Appendix 2:
Macrobiotics Stand to Wholefood vs Refined

Extracts from *Natural Healing through Macrobiotics* by Michio Kushi, Japan Publication, Tokyo, 1978

The Standard Way of Macrobiotic Eating

The standard macrobiotic way of eating represents a set of general guidelines for dietary practice in a temperate, or four-season climate. This way of eating is the most moderate in terms of yin and yang balance, and will naturally produce a condition of harmonious adaptability to the surrounding environment and result in the development and maintenance of health. However, the majority of people are not eating this way, which means that their diets contain an abundance of foods which are extremely yin or extremely yang or both. Almost every modern degenerative illness, including cancer, heart disease, and multiple sclerosis, results from the habitual excessive intake of foods which are either too yang, too yin, or both.

This standard diet consists of the following:

1. At least 50 % of the volume of every meal should be whole cereal grains, prepared in a variety of cooking methods. Whole cereal grains include brown rice, whole wheat (in the form of bread, chapati, noodles), barley, millet, oats, oatmeal, corn (on the cob, as grits or meal), buckwheat (groats or i noodles), rye, etc.
2. Etc.

Note: That a way of eating similar to the above is beneficial for the prevention of disease is being recognized by an increasing number of doctors and nutritionists, as well as by the public at large. For example, in the report entitled *Dietary Goals for the United States* released early in 1977 by the Select Committee on Nutrition and Human Needs of the United States Senate under the chairmanship of Senator George McGovern, Americans were advised to increase their intake of whole grains, beans, and fresh vegetables and fruits, in order to reduce the risk of serious illness. The dietary recommendations contained in this report approach the standard macrobiotic way of eating.

The Modern Diet

1. Foods Which Are More Yang

Many of the foods being consumed at present on a regular basis are more yang than those included in the standard diet. These products, which many people are eating daily, include (selected items):

- Meat (beef, pork, lamb, and others)
- Salt
- Etc.

2. Foods Which Are More Yin

The following products, all of which are being consumed regularly, are more yin than those included in the standard diet (selected items):

- Chemicals (additives, sprays, fertilizers, drugs, medications, etc.)
- Sugar

- Chocolate
- Honey, maple syrup, and other simple sugars
- Saccharine and other artificial sweeteners
- Soft drinks and other artificial beverages
- Refined flour and grain products
- Etc.

The present diet of the vast majority of people includes foods from both of these categories. If we regularly eat foods in either of these groups, we are automatically attracted to the foods in the other. Everyone is balancing yin and yang, but in most cases, this balance is maintained intuitively without conscious awareness. However, foods such as those outlined above are very difficult to balance. After 10, 20 or 30 years of eating foods from these categories, your condition will become either excessively yang, excessively yin, or both. In general, a diet of this type results in a very chaotic state of chronic imbalance.

In general, the foods included in both categories produce an acidic condition in the bloodstream. Among the foods included as a part of the standard diet, which are all more centrally balanced, some create a mildly acid condition while others produce milk alkaline. On the whole, a diet of this type will cause a weak alkaline condition to be maintained in the bloodstream.

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Health and happiness are the result of living in harmony with nature, while sickness is the consequence of acting, thinking, and living in a manner that is disharmonious. If, through our free will, we choose to disharmonize ourselves with our environment, sickness will occur as the natural process through which balance is again restored. Therefore, the most fundamental way of approaching sickness is to restore ourselves to a condition of harmony with the universe. This is actually the normal human condition, and it can be achieved through the following methods:

1. Dietary Approach: Proper eating is the most basic way of establishing harmony with our environment. If our daily food is in accord with our surroundings, our blood, cells, and therefore emotions, thoughts, and consciousness will also be in accord. Harmony is created through the union of opposites: for example, man and woman as well as the union of countless other complemental phenomena in the universe. The union of man and woman is referred to as *sex,* while the union of human beings with the vegetable kingdom is known as *eating*. Proper eating is the essence of natural healing, and without it, sickness can never be definitively cured.

2. Mental Approach: Sickness is also an indication that our thinking has grown out of order. Persons with any type of sickness should view the healing process as being one of learning how to adapt and maintain harmony with nature and the universe. This type of education is actually the most important of any that we receive.

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Notice

The sole aim of this appendix is to enable you to compare the statements of organizations whose origins were inspired by macrobiotics with their present situation. This does not mean that I agree with all teachings of macrobiotics (as you can see if you compare macrobiotics nutritional guidelines from the above book with General Nutritional Guidelines given on my website) – although we do agree about the great importance of wholefoods, especially whole grains.

Appendix 3:
A Single Reference to Whole Foods in IFOAM Standards

The IFOAM Basic Standards for Organic Production and Processing, Version 2005

Appendix 1: Criteria for the evaluation of inputs, additions & processing aids for organic production & processing

B) Processing and Handling Criteria

Introduction
These criteria apply to the evaluation of food additives and food processing aids. Substances used for technical, sensory, and dietary purposes are subject to these criteria. The criteria may also apply to substances in contact with food. For food processing, an input, non-organic ingredient, additive, or processing aid shall be essential to maintain or improve human health, environmental safety, animal welfare, product quality, production efficiency, consumer acceptance, ecological protection, biodiversity, or landscape. Carriers and preservatives used in the preparation of additives and processing aids must also be taken into consideration. The following aspects and criteria should be used to evaluate additives and processing aids in organic food products. All of the criteria below shall be fully and positively documented in a dossier and review for an input to be allowed in organic processing.

1 Necessity and Alternatives

All dossiers shall document the necessity of the additive, processing aid, or carrier, its essential nature in organic processing and for the proposed application, and the availability of alternative methods, practices, and inputs.

Each substance shall be evaluated with respect to its specific uses and applications, and shall be added when it is demonstrated to be absolutely essential and necessary for the production of a specific food that is consistent with organic principles stated in the IFOAM Basic Standards (IBS).

1.1. All dossiers shall take into consideration the technical feasibility of the following alternatives:

a. Whole foods that are organically produced according to the IBS.
b. Foods that are organically produced and processed according to the IBS.
c. Purified products of raw materials of non-agricultural origin, e.g. salt.
d. Purified products of raw materials of an agricultural origin that have not been organically produced and processed according to the IBS but appear on Appendix 4.

1.2 If an ingredient is required to manufacture a processed food product to independently established minimum technical specifications recognized by consumers, and no organic substitute is available, then a non-organic ingredient can be deemed essential.

Appendix 4: White Sugar as Antinutrient

Extracts from *Sugar Blues* by William Dufty, Warner Books, New York, 1975

[AMA - American Medical Association; FTC - Federal Trade Commission]

On April 12, 1973, three prominent doctors, two of them representing the AMA's Council on Food and Nutrition, were testifying before a Senate Committee on Nutrition and Human Needs.

Senator Schweiker of Pennsylvania tried valiantly to get the doctors to make the distinction between "sugar" and "carbohydrate." Here's what happened (italics added):

SENATOR SCHWEIKER: … one of the points apparently at issue here medically [in the AMA report] … saying it is inaccurate to state that sugar has high antinutrient properties. I wonder is this an accurate expression and who might comment on this for me?

DR. VAN ITALIE: When *we* talk about antinutrient properties, we *usually* refer to a substance in the diet or a drug that is antagonistic to a nutrient, interfering in some way with its use or its metabolism. Carbohydrate is metabolized or "burned" with the help of certain enzymes which contain thiamin and other B vitamins. Thus, there is an increased need for these vitamins when more carbohydrate in the diet is consumed. This is why people on very high carbohydrate diets in the Far East who also have a low vitamin B_1 intake develop beriberi. The fact that the requirement for vitamin B_1 and certain other B vitamins will increase somewhat when you take more carbohydrate does not justify the statement that carbohydrates – or sugar – is an antinutrient.

SENATOR SCHWEIKER: I am not talking carbohydrate; I'm talking sugar. Let's keep it on the sugar track.

DR. VAN ITALIE: There is no difference between sugar or carbohydrate with respect to vitamin B_1.

SENATOR SCHWEIKER: Well, we have had a number of dentists just come before us recently and tell us how bad sugar, not carbohydrate, was on dental cavities.

DR. VAN ITALIE: That is correct, but that's not what I am talking about. Sugar is lacking in vitamins. That's agreed and it's *probably* bad for teeth. ... I was addressing myself to one specific statement ... which affirms sugar to be an antinutrient. This is scientifically not a correct statement Sugar and all other carbohydrates increase the need for vitamin B_1. That's the only statement I made.

DR. VAN ITALIE: An antinutrient is a substance that interferes with the utilization or metabolism of a nutrient. Something that actually antagonizes its metabolic use. It might be, let's say, an excess of certain toxic metal that might interfere with metabolism. Certain drugs interfere with the nutrients and are called antinutrients. The antifertility pill may have antinutrient properties.

SENATOR SCHWEIKER: And you are saying that something that increases the need for nutrients in terms of quantity is not an antinutrient?

DR. VAN ITALIE: That is correct.

SENATOR SCHWEIKER. Are you sure we are not getting into a semantic argument here?

DR. VAN ITALIE: It's misleading to say that there is something bad about carbohydrate because it increases the need for a vitamin. ...

DR. VAN ITALIE: After all, exercise increases the need for certain vitamins. That doesn't mean that exercise is "anti-nutrient."

SENATOR SCHWEIKER: If we market a cereal and say we presweetened the cereal and added sugar, we are working against ourselves. A customer buys a pack of cereal, nutrients added, presweetened. Here we have both in the same ingredients. That increases the nutrients and who are we kidding? If we hadn't had the sugar we might not need the nutrients.

DR. VAN ITALIE: I am not defending sugar, Senator Schweiker. I am not hi favor of an excessive intake of sugar. I was merely objecting to the term of antinutrient in the context it was used. I agree

with you that when you add sugar to a product you may make people eat it because it is sweeter but it certainly adds no nutritional property other than energy.

SENATOR SCHWEIKER: Right That is all the questions I have, Mr. Chairman. Thank you.

DR. BUTTERWORTH: Sugar is a carbohydrate.

SENATOR SCHWEIKER: It is one of the carbohydrates but to say that the whole range of carbohydrates and sugar are the same thing is not true. Dental cavities are caused by sugar, not by carbohydrates. That's exactly the differentiation I am trying to make.

DR. BUTTERWORTH: That is correct but I didn't want to leave the hearing with the impression that sugar is an anti-nutrient Now, sugar may cause dental caries and, certainly, there is excellent evidence for that.

SENATOR SCHWEIKER: There is no doubt about that.

DR. BUTTERWORTH. No doubt. But it is not an antinutrient Sugar is a nutrient and sugar is a carbohydrate.

SENATOR SCHWEIKER: But it does substantially increase the need for nutrients.

DR. VAN ITALIE: No more than other forms of carbohydrates. ...

DR. VAN ITALIE: I think it is important to point out that any carbohydrate you take, no matter what it is, if it's going to be absorbed by the intestine, has to be reduced to "sugar" before it can be absorbed. When you take starch, any form of starch, it's digested in the intestinal tract and ends up as glucose or one of the other simple sugars. Thus sugar or sucrose is really a "pre-digested" type of carbohydrate.

SENATOR SCHWEIKER: Now, the FTC made the sugar associates quit advertising that sugar was an energy builder and nutrient Now, say carbohydrate is an energy builder but to say sugar is an energy builder nutrient, the FTC made them cease and desist, so we are getting hi a very close area here of what impression the public has.

DR. ADAMSON: I would like to examine the credentials of those who made this recommendation. It is certainly hard for me, not being a nutritionist, to accept that anybody who is qualified to make a judgment and testify to your committee could make a statement that sugar is not an energy deliverer – energy giver.

DR. VAN ITALIE: I think the reason that the FTC cracked down on that sugar ad was that the sugar people were suggesting there was something unique about sugar as an energy source. If this was the case, I believe the Federal Trade Commission was justified in their criticism of this 'kind of advertising approach.

SENATOR SCHWEIKER: But it was getting to the semantics of what the layman understands. It is very well for us to define the dimensions of what we mean but if the effect is the opposite on the public that is what the FTC was complaining about. They implied it was a nutrient Now, when *you* say it's inaccurate to call it an antinutrient we are getting awfully close to the same thing. That's two negatives making a positive.

DR. VAN ITALIE: Any food that contains readily available calories is a good source of energy. I think that's what the FTC was saying.

SENATOR SCHWEIKER: When you say it's inaccurate to, call it an antinutrient, you are really saying it is a nutrient, by any kind of deductive reasoning.

DR. VAN ITALIE: Sugar is a nutrient.

SENATOR SCHWEIKER: And that is just what the FTC said you can't say because they don't believe it.

DR. VAN ITALIE: I'm sorry, but I don't agree with that. I think the FTC was objecting to possibly misleading information that the advertisers were using in the promotion of sugar.

SENATOR SCHWEIKER: Well, I'll be glad to show you the ad. I have a copy of it.

At that point the Chairman of the Senate Select Committee, Senator McGovern, said they were running out of time. The argument and the hearing were adjourned.

Appendix 5:
140 Reasons Why Sugar is Ruining Your Health

Chapter 2 from *Suicide by Sugar*, by Nancy Appleton, PhD & G. N. Jacob,
Square One Publishers, New York, 2009

For about twenty years I have been collecting "Reasons Why Sugar Is Ruining Your Health." I have found them in everything from the Harvard medical publication *HEALTHbeat* to just perusing the web. They are difficult to find and many times more difficult to read because of medical jargon. I feel that the long-term use of added sugar can be a problem for many people and can cause many diseases.

1. Sugar can suppress the immune system.
2. Sugar upsets the mineral relationships in the body.
3. Sugar can cause juvenile delinquency in children.
4. Sugar eaten during pregnancy and lactation can influence muscle force production in offspring, which can affect an individual's ability to exercise.
5. Sugar in soda, when consumed by children, results in the children drinking less milk.
6. Sugar can elevate glucose and insulin responses and return them to fasting levels slower in oral contraceptive users.
7. Sugar can increase reactive oxygen species (ROS), which damage cells and tissues.
8. Sugar can cause hyper activity, anxiety, inability to concentrate, and crankiness in children.
9. Sugar can produce a significant rise in triglycerides.
10. Sugar reduces the body's ability to defend against bacterial infection.
11. Sugar causes a decline in tissue elasticity and function – the more sugar you eat, the more elasticity and function you lose.
12. Sugar reduces high-density lipoproteins (HDL).
13. Sugar can lead to chromium deficiency.
14. Sugar can lead to ovarian cancer.
15. Sugar can increase fasting levels of glucose.
16. Sugar causes copper deficiency.
17. Sugar interferes with the body's absorption of calcium and magnesium.
18. Sugar may make eyes more vulnerable to age-related macular degeneration.
19. Sugar raises the level of neurotransmitters: dopamine, serotonin, and norepinephrine.
20. Sugar can cause hypoglycemia.
21. Sugar can lead to an acidic digestive tract.
22. Sugar can cause a rapid rise of adrenaline levels in children.
23. Sugar is frequently malabsorbed in patients with functional bowel disease.
24. Sugar can cause premature aging.
25. Sugar can lead to alcoholism.
26. Sugar can cause tooth decay.
27. Sugar can lead to obesity.
28. Sugar increases the risk of Crohn's disease and ulcerative colitis.
29. Sugar can cause gastric or duodenal ulcers.
30. Sugar can cause arthritis.
31. Sugar can cause learning disorders in school children.
32. Sugar assists the uncontrolled growth of Candida Albicans (yeast infections).
33. Sugar can cause gallstones.

34. Sugar can cause heart disease.
35. Sugar can cause appendicitis.
36. Sugar can cause hemorrhoids.
37. Sugar can cause varicose veins.
38. Sugar can lead to periodontal disease.
39. Sugar can contribute to osteoporosis.
40. Sugar contributes to saliva acidity.
41. Sugar can cause a decrease in insulin sensitivity.
42. Sugar can lower the amount of Vitamin E in the blood.
43. Sugar can decrease the amount of growth hormones in the body.
44. Sugar can increase cholesterol.
45. Sugar increases advanced glycation end products (AGEs), which form when sugar binds non-enzymatically to protein.
46. Sugar can interfere with the absorption of protein.
47. Sugar causes food allergies.
48. Sugar can contribute to diabetes.
49. Sugar can cause toxemia during pregnancy.
50. Sugar can lead to eczema in children.
51. Sugar can cause cardiovascular disease.
52. Sugar can impair the structure of DNA.
53. Sugar can change the structure of protein.
54. Sugar can make the skin wrinkle by changing the structure of collagen.
55. Sugar can cause cataracts.
56. Sugar can cause emphysema.
57. Sugar can cause atherosclerosis.
58. Sugar can promote an elevation of low-density lipoproteins (LDL).
59. Sugar can impair the physiological homeostasis of many systems in the body.
60. Sugar lowers enzymes' ability to function.
61. Sugar intake is associated with the development of Parkinson's disease.
62. Sugar can increase the size of the liver by making the liver cells divide.
63. Sugar can increase the amount of liver fat.
64. Sugar can increase kidney size and produce pathological changes in the kidney.
65. Sugar can damage the pancreas.
66. Sugar can increase the body's fluid retention.
67. Sugar is the number one enemy of the bowel movement.
68. Sugar can cause myopia (nearsightedness).
69. Sugar can compromise the lining of the capillaries.
70. Sugar can make tendons more brittle.
71. Sugar can cause headaches, including migraines.
72. Sugar plays a role in pancreatic cancer in women.
73. Sugar can adversely affect children's grades in school.
74. Sugar can cause depression.
75. Sugar increases the risk of gastric cancer.
76. Sugar can cause dyspepsia (indigestion).
77. Sugar can increase the risk of developing gout.
78. Sugar can increase the levels of glucose in the blood much higher than complex carbohydrates in a glucose tolerance test can.
79. Sugar reduces learning capacity.
80. Sugar can cause two blood proteins –albumin and lipoproteins – to function less

effectively, which may reduce the body's ability to handle fat and cholesterol.

81. Sugar can contribute to Alzheimer's disease.
82. Sugar can cause platelet adhesiveness, which causes blood clots.
83. Sugar can cause hormonal imbalance – some hormones become underactive and others become overactive.
84. Sugar can lead to the formation of kidney stones.
85. Sugar can cause free radicals and oxidative stress.
86. Sugar can lead to biliary tract cancer.
87. Sugar increases the risk of pregnant adolescents delivering a small-for-gestational-age (SGA) infant.
88. Sugar can lead to a substantial decrease in the length of pregnancy among adolescents.
89. Sugar slows food's travel time through the gastrointestinal tract.
90. Sugar increases the concentration of bile acids in stool and bacterial enzymes in the colon, which can modify bile to produce cancer-causing compounds and colon cancer.
91. Sugar increases estradiol (the most potent form of naturally occurring estrogen) in men.
92. Sugar combines with and destroys phosphatase, an enzyme, which makes digestion more difficult.
93. Sugar can be a risk factor for gallbladder cancer.
94. Sugar is an addictive substance.
95. Sugar can be intoxicating, similar to alcohol.
96. Sugar can aggravate premenstrual syndrome (PMS).
97. Sugar can decrease emotional stability.
98. Sugar promotes excessive food intake in obese people.
99. Sugar can worsen the symptoms of children with attention deficit disorder (ADD).
100. Sugar can slow the ability of the adrenal glands to function.
101. Sugar can cut off oxygen to the brain when given to people intravenously.
102. Sugar is a risk factor for lung cancer.
103. Sugar increases the risk of polio.
104. Sugar can cause epileptic seizures.
105. Sugar can increase systolic blood pressure (pressure when heart is contracting).
106. Sugar can induce cell death.
107. Sugar can increase the amount of food that you eat.
108. Sugar can cause antisocial behavior in juvenile delinquents.
109. Sugar can lead to prostate cancer.
110. Sugar dehydrates newborns.
111. Sugar can cause women to give birth to babies with low birth weight.
112. Sugar is associated with a worse outcome of schizophrenia.
113. Sugar can raise homocysteine levels in the bloodstream.
114. Sugar increases the risk of breast cancer.
115. Sugar is a risk factor in small intestine cancer.
116. Sugar can cause laryngeal cancer.
117. Sugar induces salt and water retention.
118. Sugar can contribute to mild memory loss.
119. Sugar water, when given to children shortly after birth, results in those children preferring sugar water to regular water throughout childhood.
120. Sugar causes constipation.
121. Sugar can cause brain decay in pre-diabetic and diabetic women.
122. Sugar can increase the risk of stomach cancer.

123. Sugar can cause metabolic syndrome.
124. Sugar increases neural tube defects in embryos when it is consumed by pregnant women.
125. Sugar can cause asthma.
126. Sugar increases the chances of getting irritable bowel syndrome.
127. Sugar can affect central reward systems.
128. Sugar can cause cancer of the rectum.
129. Sugar can cause endometrial cancer.
130. Sugar can cause renal (kidney) cell cancer.
131. Sugar can cause liver tumors.
132. Sugar can increase inflammatory markers in the bloodstreams of overweight people.
133. Sugar plays a role in the cause and the continuation of acne.
134. Sugar can ruin the sex life of both men and women by turning off the gene that controls the sex hormones.
135. Sugar can cause fatigue, moodiness, nervousness, and depression.
136. Sugar can make many essential nutrients less available to cells.
137. Sugar can increase uric acid in blood.
138. Sugar can lead to higher C-peptide concentrations.
139. Sugar causes inflammation.
140. Sugar can cause diverticulitis, a small bulging sac pushing outward from the colon wall that is inflammed.

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The list of scientific papers and other resources for each number on the above list is available on:

www.nancyappleton.com/141-reasons-sugar-ruins-your-health

Appendix 6: Organic Wholefood Shops in London

Source: www.organic-london.co.uk, May 2012

10 shops	7 shops	20 shops
Wholefood in the name of the shop	The claim that the shop is a wholefood store	The claim that the shop sells wholefoods
Temple Wholefoods Shop and home delivery within 2 miles **Wholefood Express** Shop, local home delivery **The Village** Whole Food Store Organic and whole food store **Alara Wholefoods** Organic store **Portobello Wholefoods** Organic wholefood store **Rye Wholefoods** Traidcraft produce and wholefoods **Brixton Wholefoods Transatlantic** Traidcraft produce and wholefoods **Balham Wholefood Shop** Wholefood store **Gaia Wholefoods** Wholefood store **Olivers Wholefood Store** Shop and mail order	**Peppercorns** Wholefood store **The Haelan Centre** Wholefoods shop & mailorder **Holland & Barrett N10** Wholefood **Holland & Barrett N22** Wholefood **The Grain Shop** Wholefood store **Here** Wholefood store **Dandelion** Wholefood shop	**Mistry's Health Food Store** Traidcraft produce and wholefoods **House of Mistry** Traidcraft produce and wholefoods **Village Health** Traidcraft produce and wholefoods Earth Natural Foods Organic wholefoods and eco products **Abundance Natural Foods** Traidcraft produce and wholefoods **Human Nature** Traidcraft produce and wholefoods **The Olive Tree** Traidcraft produce and wholefoods Mother Earth **N1** All things healthy, whole, organic, natural, fairtrade and good **Food For All** Traidcraft produce, wholefoods, health foods **Mother Earth N16** All things healthy, whole, organic, natural, fairtrade and good **Coltsfoot & Kelp** Traidcraft produce and wholefoods **Peaches** Traidcraft produce and wholefoods **Coopers** Traidcraft produce and wholefoods **Beanbags** Traidcraft produce and wholefoods **SMBS Foods** Traidcraft produce and wholefoods **Provender** Whole foods and organic bakery **Well Being Foods** Traidcraft produce and wholefoods **Honey Tree** Traidcraft produce and wholefoods **Health Foods** Traidcraft produce and wholefoods **The Ham Pantry** Traidcraft produce and wholefoods