

This WAS corrected
BY RAY

This COPY OF
Editor Sally Fallon
Sent TO
Tues July 29 1997

A Treatment for Leprosy

by D. Raymond Schmidt

D. Raymond Schmidt is a recognized authority in the application of nutrient-dense foods in dietary therapies ^{He} and has played an active role in shaping the present day health food and nutrition movement. He was instrumental in bringing the first ^[FREEZE DRIED] blue green algae products to market in the United States. Ray has a long association with PPNF as an Advisory Board member. He is a great researcher of the medical literature, especially on the subject of lipids, phytates and the Price Factor. Twenty-five years ago he arranged duplication of all of Price's original films, slides and reprints--an invaluable service to PPNF.

Most people consider leprosy to be one of those diseases of ancient times that modern medicine has been able to eliminate. Not so: There are an estimated ¹⁰⁻¹⁵ 20 million lepers in the world, most of them in tropical areas such as India and Africa.

The disease manifests as two types: A relatively benign and stable tuberculoid type (T) and a more malignant lepromatous type (L). Individuals may transition from one form to the other during the course of the disease. The disease is said to be caused by a microorganism *Mycobacterium leprae*. It is believed to be mildly contagious, but the mode of transmission remains obscure. Infection by direct skin contact, ^{Sneezing, Coughing, Spitting} appears to be the manner in which the disease is passed from one person to another--hence the universal ~~taboos~~ against touching lepers.

Fear of contagion is one reason lepers are confined to "colonies"; ^{LEPERS} another reason is the fact that ~~most~~ people wish to be spared the sight of the ~~insidious~~ skin lesions and deformities that develop as the disease progresses. Disfiguring skin ulcers, bone absorption in the fingers and toes and "eating away" of the nose are some of the more common external manifestations. Other complications include anemia, painful neuritis, episodes of acute fever and tuberculosis.

Orthodox treatment includes isolation in leprosariums or controlled home units for those who test bacteriologically positive, and administration of drugs of the sulfone category such as dapsone and sodium glucosulfone, which can have serious side effects. More recently, steroids have been used as part of the treatment protocol. Skin lesions and ulcers are treated topically with wet dressings containing sodium glucosulfone.

During the early 1980s, this writer instituted a program for ^{Lepers} the treatment of leprosy that involved dietary improvements and ~~the administration of~~ a nutrient concentrate containing blue green algae from ^{Oregon} the Klamath Lakes. Analysis of blue-green algae indicates that it is extremely rich in protein (about 60% of dry weight) as well as vitamin B complex, vitamin C and numerous trace minerals, especially iron, copper and zinc. It contains long chain unsaturated fatty acids of the beneficial omega-3 type, such as EPA and DHA. In addition, a major cell component is a sterol called chondrillasterol, which is a precursor of cortisone, a secretion of the adrenal gland. These

sterols make up about 2% of the dry weight of some algae. Preliminary tests indicated that blue green algae supported and enhanced adrenal function and stimulated growth. In addition blue-green algae contains natural antibiotics. *and is an excellent source of healing chlorophyll.*

The program began when contact was made with Dr. J. Leonard Bell, ^{Th.D.} ~~then~~ President of World Missions Far Corners, Inc. We agreed that we would start a unique nutritional food research program with lepers at the Gladys Schumacher Memorial Leprosy Hospital, Chengizhanpet-Guntur District, Andra Pradesh, South India, under the direction of World Missions Far Corners.

Treating from 350 to 500 lepers at one time, the Gladys Schumacher Memorial Leprosy Hospital was ^{AND IS} a model leprosarium, ~~and hence~~ the ideal location for ^{OUR} ~~the~~ program we instituted. Any leper could come for free treatments--to be cared for, kept clean, housed nicely, fed daily and loved in a compassionate atmosphere. The lovely grounds were kept clean and flowers and trees were planted and cared for by the lepers. Each leper who was able had an active part in the hospital campus. Hand looms wove the finest cotton cloth; umbrellas were made for market; metal cabinets were made in a tinker shop; the barber shop was manned by lepers, as was the tailor shop. There was also a sandal shop and other small shops to care for the lepers' needs.

Their laundry was kept clean. We instituted further sanitary measures in the construction of outside showers for the men, and covered ones for the ladies. Lepers were encouraged to take a shower any time they wished. We also implemented the construction of about forty toilets with ^{SEPTIC TANKS} cesspools from concrete and stone for both men and women, with fresh water provided to wash their hands.

We selected 86 lepers for a three-month nutritional program that was carried out from November 24 1981 to February 24, 1982. In conjunction with the regular hospital routine the following items were added:

1. Blue-green algae in three 250 mg capsules given to each leper twice daily, for a total of 1500 mg per day. (The capsules were sanitary and easy to handle.) They were taken with water and meals. The algae was prepared by a careful method of freeze drying in a vacuum that involved slowly raising the temperature from freezing to just under 79 degrees F over a 24-hour period.
2. A nutrient concentrate of blue green algae dissolved in liquid (ethanol), given as 1 ml without water, twice daily between meals. The concentrate was made by isolating low molecular weight peptides that the body absorbs very easily, even from the mouth, providing the brain with a readily available nutrient source.
3. The liquid concentrate was combined with jojoba oil in a spray bottle and was used externally on open sores and ulcers.

The lepers showed some improvements under this short pilot program and all wished to continue using the blue-green algae.

We were able to institute a second program, after long delays, which combined the use of blue green algae with changes in diet and the cessation of drugs. The program started on November 24, 1984 and involved 104 lepers selected by the staff. The group ~~chosen~~ ^{three above} was diverse, containing both young and old, with both T and L types of leprosy, ~~some new cases,~~ ^{There were} some with severe ulcers and some with ~~very~~ advanced, long-term manifestations. Some were bacteriologically positive and many had been using Dapsone, ~~Some (MDT) MULTI DRUG Therapy.~~

The decision to discontinue the use of Dapsone and other drugs was a unanimous one, involving the entire hospital staff and the President of World Missions Far Corners. One criticism of the 1981 trials was that it was impossible to determine whether improvements were the result of the blue-green algae or of the drug. By discontinuing the administration of drugs, we would be able to determine whether the improvements were due to dietary measures alone.

In addition to the cessation of drugs, and the administration of the blue-green algae products ~~as was done in the preliminary trial,~~ the following dietary changes were made:

1. ~~White sugar was eliminated.~~ ^{NO Fruit OR Juice NO} Jaggery (unrefined whole cane sugar) ^{OR} honey, ~~or fruit~~ were allowed ~~but refined sweeteners (sugar, sucrose, fructose, fruits juice or lactose), known to lower the body's resistance to bacterial infection, were forbidden.~~
2. Whole grain brown rice replaced refined white rice. The rice was cooked for a very long time in copious quantities of water, and any unabsorbed water was discarded. Cooked rice was spread ~~in the sun~~ ^{on clean cloth on tables in the shade} to dry, after which it served as a base for curry.
3. Each leper received one hard-boiled egg daily to ensure they were receiving adequate protein. The egg yolk also provided vitamins A and D not available in the blue green algae.

The egg was given at the morning meal along with a slightly fermented rice gruel drink, made from brown rice. The noon and evening meal consisted of brown rice and curry made from a variety of vegetables and ^{Certain know to be nutritious and antibacterial.} spices. Small amounts of ghee, chicken, buffalo milk and coconut meat and milk were consumed when available. Most of the ~~foods~~ ^{foods} and vegetables were grown by the lepers in the hospital's own gardens and orchards. They had fresh clean water from several fresh water wells drilled by World Missions Far Corners.

During this phase of the program, the staff kept careful charts on each participant. Bacteriological and morphological tests were done regularly, along with other laboratory tests. Photographs were taken to record changes. Three years after the program began, the following results had been ~~achieved~~ ^{and maintained.} Some Lepers had healing results quite rapidly ^{Others took longer, all benefited even those resistant.}

1. In almost all cases, the skin that was once rough or cracked or miscolored became smooth and fair and returned to normal color. Although a few skin problems persisted, eczema cleared up. The skin cleared up in such a way that it was impossible to determine whether the patients had been lepers. A number of lesions in various places on the body cleared up completely and skin color became normal and smooth. Hypopigmentation (pale patches) disappeared on a number of cases. Improvement in the skin was the most dramatic observation of the staff concerning the program.
2. General health of well over three quarters of the lepers improved, as noted on daily charts by the chief medical officer.
3. Appetite increased in most. Many who did not have good appetites began to have excellent appetites.
4. The lepers became active and wanted to work on the campus or in the beautiful vegetable gardens. Many had previously lacked vitality and were languid.
5. Neuritis (painful inflammation of a nerve) cleared up completely in many lepers.
6. Chronic arthritis in many lepers, causing much pain, was wonderfully relieved and gone. Lepers testified that previously they could hardly hold a cup or move a knee or arm without pain; after participating in this unique food program, many were indeed free of pain.
7. Some lepers who previously did not sweat became able to sweat normally.
8. The medical officers noted on the charts that some who had frequent reaction cases before the program began no longer had them.
9. Elevated Erythrocyte Sedimentation Rate (ESR) normalized in many on the program
10. Anemia cleared up in many lepers
11. Total white blood cell count improved in most cases; with many patients moving into the normal range.
12. A number of lepers with a positive Bacteriological Index (BI) went into the negative (BI 0-) on the program--even though the use of drugs had been stopped. In one group of five positive patients, one became negative and the BI of two came down by a significant amount in an eleven-month period without the use of drugs.
13. Many simple ulcers healed up completely
14. Some complex ulcers on the feet healed up completely--this was recorded on the charts as well as on film. Some ulcers healed up completely, recurred and then healed up again; due to lepers walking too much on recently healed ulcers.
15. Nearly 75% of the lepers stated that they were happy to ~~very happy~~ to be on the blue green algae supplements. and NUTRITIONAL Program.

There were no side effects observed from taking the supplements. However, they were ineffective on cases with gynacomastia (men developing breasts) and on severe eye conditions. One patient, however, reported that eye pains and irritations cleared up on the program. He also stated that his near term memory improved and that numbness of the forearms was reduced.

The program at Gladys Schumacher Memorial Leprosy Hospital lasted for four years and was stopped when the ^{U.S.} federal government prevented further shipments of the algae. It demonstrated that we can help lepers ~~very much~~ with food concentrates and improved diet which work to strengthen the body's immune system without drugs. It indicates that the causes of leprosy are complex, involving more than infection by a microorganism. Lack of sufficient nutrients--due to consumption of refined foods or simply conditions of extreme poverty--weaken the immune system and leave the body vulnerable to the disease.

Nutritional food programs ^{Need to} ~~should~~ be set up with existing leper centers around the world. Further research with other leper groups ^{Need to} ~~should~~ be started immediately for further evaluation.

~~A word on blue-green algae: Many such products are currently available but a caution is in order. The nutritive value of the product depends ~~very much~~ on the medium in which it is grown, ^{as} and well as the care taken in its processing. Proper freeze drying to preserve freshness and prevent destruction of important nutrients is a time-consuming and expensive process. In addition, there are about 30,000 types of the microorganism. A recent theory is that spiroлина and chlorella are useful products but that blue green algae is harmful. Our results in India show that the products we used, grown in the then-pure waters of the Klamath Lake, and processed according to strict protocols, was ~~not dangerous but extremely helpful for treating leprosy, and its many debilitating symptoms.~~~~

Because I am not Presently Involved in The harvesting, Production Processing or Quality Control of Any of The many STRAINS OF ALGAE each With Specific Qualities ^{And uses} I Cannot endorse any Specific Product.

RAY DID
To Replace
Sally's LAST Paragraph

A WORD ON ALGAE: If mankind survives into the future ALGAE will play an important part. Per square acre Algae is more productive than any crop in the world. Algae is a very efficient photosynthesiser. Algae's wonderful broad potential benefit for humans & commerce has little been developed or utilised. There is an urgent need to do so--Petroleum & byproduct drugs polluting & non renewable must be replaced. With this Leprosy Nutrition Research Program in India just one such replacement was demonstrated. Nutrition being the key with wonderful algae nutrients from Klamath Lake, Oregon playing an important part. There are thousands of varieties of Algae. Each with its unique characteristics. Each type chosen must be carefully evaluated for its quality, uses & potential. The medium Algae grows in is critical. Algae must be carefully harvested processed & gently dried at very low temperature as we did to preserve delicate nutrients & quality. *Algae is an energy efficient renewable powerful resource capturing Energy from the sun. That Energy in Algae is abundantly available, as was shown here to be extremely helpful in healing Leprosy & its many debilitating symptoms.

Because I am not presently involved in the harvesting, production, processing or quality control of any of the many types of Algae each with specific qualities & uses I cannot endorse any specific uses or products.

*(high quality freeze drying is time consuming & expensive)