

Back to Eden

Fungus

Frontal Lobe Function

Recipe

Barley Leaf Powder

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I would like to bring to your attention some information that is quite new to me. I also would like to draw your attention to some information that was in the last newsletter. In the last issue, I reported that Brewer's Yeast is a good supply of different vitamins. Yet I now have information that it is not wise to take Brewer's Yeast. Yes it does have many vitamins in it, but because of the widespread fungal problems it can "feed" certain fungal conditions. Brewer's Yeast may have been used to supplement vitamins in past years, but because of the new fungal infections now rampant everywhere, I do not believe we should now take it.

Fungal infections were rare 50 years ago because pharmaceutical drugs that cause fungal infections were also rare or non-existent. People have been talking and worrying about the yeast *Candida albicans* for more than 20 years. *Candida* is one of the more powerful fungi around, the only problem is that it is only one of some 400 species documented as being capable of causing disease in human beings.

I recently purchased two books from USA. The author is Doug Kaufmann. The books are entitled *The Fungus Link* and *The Fungus Link 2*. (Cost of books is \$US27 each) [To order these books phone 00111 225 930 0658, or Email sandra@radianthealthbr.com]. These books relate the fungus link to allergies, arthritis, digestion, asthma, respiration, mental health, depression, chronic fatigue, women's health, osteoporosis, skin diseases, pain (eg headaches and back pain), hormone problems, autoimmune diseases, ear, nose and throat illnesses, cancer, weight gain and hair loss.

If certain yeasts, given the right conditions, can make bread rise, what do these yeasts do in our body? Yeasts have contaminated the animal kingdom and are passed on by eating the meat of these animals. Any grain or nut, if not handled properly during production and storage, may lead to mould growth. Take exceptional care not to eat mouldy food and have your environment free from any mould. Remember, when in our bodies, these yeasts "feed" on sugars and carbohydrates. Consume no yeast products. Try this diet and see if your health improves.

From Kaye and the Back to Eden team.

Fungus....

How it affects our health.

According to Jess G Thoene MD, professor of pediatrics and biological chemistry at the university of Michigan, rare diseases are not so rare anymore. Is there a common link in why these diseases are becoming so common? Did you know that over 50 years ago five physicians at the Duke University predicted that there would be a marked increase in rare diseases?

In 1944, during world War 11, field physicians were noticing rare medical disorders in soldiers fighting abroad. Interestingly, these doctors had been studying fungus infections during the preceding decade and they knew why such "rare" disorders were showing up in these soldiers. They were fungal disorders. A textbook published by these researchers concluded "Fungal infections are of such common occurrence that we have found it necessary to consider mycotic (fungal) diseases in the different diagnoses of practically every obscure infection." Could this mean that fungal infections may be the basis of practically every obscure disease? At the same time as this discovery, Alexander Fleming had discovered and was using penicillin on wounded soldiers on the battlefield. Yes, the discovery saved many lives, but has it been over used, and are we suffering the consequences.

Soon after World War 11, prominent medical journals began expressing concern over the use of broad-spectrum antibiotics. Unfortunately, such warnings have largely gone unheeded. Dr Harold Thomas Hyman reiterated medical concern over antibiotic use when he stated, "As a result of refinements in diagnostic techniques and the rising menace of fungus infections

(resulting from destruction of bacteria by penicillin, the mycins, and other antibiotics), increasing attention is being given to systemic mycoses." Experts at the Kansas Centre for the Study of Mycoses estimate at least 70 million Americans have had systemic fungal infections that went undiagnosed.

Antibiotics destroy the bacteria within the intestinal tract that normally compete with fungi for nutrients, and so the fungi proliferated rapidly. It was also discovered that corticosteroid hormones, used to combat arthritis, were also implicated in causing secondary fungal overgrowth. We also know that birth control hormones are implicated in causing secondary fungal overgrowth. Today it is likely that many of the rare diseases and many common diseases we suffer from have fungal links, yet this remain undiagnosed or misdiagnosed.

In 1994, the head of the World Health Organisation Collaborating Centre for Mycotoxins in food, AV Constantini MD, found that many common diseases had their roots in our food and medicine supply. Moulds and fungus that grew on foods and proliferated during the food storage process caused these diseases. Fungal by-products, called mycotoxins, found in corn, peanuts, and other common foods were implicated in atherosclerosis, Crohn's disease, multiple sclerosis, arthritis, psoriasis, Alzheimer's disease and even cancer. One author pointed out that the antibiotics we take are, by definition, mycotoxins, and mycotoxins are known to cause cancer.

"Mycotoxins are genotoxic carcinogens and exposure begins in utero and in mother's milk continuing throughout life; these conditions favour the occurrence of disease." Murphy, G.P. et. al. American Cancer Society Textbook of clinical Oncology., 2nd Ed. 1995. American Cancer Society Inc. Atlanta. GA.

Mycotoxins are simply fungal toxins. They are heat-stable chemicals made by fungi

that contaminate food grains such as corn, wheat, barley, peanuts and sorghum. Heat stable means that you can't destroy them in the cooking process. The toxins are ever present in our food supplies and have various effects on humans and animals, ranging from benign and beneficial to debilitating and deadly. These toxins debilitate the host's body (our body), compete for nutrients and alter the immune system of the host to such a degree that the fungus can maintain residence while avoiding the normal immune attack by host cells. Fungal cells can even damage DNA, a process that may lead to cancer.

A host of other pharmaceutical drugs are fungal derivatives. Many of the cholesterol lowering "statin" drugs are made from *Aspergillus terreus* and other moulds. (Physicians' Desk Reference, 48th edition. Medical Economics Data Production Company. Montvale. NJ. 1994)

This information is being given to you so that you may become informed. It is my opinion that many fungal conditions occur because of swallowing prescriptive medicines, breathing or eating mould spores. Would it not be ironic that a person taking antibiotics for a respiratory or intestinal complaint actually worsens their condition?

Mycoplasma is a cell wall deficient organism that is very hard to detect in normal blood tests. Mycoplasma is a fungus that feeds on sugars, alcohol, antibiotics, steroids, foods containing antibiotic residues such as dairy foods, it thrives on mushrooms, yeast breads and pastries and it even thrives on other fungi moulds and other fungal spore.

Doug Kaufmann, author of *The Fungus Link*, reports that he has seen symptomatic reversals in thousands of patients who follow a program to eliminate these fungi.

If you think you may have a fungal problem, try the diet for a few weeks.

Fungi are parasitic, that is they rely on a nutritional supply from a host (you) in order to survive. Without carbohydrate, they will soon perish. Carbohydrates are foods that produce sugar upon digestion. It is also important to re-establish good bacteria in the bowel. The bowel is an entire ecosystem containing good bacteria and harmless yeasts. A disruption within this ecosystem is called dysbiosis. Normally your intestinal ecosystem serves two functions. It protects and defends. When you take antibiotics, birth control

pills and cortisone, they negatively impact this ecosystem. If you have taken any of these you need to supplement with "good bacteria". Health food stores carry probiotics in pill or powder form. It is impossible to restore your health without restoring the integrity of the intestines.

Fungal facts

Fungus breaks things down. Terms such as yeast, mould, mildew, fungus, sooty mould and rust all describe the various forms and species of fungus. In nature they play a huge role in the breakdown of plant and animal matter and return it to the soil to be used again. The number of identified fungal species approaches 100,000, and it is estimated that there may be more than 1.5 million that have yet to be recognised. Yeasts are single-celled organisms, whereas moulds and mushrooms are groups of cell clustered together. They can reproduce either by sexually- by sharing DNA, dividing and growing- or asexually, either by releasing spores into the environment that form new fungi, or by budding new yeast cells from a parent cell. Spores can lay dormant for many years until the condition are favourable for them to multiply.

Yeasts are opportunistic organisms. This means that, as intestinal bacteria die, yeasts thrive, especially when their dietary needs are met. They can use their tendrils, or hyphae, to literally poke holes through the lining of your intestinal wall. This results in a syndrome called leaky gut. Yeasts are not the only cause of this syndrome. Some scientists have linked non-steroidal and anti-inflammatory drugs as well as antibiotics.

In addition to causing leaky gut syndrome, parasitic yeasts cause you to binge on carbohydrates, including pasta, bread, sugar, potatoes etc. so it would come as no surprise that weight gain counts as one of the telltale signs of antibiotic damage and subsequent yeast overgrowth.

Fungal cells are overall very similar to human cells in that not only do they contain a nucleus with DNA, but they also share many of the same physiologic and biologic pathways required for growth and reproduction. They are more closely related to human cells, based on function and gene content than either viruses or bacteria. (<http://hsc.virginia.edu/med-ed/micro/myc/1.html>, 2003) This similarity to human cell poses a challenge to researchers in that it is difficult to find a drug that will selectively kill the fungus

and not the human. Another challenge is that fungal cells can be confused for either normal human blood cells or even malignant cancer cells. Without the proper staining techniques by microbiologists and pathologists, the identification of fungal organisms can be entirely missed. Treatment errors may then follow. It is possible to receive an antibiotic for an infection when what you require is an antifungal. In fact the antibiotic only worsens the fungal infection by destroying our intestinal bacteria that normally serves to protect against yeast overgrowth.

In a related scenario, more than once has surgery been aimed at removing or debulking a "cancerous growth" when, upon further analysis of the growth, a fungus has been found to be the real culprit. In this new millennium, fungus is still being confused for cancer and other infectious disease.

"There are no, rapid, accurate diagnostic tests that can confirm with certainty the presence of invasive fungal disease." John Rex MD. Managing fungal infections in the new millennium. *Medscape.com*. 4/2000

Fungi enter humans by many routes. Their spores are in the air we breathe. Fungi and fungal contaminants universally contaminate staple grains, such as corn, thereby entering our food supply and are a problem to man and animals. Sexual transmission of yeast is very real, in fact many times either forgotten or unknown by medical personnel. Soil that is disturbed by wind or construction projects expose these fungal spores to all who breathe the air in the area. Homes flooded or damaged by water leaks, homes that are exposed to mould and dampness are at high risk for fungal toxins.

Other fungal toxins

A little known fact is that beer and wine are made with the help of other fungi, such as *Aspergillus* species. (Moore-Landecker. *Fundamentals of the Fungi*, 4th ed. Prentice-Hall Inc. New Jersey 1996) These fungi make their own mycotoxins that may contaminate the final batch. On top of that many grains are used to make alcohol are contaminated with fungi.

Another large industrial application of fungi involves the use of *Aspergillus Niger's* ability to make massive doses of citric acid. Citric acid is largely used as a preservative in foods and in soft drink. Often we blame the loss of calcium on the caffeine or acids in sodas. What goes

unnoticed in mainstream medicine is how some fungal toxins themselves interfere with normal calcium function in the body. It is interesting to note that chickens who consume grains laden with this chemical lay fragile, thin-shelled eggs due to CPA (a mycotoxin) binding up the calcium needed to form normal strong eggs (and bones). Since the fructose syrup used in soft drinks is mainly from corn, drinking soft drinks represent one of the main causes of osteoporosis.

Zearalenone is an estrogen-like mycotoxin made by *Fusarium* species of moulds. Its effects on the body have been mostly studied in farm animals. Its effects range from infertility, swelling and enlargement of female genitalia and mammary glands, problems with ovulation, menstrual irregularities, fetal miscarriage, and feminisation of male animals. In addition it has been suspect as the cause of premature puberty and cervical cancer. (CAST 2003; Peraica M et al Toxic effects of mycotoxins in humans. Bulletin of World Health Organisation, Sep 1, 1999.)

Tremorgen mycotoxin, such as penitrem A, made by *Aspergillus*, *Penicillium* and other mould species, can cause tremors, headaches, fever and dementia in animals and humans. Other neurotoxic mycotoxins like vomitoxin (DON) and the other T-2 mycotoxin, both can damage nerves, induce anorexia, vomiting, bloody diarrhoea and can suppress the immune system. (CAST 2003)

There is a broad range of symptoms

Fungus has been linked with problems related to the brain, arthritis eye problems, hair loss, diabetes, chronic fatigue, fibromyalgia and asthma

The following questionnaire will give an indication if your problem is fungal related. A high number of positive answers indicate this.

- At any time in your life, have you taken repeated or prolonged courses of steroids or cortisone-based pills?
- Have you been diagnosed with fibromyalgia?
- Do you have, or have you ever had asthma?
- At any time in your life, have you taken repeated or prolonged rounds of antibiotics?
- At any time in your life, have you taken repeated or prolonged courses of steroids or cortisone-based pills?

- Have you been diagnosed with arthritis?
- Do you have diabetes?
- At any time in your life, have you been treated for worms or parasites?
- Have you ever had cancer?
- Have you ever been treated with chemotherapy or radiation for any type of cancer or other disease?
- Do you have, or have you had, ringworm, fingernail or toenail fungus, or "jock itch"?
- Have you ever been diagnosed with attention-deficit disorder (ADD or ADHD)?
- Do you suffer from fatigue?
- Do you suffer from irritability, memory loss, or a feeling of constantly being "spaced out"?
- Do your muscles, bones, or joints bother you?
- Do you get headaches?
- Do you have itching, tingling, or burning skin?
- Do you have hives, psoriasis, dandruff, or chronic skin rashes?
- Do you have acne?
- Are you on medications for the skin problems listed above?
- Do you suffer from hair falling out, itching inner ears, or vision problems?
- Do you have high blood pressure, low blood pressure, high cholesterol or triglycerides? Are you on medications for these problems?
- Do you have mitral valve prolapse or heart symptoms, i.e., racing pulse or uncontrolled heart beat? Are you on medication for this condition?
- Are you bothered by recurrent digestive problems, including bloating, belching, gas, constipation, diarrhoea, abdominal pain, indigestion, or reflux?
- Do you have chronic infections for which your doctor keeps prescribing antibiotics?
- Have you ever been diagnosed with an autoimmune disease?
- Does your condition get worse in response to heat (for example does a shower, bath, or very hot weather make it worse?)
- Do your symptoms get worse on damp days or in musty, mouldy environments?
- Do you often feel "blue" or depressed? a. Are you presently seeing a therapist for depression? Are you on medication for depression?
- Do you drink alcoholic beverages?
- Do you smoke?
- Do you presently or have you ever craved corn, peanuts, or sugar?
- Have you ever worked on or played

around a farm?

- Have you ever encountered mould-related problems in your home or office? Has your home or office ever been flooded to any degree?
- Do you suffer allergic reactions due to pollens, moulds, animal dander, dust, mites, perfumes, chemical, smoke, or fabric store odours?
- Do you suffer allergic symptoms due to any foods?

FOR WOMEN

- Have you ever taken birth control pills?
- At any time in your life, have you been bothered by vaginal or urinary tract problems?
- Are your ovaries, thyroid gland, adrenals, and pancreas functioning as they should? (Symptoms of hormonal disturbances can include: PMS, menstrual irregularities, loss of libido, infertility, sugar cravings, weight problems, and constantly feeling hot or cold).

FOR MEN

- Do you now, or have you ever, experienced pain in the testicles unrelated to trauma?
- Have you ever been bothered with prostate problems?
- Are your testicles, thyroid gland, adrenals, and pancreas functioning as they should? (Symptoms of hormonal disturbances can include: loss of libido, infertility, impotence, sugar cravings, weight problems, and constantly feeling hot or cold.)

Dr Hulda Clark has researched the connection between cancer and moulds, yeasts, parasites and fungi. She advocates that in past years the native peoples from the Arctic to the Antarctica knew the value of frequent purgings that included vomiting and diarrhoea, to rid themselves of these parasites. She states (from *The Cure for all Cancers*) "Where have we gone astray? Why have we forsaken these wise practices? I have seen that eczema is due to roundworms. Seizures are caused by a single roundworm, *Ascaris*, getting in the brain. Schizophrenia and depression are caused by parasites in the brain. Asthma is caused by *Ascaris* in the lungs. Diabetes is caused by the pancreatic fluke of cattle, *Eurytrema*. Migraines are caused by the threadworm, *Strongyloides*. Acne rosacea is caused by *Leishmania*. Much human heart disease is caused by dog heartworm, *Dirofilaria*. And the list goes on."

This quotation refers to parasites, but all parasitic diseases are diseases caused by

the presence of parasites within the body. Human parasites include various types of fungi, bacteria, viruses and worms. To combat all these invaders, we need to have a clean body where parasites cannot survive. Our immune system must be strong to fight against all invaders.

How to Control Fungus

Get rid of all fungus and mould in the home and work areas. Avoid dusty areas (this may be very hard in some cases, but fungal spores are carried in dust). Keep air conditioning filters clean as they are a breeding ground for fungus and moulds. Avoid chemicals, both household and industrial. Mycoplasma can live on chemicals in the body.

It is very important to avoid environmental toxins as much as possible. These include any ingredient listed as isopropyl or propanol as used in cosmetics, shampoos, hair sprays, lotions and personal hygiene products or any other product that has ingredients listed that has the prefix "prop", isophorones, hexane dione and methyl ketones in flavoured foods. These are stored in the liver but the liver is unable to detoxify them and the toxins depress liver function.

Many nuts contain moulds. To help this it is wise to rinse the nuts in water (a lot of mould is removed this way), cover the nuts with water, add about ¼ teaspoon of vitamin C powder in a litre of water and mix. Let stand for about five minutes. The water penetrates the nuts, taking the vitamin C with it and detoxifies them. Pour off the water and dry the nuts in the oven at low heat. Be careful not to burn them.

If you wish to go on an anti-fungal diet the following is a list of what to eat and what to avoid. It is suggested that you stay on this diet for at least 2-3 months.

Allowed foods

Fruit: Granny smith apples (contain anti-fungal properties), olives in brine, lemons, and grapefruit.

Fruit juices: None, only can use leafy green, cucumber, celery, carrot, wheatgrass, beetroot and tomato juice.

Limit to 100 ml per day.

Vegetables: All fresh vegetables, organic if possible.

Cereals: No pre-packaged boxed cereals. Only use whole grains (barley, millet, oats, brown rice, wheat, buck wheat.) Rinse grains in cold water before using. Cook

grains slowly over low heat for longer than normal time. Avoid using leftovers especially rice as it is very susceptible to aflatoxin (fungus). **Some people who have severe fungal problems may need to minimise or avoid grains and grain products completely while on this diet.**

Nuts: All nuts and seeds may be used with the exception of peanuts or any peanut product, and pistachios.

Cultured foods: Soy yoghurt and soy kefir are excellent foods, also can use miso, tofu and tempeh.

Breads and wholemeal pasta: Yeast-free sour dough cultured wholemeal bread is the only one – make sure it does not contain any yeast or sugars.

Coconut products: Use them freely as they are anti-fungal – shredded, oil, cream or fresh (caprylic acid is derived from coconut oil)

Protein: Eat some legumes and or sunflower seeds with every meal even if it is only a tablespoon – this normalises the carbohydrate levels, detoxifies chemicals/oestrogens and assists in the repair of tissues.

Minimise carbohydrate vegetables.

Celtic sea salt: Use at least 1¼ teaspoons in your cooking and on your food every day as this builds good blood.

Raw garlic is excellent to destroy parasites and viral infections. Use the whole clove crushed. (May juice the cloves in vegetable juice – but it will taste a little strong)

Anti-fungal herbal teas (cats claw, aloe vera, goldenseal, pau d'arco)

Olive Leaf extract has antimicrobial abilities.

Grapefruit seed extract is very effective at killing yeast.

Tea tree oil can be used topically on the skin.

Foods to avoid

No ice cream, cheese, eggs, dairy milk.

No left-overs as these can easily grow bacteria, fungi, moulds and aflatoxin.

No micro-waved foods.

No packaged or processed foods.

No alcohol in any form, including herbal tinctures or extracts, or kombucha.

No animal products, may contain antibiotic residue, growth promoters, bacterial and yeast overgrowths which are heat resistant, and also may contain pathogens and parasites. All animal product contain the wrong cholesterol and may delay if not stop the healing process as fungus lives on the cholesterol.

Sugars and any food containing sugar, especially fruit drinks and fruit juices, Brewers yeast and food yeast and vitamin B supplements made from yeast.

All vegemite, promite or marmite.

All sugars including honey, malt and

treacles.

All vinegars.

No dried fruits, fresh fruits, canned fruits, bottled fruit, only the few listed above as permissible.

No lollies, carbonated drinks, chocolates or other sweets.

No bread, pastries, rolls, cakes etc (except sour dough bread and wholemeal pasta).

No mushrooms, condiments (especially processed ones).

No artificial sweeteners.

No coffee or tea (except herbal, unsweetened).

No cooking or table salt (celtic sea salt is allowed).

No foods containing free fats or oils, including deep fried chips.

All deep fried foods.

No peanut butter.

Other things to remember

Avoid birth control pill.

Avoid steroids.

Avoid all environmental toxins.

No eating between meals.

No drinking with meals.

Chew food thoroughly.

Drink water or herbal teas between meals.

Don't eat fruit and vegetable at the same meal.

Store nuts and grains in the freezer or cupboard. They attract moisture which develops moulds.

Wash fruits and vegetables thoroughly before using.

Corn products are the most easily contaminated with mould.

When rebuilding systems, especially immune, more protein is needed than normal. Good quality protein is needed eg lentils, beans, split peas. All legumes contain Mycoplasma neutralising substances and should be eaten at every meal. (At least 1-2 tablespoons) They are also excellent for balancing hormones and anti cancerous.

Remember to keep eight laws of health.

Exercise daily and breathe deeply in the fresh air. Regular sunbaths will help in destroying fungus.

A word of caution is needed as when the organism dies off it releases toxins and these toxins can make you feel sick. This is normal. Toxins coming from die off can cause nausea, diarrhoea, wind and bloating, depression, infections, rashes and just feeling down.

Look up fungus and related topics

www.mercola.com

www.yourhealthmatters.com

www.drfungus.org

www.iknowthecause.com

Function of the Frontal Lobe

MTV-Problems with Violence

There is a concern that many teenagers are moving from more typical television options to MTV and its imitators. This type of music programming constantly stimulates the visual senses through its provocative, fleeting images of rapidly changing scenes. Not only do the images rapidly change (even multiple images per second on occasion) but the ear is stimulated as well. This eye-ear combination seems calculated to induce an even more profound shutdown of the analytical processes.

One study that uniquely demonstrates this was done in a maximum-security mental hospital with 222 patients. During a period of about a year, patients were exposed to seven months of MTV followed by five months without it (normal TV options remained available). The results showed aggressive behaviour decreased by up to 52%.

We have already seen that the standard, modern, rapid-paced television has a well-proven negative influence on the frontal lobe. However, we see here indications that the effects of MTV are even worse.

Television and Sex

Television also effectively increases sexual activity in teens and younger children. Studies show it significantly decreases the age of first sexual intercourse. The more television watched, the lower the age for that first sexual encounter. Not only do studies show it, but the children themselves report that television encourages them to take part in sexual activity too soon.

Television Is Addictive

Most people do not realize that television is addictive. They find themselves gravitating toward the set without thinking about it, and some leave it on all day. In 1976, the Detroit Free Press

conducted a survey to help determine why their newspaper circulation was decreasing. The survey results showed that most people received their news and information from television. This is unfortunate because, as we have seen, in some respects it is the poorest source of information. We can learn so much more from reading newspapers, news magazines, or online computer news services than by watching one-sided news clips pass before our eyes in rapid succession. Also, we may miss a point, but cannot go back and take another look. Reading is by far a better way to review the news, learn new things, and involve our frontal lobe.

The Detroit Free Press did not stop with their survey. They went on to offer \$500 to any family who would give up television for one month. The paper extended the invitation to 120 families. A total of 93 of them could not be enticed to part with their television for even thirty days. However, 27 families accepted their offer. To make sure they could not cheat, the newspaper company installed electronic devices that would interfere with any television used on their premises.

The results of the one-month trial were amazing. Family members manifested actual withdrawal symptoms. Insomnia and headaches were common. One man, noted for being a kind husband, lost his cool during the first week, became irritated, and began beating his wife. However, throughout the month attitudes changed. At the end of the month, to almost everyone's surprise, all 27 families said that it had been a good experience. Most of the families put their extra time to good use by getting things done around the house. One of the most rewarding findings was that the families were able to relate to each other in ways they had not done for years. They found things they could do together, their minds were more creative, and they were actually enjoying life more than when they had television.

Would they go back to television now that

Concluding... This excerpt from PROOF POSITIVE: by Dr Neil Nedley is taken from the chapter entitled The Frontal Lobe. This concludes the series of articles that looked at the different ways we can impair the function of the frontal lobe.

they earned their \$500? They were generally convinced that they would do much better if they kept television viewing to a minimum. The study helped to illustrate televisions' addictive allure and demonstrated that in many respects TV viewing works against us rather than for us. This study actually provides a glimpse into another danger of TV viewing: the influence of parents is greatly diminished when TV becomes the main companion to children in a home. This lack of parental involvement in the lives of children directly relates back to another frontal lobe robber: alcohol and tobacco use. Researchers from Louisiana State University Medical Centre in New Orleans demonstrated this when they studied over 2000 fifth and sixth graders for three to four years. Children who reported that their parents spent more time with them and had more communication with them were less likely to use alcohol and tobacco. They were also less likely to choose friends who used these substances. Unfortunately, research shows what we all would expect: with more television viewing, the amount of time spent in active conversation with family members significantly decreases. If television viewing is depriving us of active time spent together as a family, parents may likely reap an extremely bitter harvest.

Television Robs Spiritual Qualities

Television viewing, because of the time it takes, can keep us away from other meaningful activities and pursuits, including spending time with God. When we look at an average person's weekly activities before and after the arrival of television, we see that the amount of time in church or in reading spiritual material such as the Bible, has noticeably decreased. The reason for this probably has to do with more than TV subtly stealing away our time. Remember, television depresses activity in the frontal lobe, which is the seat of spirituality, morality, and the will. We would expect a corresponding decrease in such intangible

frontal lobe qualities as spirituality and faith in God.

However, if we consider television from just the standpoint of time: it often captivates the few hours of discretionary time that we have in our day. Before television, the three most profound influences on American values were the family, the church, and the school. If the amount of time we spend in an activity directly corresponds to its power to shape our values, then in the 1950's television superseded the church. In the 1960's TV superseded the family; and by the 1970's it superseded the school. Currently, U.S. children spend approximately 20 percent of their waking hours watching television. The average American child, by the time he graduates from high school, has spent more time in front of the television set than he spent in 13 years in the classroom.

Many believe that these thousands of hours of random exposure to television programs have profoundly affected our nation. They blame TV as one of the prime reasons for a decline in our nation's moral values. Some critics would like to use legislation to fix the problem, but we should not and cannot legislate what people do in their homes. Families should set their own rules. But how can a family be motivated to set rules without being adequately informed of the injurious effects of television? Somehow, accurate information as outlined in this chapter should go out to every family in America so that informed decisions can be made. If simple, healthy, and enjoyable TV-less family activities became the foundation of the home life, I believe there will be generally few regrets about abandoning the former life in which the TV set held full control.

If any are still wavering as to whether television should be emphasized less in their homes, let me summarize 17 deleterious effects of TV watching that I have covered in this chapter.

1. Produces a hypnotic effect, bypassing the frontal lobe filtering
2. Reduces interest in reading and learning
3. Weakens brain power
4. Encourages poor lifestyle habits
5. Encourages obesity
6. Increases daydreaming
7. Weakens creativity
8. May reduce our powers of discrimination
9. Trains in non-reaction
10. Influences viewers to regard violence lightly

11. Makes children more irritable
12. Increases aggressiveness
13. Accelerates sexual activity
14. Addictive
15. Reduces time available for productive achievement
16. Steals time from family interaction
17. Adversely affects spiritual pursuits

These harmful effects collectively build a strong case for personal action—today. After all, the very moral conscience of you and your family—residing in your frontal lobes—may be hanging in the balances.

Music and the Frontal Lobe

Few people understand the powerful influence that music has on the frontal lobe. Music enters the brain through its emotional regions.

Depending on the type of music, it can either influence the brain beneficially or detrimentally. Music therapists tell us that certain types of music, such as rock with its syncopated rhythm, bypass the frontal lobe and thus escape our ability to reason and make judgments about it. Evidence suggests that it, like television, can produce a hypnotic effect. For many years some have argued that rock music was ruining America's youth. Recently a neurobiologist and a physicist teamed up to put this generalization to a test. They designed a study to evaluate the neurological reaction of mice to different musical rhythms. For eight weeks they exposed each of three groups of mice to different music settings. One group heard rock-like disharmonic drum beats playing softly in their environment, a second group heard classical music, while the third heard no music whatsoever. All the mice went through a standard maze test (with food at the end of the maze). On the first day, all three groups performed equally well. They groped about the maze in search of food. By the end of eight weeks, however, it was noted that the second and third groups had learned the direct path to the food. The "rock group," however, was still groping for it, taking much longer to find the food than the other two groups.

Next there was a three week break in their maze training without music followed by maze re-tests to see how much knowledge they had retained of the maze's course, and to see if the effect of the rock beat had worn off. Again the rock group performed poorly. They continued to have difficulty

remembering how to get to their food, while the other two groups still found it quickly. The rock group seemed almost to be starting from scratch. They groped around and seemed disoriented. Both the control group and the harmonic group, on the other hand, could run the maze considerably faster, proving that their learning had stuck.

To determine why the poor performers were having so much trouble, the researchers examined their brains, looking for changes in the hippocampus, a region in the temporal lobe near the brain stem, which is usually associated with alertness, memory, and learning. They found evidence of abnormal branching and sprouting of the nerve cells, and also disruptions in the normal amounts of messenger RNA, a chemical crucial to memory storage.

The researchers concluded that the culprit causing the memory and learning problems was the music's rhythm, not its harmonic or melodic structure. The theory is that certain musical rhythms help to synchronize natural biological rhythms, thus enhancing body functions, while other rhythms tend to clash with, or disrupt, those internal rhythms. This is not surprising since all of our body systems function in rhythm. The study's authors postulate that if these natural rhythms are disrupted by some kind of disharmony, detrimental effects can result, including permanent learning difficulties. This could help explain why rock music listeners are more prone to use drugs and engage in extramarital sex, and why heavy metal listeners are much more likely to consider suicide. Not only did the disharmonic rock-like music cause damage to the temporal lobes, it also caused atrophy of the frontal lobe. This atrophy would be expected to affect moral worth, learning, and reasoning power.

Harmonious types of hymns and symphonies, on the other hand, can produce a very beneficial frontal lobe response. This is the kind of musical environment in which our children should be raised—music that can produce a positive rather than a negative effect. Classical music has been demonstrated to help college students learn spatial relationships in geometry. A study showed that listening to Mozart piano sonatas significantly increased spatial-temporal reasoning. Interestingly, Mozart began composing music at the age of four.

In a follow-up of the Mozart study,

children three to five years of age who received eight months of group singing and keyboard lessons scored significantly higher on the “object assembly” task (arranging pieces of a puzzle to form a meaningful whole, requiring frontal lobe function) when compared to children in the same pre-school who did not receive music lessons. Another study showed that musicians who possess perfect pitch were soundly exposed to music before the age of seven.

The impact of music on shaping the character (and hence the frontal lobe) was recognized at least 23 centuries ago. Aristotle, the Greek philosopher of the 4th century B.C., recognized that music can either be beneficial or detrimental to our character, depending on the kind of music we expose ourselves to. He wrote, “Music directly represents the passions or states of the soul—gentleness, anger, courage, temperance, and their opposites and other qualities; hence, when one listens to music that imitates a certain passion he becomes imbued with the same passion; and if over a long time he habitually listens to the kind of music that rouses ignoble [degraded or vulgar] passions his whole character will be shaped to an ignoble form. In short, if one listens to the wrong kind of music he will become the wrong kind of person; but, conversely, if he listens to the right kind of music he will tend to become the right kind of person.” Aristotle unwittingly referred to the frontal lobe, where we now know the seat of our character resides.

Summary List of Seven Actions to Take for Enhancing the Function of the Frontal Lobe.

1. Protect the frontal lobe from mechanical injury eg boxing, football, and motorcycle riding are examples of high-risk activities.
2. Prevent diseases that may damage the frontal lobe eg controlling risk factors such as high blood pressure, diabetes, current tobacco use, heart disease, and alcohol.
3. Improve the Quality of Your Brain’s Blood Supply eg By breathing clean, fresh, well-oxygenated air, By taking deep breaths of fresh air we may be able to boost oxygen saturation sufficiently to improve frontal lobe function
4. Provide Good Nutrition. A total vegetarian diet that is free from all

stimulating agents appears to be the best diet to improve the abilities of our front brains.

5. Get Adequate Sunshine as it increases serotonin production in the daytime. This, in turn, can help prevent depression and fatigue.
6. Challenge Your Frontal Lobes by exercising the thinking power of your brain, Serious reading, the study of nature, asking questions about the vast world surrounding us, and other wholesome uses of our mental capacities tend to produce salutary frontal lobe.
7. Control What We See and Hear. Exposing our minds to great inspirational material will enlarge the mind and strengthen the intellect. Since spirituality, morality, and the will are centered in the frontal lobe of the brain, the inspirational material chosen should ideally appeal to our spiritual and moral being. The study of the Word of God fills this requirement like no other can.

Conclusion

God has provided each one of us with the power to freely choose how we will live. And He usually does not interfere, even when we make bad choices. Truly, “there is much truth in the adage that every person is the architect of his own fortune.” In view of this tremendous power that you have been given to shape your own future, won’t you take some time today to again seriously look at your lifestyle. I challenge you to reflect on your current health habits and ask yourself what you can do to take advantage of what you have learned from this chapter. Try to identify some concrete steps that you can take within the next week to help protect and enhance your frontal lobe—and of course with it, your entire body. A healthful lifestyle makes sense. Do not merely follow your old ways of doing things just because they are comfortable, or “because everyone else is doing it.” In the words of Scripture, “Be not conformed to this world: but be ye transformed by the renewing of your mind, that ye may prove what is that good, and acceptable, and perfect, will of God.” Romans 12:2.

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Recipe

PERSIAN LENTIL STEW

- 1 onion, chopped
- 2 cloves garlic, crushed
- ½ red or green capsicum, chopped
- 3 cups red lentils
- 1 small tin tomato paste
- 2 or 3 carrots, chopped
- 2 medium potatoes, cubed
- 2 cups shredded cabbage
- 2 tsp sea salt
- ½ marjoram

Saute onion, garlic and capsicum in a little water until soft. Add a little more water and add potatoes and cabbage. Cook for about five minutes. Place carrots in a blender, cover with water and blend until liquid. Add this carrot liquid to pot, add lentils, tomato paste and salt. Add enough water to cover the lentils by about 3-4 cm. Stir mixture and let it simmer until the lentils are almost cooked - usually about 30 minutes. Stir periodically to prevent from burning.

Serve as stew, or over a bed of rice or over potatoes.

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