

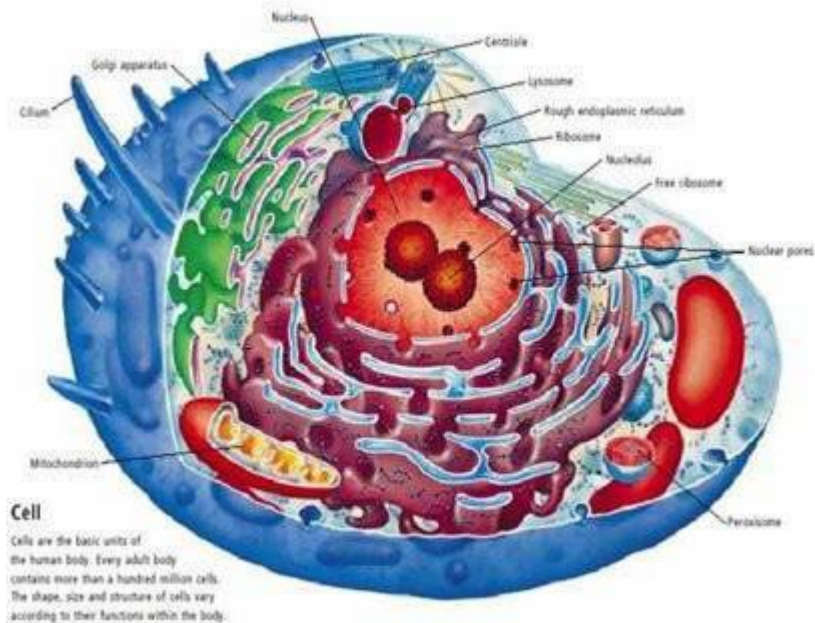


GRC

Glycocalyx Rejuvenation Centers

Education Series – Technology – Foot Spa/Cell Cleansing

Reverse Aging Principles
Everything starts at the cellular level!
Lymphatic/Liver/Kidney/Lung system Detoxification!



Removal of Toxins / Technology / Detoxification Pollution in People

Removal of Toxins / Detoxification / Pollution in People Pollution in People - Overview

The human body becomes toxic or polluted from both *external* (exogenous) sources and *internal* (endogenous) sources. The most common external pathways of toxicity are from *inhalation* (smoking, air pollution, dental amalgam fillings, sick buildings), *ingestion* (chemical residues on food, chemicals in water, drugs) *injection* (vaccinations, flu shots, tattoos), *absorption* (chemicals from synthetic fabrics, paints, plastics, pesticides and chemical fertilizers sprayed on lawns) and *irradiation* (medical x-rays, nuclear power plants, bomb testing, uranium mine tailings, cell phones and towers, computer monitors and televisions, microwave ovens, and power grid and radio and satellite transmissions). The internal sources of toxicity are from *fermentation*, *purification*, and *rancidity* from undigested foods consumed, and from *dehydration*, *malnutrition*, and toxic *thoughts* and *emotions*. This *endogenous* toxicity can also be caused from the effects of *exogenous* toxins contributing to malnutrition, and inhibition of digestion through damage to the nervous system, immune system, and enzyme systems.

There are 70,000 chemicals being used in commercial production in the US. The EPA has classified 65,000 of them potentially, if not definitely hazardous to human health. Over 6,000 new chemicals are tested in the US each week! Three thousand chemicals have been identified as intentionally added to food supplies and over 700 in drinking water. During food processing and storage, more than 10,000 other compounds can become an integral part of many commonly used foods. One of the major symptoms of chemical toxicity seems to be a breakdown of the immune function, which encourages all kinds of symptoms in the body. Another major symptom is damage to the nervous system and nervousness. We aren't rewarded immediately with good health and radiant well-being as soon as we change our "evil ways." The vast increase of chemicals in our environment, foods and medicines has greatly altered the body's ability to rid itself of toxins. Often, the recovery of health and improvement of the diet cause unpleasant symptoms. People truly seeking health have to decide to sacrifice their old comfortable diet patterns and habits to be rewarded by good health. It doesn't take long before they discover that after improving their diet, they sometimes feel much worse (temporarily). A common complaint is, "Do I really have to go through that?" They're going through what is called detoxification. Poor health and illness is progressive; it does not occur overnight. Good health and well being is also progressive; it may take weeks, months, or years.

Types of Toxins

Cellular Phones

- The number of people using cellular telephones has risen dramatically during the past decade, and is expected to continue increasing. According to the Cellular Telecommunications Industry Association (CTIA), there are currently (2002) over 110 million wireless telephone users in the United States. This number is increasing at a rate of about 46,000 new subscribers per day. Experts estimate that by 2005 there will be over 1.26 billion wireless telephone users worldwide. A study by scientists in Finland has found that mobile phone radiation can cause changes in human cells that might affect the brain. The study at Finland's Radiation and Nuclear Safety Authority found that exposure to radiation from mobile phones can cause increased activity in hundreds of proteins in human cells grown in a laboratory. Nonetheless the study, the initial findings of which were published June 2002, in the scientific journal *Differentiation*, raises new questions about whether mobile phone radiation can weaken the brain's protective shield against harmful substances. The study focused on changes in cells that line blood vessels and on whether such changes could weaken the functioning of the blood-brain barrier, which prevents potentially harmful substances from entering the brain from the bloodstream.
- They also found that one hour of exposure to mobile phone radiation caused cultured human cells to shrink. The researchers believe this is triggered by a response that normally only happens when a cell is damaged. In a person, such changes could disable safety mechanisms that prevent harmful substances from entering the brain from the bloodstream. Radiation-induced changes in the cells could also interfere with the normal death process of apoptosis. If cells that are "marked" to die do not, tumors can form. The study found that a protein called hsp27 linked to the functioning of the blood-brain barrier showed increased activity due to irradiation and pointed to a possibility that such activity could make the shield more permeable, he said. Increased protein activity might cause cells to shrink--not the blood vessels but the cells themselves--and then tiny gaps could appear between those cells through which some molecules could pass.

Drug Toxins

- One of the largest sources of body toxins is the prescription drugs people take to supposedly fight disease. Medicinal drugs are very strong--they have to be to overcome the body's natural defense system. When such drugs are taken, they must either be eliminated from the body or stored within for later elimination. When drugs are discontinued, the old toxins may enter the bloodstream for elimination. The circulation of these old drug toxins in the system may produce bewildering symptoms that can be alarming. As drugs leave the body, you can taste them in your mouth. Every drug used, whether legal or illegal, leaves its mark upon the body. As the body regains health, the drug deposits are put into circulation for elimination.
- Old drugs that were taken, even many years ago, may reappear in the bloodstream as they leave fat tissue and the organs. Since a combination of past drug deposits may enter the bloodstream at once, disconcerting symptoms may arise. Drug toxin elimination may express itself in a series of rashes as they leave the body through the skin. Drug detoxification can be a lengthy process, but juicing and a diet high in fruits and green leafy vegetables and bitter-greens aid it.

Caffeine and Nicotine

- Heavy smokers or coffee drinkers may experience similar symptoms when they withdraw from their drug. Nervous irritability and emotional outbreaks are common symptoms of these drug addicts when they are detoxifying. Nicotine and caffeine damage the nervous system and upset the vascular system, so symptoms such as headaches, edginess, extreme lassitude or mental cloudiness (feeling spaced out) are expected. Such symptoms from these drugs usually lessen after three to ten days.

Salt and Other Condiments

- Once processed salt is stopped and the proper version is used, old salt deposits in the body exit through the skin and kidneys. Sometimes the elimination is so intense that a person may have a continual salty taste in the mouth.

White Sugar

- Eliminating sugar from the diet may make a person feel slightly nervous and hyperactive until the energy levels adjust to a raw-food diet. Mood changes, however, are usually more noticeable than any physical symptoms when sugar is eliminated. Reformed sugar addicts may feel periods of unaccountable depression as their blood sugar level tries to right itself. Getting off the sugar roller coaster, with its rapid rises and falls in blood sugar levels, is easier when a raw-food diet high in salads and avocados is followed.

Heavy Metals

- Deposits of heavy metals in the body poison almost everyone. Lead, aluminum, mercury, copper, cadmium, and arsenic collect in organs throughout the body. Because of their heavy weight, they are difficult to eliminate, and may cause discomfort as they leave the body. As these metals come out, headaches and a general achiness all through the body may occur. The gums may hurt and the kidneys may throb as these metals leave the organs and bones. Heavy metal poisoning can make you feel uncomfortable all over, and it is very common, due to all the environmental toxins and the amalgam fillings put into people's teeth. As you eliminate these metals, if you can bear the uncomfortable body aches and realize that they are leaving your body forever, it will help you go through it more gracefully.

Vaccinations

- Vaccines contain substances poisonous to humans (i.e. mercury, formaldehyde, aluminum, graphene oxide etc.) Vaccine package inserts contain this and other information required by law to be disclosed to the public. Although these inserts are produced for consumers, doctors do not make them available to their patients.
- Vaccines are grown on and contain foreign tissue and altered genetic material of both human and animal origin.

Chlorine/Water

- Is the chlorine in our drinking water acting as catalyst triggering tumor development both in atherosclerosis and cancer? The addition of chlorine to our drinking water started in the late 1890's and had wide acceptance in the United States by 1920. Joseph Price, M. D, wrote a fascinating yet largely ignored book in the late 1960's, entitled Coronaries Cholesterol. Chlorine, Dr Price believes, is the primary and essential cause of atherosclerosis is chlorine. "Nothing can negate the incontrovertible fact the basic cause of atherosclerosis and resulting entities, such as heart attacks and most common forms of strokes is chlorine. The chlorine contained in processed drinking water."

GMO Foods

- There are 2 main categories of genetically engineered crops now on the market: **"Insect Resistant" and "Herbicide Tolerant"**.
- **Herbicide Tolerant crops** (which include corn, cotton, soybeans, sugar beet and canola) are crops which are genetically engineered to withstand direct application of herbicides. These herbicides would kill natural crop plants, but farmers are now able to spray weed killers directly onto genetically engineered herbicide-tolerant varieties. This could mean more chemicals onto our food and in our environment. **About 70% of genetically engineered crops growing in the United States today are herbicide-tolerant varieties.**
- **Insect Resistant crops** (which include corn, cotton and potatoes) are also called 'plant pesticides', because the plant itself is a pesticide. As it grows, the plant produces an insecticide, killing insects when they feed on the crop. Industry claims that these genetically engineered crops will mean that fewer chemical insecticides are sprayed.

Monsanto's recombinant Bovine Growth Hormone

- Over 70 million acres of genetically engineered crops are presently under cultivation in the United States, while up to 500,000 dairy cows are being injected regularly with Monsanto's recombinant Bovine Growth Hormone, known as "rBGH".
- In 1994, the Food and Drug Administration approved the sale of Monsanto's controversial genetically engineered recombinant Bovine Growth Hormone (rBGH) - injected into dairy cows to force them to produce more milk - even though scientists warned that significantly higher levels (500% or more) of a potent hormone, Insulin-Like Growth Factor (IGF-1), in the milk and dairy products of injected cows, could pose serious hazards for human prostate, breast, and colon cancer.
- A number of studies have shown that humans with elevated levels of IGF-1 in their bodies are much more likely to get cancer. In addition, the U.S. Congressional watchdog agency, the GAO, told the Food and Drug Administration not to approve rBGH, arguing that increased antibiotic residues in the milk of rBGH-injected cows (resulting from higher rates of udder infections requiring antibiotic treatment) posed an unacceptable risk for public health.

Work Environments

- A major cause of indoor illnesses is contact with bacteria, fungi, viruses, dust mites, insect parts and biological contaminants collecting within the fibers of panel fabric.
- Contaminants that affect us outside are transported to our indoor environments. The result is a higher and more dangerous concentration due to the "trapping" of these contaminants within the confines of the structure.
- Pollutants from vehicles, pipe vents and building exhausts are transported through airways.

Organ Cleansing/ Foot spa technology

The Liver



Cirrhosis

Cirrhosis is the destruction of normal liver tissue. The liver becomes shrunken and filled with fibrous tissue. It functions poorly, and the flow of blood through the liver may become restricted. Eventually, a liver transplant may be needed.



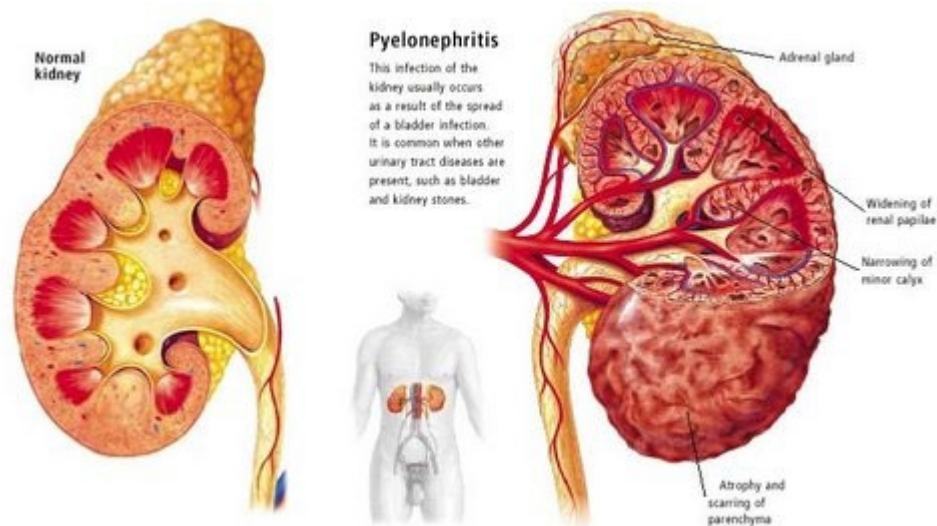
Healthy liver

A liver that is functioning properly has a number of important tasks to perform for the body, including filtering the blood, secreting bile, and converting sugars into glycogen.

- The liver is one of the most important organs in the body when it comes to detoxifying or getting rid of foreign substances or toxins. Glutathione, the most abundant sulfhydryl in the

body, functions to chelate and detoxify heavy metals; mercury and lead have also been shown to combine or complex with glutathione. Once complexed together, the bile becomes a major route used by the body to excrete the complex, thereby reducing the amount of glutathione available. The primary source of the sulfur portion of cysteine is methionine. Cysteine cannot be taken up by hepatocytes (liver cells) easily, whereas methionine is taken up more readily, and is then metabolized into *S-adenosylmethionine*, *homocysteine*. Cancer or tumor dependence on methionine for growth is an artificial condition, brought about by some earlier failure in the transsulfuration and transmethylation pathways. Therefore, if the availability of methionine is reduced, not only will the capability of the liver to detoxify be impaired, but there will also be less glutathione available to complex with foreign substances. Studies have demonstrated that a deficiency of methionine can, in itself, cause liver cancer without the presence of a carcinogen, and also that the deficiency of methionine can permit a heavy metal to cause toxic effects.

The Kidneys



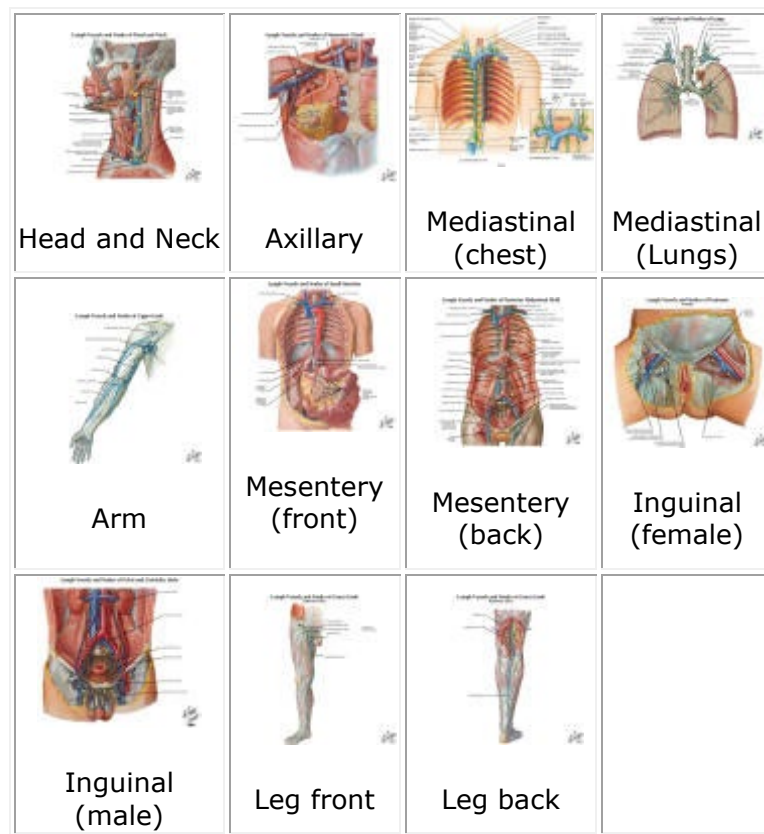
- The principle task of the kidney is to preserve the volume and composition of the extra cellular fluid constant. This it must do despite a varying outside environment, and varying input. A part of this task--but only a part--is to remove from the body some of the waste by-products of metabolism which the cells cannot break down further. Thus the principal function of the kidney is not excretion, but regulation. We can move and live on dry land, even though we are three-quarters water, and survive; our cells tucked away in a carefully preserved ocean of extra cellular fluid, whose composition is guarded with exquisite accuracy by the kidneys, a major part of our life-support system in this hostile environment. We can roam into deserts, and (usually) survive, or drink a six-pack of beer, or starve, or gorge, but essentially the extra cellular soup remains of a constant composition, and because of this, the composition of the cells themselves is constant.
- The kidney is less in control of the intracellular water, since if the kidneys do their job adequately, each cells is largely autonomous, and will extract and eject what it needs or does not need from the extra cellular fluid. The kidney conserves what we need, but even more, it permits us the freedom of excess. That is, it allows us to take in more than we need of many

necessities--water and salt for example--and excretes exactly what is not required. This is essential, since neither our ancestors nor we, animal or human know the composition of the foods we eat, and the only way to ensure a sufficiency of everything is to eat an excess of at least some. Finally, the kidneys preserve the volume of our body fluids as well as their composition. Given that we're almost $\frac{3}{4}$ water, quite simply weighing oneself each day can assess the precision with which the kidney achieves this.

- Despite variations in diet, exercise or fluid intake, the figures remain constant. The kidney performs its tasks, with a precision of as good as 1% and never worse than 5%, under extremely varying circumstances. If the kidneys fail suddenly, death occurs after a few days, partly because some of the accumulated metabolic waste products are toxic to the heart, which stops. More interesting, is the way in which the kidney can adapt to slow destruction by dysfunction, so that one can survive on as little as 5% of overall kidney function.

Lymphatic System

Lymphadenopathy is the medical term which simply means swollen lymph nodes. In the alternative world a plugged lymphatic system is the direct link to the environment that starts a viral condition, in other words it is the principle factor. There are about 500-700 lymph nodes spread throughout the body



Some of the common names of the lymph node locations you will encounter are :

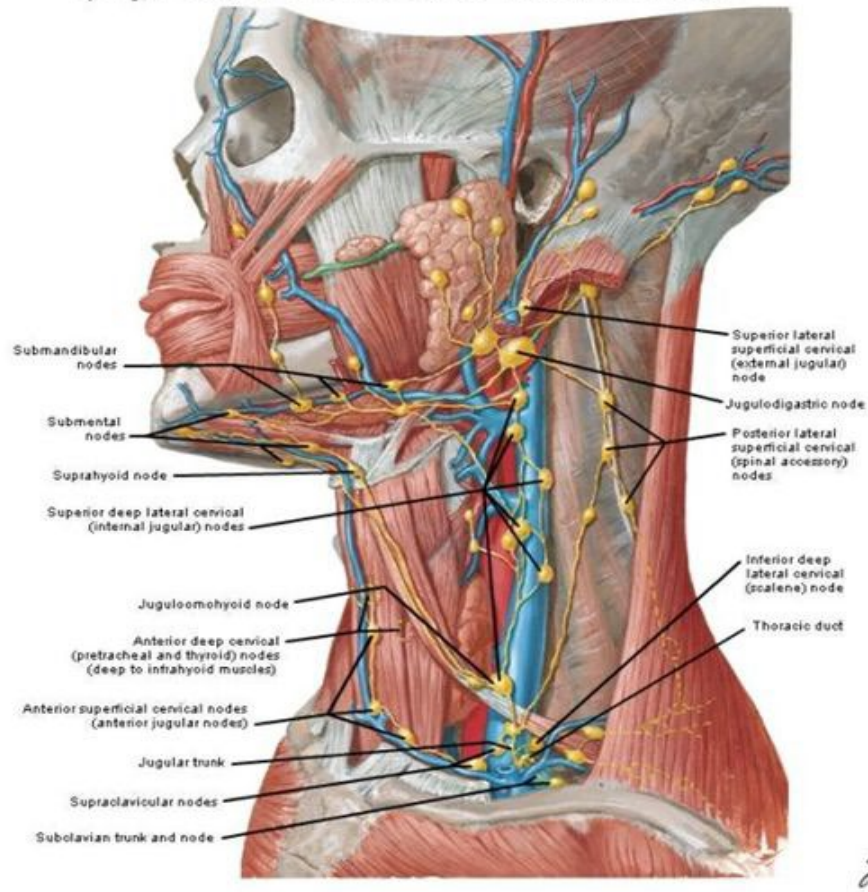
- Cervical - Nodes in the neck
- Axillary - Nodes in the armpits
- Supraclavicular - Nodes along the collar bone
- Mediastinal - Nodes in the upper body behind the sternum and between the pleural sacs (lung sacs)
- Mesentery - Nodes in the lower body (abdomen) below the rib cage
- Inguinal - Nodes in the groin

- Femoral - Nodes in the upper inner thigh

Most normal lymph nodes are about 1cm in size but that size varies depending on the location of the node, and what activity is going on. Infections, cancer and many other conditions can cause it to expand as the immune system reacts to the problem. Abnormal size is defined as:

- Epitrochlear Lymphadenopathy >0.5 cm
- Inguinal Lymphadenopathy >1.5 cm
- Isolated lymphadenopathy in children >1.5 to 2.0 cm
- Other lymphadenopathy >1.0 cm

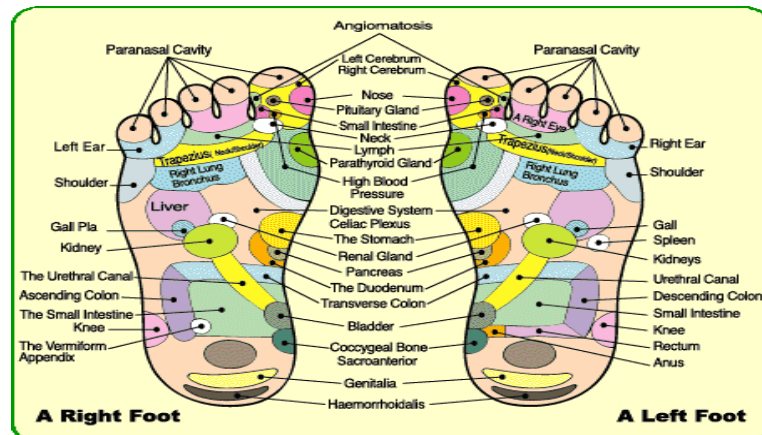
Lymph Vessels and Nodes of Head and Neck



- When the lymphatic system becomes extremely full of mucous material, a pressure is created that is felt all over the body. It starts as a tension in the muscles that becomes an aching of the muscles as the pressure increases. One function of a fever is to thin the lymph mucous, improving its ability to flow and to pass through the walls of the colon. All lymph-purifying influences reduce fever by lessening the necessity for using fever to thin the lymph. If the colon cannot perform the necessary rate of purification of the lymph, then the body uses the liver to do the work instead. The toxins taken up by the liver are excreted as part of the bile. When the flow of bile becomes excessive, bile backs up into the stomach, and the result is nausea. Most grasses are lymph purifiers, which is why animals eat grass when sick. Now we can see how problems can originate when the colon becomes clogged. When this happens, waste material gets backed up into the lymphatic system.

Cell Cleansing/Foot Spa

- The sole of your foot contains more than 60 reflexology points which means it is a very energetically active place on your body. Cell cleansing/foot spa sessions help detoxifies your body by pulling the toxins out through the soles of your feet. The central-anterior area of the sole of the foot corresponds and connects to the kidneys and liver.
- If you look at the picture below you will see how the sole of the foot corresponds and connects to the various organs in your body.



Color or Particle	Material or Area of the Body
Yellow-green	Detoxifying from the kidney, bladder, urinary tract, female/prostate area
Orange	Detoxifying from joints
Brown	Detoxifying from liver, tobacco, cellular debris
Black	Detoxifying from liver
Dark green	Detoxifying from gallbladder
White foam	Lymphatic system
White cheese-like particles	Most likely yeast
Black flecks	Heavy metals
Red flecks	Blood clot material



PREMIER ENERGY IONIC SPA

Premier Energy Ionic Spa is designed to work on the principles of bio-energy, ionization, and electrolysis.

Healthy oxygenated cells are extremely resistant to disease, illness, and early aging.

- 30 Day Money Back Guarantee
- 1 Year Limited Warranty
- 1 - Polarity Switches
- 1 - Green LED's (Cleansing)
- 1 - Blue LED's (Energy)
- Heavy Gauge Enclosure
- Dead Sea Salt (7 oz. Shaker)
- Hand/Foot Tub
- Tub Liners (10)