kushi, Michio. "Appendix Global Macrobiotic Dietary Guidelines." Web.

- 7. Kushi, Michio, and Alex Jack. *The Macrobiotic Path to Total Health: A Complete Guide to Preventing and Relieving More than 200 Chronic Conditions and Disorders Naturally.* New York: Ballantine, 2003. 386. Print. [MPTTH] "Animal food is optional and not necessary for daily health or vitality."
- 8. Examples include "Macrobiotics and Animal Foods" (Alex Jack in *Macrobiotics Today*, Summer 2015, pp. 9-11), "The Humanitarian Evolution" (Jane and Lino Stanchich, Ibid., pp. 12-15), "Macrobiotics, Meat Eating, and Human Ecology" (Bill Tara in *Macrobiotics Today*, Autumn 2015, pp. 20-23).
- 9. TBOM, p. 24, "Levels of Judgment and Consciousness." Kushi, Michio, and Aveline Kushi. *Macrobiotic Child Care and Family Health*. Tokyo, Japan: Japan Publications, 1986. 57. Print. [MCFH] "The Spiral of Consciousness." AMNI, p. 43 In 1990, Michio presented "consciousness" as having five levels.
 - 10. TBOJ, p. 97.
- 11. NHTM, pp. 26-27, "The Seven Levels of Eating," illustrates Kushi's use of this approach.
- 12. Holdø, Ricardo, Joseph Dudley, and Lee McDowell. *Journal of Mammalogy*. Geophagy in the African Elephant in Relation to Availability of Dietary Sodium. Web. 12 Dec. 2015. This behavior has been observed in in over 200 species, including birds, elephants, livestock, rabbits, primates, bears, porcupines, etc. It is taken as a sure sign of pregnancy in human females in populations as diverse as the American South and sub-Saharan Africa.
- 13. Voth, Cathy. "Deer Eat Birds." On Pasture RSS. N.p., 12 Aug. 2013. web; MailOnline, Sarah Griffiths for. "Bambi Gone Bad! Deer Eat CHICKS for a Protein Hit, Snatching Them from Nests." Mail Online. Associated

Newspapers, 05 Mar. 2015. Web.

- 14. "Three Steps to Fight Cheese Addiction." The Physicians Committee. Physicians Committee for Responsible Medicine, 2012. Web; "Addiction to Cheese Is Real Thanks to Casomorphins." YumUniverse. 25 Apr. 2011. Web.
- 15. Ohsawa, George, and Herman Aihara. Macrobiotic Guidebook for Living and Other Essays. Rev. English ed. Oroville, Calif.: George Ohsawa Macrobiotic Foundation, 1985. 38. Print. [MGFL] "Those who do physical labor ... take some animal food, principally fish—about ten percent of the total food intake. This is not an absolute essential, however, even for laborers. Rather than being an actual necessity, it is more a pleasure item to satisfy the taste."
- 16. TBOJ, p. 40. "Man is the prince of animals. Animals have been created to serve or amuse us; each serves its purpose but we have no need to feed ourselves with meat or animal products, save for pleasure. Pleasure always has a limit."
 - 17. NHTM, p. 27.
 - 18. Ibid.
- 19. It helps if two parents are on board. I know a woman who took her two little children off dairy and eliminated their earaches, sore throats, drippy noses, and stomach aches. After two weeks of no dairy and no health issues, her husband (who felt very sentimental towards milk, having been personally raised on the milk of water buffalo) put both toddlers back on milk and stuck to it, though the symptoms started up again almost immediately.
- 20. There's a way to do this that doesn't involve divorce. Don't be in a rush. Little by little, slow but steady may win the race. One of the women in our group was faithfully macro for decades before her husband recently climbed on board, due to health problems.
- 21. Although they also domesticated some animals (e.g., bees, turkeys) and ate some wild animals (e.g., insects, frogs). these foods were a minor part of the diet, with children reportedly raised exclusively on grain for the 1st ten years!
- 22. Markels, Alex. "A Run to Moonlight For Food and More." *The New York Times*, 20 Aug. 1994. Web.
- 23."Colon-rectum Cancers Death Rate by Country." World Life Expectancy. Web. Recently, a friend pointed out to me that it's not accurate to compare Hungary and Tanzania, since Hungarians live approximately 20 years longer. I said, "Okay, let's stick to Africa." Zimbabwe has life expec-

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- 40. Natural carnivores eat the vital organs and intestines, a concentrated source of nutrients which they need to digest and benefit from that food. They also eat teeth, bones, feathers, etc., those parts which contain alkaline-forming elements, e.g., calcium, potassium, magnesium, sodium, etc., as required to protect a carnivorous animal from the acid-forming concentration of protein and fat. This approach has proved only partially successful for groups whose climate historically restricted them to animal food consumption, e.g., the Inuit's traditional diet promoted osteoporosis.
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- 45. Carnosine is made by gut bacteria, and purportedly separated from gut bacteria for absorption across the intestinal wall barrier in the presence of lactic acid. Lactic acid is obtained by the fermentation of carbohydrates, and

available in such foods as 3-5 day pressed salad, sauerkraut, etc.

- 46. Creatine is naturally produced in the human body from the amino acids glycine and arginine.
- 47. Docosahexaenoic acid is made in humans from alpha-linolenic acid. Alpha-linolenic acid is available in many seeds and nuts (e.g., chia, flax, walnut, rapeseed, soybean) and wild vegetables (e.g., shiso, purslane). Additionally, both EPA and DHA are available in sea vegetables.
- 48. Omega-3 is available in many plant foods, including chia and flax seed, English walnuts, fresh basil, frozen spinach, etc.
- 49. Taurine is made when animals metabolize cysteine (as available in grains, legumes, vegetables).
- 50. Tyrosine is made by humans from the amino acid called phenylalanine (as reported in almonds, avocado, beans, figs, leafy greens, most berries, olives, peanuts, pumpkin, quinoa, raisins, rice, sea veggies, seeds, spirulina, etc.).
- 51. Vitamin B12 is made by the same microorganisms in the human gut which make other B vitamins, vitamin C, and vitamin K2. The molecule is the most complex nonpolymeric substance on our planet, requiring 192 steps from its skeletal form (cobrynic acid) to the finished cobalamin. Its synthesis requires a dietary source of the trace metal, cobalt and cannot be performed by bacteria which are confused, poisoned, or dead. Your chances of meeting your needs for this vitamin are enhanced by your non-use of chlorinated/fluoridated water, antibiotics, and chemicalized food – obviously much better than the chances of the farmed animals, or the wild animals who have no means of mitigating the effects of a heavily poisoned natural environment. The higher algae do naturally contain the actual (rather than analogue) vitamin, in research studies by NIH, etc. However, in view of the increasingly inhospitable environment and foods assays which I personally funded in the late 80s/early 90s showing ample vitamin B12 and zero findings for the same sea vegetable (harvested in different seasons), I am inclined to recommend supplements.
- 52. Vitamin D3 (also called cholecalciferol) is produced in the skin when sunlight's ultraviolet B energy activates a universally present form of cholesterol, 7-dehydrocholesterol.
 - 53. MPTTH, pp. 57-58.
 - 54. The Old Testament, "Daniel," chapter 1 verse 15.
 - 55. Ibid., verse 17.
 - 56. Ibid., chapter 6. Although an angel is said to have shut up the mouth

32 Eating Animals

of the lions, it also seems likely that Daniel was rejected by them as food on the basis of smell (like a vegetable) and non-animal vibratory rate.

- 57. TBOM, p.23.
- 58. MATC, p. 22.
- 59. (after years of nutrition theory misdirection "balanced" by 2+ years of vegetables and wild foods without fruit or animal)
- 60. My infant established ground rules up front, i.e., no animal, no fruit, no frozen Rice Dream. She actually went 1-1/2 days refusing to nurse or drink anything, at less than 2 months of age, after one of my "feeling pretty, very skinny, wanting to eat more widely experiments."
- 61. This was before my intro to the Internet. Waking up is more easy now, especially for folks who don't like to read. For starters, I recommend "Earthlings," https://www.youtube.com/watch?v=qCRspwfKHmI; "Cowspiracy," http://www.watchfree.to/watch-2a0d2e-Cowspiracy-The-Sustainability-Secret-movie-online-free-putlocker.html and "Vegucated." https://www.youtube.com/watch?v=19qSsUI79Ro
- 62. Kingdom: Animalia; Phylum: Chordata; Subphylum: Vertebrata; Class: Mammalia; Subclass: Theria; Infraclass: Eutheria Order: Primates; Suborder: Anthropoidea; Superfamily: Hominoidea; Family: Hominidae. Genus: Homo; Species: sapiens.
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 - 125. TBOM, p. 23.
 - 126. TBOJ, p. 101.
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man who had fallen into the gorilla enclosure, an elephant crashing into human structure in search of food and stopping when she heard cries of a human infant, - attempting to remove debris from the crib and then leaving the home.

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 - 147. Jane Quincannon-Stancich, http://www.greatlifeglobal.com/

About the Author

Sylvia Ruth Gray was born in 1945, and reborn through macrobiotics in 1983 In the context of this discipline, she has been published by the *Gold Mine Gazette, Macrobiotics Today*, and *Solstice*, and was a lecturer at French Meadows in 1990, 1991, and 1993. (Portions of this pamphlet were presented at that camp in 1993 as part of a lecture entitled "Eating Anbimals: Ethics, Economics, Environmental Impact and Human Health.")

Sylvia lives in Salt Lake City, Utah, and remains technically employed as a medical transciptionist for the anesthesiology department of a local teaching institution.

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