

Diet

The idea that food might have something to do with cancer prevention or cancer cure is one that has not always been encouraged by the U.S. National Cancer Institute: ‘There is no diet that prevents cancer in man. Treatment of cancer by diet alone is in the realm of quackery.’ Dr Morris Shinkin wrote in 1975, quoted in Moss, 1982). For decades, spokesmen for the leading American cancer institutions poured scorn on ‘food faddists’ who promoted ‘wonder foods’. Yet now it is now accepted that a high fibre diet is important for intestinal health. However, nutrition still plays a very minor role in a doctor’s education

This neglect of nutrition is a modern phenomenon. Some 2,500 years ago, Hippocrates said: ‘Let food be your medicine and medicine be your food.’ Six hundred years ago, Paracelsus talked of curing cancer by natural means. ‘In the hand of the physician, nutrition can be the highest and best remedy,’ he said. Unfortunately, he didn’t keep statistics. This idea that nature does not need to be over-ridden by drugs became derided – and still is derided by large numbers of doctors. But people are voting with their stomachs and scientists from the National Cancer Institute are belatedly finding evidence to support their concerns.

The evidence

One American study published in 1994 reported a sharp drop in the incidence of colon cancer between 1985 and 1988 – eight percent for men and 11 percent for women. ‘The most salient risk factor for colorectal cancer is diet,’ the authors reported that dietary fat, particularly animal fat, was associated with a high risk, and dietary fibre, particularly insoluble or grain fibre, was associated with low risk. Fruits, vegetables and vitamin D were also seen to have a protective effect while a sedentary life-style and obesity were correlated with a higher incidence of colorectal cancer.

These are very significant findings. Evidence that diet and environmental factors could be the key to all cancers is, of course, implicit in comparisons of cancer rates in different countries. We know it is not genetic because immigrant families, after a generation or two, develop the cancer profiles of their host countries.

Compare the following:

Age-adjusted death rates per 100,000 population for colon cancer (1988-91)

	Men	Women
USA	16.7	11.4
England and Wales	20.2	13.7
Ireland	23.2	15.1
Scotland	20.6	15.2
Germany	21.1	15.2
Denmark	22.8	17.5
France	17.3	10.3
Spain	13.2	9.2

Italy	15.6	10.3
Greece	6.8	5.5
Japan	15.1	9.7
China	7.9	6.5
Hong Kong	14.8	10.7
Mexico	3.3	3.1
Argentina	13.7	9.3
Chile	7.0	6.0

Source: *CA: A Cancer Journal for Clinicians*, American Cancer Society

The high incidences in northern Europe, dropping as we move to the Mediterranean, and the very low rates in countries where the diet is largely cereals and vegetables, are a clear indication that the diets of prosperous countries, high in animal fats, are to blame for significant numbers of cancer cases. Wealthy Hong Kong compares badly with neighbouring China. Is this likely to be genetic?

Colon cancer, has obvious links to food. What about other cancers?

Breast Cancer Death Rates per 100,000 population 1988-91

USA	22.4
England & Wales	28.7
Germany	21.9
Spain	17.1
Greece	15.2
China	4.6
Japan	6.3
Mexico	8.1
Argentina	20.9

Lung Cancer Death Rates per 100,000 population 1988-91

	men	women
USA	57.1	24.7
England & Wales	57.0	20.5
Germany	48.7	7.8
Spain	45.2	3.4
Greece	49.8	6.9

China	34.0	14.5
Japan	30.1	8.0
Mexico	16.5	5.9
Argentina	39.2	5.8

This may not appear to support the argument (certainly the figure for Chinese women is anomalous) – but the Chinese, Japanese and Greeks are ferocious smokers and certainly a far larger proportion of the male population in these countries smokes than in the US. Yet their death rates are much lower. How can this be? Diet is the obvious answer.

If we compare the top five with the bottom five for all forms of cancer we get the following

	Men	Women
1.	Hungary	Denmark
2	Czechoslovakia	Scotland
3	Uruguay	Hungary
4	Poland	Ireland
5	France	New Zealand
42	Israel	Mexico
43	Venezuela	Greece
44	Mauritius	Japan
45	Ecuador	Puerto Rico
46	Mexico	Mauritius

So relative poverty, a diet heavy with rice or pasta and vegetables, olive oil or tofu – add in sunshine, music and laughter. These are, it has been argued, the ingredients for a cancer-free life. The Mediterranean diet of olive oil, pasta, vegetables with a little wine and lots of grapes has been put forward by some as a healthy diet that we should adopt. Certainly it is a tempting one!

These epidemiological comparisons of countries are one basis for the argument that diet can help protect against cancer. But a number of people have gone beyond this and argued on the basis of individual case studies that diets can also *cure* cancer. This view is strongly condemned by the orthodox profession. The authors of *Everyone's Guide to Cancer Therapy* say flatly: 'Following a certain diet or eating certain foods will not make cancer go away....None is known to be helpful. Many result in nutritional deficiencies... Moderation is still the best approach to diet for all medical problems.' But they offer no support for these assertions, which are simply the opinions of surgeons and oncologists who have no training or experience in the nutritional sciences. The need for evidence and proof cuts both ways. We are free to make up our own minds on the matter. Here then are some of the 'miracle diets' for which cancer cures have been claimed.

The five-week juice fast cure

Anne Frahm believed that diet can cure cancer. Hers was a breast cancer that had metastasized to the backbone – and even to the bone marrow. In her book: *Cancer Battle Plan*, she describes how, for eighteen months she went through every form of conventional therapy – surgery, chemotherapy, radiation, hormone therapy and finally, an autologous bone marrow transplant. They all failed. She refused to ‘lie down and play dead’ and instead went to see a nutritional counsellor. Following a strict juice diet, she claimed that all signs of cancer quickly left her. ‘ Within five weeks after starting a strict programme of detoxification and diet under the guidance of a nutritional counselor, my cancer had packed its bags.’

Her recovery was begun by going on a juice fast that looked like this:

8:30 am	grapefruit juice with olive oil. She brewed a pot of Jason Winter’s Tea to sip throughout the day.
9:00 am	apple juice with fibre cleanse, plus enemas.
10:00 am	green-drink with vitamin C powder
11 am	apple juice with fibre cleanse
Noon	carrot juice, acidophilus
1:00 pm	green drink with vitamin C powder
2:00 pm	apple juice with fibre cleanse.
3:00 pm	carrot juice
4:00 pm	green drink
5:00 pm	apple juice with fibre cleanse
6:00 pm	carrot juice
7:00 pm	green drink with vitamin C powder
8:00 pm	carrot juice
9:00 pm	green drink with vitamin C powder
10:00 pm	apple juice with fibre cleanse

It is not clear from the book what the green drink consists of. It is either a mixed vegetable juice containing red cabbage, cos lettuce, watercress, and green peppers (favoured by proponents of the Gerson diet described below) or it is the Barleygreen or Wheatgrass drink (also described below). Acidophilus are so-called ‘friendly’ bacteria that aid digestion and the absorption of nutrients. Jason Winter’s Tea is a tea made from chapparal, an American herb.

The ingredients for the juices were organically grown apples and carrots and they were mixed 50-50 with distilled water. No tap water was allowed. The juices have to be drunk soon after they are made as the nutrients quickly oxidise.

For Anne Frahm, this was the start of a programme that would lead on to a largely raw vegetarian diet supported by enzymes, amino acids and vitamin & mineral supplements; strengthened through morale boosting activities and exercise. And, if we believe what she says, by following this diet

rigorously all signs of her cancer were gone in five weeks.

The water question

This question of water needs to be dealt with early on. It is strongly believed by many that tap water, chlorinated and/or fluoridated or simply heavy in calcium, is extremely unhealthy and interferes with the absorption of nutrients. The option generally argued for is pure distilled water. However, there are critics who say that distilled water leaches minerals from the system and would therefore in theory lead to inevitable mineral deficiencies. The retort to this is that, yes, distilled water does leach out minerals but these are not the organic minerals that the body can use – they are therefore potentially toxic to the body and so distilled water is doing the body a favour by removing them.

Others take a different tack. They say that filtered tap water is fine because the toxic chemicals have been removed. Still others say that filtered tap water is a potential health hazard if the filter is not regularly changed because the filter becomes loaded with toxins which eventually leak through and instead of providing the drinker with chemical-free water instead provides water with a very high and very toxic chemical content. This argument goes round and round. Each person has to make his/her own decision. With respect to the juice diet, it seems to me sensible to use bottled distilled water if this is cheaply and widely available.

The case against meat

Anne Frahm was forbidden by her nutritionist from taking in any animal product: the reason being that they store pollutants from the environment. Dairy products have a 250% higher concentration of pollution – pesticides etc – than green leaf vegetables and 1,500% more than root vegetables. The figures for meat, fish and poultry are double these figures. Meat also contains all the hormones, antibiotics and other chemicals that are part of modern animal farming. According to T. Colin Campbell, professor of nutritional biochemistry at Cornell University: ‘Excessive animal protein is at the core of many chronic diseases.’

Animal fats also increase the number of anaerobic bacteria in the human gut – and these bacteria create an environment that favour the development of cancer. These anaerobic bacteria live not by oxygen but by fermentation – and so do cancer cells. In fact, it appears there is a strong case to be made that cancer cells develop as a response to a low oxygen environment. A diet high in animal fats is likely to be low in fibre so these bacteria stay for longer than they should in the intestine.

So meat is out.

The principles of detoxification

Alongside her dietary changes, Anne Frahm had a daily enema. The purpose of this procedure is to flush out the colon and so help the regeneration of the liver. Now, the place of the liver in the scheme of things is another focus of dissent. Orthodox surgeons pour scorn on the idea that a poor functioning liver has anything to do with the development of cancer, but most complementary health practitioners disagree. So do some orthodox doctors. Dr Harold Manner has absolutely no doubt that liver dysfunction is the root of the problem: ‘the livers of cancer patients have become clogged with many of the poisons they were meant to eliminate...Cancer can be reversed and controlled only if we regenerate the liver. Fortunately for us, the liver is the one organ in the body capable of regenerating itself.’

So purification of the liver is the first step to a cancer-free existence. What causes the liver to become toxic and so dysfunction? Poor elimination of waste in the colon is the answer. Poisonous materials are trapped in the large intestine and reabsorbed back into the bloodstream where they again go through an increasingly weakened liver. As it becomes less and less able to keep up the work of cleaning the blood, the whole body becomes more toxic.

The most famous exponent of colon health was Norman W. Walker. On the first page of his book: *Colon Health: the Key to a Vibrant Life.*, he says: 'Few of us realise that failure to effectively eliminate waste products from the body causes so much fermentation and putrefaction in the large intestine, or colon, that the neglected accumulation of such waste can, and frequently does, result in a lingering demise.' Norman Walker's prescription for a healthy life included half-yearly colonics, vitamin C and raw vegetable juices, particularly carrot juice. Since he lived actively to the age of 109, it is hard to argue with him!

An efficient colon will eliminate food 16-24 hours after it has been ingested. Very few British intestines work at this rate. According to the Dunn Nutritional Institute at Cambridge, they average, 60 hours, and 5 days is not unusual. Colonic Therapist, Pauline Noakes, likens the situation to having the dustmen permanently on strike so that the rubbish piles up in the street. 'Many people don't realise they are carrying around impacted faecal matter in their colons and that their lack of energy, their irritability, their aches and pains...and various ailments are due to the toxic waste in the bowel.' (P.Noakes, Positive Health magazine, April/May 1995)

There is evidence to support this view. Two doctors from University of California, Nicholas Petrakis and Eileen King, writing in the Lancet in 1982, reported that they had studied the breast fluids of 5,000 women. They had found that women who had two or fewer bowel movements per week had four times the risk of breast disease (benign or malignant) as those who had one or more bowel movements per day. They also found that the bowels of people who ate meat contained greater amounts of mutagenic (potentially harmful) substances than did those of people who abstained from eating meat.

Colon Cleansing

Enemas can be undertaken at home with an enema kit bought at a pharmacy. It is easier and more effective to go to a colonic cleansing clinic, but make sure the person giving the therapy is a registered colonic therapist. (Send a large SAE to The Colonic International Association, 50A Morrish Road, London SW2 4EG or telephone 071-671-7136 for a list of registered colonic therapists in Britain.)

And how do you feel after a colonic? Carol Signorella, writing in Cosmopolitan October 1979 wrote: 'After a year of colonics, my appearance and energy levels were both radically improved. No more draggy mornings or late afternoon slumps... I seem to think more clearly now and I need less sleep. In a word my body and mind feel marvellously clean.'

Wouldn't laxatives work just as well? The answer is a definite no. Colonics clean out the large intestine but laxatives also interfere with the small intestine which is where digestion and absorption of nutrients occur. Also laxatives are, in a sense, addictive – for them to continue to be effective, you need to take larger and larger doses.

A word of caution: colon hydrotherapy is not suitable for people with the following conditions: severe cardiac disease, aneurysm, severe anaemia, severe haemorrhoids, cirrhosis, carcinoma of the

colon, fistulas, advanced pregnancy, kidney problems and hernia.

There are perfectly good alternatives to a full colonic. One is to take a colonic cleansing treatment. A suspension of Bentonite mud and dried psyllium husks does a good job of taking waste material out of the digestive system. All pharmacies and health shops should be able to offer advice in this area.

Anne Frahm's story is enlightening. Hers is one story that food alone can cure cancer in a person who is still prepared to fight despite gloomy medical predictions. But she is not alone. In fact the principle that underlay Frahm's cure has been known for thousands of years. The ancient Hippocratic Oath contains the following much ignored statement: 'I will apply dietetic measures for the benefit of the sick according to my ability and judgement.'

The Gerson diet

Max Gerson was a Jewish doctor of rising eminence who fled Nazi Germany for America – only to find himself persecuted there for his methods of treating cancer. He cured Albert Schweitzer's wife of tuberculosis by dietary means and on his death in 1959 Schweitzer said of him: 'I see in him one of the most eminent geniuses in the history of medicine.'

The diet that Anne Frahm followed was essentially the diet recommended by Max Gerson in his book: *A Cancer Therapy*. This was a summary of 30 years of cancer work using dietary means. Gerson's diet consists of fresh juices of fruits, leaves and vegetables; large quantities of raw fruit and vegetables; vegetables stewed in their own juice, compotes, stewed fruit, potatoes, oatmeal and saltless rye bread.

Everything must be prepared fresh and salt must be completely excluded. After six to twelve weeks, animal proteins can be added in the form of pot cheese (saltless and creamless), yoghurt made from skimmed milk, and buttermilk. One underlying principle is to exclude sodium as far as possible and to enrich the body's tissues with potassium – 'to the highest possible degree'. Because it is easier to digest than a normal diet, the body digests each meal faster so larger portions and more frequent meals need to be eaten. Patients are encouraged to eat and drink as much as possible.

The following are forbidden on Gerson's diet: Tobacco, salt, spices, tea, coffee, cocoa, chocolate, alcohol, refined sugar, refined flour, candies, ice cream, cream, cake, nuts, mushrooms, soy beans and soy products, pickles, cucumbers, pineapples, all berries (except red currants), water to drink (stomach capacity is needed for the juices), avocados, all canned foods, preserves, sulphured peas, lentils and beans, frozen foods, smoked or salted vegetables, dehydrated or powdered foods, bottled juices, and all fats, and oils.

Some food items are forbidden at the beginning but may be introduced to the diet later. These include: milk, cheese, butter, fish, meat and eggs.

When cooking, aluminium pots must not be used – only stainless steel, glass, enamelware, or earthenware pans and containers. In addition to diet, hair dyes are also forbidden.

Although this diet appears to be easy to follow in principle almost everyone following it will suffer some degree of nausea, headaches, gas, depression and even vomiting. Gerson recommends peppermint tea served with some brown sugar and a bit of lemon as a cleansing drink to take away any bad tastes or inability to stomach the diet.

Patients also have to expect 'flare ups' – a sudden incidence of unpleasant symptoms – which do not

last more than a few days. These are in fact essential to health as they indicate that the body is expelling toxins. Without them, Gerson believed that the patient will not be cured. The more poisoned the body was prior to treatment, the more serious the flare ups. These flare ups are the result of a toxic release and the body must be detoxified with the use of coffee enemas to ensure that the patient is not damaged by them. It has been argued that it would be very dangerous to combine the Gerson diet with any other effective regime – such as laetrile injections for example – as this might bring on an unexpectedly quick flare up of dangerous intensity.

Beata Bishop, in her book: *Triumph over Cancer*, describes how she was cured of her melanoma which had spread to the groin, and which would normally have been fatal within 6-8 months, by strictly following the Gerson regime. In her case it took about eighteen months before she was certain she had beaten the disease.

Supplements

Gerson was in favour of lugol solution (half strength) to provide potassium and iodine. ‘High potassium/low sodium environments can partially return damaged cell proteins to their normal undamaged configuration,’ he wrote. Potassium deficiency has been shown by others to be present in the following diseases: cancer, leukemia, diabetes, glaucoma, chronic arthritis, acute and chronic asthma and sinusitis.

Gerson also recommended Niacin 50 mg, six times daily, for six months. As for vitamin B12 he was undecided but he was against the administration of other vitamins because he noticed they sometimes had the effect of causing a tumour to grow back. This is because, he says, non-cancerous tissue in a cancer patient does not react in the same way as normal healthy tissue. That is to say, vitamins may normally be very healthy – but they can have negative effects in people with cancer.

Gerson’s evidence for success

And what evidence did Gerson put forward to support his claim that his diet was effective as a cancer treatment? In his book, *A Cancer Therapy*, he provides case histories of 50 patients that he cured. One of these cases, Case No. 46, was a Mrs E.B. Aged 48, married with two children. She presented with a cervical carcinoma which was showing signs of invading neighbouring tissues. The biopsy showed clear malignancy. By the time she reached Gerson she had already had radiation treatment but the tumours had returned. He started her on the diet and she kept to it faithfully for 18 months. At the end, she had no sign of cancer. She slowly weaned herself off the diet and eleven years later was still cancer-free.

The Gerson Institute claims a success rate of 50-80 per cent depending on the stage of cancer on arrival at their clinic. Other, not necessarily unfriendly, observers estimate a much lower success rate. The Gersons take their readings when the patient goes out by the front door. The observers look at results five years down the road. The difference is easy to explain away. The Gerson diet is rigorous. At home it is easy to slip. Certainly observers of patients at the clinic are impressed with the general level of well-being of the patients.

For further information contact: The Gerson Institute, P.O. Box 430, Bonita, California 91908. USA

The Moerman Diet

In 1938, Dr Cornelis Moerman developed a diet that he used to treat those cancer patients that came to see him. He was ridiculed for decades, but in 1987, the Dutch Ministry of health publicly recognised the Moerman therapy as an effective cancer treatment. Moerman, like many others favouring nutritional health, lived rather longer than many of his orthodox colleagues. He died in 1988 at the age of 95.

Moerman began his treatment when a man by the name of Leendert Brinkman came to him seeking his help. He had a stomach tumour that had spread to his groin and legs. The doctors had given up on him Moerman told him to eat as many oranges and lemons as he could. He ate them ‘by the truckload until I was up to my eyes in vitamin C’ – a year later he was free of tumours. He went on to live to a healthy old age himself, dying at the age of 90.

This success led Moerman to develop his nutritional ideas which he tested on pigeons. Eventually he came to believe that there were eight substances of vital importance to ideal health. These should be taken in supplemental form as well as through dietary means. The required doses of the eight substances were as follows

Substance	Dose
1. Vitamin A	50,000 iu – 100,000 iu
2. B-complex vitamins	2 large dose tablets
3. Vitamin C	as much as can be tolerated
4. Vitamin E	400-2,200 iu
5. Citric Acid	3 tablespoons of solution: 10-15g Acidum citricum in 300 g of water
6. Iodine	3 tablespoons of solution: iodii spirit, 3%; 1-3 drops in 300 g of water
7. Iron	3 teaspoons of solution: undiluted sacharatis ferrici aromatic triplex)
8. Sulfur	1,000 mg

Citric acid helps the blood flow, iodine is important for stimulating the thyroid gland. It also works with sulphur to help oxygenate cells. Iron is needed to prevent anaemia. It should be noted that Moerman’s liking for iron is not universally accepted among the vitamin and mineral supplement crowd. Iron has also been implicated, in other studies, as a cancer-promoting agent. It is hard to say at this stage who is right.

Moerman’s diet allows selection of any of the following

- Grains: whole grain breads and pastas, brown rice, barley, oat bran, wheat germ, what or corn flakes
- Dairy: butter, buttermilk, cream cheese, cottage cheese, egg yolks, plain live yoghurt
- Vegetables: most vegetables lightly steamed. Highly recommended: beet juice and carrot juice
- Limited intake: brussel sprouts, cauliflower, parsley
- Fruit: most fruits. Most recommended: mixed fresh orange and lemon juice.
- Others: bay leaf, garlic, herb tea, nutmeg, cold-pressed olive and sunflower oil.

Prohibited foods are

- all meats
- all fish and shellfish
- alcohol
- animal fats
- artificial colourings
- beans, peas, lentils, mushrooms, potatoes, red cabbage, saurkraut.
- cheeses with high fat and salt content
- margarine and other hydrogenated oils
- coffee, cocoa or caffeine containing teas
- egg whites
- sugar
- salt
- white flour
- tobacco

As you can see, there is a great deal of overlap with the Gerson diet. Of the two Gerson's is clearly more rigorous in that it stresses that the intake must be raw – but if even the lighter regime of Dr Moerman is considered to be effective then some leeway is clearly permitted. But is there any proof that it is effective? A number of doctors sympathetic to Moerman's diet set up a research project which followed 150 patients. The results were as follows.

Number cured with Moerman Therapy alone:	60	(40%)
Number cured with Moerman Therapy after initial treatment with another therapy:	55	(36.66%)
Total number cured with Moerman Therapy:	115	(76.66%)
Number who could not be cured:	35	(23.33%)

Source: 1983 SIKON Study Data (adapted from Ruth Jochems, 1990)

These should be compared with the figure of cancer patients cured by normal means, which is approximately 40 per cent overall.

Results of small studies like this are open to many objections, but the results certainly indicate that further research should be done. The Dutch Ministry of Health accepts that the Moerman diet is a bona fide and effective cancer treatment. The American Cancer Society disagrees.

The Macrobiotic Diet

Modern macrobiotics was developed in Japan at the turn of the century. Two educators, Sagen Ishitsuka, who was himself a doctor, and Yukikazu Sakurazawa cured themselves of serious chronic

illnesses by changing their diets to one consisting of brown rice, miso soup, sea vegetables and other traditional foods. Sakurazawa went to Paris in the twenties and – using the name George Ohsawa – began to spread the word.

Ohsawa’s Macrobiotic diet is based on Eastern philosophy and takes its starting point in the idea of Yin and Yang, the dark passive female and light active male forces which must be maintained in a state of harmony. The body, as with everything else in the universe, must also maintain a healthy balance between these two forces. As each person is unique, the point of balance will be different for each person. Individual cancer tumours also have yin and yang characteristics. For example, while cancer of the tongue is yang, all other tumours of the upper digestive tract are considered to be yin.

From a macrobiotic point of view, cancer is simply a sign, one among others, that the body is in a disharmonious state. The objective then is simply to restore the harmony. The only way we can achieve this is through dietary means, such as that recommended by Michio Kushi and Alex Jack, in their book: *The Cancer-Prevention Diet*. This is true even when there appears to be a direct carcinogenic cause – ie a skin cancer caused by too much exposure to sunlight. They explain this in the following way. People in the west eat a lot of sugars, fats, dairy products and canned foods and drinks. These create an acidic state – which is yin. When exposed to the sun, a strong yang factor, the yin items rise to the surface and a tumour results. People in tropical countries whose diets consist of grains, tubers, seeds, vegetables and locally grown fruit with only a small amount of animal food will not get skin cancer no matter how long they are out in the sun because their blood and tissues do not contain these yin toxins. Certainly, inhabitants of hot countries do not appear to suffer higher incidences of melanoma.

The macrobiotic diet consists of the following:

Food item	% Daily intake	Form
Whole grains	50-60	These should be eaten in whole form – and not cracked. Brown rice should be pressure cooked rather than boiled. Breads should not contain yeast so chapatis and tortillas and sourdough bread are recommended.
Soup	5-10	One or two bowls of miso or tomari soup. Miso is a kind of fermented soybean paste. Miso should have aged more than 1½ years and be made of organically grown soy beans*
Vegetables	25-30	These should be fresh. Up to a third can be eaten raw.
Beans and sea vegetables	5-10	
Oils		Unrefined sesame, corn or mustard seed oils are best. Unrefined safflower, sunflower, soy and olive oils can be used occasionally

Others

Sea salt – though meals should be neither too salty or too bland. Salt should be used in the cooking and not at the table.

(*Miso contains a number of anti-angiogenesis substances that interfere with tumour growth)

The way the food is eaten is also important. Each mouthful should be chewed 50-70 times before swallowing. Avoid eating three hours before sleeping. Eat only when hungry. Drink only when thirsty. Give thanks and respect to the whole world of living beings and to all those who made the food available.

One of the surprising features of the macrobiotic diet is its avoidance of fruits. This avoidance isn't absolute but fruits are advised only occasionally and only in the proper climatic zone and in the proper season. A person in Europe in winter should not be eating bananas or even oranges. Also to be avoided, in addition to red meats, dairy products and any form of processed food, are cooking spices and herbs, butter or margarine, iodised salt, ginseng, eggs and yoghurt. Another surprise is the ban on any kind of vitamin or mineral supplement.

Evidence for the macrobiotic diet's success

Kushi and Jack offer a number of stories of people being cured. One was Jean Kohler, a 56-year-old pianist and professor of music. One summer, he suddenly became aware of an itch that spread up his leg. After several tests were conducted the doctors discovered a massive tumour on his pancreas. Pancreatic tumours are almost always fatal. He was told nothing could be done and that he had anywhere from one month to three years to live. He accepted chemotherapy but after a few days decided that he didn't want to continue with the treatment as it was too debilitating. He started to look for an alternative therapy and was referred to the Kushi Institute in Boston. He started a macrobiotic regime and within six months all signs of cancerous activity had ceased. This was confirmed by medical tests.

Kohler lived another seven years and died of something else entirely. He publicised his case whenever he could and even wrote a book about it. Kushi and Jack quote him as saying: 'The best thing to ever happen to me was having so-called terminal cancer.'

In another case, Dr Vivien Newbold, an emergency care doctor in Philadelphia became interested in macrobiotics when her husband had a metastatic cancer of the colon. He reduced the cancer by 70 per cent by going on a macrobiotic diet. She subsequently wrote an article detailing the effect of a macrobiotic diet on six cases in which the five cases who stuck with the diet went into total remission for over five years. This article was rejected by three professional magazines. She was also told by the American Cancer Society's director: 'It is of no interest to us.'

Dr Newbold came to the conclusion that the medical profession didn't wish to know if there was a possible cure for cancer: 'They state repeatedly in their articles that a careful review of the literature reveals there are no documented cases of recovery using macrobiotics...Of what use is a careful review of their literature if medical journals refuse to publish any cases...'

(quoted by Richard Walters, 1993)

In 1993, however, the Journal of the American College of Nutrition published a study of the effects of the macrobiotic diet on people with pancreatic cancer. After one year 52 per cent of those on the diet were still alive compared with only ten per cent of the controls – a 500 per cent increase in one year survival rates.

Kushi regrets that too often people only start to look at macrobiotics when other attempts have failed. ‘Only about 15 to 20 percent among my visitors...are able to get better. If they would come to see me at an earlier stage of illness, or had greater family support, the percentage would be much higher.

For further information contact: Kushi Institute, PO Box 7, Becket, MA 01223, USA

The Bristol Detox Diet

This diet is, first of all, mainly a juice diet. It is 100% vegan, it consists 90% of raw food and is strictly salt and sugar free – not even honey should be taken. Each meal can be accompanied by wholemeal bread or wholegrain rice.

Foods may be chosen from the following list:

Eat plenty of: alfalfa sprouts, almonds, bean sprouts, sprouted aduki and mung beans, runner beans, soy beans, beetroot, broccoli, brussel sprouts, carrot juice, cauliflower, chicory, fennel, fennugreek, kale, kohlrabi, leeks, summer lettuce, home-made muesli, rolled oats, brown rice, ryebread, sprouted sunflower seeds, wheat berries.

Eat in moderation: apple, apricot kernels, apricots, artichokes, bananas, bay leaves, beans of all kinds, wholemeal bread, bugar wheat, carrots, cashews, Chinese cabbage, corn on the cob, courgettes, couscous, fresh figs, grapefruit, grapes, hazel nuts, kiwi fruit, lentils,, marrow, melon,, millet, fresh dried mint, oranges, peas, sweet potatoes, pumpkin, wholewheat semolina, spinach, swedes, turnip

The only surprises in this list is the low value given to onions and especially to garlic As with the macrobiotic diet great attention should be given to chewing the food slowly in a calm frame of mind.

For further information contact the Bristol Cancer Help Centre, Grove House, Cornwallis Grove, Clifton, Bristol BS8 4PG, Phone: 0272 743216

Fasting

Doctors, by and large, take it as an article of faith that it is important to eat well in order to maintain the health and vigor of the body. Even Max Gerson opposed the idea of fasting because it would result in vitamin and mineral deficiencies and so weaken the body further. However, there is a great deal of evidence that fasting, either voluntarily or involuntarily can have a positive effect on the body's health.

The masterwork on fasting is Herbert Shelton's *The Science and Fine Art of Fasting* which was first published in 1934. In a foreword to this edition, Shelton describes the case of Henry Tanner M.D. , who, in 1877, felt he could no longer cope with the pains and illnesses that were plaguing him. It was an accepted fact at that time that to go without food for ten days was a certain way to enter the beyond. So Tanner, preferring to ease his way to the next world, rather than to commit an act of violence against his person, took to his bed and refused all food. So far from dying, he found that,

by the 42nd day he had recovered. When he announced this to his colleagues, he was denounced as a fraud. To prove he was not a fraud, he undertook another forty-two day fast under the supervision of the United States Medical College of New York. He was placed in a fenced off area and a watch was kept on him by 60 volunteer physicians. 'During the first fourteen days of the fast I drank no water and breathed air in the hall that would vomit an Arizona mule.' He was eventually allowed access to water and fresh air. On the eighteenth day, he got into an argument with a medical student over which was the best source of food: oxygen or beef. He challenged the student to walk around the hall until one of them dropped out. The medical student dropped out puffing and panting on the eighteenth lap, leaving Dr Tanner a clear winner.

Shelton argues that fasting, far from being an abnormal reaction to ill-health is actually a very natural one. He points to the fact that wounded or ill animals very often refuse food until they are well on the mend. When we are ill we very often feel no appetite at all for food. The obvious implication is that the body does not wish to have food – and since the body is credited with healing powers, what it wants is probably good for it. Animals will also go for months in hibernation without any food or drink of any kind.

Fasting as a way of achieving physical and spiritual purification is a common aspect of religious life. Fasting is frequently mentioned in the Bible. The ancient Greek philosophers were also frequent fasters. Before any student could be accepted as a student by Pythagoras, he had to undergo a forty day fast. In addition to its therapeutic value it was, presumably, a means of determining who had the necessary discipline for study. Asclepius is the Greek God of Healing. Healing through fasting was a regular feature of life at his temples. All the great doctors from Hippocrates to Avicenna have recommended healing fasts. Mark Twain (not a doctor) also approved of fasting: 'A little starvation can really do more for the average sick man than can the best medicines and the best doctors. I do not mean a restricted diet. I mean total abstention from food for one or two days. I speak from experience. Starvation has been my cold and fever doctor for fifteen years.'

Shelton describes the case of an overweight 53-year-old English businessman who was blind in both eyes due to cataracts, had no sense of smell and who had heart trouble. He went on a fast from October 31st 1932 to February 8th 1933 – 101 days. He lost 89 lbs, regained his sight and his sense of smell. His heart trouble was much improved. He had started the fast as an experiment, intending only to go on it for ten days. After that he had just continued from day to day, gradually feeling better. But those who go on fasts to lose weight should know that the weight lost is very easily regained especially if ravenous eating follows the diet.

Fasting works because of a process known as autolysis, self-digestion. For example, when a tadpole starts to turn into a frog it first grows four legs. It then rids itself of its tail – but the tail does not fall off. Instead it is taken back into the body and absorbed. While this is occurring the tadpole-frog does not eat. It may be that fasting is essential to this process. This autolysis is a controlled process by which the least essential parts of the body are self-digested. This is also true in starvation, the body seeks to preserve the most essential organs and tissues by allowing the least essential to be digested first. This is very important when it comes to cancer. Cancer tumours are recognised as being the least essential tissues in the body and so are easy victims of the autolytic process.

How to fast

Is it difficult to fast? Apparently not. After a few days, it seems that the hunger goes. Many fasters experience clear improvements in their mental abilities. Shelton says: 'All of man's intellectual and

emotional qualities are given new life. ‘The first week of a fast should be done during a period of rest where no physical demands are made on the faster. But after that, it appears, there is no problem accomplishing quite demanding tasks. However, Shelton’s view on this subject is pithy: ‘On general principles working during a long fast is to be severely condemned. It has been done. It can often be done. But it should not be done.’

Water should not be drunk in large quantities:, instead the faster should drink when thirsty. Shelton is also opposed to the use of enemas. He feels they actually retard the process of healing. This is a matter on which there is much disagreement – the present European practice strongly encourages the taking of enemas to rid the body of any toxic build-up.

Evidence for the success of fasting

Shelton gives a number of examples of people who were cured of cancer by means of a fast, but he cautions that there is a wide variation in response from person to person. In some people the tumour will be devoured quickly, in others slowly. In one case a cancer cure required a fast of 21 days followed shortly after by another of 17 days. This was considered by Shelton to be abnormally long. Another woman had a speedier response: ‘(after) exactly three days without food, the ‘cancer’ and all its attendant pain were gone. There had been no recurrence after thirteen years and I think that we are justified in considering the condition remedied.’

Shelton does accept that, when a cancer tumour has grown very large that it may take years of on and off fasting to absorb it – and even then it may not be possible. But on the whole he is extremely optimistic about the cancer curing potential of a fast.

Dr Virginia Vertrano, who took over Shelton’s clinic reports, reported: ‘ I kept a lady alive for ten years longer than the doctors said she’d live by fasting her once a year and keeping her on an all raw food diet between the fasts. She had a very malignant breast tumour.’ (quoted by Richard Walters, 1993) However, Vertrano cautions that some tumours return once the fast has finished.

Is there any more recent evidence that fasting works? Certainly there is evidence that low-calorie diets are health promoting, as the following examples show:

- In 1942, Albert Tannenbaum, cancer researcher at Michael Reese Hospital in Chicago, found that mice on a low calorie diet had substantially lowered incidences of induced breast tumours, lung tumours and sarcoma than mice on an unrestricted diet. He also found that mice on a high-fat diet had a significantly higher incidence of spontaneous breast cancer. Tumours also appeared much earlier in mice fed with a high fat diet.
- In 1944, cancer researcher J. Saxton reported that a special strain of laboratory mice having a high leukemia rate fed only 40 per cent of a normal diet reduced their leukemia incidence from 65% to 10%. A 1947 study found that the opposite effect also occurred. A high-protein diet increased leukemia incidence.
- A 1982 study at UCLA found that mice fed 28-43 percent fewer calories lived 10-20 percent longer than their controls and had fewer tumours of the lymphatic system

Fasting has a major theoretical defect as a cancer treatment in that the original imbalance of vitamins, minerals and/or essential fatty acids that may have helped to give rise to the cancer in the first place is not rectified. It seems sensible then, if a fast appears to be an attractive way of dealing with a cancer, to fortify the body with high levels of the relevant supplements before and after the

fast. Also, at the end of the fast, you should not go for a sudden blow out. A juice diet should be the first step on the road to a normal diet, then some thin oatmeal porridge or vegetable soup, working slowly up to a vegetable stew.

Juice fasts

Austrian herbalist Rudolf Breuss claims that a fast in which the faster drinks only half a litre a day of his special juice is an effective cancer treatment. His juice should be made from the following vegetables in approximately the following proportions: beet (300gm), carrot (100gm) celery (100gm) a small radish (50 gm) and a small potato. Press these vegetables through a tea sieve and drink the juice but don't eat the remaining solid sediment.

Instead of the potato one can make a tea of potato peel. Cook a handful of peel with 2 cups of water and simmer for 2-4 minutes. If the resulting liquid tastes unpleasant don't drink it. Taste is an indication of the body's desire to take in a particular food.

This juice should be supplemented with sage tea. According to Bruess, sage tea drunk everyday will keep you free of almost all illness. It is made by putting two teaspoons of fresh sage in half a litre of boiling water. This should be boiled for 3 minutes, left to steep for ten minutes and then drunk.

The grape cure

The grape cure is not the first or only single food diet that has been put forward as a health cure. In Victorian times a diet of pure raw lean beef was considered to be the perfect health regime. Similarly, in India, a diet of urine alone for several weeks on end is supposed to be cleansing. A diet of plain steamed brown rice has also been proposed by some as a cleansing diet that releases a great deal of healing energy.

So, the grape cure is nothing more or less than the eating of grapes – all of the grape (skin, pips and all) – and nothing but the grapes – for a period of four weeks. This grape cure is probably an ancient Mediterranean folk cure. Basil Shackleton was a very ill man when he came, almost at the end of his tether, to the grape diet. His only remaining kidney was diseased and would not respond to drugs. He had been chronically ill for over 40 years, having caught bilharzia when a young boy growing up in Africa. In despair he turned to a cure that he had only vaguely heard about – a diet of grapes. In his book, *The Grape Cure*, he explain what happened: 'There is magic in the world – and there are miracles!... after twenty-three days on the treatment... I came through ... looking and feeling twenty years younger – and I was completely and permanently cured!... My body became charged with a new vitality. I felt radiant and whole.'

The grape cure that he recommends consists simply of eating as many grapes as desired and nothing but grapes – no drugs, no other foods, no liquids other than hot or cold water – hot for those times when you will feel nauseated. The water may be drunk at all times but not within an hour after eating the grapes as this will only dilute the strength of the natural chemicals in the grapes. The grapes must of course be washed thoroughly – and soaked two or three times – to wash off any pesticides that might be on the skin.

During this cure there must be at least one bowel movement every two days – if not, an enema or colonic is necessary – because the faeces are the main channel for the elimination of toxic matter. Shackleton also recommends a glycerin suppository for the purpose of encouraging a bowel movement.

Anyone following a toxin-removing regime will suffer badly in the first week from headaches but this will gradually disappear. These headaches are a barometer of your condition. The worse they are, the more toxins you have in your body that need to be eliminated.

Shackleton ate between four and five pounds of grapes a day and after four weeks – having started the diet near death’s door was able to say: ‘ All forms of irritability and frustration – from which I had suffered for so many years – had completely disappeared. It was quite impossible for me, it seemed, to get angry! All negative symptoms recorded before the treatment had completely vanished. I was [even] able to read a newspaper without glasses. ‘

Individual foods as medicines

Barley Green Essence and Wheatgrass

Barley Green Essence is the concentrated extract of young barley, rye and oat shoots which have been allowed to grow until the leaves have become dark green. This was developed by a Japanese scientist Yoshide Hagiwara to support his own health. Hagiwara believes that : ‘the leaves of the cereal grasses provide the nearest thing this planet offers to the perfect food.’

Wheatgrass is a variation which was developed in America by Ann Wigmore. Both consider their products to be effective components of a holistic anti-cancer dietary regime. There are now a number of similar products on the market containing additional herbs, enzymes and so on.

Green Barley Essence is available as a powder and in capsule forms though he personally recommends the powder form as better. The potassium content of this product is very high, which makes it a good food for people working under high stress – when blood potassium levels will show a marked tendency to fall. Potassium is therefore being used up at a high rate and needs to be replaced. If it is not replaced then the result is fatigue.

Green Barley Essence is also very high in vitamins. It has six times as much betacarotene and 3 times as much vitamin C as spinach. It is high in folic acid and nicotinic acid (important B vitamins) as well as biotin, chlorophyll and choline. Chlorophyll, which in plants is the substance that transforms the sun’s light into food, is very close in chemical structure to the haemoglobin in our blood – the only difference being one of its mineral components. Blood is bonded with iron while chlorophyll is bonded by magnesium. Hagiwara believes that the blood can be reinvigorated by eating chlorophyll.

Wheatgrass drinks were not invented by Hagiwara. They were common in Europe during the 1920s and it was from this source that Ann Wigmore brought them to America. Containing over 100 nutrients, she considers it to be a whole food in itself. It is the anchor around which she has developed her Wheatgrass Therapy. The other components are the eating of raw foods – especially sprouting beans , meditation, and detoxification.

Further information can be obtained from

- *Association of Green and Health, Daido Building, Room No.303, 3-5-5, Uchikanda, Chiyoda-ku, Tokyo 101, Japan.*
- *The Ann Wigmore Foundation, 196 Commonwealth Avenue, Boston, MA 02116, USA*

Linseed Oil & Cottage Cheese

The importance of linseed oil as a cancer fighter was first proposed by an eminent German biochemist, Dr Johanna Budwig. She meticulously analysed thousands of blood samples from people who were ill and compared these samples with other blood samples taken from people who were well. She discovered that those who were seriously ill (with cancer, diabetes and other ailments) were, without exception, deficient in linoleic acid. They were also deficient in phosphatides which are required for normal cell division and albumin – a blood producing lipoprotein which is itself a combination of linoleic acid and proteins.

Without linoleic acid the body can't produce haemoglobin and without the haemoglobin, the body can't carry vital oxygen to the tissues. This then creates a low oxygen environment which is ideal for the development of cancer. The cancer patient becomes more anaemic and the inevitable result is death. Without the phosphatides to stabilise cell-growth, cancer tumours grow uncontrollably. Without the albumin, the haemoglobin changes from a healthy red to a diseases yellow-green colour and cannot do its job of circulating oxygen around the system. To correct the situation, Dr Budwig surmised, the patient should take in large quantities of linoleic acid and sulphur based protein.

The source she chose for linoleic acid was pure virgin, cold-pressed, unprocessed linseed oil (also known as flaxseed oil). For sulphur based proteins she first chose skim milk but later chose low fat cottage cheese. She tested this out on cancer patients giving them 40 grams of linseed oil in 100 grams of skim milk with 25 grams of whole milk to make the mixture easier to blend. The result was exactly as she had predicted. The cancer tumours receded slowly and the haemoglobin regained its healthy red colour.

The basic combination can be taken in any quantity, the more the better. Flaxseed oil is sold at most health food shops. It must be kept in dark bottles and kept in cool places. It quickly loses its potency in light conditions so it must be made up fresh each time it is eaten. However, citrus fruits prevent it from being effective.

It is recommended that this basic mixture be supported by a diet that contains fresh fruits, fresh vegetables, unprocessed cereals, fresh cold water fish, 6-8 glasses of bottled distilled water and herbal teas. Foods to avoid include all processed oils, fried foods, sugar, artificial sweeteners or any processed food containing preservatives, or chemical additives.

It is also useful to wrap the affected part with towels soaked in linseed oil. Do not warm or heat the oil. Healing aromatherapy oils can be added at the same time.

Flaxseed oil is very high in Omega-3 fatty acids as is EPA, which is found in fish oils and seaweeds.

Support for omega 3 oil's anti-cancer effects comes from Barry Sears, author of *The Zone*, a book proposing a radically new way of viewing diets. He puts the cause of both health and disease at the doorstep of a group of chemicals called eicosanoids – there are good eicosanoids and bad eicosanoids. A diet that is high in total fat consumption (particularly omega 6 fatty acids) will produce more bad eicosanoids – whereas a diet that has a high omega 3 oil content favours the production of good eicosanoids. He attributes the success of the macrobiotic diet to the fact that it results in a very good oil intake. Where he faults it is in the fact that it favours a high carbohydrate consumption, which again favours the production of bad eicosanoids. For this reason, Sears also does not approve of strict vegetarian diets for cancer patients.

Sears, who is himself a biochemist who owns a large number of patents on ways of delivering

chemotherapy drugs, nevertheless argues that: ‘caloric restriction – coupled with the correct macronutrient composition – is far more effective than any drug in the prevention or treatment of cancer.’ For Sears, the best anti-cancer diet:

- is low in calories
- contains no red meats or egg yolk
- is low in total fat but high in fish oils (especially from salmon),
- has a protein to carbohydrate ratio of 3 grams of protein for 4 grams of carbohydrate, with most carbohydrates coming from fruit or fibre-rich vegetables

Garlic

Garlic is a very potent anti-pathogen. Recent tests at the University of Alabama Medical School suggest that it is as powerful as many modern anti-bacterial and anti-viral drugs – with minimal toxicity – ‘The only toxicity is social’ said one commentator wryly. To beat the social side-effects, garlic can be taken in deodorized pill form. In China, garlic extract is used in IV infusions to treat systemic fungal infections. One or two cloves a day can be sure to keep the doctor away. For garlic breath, chew on parsley leaves. Garlic is also a potentially useful protective agent for the liver.

It may be relevant that garlic is a very good source of selenium, germanium, amino acids and enzymes among other things.

Garlic can be eaten raw, 1-4 ounces a day, or it can be taken in the form of deodorised pills or liquid extracts. Kyolic ® brand garlic pills are highly regarded because of the quality of attention paid to the soil that the garlic is grown in and the quality of the cold-aging process that the whole cloves of garlic undergo.

Although garlic is the most potent member of the onion family, other members are also associated with good health. Apart from garlic and onion, this family includes asparagus, chives, leeks, and sarsaparilla.

It is no coincidence, it seems, that a string of garlic was hung up outside the door during times of plague – or around the necks of the ill. And garlic, as is well-known, keeps vampires away. There’s to you Count Dracula.

Garlic can also be applied externally with good effect. A poultice of finely chopped or juiced garlic, slippery elm, pokeroot – a wild plant common to the southern states of America whose leaves appear in salads – castor oil, vinegar, water and, on open wounds, cayenne pepper. Place this mixture with any additional herbs desired on a gauze pad and apply it to the skin closest to the tumour site. The poultice should be washed off in a shower every 12 hours and the area under the poultice allowed to breathe for 1-2 hours before a new poultice is applied. The result will burn the skin and may even raise a blister. These burns can be treated with lavender essential oil, aloe vera or comfrey. DMSO can be added to the poultice to aid absorption through the skin. This is claimed to be a very powerful anti-tumour treatment.

Cruciferous vegetables

This vegetable family which includes broccoli, cauliflower, cabbage, Brussels sprouts, collards, kale, mustard greens, turnips and turnip greens contains a number of compounds that have shown

inhibitory action on cancers in animals. Communities that eat higher amounts of these vegetables show reduced incidence of cancer.

Sea vegetables

We call them seaweeds but the Japanese, in particular, have a liking for these edible plants that grow in the sea. One seaweed extract marketed under the name Viva Natural has been found to be active against lung cancer and leukemia. There is also some evidence that these vegetables may be active against breast cancer. Kelp and dulce are widely available seaweed extracts. Kombu however should be eaten in moderation as it contains very high iodine levels and can induce temporary hyperthyroidism which stops when levels of iodine are reduced.

Bitter melon

This is a light-to-medium green Chinese melon recognisable for being 6-8 inches long with knobbed ridges – a very bumpy vegetable! Its botanical name is *Momordica Charantia*. In Cantonese it is known as Fu (bitter) Gwa or Leung (cooling) Gwa. When lightly fried or steamed it has a sharply tart but not unpleasant taste. It is very popular in summer months when it is eaten to cool the body down. This ‘cooling’ effect may be felt as a cleansing or purifying process. It is not recommended for pregnant women as it can have the effect of inducing spontaneous abortion.

For cancer patients it is suggested that the bitter melon fruit and leaves are eaten together in large daily quantities.

Bitter melon is being recommended by a number of AIDS activist groups as an immune support for people infected with HIV. For these purposes, the fruit of the bitter melon is not used. A ‘tea’ is made from boiling a pound of leaves and vines with two liters of water, brought to the boil and then simmered for 60-90 minutes (stirring every 20 minutes) and then cooled. Alternatively leaves and water can be put through a blender. In both cases the resulting ‘tea’ is strained to remove solid particles. It is then taken into the body through the colon in the form of a retention enema. This way of taking bitter melon may also be beneficial for cancer patients.

Bitter melon tea appears to be, like garlic, a powerful anti-viral agent and is also effective against the Herpes Simplex virus.

Some studies seeking to work with the substance identified as the active agent had to be cancelled quickly as it was highly toxic in its pure form. We see in Bitter melon a problem of classification: should we see it as a herb or as a food item.

Foods rich in abscisic acid

Abscisic acid is one of nature’s most potent anti-cancer weapons, according to Dr Livingston-Wheeler. The foods richest in these substances are: carrots, mangoes, avocados, tomatoes, lima beans and green leafy vegetables.

Foods rich in starch

Foods rich in starch. This information arose out of an epidemiological study of 12 countries. Those with high average starch intake scored low on cancers of the bowel, colon and rectum. Australian men and American women eat the least starch, 100 grams or less a day, while the Chinese eat 370

grams or more. Australian men suffer colon cancer at a rate of 25 per 100,000 while the rate for the Chinese is only 6.3.

The benefit comes from starch that is not digested in the small intestine. This so-called 'resistant' starch is then broken down by bacteria in the large intestine. This produces a short-chain fatty acid called Butyrate which may have a beneficial effect on reducing the proliferation of cancer cells. Slightly unripe bananas are good, ripe bananas are not because the resistant starch has been converted to sugars. Another good source of resistant starch is cold boiled potatoes.

Foods to avoid

All refined polysaturated oils eg cooking oils and margarines. These have a depressing effect on the immune system. They also interfere with the cell's use of oxygen to burn the basic foodstuffs to produce energy. The result is a cell that is potentially cancerous.

All animal fats These should be avoided because they are full of synthetic hormones, antibiotics and pesticides. According to Dr Livingston-Wheeler, chicken especially should be avoided because it contains, in very high quantities, a microbe implicated in cancer generation, which she called *Progenitor cryptocides*. Since intensively farmed livestock is often fed chicken manure so beef and pork meats may also be affected. This microbe can change its form from something similar to a bacteria to another form similar to a virus. This microbe is present in large numbers in cancer patients. Milk may also be dangerous, according to Dr Livingston-Wheeler, as 80-90 per cent of cattle carry leukemia.

Nutritional therapy: an overview

There is general agreement from all sides that 70-90 per cent of all cancers are caused by lifestyle and environment, and of this at least half are in some way related to diet and nutrition, while a further 30 per cent are the result of cigarette smoking. Some studies supporting a nutritional approach to prevention or cure are summarised here:

A large-scale study in New Zealand published in 1994 showed that vegetarians had less than half the cancer risk of their meat eating friends and neighbours.

- A 50-year study in England and Wales found that breast cancer mortality fell from the beginning of World War II because intake of animal fats and sugar fell due to rationing. In 1954, consumption of these items returned to prewar levels. However, breast cancer rates did not return about 1969, suggesting that there is a 15 year time lag between ingestion and development of the disease. This is close to the 20 year timelag reported between increase in smoking habits and increased incidence of lung cancer.
- Seventh Day Adventists, of whom roughly half are vegetarian, have significantly lower cancer levels than average. 84 per cent less cervical cancer and 30-44 per cent fewer leukemias for example.
- The Hunza people of northern Pakistan are renowned for their freedom from degenerative diseases. Dr Robert McCarrison who visited the area from 1904-1911 said, 'I never saw a case ... of cancer.' he attributed their health and longevity to their diet of whole-wheat chapatis, barley, maize, green leafy vegetables, beans and apricots. Later experimenting on rats, he found that rats fed on the Hunza diet remained healthy and free of disease, while rats fed on the normal Indian

diet contracted heart disease, cancer and other ailments.