Diseases of the skin, digestive organs, urogenitary tract, mouth, etc. are caused by the multiplication and spread of fungal microorganisms known as mycelia. Mycoses (fungal infections) range in degree from unnoticed to fatal. They are directly related to asthma and allergic alveolitis reactions. They are dealt with by the immune system and competition from other microbes or earlier developmental phases of their own cyclogeny.

Fungal infections can be classified as;

Superficial -- those that effect hair, skin, nostrils, genitals, and oral mucosa

Subcutaneous -- those which occur beneath the skin

Deep -- those which effect the internal organs, lungs, liver, bones, lymph, brain, heart, and urinary tract

These infections often occur in those on long-term antibiotic therapies, corticosteroids, and immunosuppressant drugs. This type of opportunistic infection is common in those with the acquired immunodeficiency syndrome, commonly known as AIDS, and also CFIDS (chronic fatigue syndrome).

Primitive bacterial varlents (thecits)

Some of these fungal forms are received from the environment, are transmitted sexually, or are transmitted through mother's milk (Candida albicans). Candida remains in non-virulent phases of development until the terrain allows for its progression into more complex pathogenic forms. The efficacy of many of the SANUM fungal remedies is based on the sexual activity of the particular species of microorganisms (and/or the benign effect altogether, through competition, on the terrain) which is initiated through the process of reinstalling the microbial flora in the body in it's apathogenic earlier phases of development. The flora that was installed then copulates with the pathogenic variety and shares the sexual information of the earlier phases, which, all things being equal (terrain modulation, removal of stressors, proper diet, lifestyle, etc.) causes the pathogenic form to convert or be reduced to the apathogenic variety. It is believed that the pathogens are also reduced in valence through the actual activity of the copulatory process.

The main causes of pathogenic albicans overgrowth are indiscriminate antibiotic application and dental inclusions from mercury tooth amalgams. Other factors include addictions to coffee,
chocolate, drugs, unsafe sexual practices, immunocompromisation, stress, chemicals, radiation, improper diet, etc.

The fungal overgrowth occurs because its natural competitors have been removed, in the case of antibiotic usage. In the case of dental amalgams or metals, it is due to decreased immunity from immunocompromisation. The candida also adsorbs the mercury in the gut, thereby serving the function of keeping it from moving deeper in the system, to some degree. A good inclusion in a program of remedies for alleviation of mercury toxicity in the nervous system and brain is broken cell wall chlorella, because not only is it similar to the fungus in that it adsorbs the mercury, but also carries it away.

**Primitive bacterial variants and cell wall deficient fungal species**

I begin this section with a quote from "Cell Wall Deficient Forms: Stealth Pathogens" by Lida Mattman.

"Wall-deficient bacteria are called fungoidal as they produce yeast-like (emphasis added) budding spheres or simulate molds with elongated branching threads. (See chondrothecit and free chondrit plates, respectively). How, then, does one solve the dilemma of recognizing a wall-deficient fungus? One can start with the vital activity in a fungal filtrate of Candida Albicans where the tiny 0.15-µm particles cannot possibly possess the wide hard wall of the parent. Colonies developing are usually comprised of twisted Gram-negative skeins so delicate that their course is interrupted by submicroscopic gaps. These fine threads of growth have never been described as part of the classic growth of fungi. (Emphasis added where bolded).

The above description corroborates the findings of Dr. Günther Enderlein when he described such coccoidal manifestations as being either primitive bacterial variants or the most primitive mycelian strands.

Species of microorganisms which exhibit fungal variants in tissue (in vivo) are only microscopically visible in the blood as the most elementary and minute primitive spore forms, ranging in size up from approximately 0.15 microns. The notion that anyone is viewing fungus balls in phase contrast or darkfield is technically a complete misconception, as the forms which are being regarded as fungal developments are appearing in an alkaline milieu in the blood which will not support the fungal stages of development. This is not to say that the microorganisms may not be a species that can represent fungal developments elsewhere in the body. But this species specificity is indeterminable by viewing the fresh live blood, as there is not a way to distinguish which species is being viewed without culturing it out through the use of a medium, or by aging or heating the sample, under some conditions. This process changes the phase of development into phases that do not appear, again, in the alkaline milieu of the blood. The forms that are being viewed (and mistaken for fungus stage) are actually colloid thecits, thrombocytes, chondrits, ascits, synascits, and mychits, all of which are part of the bacterial phase of development, which develops in an alkaline milieu. Also, the cell wall deficient forms, chondrits which are symplastic, are mistaken for fungal appearances. These chondrits do represent a fermentative process, but not at the level of a fungal appearance. They are even an earlier stage appearance than the most primitive cell wall mediated bacterial variants. The species, again, are unspecified upon appearance, as they are the same common stages that appear in many species of microorganism developmental cycles.
Some of these developments in polymorphic progressions are actually thrombocytes, and act as regulators, per Dr. Enderlein, and even (in some species) emerge from the red corpuscles in the serum. Some of these ball or balloon-like forms may become functionally pathogenic under certain specific terrain related conditions, and conversely, some of these developments certainly are an expression of the body's capacity to mount a defense. The possibility of making these determinations within this phase of bacterial cellular developments requires that the viewer be able to distinguish the number of nuclei which appear within these delicate diaphanous bacterial cells. This microscopic imagery is only obtainable in a true, ultra illumination darkfield, employing superior plan achro or plan apo medical grade oil immersion iris diaphragm objectives and the proper condenser, which would be of the oil immersion variety also. This determination of the developmental progression of the bacterial variants is generally not able to be made in a phase contrast or differential interference field microscopically, because these fields generally do not provide adequate resolution to count the nuclei which appear within the ball-like cells that develop in conjunction with their primary nuclei (which are the cell wall deficient sympotits until they develop this cell wall mediated appearance). This is a crucial determination which must necessarily be made in order to distinguish the function which is related to the cell's very appearance.

It should also be noted that the pathogenicity of most microbes only exists in one stage of development, being either viral sized, bacterial or fungal. The exception to this is the Endobiont, Mucor racemosus Fresen, wherein any stage above the primitive stages is pathogenic.

Candida is never observed in its fungal phase in the blood because the blood's inherent alkalinity supports it's development only to a spore stage. These spores are extremely minute, and do not progress to visibility at the level where they can be distinguished from other similar microorganisms in the blood except possible through staining. The primitive bacterial phase microorganisms that are mistakenly called fungus may be part of the developmental phase of a species that has a fungal variant or may culminate as a fungus, but it is an error to call it a fungus in the blood. It is a species that has a fungal variant, and may also have a bacterial phase that occurs in the alkaline milieu of the blood. the ball-like appearances are bacterial phase developments.

These so-called 'fungal balls' appear very similar to each other, regardless of the number of nuclei, in phase contrast, but differ greatly in the higher resolution of Ultra darkfield. In the Ultra-darkfield the number and valence of the nuclei determines their status as potential regulators or pathogens, and it is a mistake to classify them all as the same thing, or as having the same function. Therefore, there may be a thecit (primitive bacterial) phase in the life cycle of the species Candida Albicans. It follows that if Candida appears in the blood, it may exhibit a bacterial phase rather than the fungal phase, or certainly will appear as cell wall deficient spores.

Virus is a primitive stage of development of all microorganisms share and this phase is virtually invisible in the present context of known light microscopy techniques. Microbes are ubiquitous and can rise to their pathogenic phase from any other phase, as their progression is not linear, and the progression is terrain dependent. One must know which stage is pathogenic in order to treat related conditions. For instance, acid-fast rods are not necessary for tuberculosis.

**Candida Albicans**

This may be one of the most controversial and misunderstood areas in natural health, especially as related to the correction of this fungal condition. I have observed more individuals with failed
programs for this condition than any other. And by failed program, I am referring to ending up on what I call the "coping diet". Candida sufferers know this one well. It is the one where you live on this very weird, limited diet and supplementation regimen because you have been unable to determine and reverse the stressors that are causing and maintaining the problem. This problem of epidemic proportions is where great numbers of the victims of indiscriminate antibiotic use and amalgam dental fillings recipients have ended up.

Pathogenic albicans (chronic candidiasis, more commonly known as candida or thrush) is generally caused by drug use, particularly antibiotic drug use, and poor diet, lowered immunity altogether, and metals, especially dental amalgams. Mercury will promote the growth of Candida, as it adsorbs the mercury and thereby protects the system. Candida cannot be effectively dealt with without dealing with the dental issues first. This is not an optional approach, but necessarily part of the primary approach.

The progressive decline which occurs as related to these mycotic conditions does so in this order. First the antibiotics (which are aimed at E-coli, strep, staph, etc, infections) wipe out the benign and necessary floras in the gut. The presence of these benign floras (L. acidophilus lactobacillus, bulgaris, B. longum, L.plantarium, L. salivarius, S. faecium, S. thermopilus) is necessary for the equilibrium in the flora system which keeps the competing (potentially pathogenic) yeast forms in check and allows these ever present yeast forms to be a natural occurrence which is apathogenic. The natural balance is maintained through competition of the multiple microbes which are present. It is interesting to note that many physicians treat this condition with additional antibiotics, causing tremendous problems. Many use Nystatin or other antifungals which can cause the creation of a resistant strain of fungus. They just mutate around it. The preferable remedies would be benign pro-biotic remedies such as SANUM Albicansan, Fortakehl and Pefrakehl which neither create nor further these harmful situations.

When their natural regulators and antagonists are wiped out through antibiotic drug use, the potentially harmless floras (colloids), which are generally kept in check, become more highly developed and propagate in massive numbers in the gut and tissues ( and thereby contribute to a conversely high alkaline pH in the blood), while producing their own species specific acids which maintain the terrain that they require for their maintenance and propagation. In this environment they become more and more virulent and even penetrate and root into the intestinal walls and invade the cells. These fungal microorganisms become quite at home in the cell, and can be considered to be a third primary potential parasite, along with Mucor and Aspergillus, because of the advent of runaway antibiotic usage over the many years. The only difference is that there is no known symbiosis occuring from the presence of Candida Albicans in the body.

Certain vegetable species colloidal microorganisms produce particular acids to maintain their environment. Examples of this are:

Mucor lactic acid
Aspergillus citric acid
Penicillin penicillic acid

The developmental life-cycle of microbes require differing pH conditions. Some microorganism species find their culminant phase of development in the bacterial phase. The different phases of development of microorganisms require the following terrains for development:

virus, microbe, or primitive form strongly alkaline
bacterial phase weakly alkaline
fungal phase acidic
This developmental process is related to leaky gut syndrome, as the tissues are weakened, even by the infection. The microorganisms continue to multiply and then invaginate the venous wall (in spore form) and are carried again out of the bloodstream and multiply in the tissues where they deposit their acids, thereby enhancing the acid pH which they require for propagation. This is why individuals with candida feel acidic. At this point in the total progression of the problem, it is not just because their diet is acidifying. An acidifying diet may be one of the original factors which contributed to this complex problem, though. At this stage it probably will not be possible to balance the pH through diet alone, because of the proliferation which is creating and mainaining its own environment, at that point, through the processes inherent to its upward development which are related to the production of acids. To achieve the necessary optimum pH balances, these individuals must use some combinations of Alkala (or other bicarbonate combinations), baking soda baths, lemon juice and maple syrup combination (juices only where tolerated), fresh pineapple juice, and electrolyte solutions such as Cell Food, macro minerals, and all citrus fruits and their juices (again, if tolerated). At this point the reader may think "Fruit juices are full of yeast and sugars. Doesn't this feed the yeast?". This is true, but the point should not be to try to create a dietary approach in order to cope forever with the problem, but rather to just create a diet which is tolerable and supportive to elimination and then to deal with the problem therapeutically with other meaneas being the primary methods. The imbalance is not created strictly by dietary imbalances and is not eliminated in this fashion either. I will elaborate to some degree on these approaches further on in the article.

pH balancing and gut flora enhancement or replacement alone will not affect this condition, and most practitioners experience temporary results or failure if they attempt this in combination with an exclusively dietary approach. Most will find some relief with this approach (diet combined with flora replacement) but will then end up living off of the shelves of health food stores, on a continual supplementation regimen that addresses some percentage of the associated symptomology and pathology. The reason for this failure is that the candida has the upper hand in the gut and also systemically, and has to be weeded out first or simultaneously, through utilization of therapies that the yeast cannot mutate around (as in the case of Nystatin and other antifungals).

These therapies may include SANUM remedies (isopathic combinations), ozone, colloidal silver, Beck's box, and Rife type or other electromagnetic field generators. These therapies may be effective in numerous different ways and for varying reasons nad must be recommended and guided by an experienced practitioner who will know how to combine all of the different elements. Often individuals expect immediate, symptomatic relief. In reality, one should expect to feel worse first, as a great deal of eliminative activity is in order. So it is important to understand that this condition was not created in all of its severity overnight, and it may take a fair amount of time in order to reestablish balance. For severe fungal infections a good approach is to utilize Utilin, Latensin, Pefrakehl, Notakehl, and Albicansan, w/ Alkala, colon cleansing, and kidney and liver drainage. Again, the stressors must be removed first or simultaneously.

The SANUM remedies reintroduce the original form of the microbe which appears in the body and is harmless, before it mutated. In a regulated pH environment this benign form copulates (exchanges information) with the pathogenic forms and they devolve into their original apathogenic forms and can be maintained in that range of development.

The mode d' employ of Rife generators is to disturb the microbe's progression through the application of electrical Herzian fields and also through the stimulation of interleukin II and other immune factors.
The Beck box emits pulsed micro-amps causing the blood and tissue cell membranes to oscillate, thereby interfering with the microorganisms ability to parasitize the cell by entering it an using its components and protection from the immune system. The cell membrane opens and closes rapidly, flushing the serum in and out, taking with it microorganisms which would otherwise be using the cell interior for its store of nutritional reserves and as an environment in which to replicate or develop into more advanced phases of manifestation. Simultaneously, nutrients are carried in and out, and feed the cell at a much more effective level.

Ozone stimulates interleukin II, alkalinizes the body through the production of ash, oxygenates the blood and tissues, and provides higher forms of oxygen (O3 through O13?, or higher depending how it is produced) which share electrons with bacteria, virus, fungus, toxins, chemicals, and reduce all to ash or nonpathogenic forms.

Colloidal silver interferes with the enzyme system that the anaerobic microbes use for respiration. Therefore they cannot mutate around it or become resistant and are eliminated instead. Special care must be taken with colloidal silver to use one that is strong enough and simultaneously supplement the gut flora, as the silver can also interfere with aerobic microorganisms. Failing to supplement the flora, or using a product that only contains 3 to 5 parts per million of silver, appears to be the main limitations in terms of effectiveness. Naturally this approach, like any other, must be accompanied by a full regimen that includes cycles of purification, balancing, and rejuvenation. Contrary to popular gossip to the contrary by invested promoters, there appears to be some negative side effects to colloidal silver consumption, when used over long periods of time and in relatively high amounts. These include drainage problems and the destruction of intestinal floras. For some, the results of oral use have been complicated gastro intestinal dysbioses and Fortakehl, Albicansan and Pefrakehl and other SANUM preparations in combination may be a better approach as they do not tend to produce those negative results.

Many individuals have been known to exhibit extreme Herxheimer's (healing crisis) reactions with silver. This has particularly been a problem with chronic fatigue syndrome. Lymphatic drainage (homeopathic, herbal, or 714-X, which also regulates the immune system) along with juicing, consumption of a minimum of eight 8 oz. glasses of Crystal Energy water and/or other natural fluids such as juices and herbal teas, colonics or colemas, lymphatic massage, dry brush massage, bouncing exercises, and walking are all required in combination with colloidal silver and also the other aforementioned approaches. It is not useful or necessary to load up the body with unnatural numbers of metals such as silver over extended periods of time in order to maintain good health. It is better to understand the overall biological terrain requirements and meet them through the adjustment of lifestyle. Nevertheless, it may be very useful to apply colloidal silver for a measured period of time because of its ability to interfere with the respiratory enzymes of the microorganism. They also cannot mutate around this effect.

Ozone will cause less of a negative reaction than silver. The reaction will not as likely be a result of the breakdown of toxins, but rather congestion in the lymph and liver. This is because the ozone reduces toxins to ash, so they don't get recycled through your bloodstream as poisons on the way out (and by association, through the brain). The Rife and Beck therapies also require all of the same drainage requirements, and the lymphatic thumper (Beck's design) may be useful while the fungus is being reduced. The best approach, as always, is to combine elements based on the individual's tolerance and needs. Diet alone most likely will not correct this condition of candida overgrowth, but is certainly a necessary adjunct to any program. The dietary needs and reactions will be observed to change greatly after the problem has been addressed.
Many people have been misled through the wrongly held beliefs of most primarily dietarily oriented natural therapists on this subject. Therefore, I recommend that practitioners understand that the microbe must be reduced both in number and also to its apathogenic form, while adjusting the pH. Acidophilus replacement is not the answer, as the higher phase dominant yeast forms (which have overwhelmed the immune system's capacity to control them) are at such a high valence that they just feast on or suppress the installed lactobacillus strains when the subject is without proper therapeutic intervention. This mycotic condition was not generally created through dietary means alone, and although diet will be extremely necessary and instrumental in a program of complete recovery, it will not on its own be adequate therapeutically, which is the overwhelming and ongoing experience of the numerous masses who are led in the direction of this belief. The immune response is so overwhelmed that the body temporarily needs a "second immune system" in the form of the aforementioned therapeutic approaches, or other effective means.

All of the aforementioned therapeutic approaches (excepting Rife type generators, for some) also relate to how to deal with Chronic Fatigue Syndrome, although there are also many other factors, (especially sociological) which need to be dealt with. See "The Four Underlying Causes of Illness and What to Do About Them" by Michael Coyle, for a more complete explanation regarding these syndromes.

It may or may not be necessary for the client to eliminate all yeast containing products (breads, cakes, pastries, yeast related supplements), from the diet. The elimination of these foods is only necessary if they are reactive to them. There is no sound basis to the notion that yeast, such as brewers yeast, feeds fungus. Yet individuals with fungal conditions can be reactive to almost anything, including yeast containing foods and food supplements. Metals are also an extreme deterrent to recovery.

Since microorganisms compete for terrain in the body, it is a necessary and useful corrective approach to supplement body floras once the proper therapeutic intervention has been established. The gut should contain a great deal of beneficial microorganisms, even measurable in pounds. Flora replacement is therapeutic in that the floras will compete with anaerobic microorganisms and thereby reduce their number, especially once therapeutic intervention has reduced the valence of the pathogens. This is why aerobic gut microorganisms are considered to be an indispensable aspect of the immune system, and should be present as at least 50%, and optimally 100%, of the flora content in the gut.

An good formula for gut flora supplementation, both after and during a program of correction of mycelium dysbiosis, is any flora product which contains:

L. acidophilus
B. longum
L.planaterium
L. rueteri
L. salivarius
L. bulgaricus
E. faecium
S. thermophilus
Fructo Oligo Sacharrides
Calcium ascorbate
Trace minerals
Albicansan and Pefrakehl are specifics for fungus, and Notakehl and Okubasan for reestablishing gut flora. The water drawn off of hulled barley, drunk, is also useful in reestablishing flora. Use one part barley to one part water, leave it overnight, and drink freely.

Many fungal disorders respond well to a series of courses of Latensin, Notakehl, Pefrakehl, Fortakehl and Albicansan. Reactions may accompany these remedies, and they should only be administered by a trained health professional. These remedies are not antibiotic, but pro-biotic, and work remarkably well. Because the type of fungal dysbiosis which is occurring will not be determinable in the blood picture, the remedies must be applied on the basis other forms of testing such as point testing, Kinesiology, etc.

A strong empirical understanding of how the condition presents and what the primary stressors are in the subjects total life picture is likely the most important means of evaluation of both condition and remedy.

About the Author
Michael Coyle was a Natural Therapist, researcher and educator, and the author of the definitive "NuLife Sciences Applied Microscopy for Nutritional Evaluation and Correction" Workbook text. Michael conducted monthly or bimonthly training for health care practitioners in live-blood analysis. For further information on NuLife Sciences and Michael's work and for a schedule of training dates and a complementary microscopy equipment catalogue you may search under NuLife Sciences on the worldwide web for further information.