## Therapeutic Recommendations for HIV Positive and AIDS Patients.

(Therapeutic recommendations from the studies of Dr. Heinrich Kremer (Barcelona) author of: The Silent Revolution in Cancer- and AIDS- Medicine <u>www.Xlibris.com</u>, Prof. Alfred Hässig (Bern), and Dr. Eleni Papadopulos (Perth), Dr. Stefan Lanka (Stuttgart), Ralf Meyer ()Etienne de Harven (France), MD Roberto Giraldo (USA) and Gerry B. Mullis (USA) available under: <<u>http://www.ummafrapp.de/</u>> and <<u>http://www.virusmyth.com/</u>> and the studies of L.A. Herzenberg, J.D. Peterson and S.C. De Rosa, W. Droege, J.K. Shabert, G. Ohlenschlaeger, C. Richter, V.Hack, H. Rode, E.A. Newsholme, C De Simone, S.J. Ferrando, C. de Back, M. Clerici, G.M. Shearer, M.C. Dalakas, G.Tomelleri, E. Benbrik, G.A. Cannon, B.D. Cheson, and L. Chaitow under: <u>www.ncbi.nlm.nih.gov</u>.

The diversity of diseases which define the AIDS syndrome: the various infectious diseases, fungal attacks in the lungs, the mucosa, the brain and inner organs, degenerative transformations in the endothelium of blood vessels and lymph channels (KS) are all the result of an ongoing autoimmune reaction in which antibodies are produced to body's own cells and their proteins (amongst others T4 helper cells) forming immune complexes, which have to be reduced by phagocytes. The causes of this continuous autoimmune reaction are toxification from heavy metals and other environmental toxins and toxification from antibiotics which through changes to the permeability of the cell walls lead to a blockage of ribosome producing proteins and amino acid activating enzymes needed for the synthesis of peptides to be incorporated into the membranes of mitochondria where they are required for the production of energy (ATP) and the degradation of toxic oxygen radicals. In this process the formation of B cells in the bone marrow and the activities of circulating T4 helper cells decreases and resistance of diverse pathogens to antibiotics occur. Additionally heavy metals and other environmental toxins, due to blockages in the mitochondrial ion channels, impact on the production of energy (ATP) which, in the same way as recurring infections, leads to exhaustion of the body's own antioxidants (glutathione molecules). All this leads to a decrease in the production of gaseous nitric oxide (NO) in immune cells and other body cells. When this occurs then T4 helper cells are formed predominantly with Th2 profile of messengers, which on contact with B cells initiate the defence mechanisms against bacteria and toxins by means of antibodies but still only in small amounts as T4 helper cells with a Th1 profile of messengers which activate killer cells to attack cells bearing fungi, viruses and mycobacteria, by means of NO gas and also phagocytes to reduce immune complexes from antigens and antibodies. When this Th1-Th2 switch takes a long time then the production of NO gas becomes disrupted leading to degenerative processes (KS), an increase in reverse transcription and through an increase in cell decay to an increased release of those proteins of the cytoskeleton and mitochondria which are designated as HIV proteins in the so-called HIV tests. The increased amounts of antibodies which are formed against these proteins and against a multitude of diverse antigens lead after a certain, level (set in 1988) is reached to a positive result in the socalled HIV antibody tests.

## A permanent Th1–Th2 cytokine switch of T4 helper cells results from:

- frequent repeated antigen contact from frequently repeated injuries, operations, chronic infections (e.g. hepatitis B), contaminated drinking water and repeated accession of foreign proteins in the bloodstream (amongst other things through coagulation proteins in blood preparations and sperm via anal intercourse).
- Antibiotics acting on the cell-surface and intracellularly (chloramphenicol, tetracykline, macrolides, quinolone, betalactams etc.) block proteins formed

on the cell walls by ribosomes and coded in the cell core, and enzyme activating amino acids for the synthesis of peptides, imported to the mitochondrial membranes and there translated for energy production (ATP) and the reducing of toxic oxygen radicals (ROS). Sulfonamides with trimethoprim (TMPSMX), insecticides (e.g. lindane for treatment of crab lice), chemotherapeutics and nucleoside analogs (like AZT, nevirapine etc) block the formation and release of folic acid and purines necessary for the development of DNA in mitochondria and the formation of iron and copper containing enzymes which are needed for the respiratory cycle of mitochondria. They seal the mitochondrial membrane and thus block the production of energy and the degradation of oxygen radicals taking place there which play a central role in detoxification of the cells. In addition they block the formation the enzyme dihydrofolate reductase required in the liver with tetrahydrofolate for the production of glutathione and for the generation of tetrahydrobiopterin (TH IV) needed for the generation of NO gas with which killer cells attack cells bearing fungi, viruses and mycobacteria.

- contact with heavy metals (mercury, aluminium, lead, arsenic etc.) in the environment, in contaminated water, in foodstuffs, in dental fillings and vaccine carrying substances, with toxins in foodstuffs (preservatives, fungicides, herbicides and insecticides), azo pigments and toxic textile auxiliary substances. They all lead, firstly, to the activation of cell-mediated defences with excessive release of NO gas and subsequently to an inhibition of type-1 cytokines (IL-2, IL-12, IFNy) to prevent the destruction of tissues. A long-term change of the redox milieu in the cells results from an increased consumption of thiols and a sustained type-2 cytokine (IL-4, IL-6 and IL-10) counterregulation with an increased production of Th2 helper cells, which stimulate B cells to an increase in antibody production. This eventually leads to autoimmune reactions in which antibodies are formed against the bodies own cells (amongst others T4 helper cells and intestinal mucosa cells) which dock onto them and with them establish immune complexes. These conditions lead to an inflammatory activation of macrophages with are unable to adequately break down the immune complexes (consisting of autoantibodies and the body's own cell proteins) and via mediators trigger the continuation of autoimmune reactions.
- Through antibiotics, malnutrition and preserving agents and additives in food, the balance between various bacteria in the intestines alters. Then some bacteria produce toxins, which attack the intestinal mucosa, which makes nutrients and bacterial parts filtering through the intestinal mucosa, where they encounter high concentrations of lymphocytes, thereby inducing long lasting inflammatory reactions (Th1-Th2 switch), the production of antibodies against nutrients and allergic reactions, that causes a continued release of the hormone, histamine, which further promotes intestinal inflammations and autoimmune diseases.
- The absorption of nitrites via inhalation (poppers), contaminated water and foodstuffs (mainly in developing countries). Nitrites inhibit the synthesis of type-1 cytokines and the maturation of T4 helper cells. Just like Azathioprine, antibiotics, chemotherapeutics and fungicides they lead to a long-term Th1–Th2 switch and thus, eventually to swellings and degenerative transformations

in the endothelial cells of blood vessels of the lymph channels (Karposi's sarcoma) and in other tissues.

- a prolonged depletion in glutathione molecules, as can happen with an impairment of glutathione production in the liver through chronic hepatitis, heavy alcohol consumption, prolonged intake of heavily oxidative substances and antibiotics and through a deficit of sulphur-containing cross-linked proteins (cysteines) in nutrition. Prolonged deficiency of glutathione weakens the transport and gradual reduction of oxygen into the cells, with the effect that mitochondrial energy production in the cells is disturbed and killer cells destroy themselves with NO gas when they attack cells containing fungi, viruses and mycobacteria. An ongoing deficit of glutathione favours the spreading of fungi (e.g. Candidas Albicans), in the intestines and mucous membranes, which then release toxic degradation products, which impair the production of glutathione in the liver and these products can also only be broken down by glutathione and glucuronic acid. A prolonged deficit in glutathione in antigen-presenting cells eventually leads to a Th-2 predominance.

## The Consequences of Antiretroviral and Antibiotic Treatment.

The so-called HIV retroviruses, which today have been made responsible for more than 30 AIDS defining diseases, have yet to be isolated as transmittable, propagable viruses, photographed and biochemically characterized according to Koch's postulates. In AIDS only known viruses, bacteria and fungi as well as autoantibodies and immune complexes are transmitted via blood and semen. This can lead to a Th1 - Th2 switch in immune deficient recipients and in cases of chronic stress to advanced autoimmune reactions (and to a positive HIV antibody test result).

For Gallo and Montagnier's postulation of 'HIV retroviruses' in 1984, lymph cells were cultivated with leukemic, white blood cells and embryonic cells of AIDS patients, which exhibited a heavily increased activity in reverse transcription that was further activated by doses of hydrocortisone. The increase in the incidence of reverse transcription in these cell cultures was then interpreted as proof of the existence of a new, infectious, transmittable virus. The later developed HIV tests correspondingly identify an increased titer of antibodies against leukemic cells, which appear in various immune reactions, as HIV positive.

Nucleoside analog substances (Acyclovir, Nevirapine, DDI etc.), even after a short time of administration, have a sustained effect on the maturation of all immune cells in the bone marrow: the B-cells, the T-cells that are later developed in the thymus, and the antigen-presenting dendritic cells and the macrophages. The damage to the new growth of B-lymph cells means that their activities and numbers are severely compromised and defense by antibodies against bacteria is weakened so that they can disperse in cells without hindrance. When T-4 helper cells then circulate they find only reduced amounts of B-cells in the lymphatic tissues that they can activate. As T-4 helper cells with a Th-2 cytokine profile they then circulate in the plasma and lymphatic tissues for 24 hours without a function. This results in a higher measurable number of T-4 helper cells in the plasma.

Nucleoside analogues substances, protease inhibitors and fusion inhibitors severely reduce the levels of thiol and thereby further aggravate the already present glutathione deficits in HIV positives. Glutathione deficiency in antigen-presenting cells leads to the formation of T-4 helper cells principally with a Th-2 cytokine profile, which trigger an increased production of antibodies and only a small number of the Th-1 cells that activate defence against fungi, viruses and mycobacteria via macrophages. Protease inhibitors impair the development of proteins for nucleotides needed for the structuring of new cells in all organs. Treatment results in diabetes, the shift of fatty acids from the extremities, retinitis, the formation of kidney stones and to liver failure.

Antibiotics (Bactrim, Septrin, TMPSMX etc.) that block the formation of folic acid, purines and DHFR enzymes, damage glutathione production in the liver, NO production and oxygen transport in the cells, in the process continuously blocking the whole cell-mediated defense resulting, via a permanent Th1–Th2 switch, in ongoing functional immune deficiency. By choking cell respiration they promote fungal infestations (PCP, candidas albicans etc.) in the mucosa, intestines (chronic diarrhea) and skin. Long-term dispensing of antibiotics also leads to an inhibition of tetrahydrofolate necessary for uracil production and thus results in an inhibition of the T-cell growth factor, interleukin-2. By inhibiting the biologically active folic acid, antibiotics also impair the transformation of the RNA base, uracil, to the DNA base thymine and thus hinder DNA repair via reverse transcription. Additionally, by altering the genetic structure in bacteria, which exchange plasmids with each other, they increasingly cause antibiotic resistance.

Nucleoside analogue substances (like AZT, DDI, DDC etc.) reduce by blocking the development of DNA for a limited time bacterial infections, fungal infestations and the production of the non-characteristic particles with mediators (RNA) that are termed HIV particles, as well as immune complexes of antibodies and the body's own cell proteins. This process further promotes autoimmune reactions. However, nucleoside analogs are only 1% phosphorylated and practically not integrated at all in the nucleus where they are supposed to inhibit the 'HI' viruses as DNA terminators. Nucleoside analogs and protease inhibitors, furthermore, cause disturbances to the biosynthesis of proteins and enzyme proteins and by impairing the production of nucleic acids lead to damage both in the nuclear and mitochondrial DNA. The Sooner or later this leads to sever damage to the brain, muscle cells (heart attacks and paralyses) and in the internal organs as well as to the formation of cancer cells.

Under the above-mentioned conditions the cells increasingly switch to an oxygen-free fermentation metabolism, burdening the organism with lactic acid or causing wasting, in which the cells draw essential substances, as an alternative, directly from muscle proteins. With continuing damage to mitochondria through the blockage of their membranes, glutathione deficiency and DNA damage the symbiosis between mitochondria and the nucleus breaks down (Warburg Phenomenon) with the consequence that nuclear sections with agents that had been previously successfully isolated, are activated and the survival of nuclear DNA is increasingly assured by reverse transcription. In the process the numbers of measurable RNA in the plasma increases (increase in the so-called HI viral load). The consumption of RNA markedly increases for repairing the increasingly recurring DNA damage caused by combination therapy (HAART), so that the numbers of cell particles decline. This is measured by means of the polymer chain reaction test (PCR) as the viral load. Through disruption to the synthesis of nucleic acid the coding patterns of nuclear and mitochondrial DNA are altered by combination therapy and the DNA repair, via reverse transcription, is further impaired. Depletion of the repair enzymes

eventually leads to the products of reverse transcription no longer being able to be adopted by DNA (renewed rise in the 'viral load' and irrevocable resistance to combination therapy).

## Elements of a Compensatory Therapy Supporting the Immune System:

- Curcumin, extracted from the spice plant Curcuma longa (turmeric), inhibits in the ultraviolet range those signals responsible for the progression of inflammations and degenerative developments (cancer). A daily dosage requires 8 tablespoons of curcumin powder mixed with 1 litre of tomato juice or coconut juice. In new preparations the curcumin is supplemented with peperino, quercetin, molybdenum, grape seed extract and the medicinal mushroom Agaricus blazei murill, which boosts its effect. Curcumin cannot be taken in conjunction with high doses of vitamin C, E and beta carotene, especially in cases of glutathione deficiency, as it changes then into a substance that has a prooxidative effect and it can no longer deploy its anti-infectious effects and thus aggravates a glutathione or thiol deficiency. Artemisin, derived from Artemisia annua, has strong anti-oxidative and anti-inflammatory effects and is effective in conjunction with Curcumin against parasitic infections (such as Malaria) and viral infections (such as Epstein Barr).
- Polyphenols from green tea, ginger, vine leaves, diverse cabbage types, ginko biloba, quercetin, wheatgrass and other plants (included in new preparations), bind toxic oxygen degradation products, have an inflammation inhibiting effect, support the programmed death of degenerating cells, have a supportive effect on cells and the mitochondrial membrane and thus provoke a transposition of blocked immune reactions (Th1-Th2 switch).
- The negatively charged basic tissues can be protected by polyanions (heparin and heparinoids) in brown algae (Ecklonia cava, Laminaria digitata. Agar etc), guar, shark cartilage or green mussel preparations. As natural protease inhibitors they can slow down progressive inflammatory reactions that lead to autoimmune reactions, increased cell death and increased reverse transcription. By supporting cell-mediated defence systems they can restart flexible immune responses.
- The production of T-4 cells with a Th1 cytokine profile can be assisted by the intake at mealtimes of vitamin D3 (5-10 drops =2000-5000 I.U. daily). By doing so progressive autoimmune reactions are slowed down.
- Glutathione production can be boosted by the supply of sulphur-containing protein mixtures (N-acetyl cysteine, 3-8 gms daily) Glutathione production and NO synthesis in the liver, which are decisive for the regulation of the T-4 immune response and for the regression of tumours, can be supported by doses of glutamine (40 gms daily) and L-arginine (20-30 gms daily) and by Citrulline Powder, derived from water melon. L-carnitine is necessary for the incorporation of long-chain fatty acids (triglycerides) into the mitochondria. A deficiency of L-carnitine impedes the energy-releasing process in mitochondria. By the administration of 6 grams of L-carnitine daily for 14 days, this deficiency can be resolved. After specific laboratory analyses these substances can be administrated in higher doses orally or by means of infusions.

- Allergic reactions to foodstuffs, which lead to continuous inflammatory reactions (Th1-Th2 switch), can only be avoided by dispensing with foodstuffs commonly associated with allergies: milk and diary products, preserving agents, yeast, glutenous grains and substituting them with potatoes, rice, noodles, crisp bread and gluten-free grains (rice, maize, millet, buckwheat, amaranth and quinoa), cooked and raw vegetables and fruit. Allergic reactions lead to a continual release of the hormone histamine, provoking inflammations of the intestinal mucosa. These are aggravated by histamine-containing foodstuffs, like chocolate, yeast, tomatoes, cheese, nuts and sardines. Sugar, white flour and milk products can damage the intestinal mucosa and thus providing favourable conditions for intestinal fungi. A specific foodstuff antibody test can determine which foodstuffs cause these allergies; which then allows the creation of an individual nutrition plan.
- The impact of mercury, aluminium, lead, arsenic and other heavy metals in amalgam dental fillings, vaccine substrates, contaminated water and foodstuffs that trigger autoimmune reactions can be reduced by the intake of Chlorella algae, Ramson extract and other plant compounds, as well as coriander tincture, alpha lipoic acid, N-acetyl cysteine, selenium, zinc and chelating substances (DMSA and EDTA).
- The electron transport of the respiratory chain of mitochondria can be improved with the co-enzyme Q10 (100 200 mg daily). The mitochondrial activity, the development of membranes and the repair of damage to mitochondrial DNA can be supported by folic acid (5 20 mg daily), alpha lipoic acid (300 600 mg daily), vitamin B1 (150 300 mg daily), vitamin B6 and B12 and doses of selenium (250 mg), zinc (10 mg daily), magnesium, manganese and the medicinal mushroom Lingzhi, as well as through chromium (100 300 micrograms daily) and uridine (the latter in molasses, 2 dessert spoons daily) and soy lecithin (1-2 dessert spoons daily), methionine (500-1000 mg daily) and Citrulline Powder (3 grams daily), derived from water melon, which is converted into L-Arginine supporting the level of nitric oxide (NO) essential for the formation and activity of the mitochondria.
- Oxygen absorption of the cells and cell protection can be improved by multiple, unsaturated omega-3 fatty acids (from argan oil, krill oil, coconut oil and rapeseed oil, (in new composed preparations) or in hemp oil, linseed oil, safflower oil and cumin oil (5-6 dessertspoons daily). Microalgae (e.g. Chlorella algae 3-4 gm daily), hemp oil, oenothera oil and fish oil (3 dessertspoons daily), can as prostaglandin modulators activate cellular immunity. In serious cases, opportunistic infections can be treated by selective cyclooxygenase 2 inhibitors and by gamma globulin.
- Mitochondria regulate cell metabolism and cell transformation and retransformation. Enzymes in the mitochondria are governed by ions that in turn are controlled by over 300 mineral salts that are present in organisms. A sufficient supply is possible with base mineral salt mixtures. Thanks to capsules resistant to gastric juices they can directly reach the small intestine with new preparations. (High doses of base compounds are not indicated in cases of tumour formation).
- Candida albicans can be successfully treated with gastric juice resistant capsules with caprylic acid, with biotin (vitamin H), with Aloe vera and with probiotic

substances such as effective microorganisms (EM), fermented grain drinks and dextrorotatory lactic acids, with bifidus and acidophilus bactera. The bases of such treatment is a diet poor in sugar, refined carbohydrates and fat but rich in fiber, bases and roughage, with high value carbohydrates (potatoes, whole grain bread and pasta), vegetables and fruit (plant antioxidants) and cold pressed oils, algae, soya beans and fish but without: iron-rich red meat, smoked meat or fish, fresh egg-white, white wheat, refined sugar, alcohol, fermented or malted products, canned citrus drinks, dried fruits or nuts, pasteurized milk, buttermilk and sour cream and products derived or containing yeast or fungi. The acid-base-balance can be restored by mixtures of bases. The prerequisite for this is doing without refined sugar and instead using whole cane sugar or other natural sweeteners like honey or maple syrup.

- Fungal infestations and internal infections, skin and mouth infections can be treated by grapefruit extracts (drops) or by emulsions obtained from them. These are effective against a diversity of fungi, viruses and gram-positive and gram-negative bacteria. Hand creams with sulphur, tea tree oil or acidophilus are also effective for the skin, as is an infusion of papaya leaves, for the stomach (1 cup 3 times daily).
- The balance between cell-mediated immunity and antibody immunity (Th1 and Th2 cytokine profile) is controlled by the hormonal stress axis between the hypothalamus, the pituitary and the adrenal glands. The stress hormone, cortisol, produced in the adrenal glands activates the antibody response, its hormonal counterpart, DHEA, stored throughout the organism, the cell-mediated response. A continuous shift of the stress axis towards cortisol can be corrected by doses of DHEA-S. Continuous use of preparations, sprays and skin creams with cortisone and the use of steroid hormones (e.g. for improved muscle formation), correspondingly leads to a reduction in lymphocytes and their functions and thus to the onset of viral and fungal infections and to Kaposi's sarcoma.
- Stress can be relieved through autogenic training, stretching, Alexander technique, and massage and through natural sleeping potions, through refraining from drugs (coffee, sugar, alcohol, nicotine, cannabis, amphetamines, ecstasy, cocaine and heroin) that lead to an increased release of stress hormones. The amino acid, L-tryptophan, which is converted to serotonin, helps against depression.
- Repeated inflammation reactions due to droplet infections (hepatitis, venereal diseases etc.) can in part be avoided by careful treatment of wounds and the use of condoms and rubber gloves during anal intercourse. By refraining from nitrite inhalation (poppers) lymph node swellings, which promote degenerative transformations in tissues (KS) and fungal infestations, can be avoided.
- By avoiding high doses of coagulation proteins in blood preparations.

....cellular endosymbiosis and a flexible immune response can be restored in HIV test positive persons and AIDS patients. If, temporarily, antibiotics are administrated then this basis therapy must be continued. If differentiated labour analysis and infusions are not available ART treatment cannot be terminated. By means of the above mentioned treatment measures, the dosage of ART can be reduced, infections occurring with ART and the adverse effects of ART can be limited.

The success of this immune system supporting therapy, which has to be adapted to individual disease patterns, can be established by measuring trace elements, stress hormone profiles, T4:T8 cell ratios, macrophage activation (neopterin test), the serum ferritin levels, the glutathione levels in plasma and in T4 helper cells.

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Literature: Glutathione deficiency is associated with impaired survival in HIV disease <u>https://web.archive.org/web/20101105162959/http://aliveandwellsf.org/articles/Herzenbe</u> <u>rg\_GSH\_1997.pdf</u> N-acetylcysteine replenishes glutathione in HIV infection <u>https://web.archive.org/web/20101105175609/http://aliveandwellsf.org/articles/derosa\_N</u> <u>AC\_GSH\_2000.pdf</u>

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