

Nutrient Therapy on Cataract and Other Health Issues

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ABSTRACT

Four case studies on people with health disorders treated with different supplements at Miljo Naringsbalans Vatten (MNV), Environment Nutrient Balance Water, are mirrored in this article. One female with diabetes was successfully treated with especially Mg, Mn, vitamin C and vitamin B complex. By that treatment also her diagnosed cataract later was unintentionally healed. Attempts to balance the body in accordance with recommendations after hair nutrient analysis, as well as to eat asparagus, maintaining body pH at neutral level, and taking especially additional anti-oxidants and enzymes, most probably helped her to recover quickly from her cancer after surgery and radiation, which was performed in hospital.

The importance of maintaining pH 7 in body, as measured in the urine, was found essential in healing processes. Powder of green vegetables and herbs, as well as dolomitic limestone were effective in increasing pH from acid to neutral 7. Diarrhoea caused by elevated Fe (>1 mg/L) in the drinking water had troubled case study 3 for more than a year. Powder containing different nutrients aimed for stomach, intestines and detox, and probiotics, aloe vera and *Lactobacilli* and Bifido bacteria were successfully used to eliminate his severe diarrhoea. Powder containing a number of nutrients intended to decrease inflammation, significantly decreased sensitivity to sunlight and Electro-Magnetic Fields. Vitamin B complex, Se and vitamin E, and retaining pH at 7 were also important. Iris diagnosed that showed disturbed kidneys was needed to find the underlying cause of mucus in the throat of a young male. By supporting the kidneys symptoms disappeared. The need of long-term treatment was obvious, and many different organs needed treatment when non-specific multiple organ symptoms were reported.

Keywords: Acidosis; Cataract; Iris diagnosis; Diarrhoea; Immune

ABBREVIATIONS

EMF: Electro-Magnetic Fields; U: Uranium; Se: Selenium; Mg: Magnesium; Ca: Calcium; Mo: Molybdenum; BMD: Bone Mineral Density; EHS: Electromagnetic Hypersensitivity; MCS: Multiple Chemical Sensitivity; Hg: Mercury; Ag: Silver; Cu: Copper; Zn: Zinc; Sn: Tin; Vit: Vitamin; Th: Thorium; MNV: Miljo Naringsbalans Vatten; Mn: Manganese; Na: Sodium; K: Potassium; MCS: Multiple Chemical Sensitivity; CKD: Chronic Kidney Disease; IBS: Irritable Bowel Syndrome

INTRODUCTION

The International Atomic Energy Agency has since 1965 regarded hair trace mineral concentrations, especially from the scalp, as a method for mirroring both external and internal contamination [1]. Thus, e.g. Uranium (U) in the body from drinking water has been studied in hair [2], and hair Selenium (Se) analysis was used as a biomarker of Se in the body [3]. Changes in the hair mineral pattern after treatment with nutrients has also been studied, as Magnesium (Mg) and vitamin B₆ led to a reduction in Pb and Cd

concentrations in hair and erythrocytes in children with elevated heavy metal levels [4]. The influence on hair minerals in drinking water was studied [5]. They found that, e.g. Calcium (Ca) and Molybdenum (Mo) from well water was mirrored in hair. Park et al. on the other hand, studied Ca intake from food *vs.* BMD (Bone Mineral Density) and found that hair Calcium concentration was associated with low Calcium intake and low BMD. This indicates the importance of Ca from drinking water [6].

Sensitivity to Electro-Magnetic Fields (EMF) was first reported by Soviet medical researchers in the 1950's Silverman [7]. Symptoms of EMF include headache, fatigue, stress, sleep disturbance, "brain fog", short term memory disturbances, irritability, emotional liability and anxiety [8,9]. Stein et al. give an excellent summary of Electromagnetic Hypersensitivity (EHS) [10]. They state that the syndrome is characterized by non-specific multiple organ symptoms, including the central nervous system. Symptoms occur after acute or chronic exposure to electromagnetic fields. Multiple Chemical Sensitivity (MCS) show similar symptoms. Impaired detoxification systems causing oxidative stress appears to be one underlying

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factor. Autonomic nervous system effects can give symptoms in the cardiovascular system, on skin, microvasculature, immune and hematologic systems. Mast cells are part of the immune and neuro-immune system. In a study by Johansson and Liu (1995) it was clear that the number of mast cells in the upper dermis was increased in the electro-hypersensitivity group, as compared to healthy references [11]. The release of inflammatory substances, such as histamine, from mast cells in the skin, when exposed to Electro-Magnetic Fields or ordinary light, results in a local oedema, and sensation of itch and pain. Mast cells are also present in heart tissue. Some electrically sensitive people have symptoms similar to heart attacks after exposure to Electro-Magnetic Fields. These symptoms may appear in connection with mast cells in heart tissue [12].

Nutrient balancing of the body has been a tool for a better health since decades [13]. Depletion of Mg may cause increased accumulation of toxic metals, such as Pb and Cd. Thus, Kozielic et al. showed positive influence of Mg supplementation on the decrease of Pb and Cd hair content [14]. In another study a group of subjects with chronic work stress that were treated with high dose vitamin B complex reported significantly lower personal strain, reduced confusion and depressed/dejected mood after 12 weeks administration [15]. The different vitamin B's have a bit different tasks in the body, as e.g. B₆ deficiency gives symptoms especially from the nervous system and the skin, as well as increased sensitivity to sunlight. B₂ and B₅ deficiency is also connected with sensitivity to light among other symptoms, even if B₂ deficiency mostly is related to mouth angle cracks and swollen mucus membranes of the mouth and throat. Symptoms of deficiency of vitamin B₅ are connected with fatigue and depression. Vitamin B₃, B₁₂ and folic acid are all necessary for the intestinal balance and B₁₂ also for the nervous system [13].

Amalgam fillings, causing dissolution of Hg into saliva and blood vessels, potential gastro-intestinal uptake and health have been debated for decades. Amalgam is a mixture of different metals; Mercury (Hg) in combination with Silver (Ag), Tin (Sn), Copper (Cu) and Zinc (Zn). Health risks associated with amalgam fillings have often been denied [16] stated that studies of the association between symptoms and amalgam fillings have been negative. However, in an acid environment metals tend to dissolve, especially the less noble metal/metals when more noble metals also are present. Dissolution of amalgam was tested in synthetic saliva at different pH values, saliva being the electrolyte needed for dissolution. Results showed that if Tin (Sn) was present in an acid environment a thin layer of tin-oxide was formed, and that more mercury dissolved from the tin-free phase than from the tin-containing phase [17]. The normal potential, E, for different metals indicate their nobility, ability to stay reduced. A metal with a higher E. value tends to stay/be reduced and stay in the solid phase, while it increases the release of a metal with a lower E. value, which then oxidizes. For Sn the E. value is -0.14 V, while it is +0.79 V for Hg, showing Hg to be a more noble metal as compared with Sn. Thus, oxidation of Sn is increased in the presence of Hg, forming a shielding layer of tin-oxide on the amalgam surface. On the other hand, silver (Ag, E. 0.8 V) at low pH values accelerates dissolution of Hg (E. +0.79 V), and in the tests by Marek et al. more Hg was released from the tin-free areas in the presence of Ag, even though the difference in E. value is small [17]. In a study where volunteers with no amalgam fillings ingested 1 g of dental amalgam, the absorbed fraction of the administered dose was about 0.04%.

The researchers concluded that the gastro-intestinal uptake of Hg is of quantitative importance especially during dental treatment [18]. Selenium has been proven to counteract the toxicity of heavy metals such as Cd, inorganic Hg, methylmercury, Thorium (Th) and to a limited extent Ag. Although not as effective as Se, vitamin E significantly alters methylmercury toxicity [19].

In year 2001 the author (I.R.) took an education to become nutrient therapist and hair nutrient analyser, and started the work to balance humans in the company Environment Nutrient Balance Water, Miljo Naringsbalans Vatten (MNV).

MATERIALS AND METHODS

Patients treated for different symptoms at the environment nutrient balance water reception

Two females and 2 males came among others to the reception of the company Environment Nutrient Balance Water that works in the complementary medicine field. People were asked about their different health problems and an overall picture of the person was formed. pH in urine was measured (pH indicator strips, Merck KGaA, Darmstadt, Germany). Hair nutrient analysis was performed at Trace Elements Inc, Dallas, USA, for analysis on ICP-MS (Tracetlements.com). Eye diagnosis was performed in two cases. Most supplements were distributed by Alpha-plus, Falun, Sweden.

TREATMENTS AND RESULTS

Case study 1

Woman 79 years old. Treated until she was 90 years old.

Symptoms: Diabetes mellitus (takes medication), sore gums, jaw locks, suspected amalgam poisoning, pH 5 in urine, pH <5 in saliva, pain in eye especially after dental treatments and exposure to sunlight, right eye occasionally diffuse vision, stools alternating between loose and hard, for a period of 30 years admitted to a psychiatric clinic for weeks or months at several occasions. Takes three different kinds of anti-depressants. Right side of body paralyzed for 4 months twenty years ago and in pain ever after. It is obvious that she does not spend much time on food preparation, as sandwiches and cookies are often consumed instead of a regular meal. Drinks only about 3/4 Liter of different kinds of liquids, including coffee and tea. During her professionally active period she worked as a dental nurse and during one period as hospital photographer.

Supplements (daily): 3 tablets Diabolx (diabetes, Table 1), 3 tablets Mega B stress (stress, energy, antioxidants, hair, Table 2), 6 tablets Probion *bifido* (intestines, immune defence, skin, inflammation; probiotics), 2 teaspoons Dolomitic Limestone powder (aim: pH in urine to neutral (7) from acid) and oats porridge each morning (stools). Keeps taking anti-depressants, but eliminates one tablet on own initiative. Starts to drink 2 liters per day, mostly water.

Table 1: Diabolx.

	Per tablet
B ₁	25 mg
B ₂	10 mg
B ₃	25 mg
Ca	22 mg
Mg	70 mg
Zn	5 mg
P	17 mg
Cr	200 µg
V	5 mg

Table 2: Mega B stress.

	Per tablet
Vit C	333 mg
Bioflavonoids	33 mg
Pholic acid	133 µg
B ₁	33 mg
B ₂	33 mg
B ₅	33 mg
B ₆	33 mg
Niacinamide	33 mg
B ₁₂	83 µg
PABA	33 mg
Biotine	33 mg
Choline	33 mg
Inisitole	33 mg

Results after 3 months: Diabetes reduced to normal level, and subsequent elimination of medication on woman's own initiative. pH in urine and saliva stable at 6.5-7. Decreasing ache in right side of body, many days no ache. Stools more normal. Eye pain reduced clearer vision and decreased sensitivity to sunlight. Reduced jaw locks. Normal gums. Further reduced intake of anti-depressants on own initiative.

Further measures: Starts to eliminate amalgam fillings (some days after eliminations; extremely tired, aching eye), continues to take Diabolx, Probion *bifido* and dolomitic limestone. Added supplements: 2 tablets VitE+ (Vit E and Se, Table 3), 2 ZMC+ (immune system, skin, muscles and joints, Table 4), 2 Flax seed oil, 2 MinplexB (blood sugar balance, stress; Table 5) to support body during elimination of amalgam.

Table 3: Vit E+ content.

	Per tablet
Vit E	200 mg
Se	50 µg

Table 4: ZMC+ content, alpha-plus, falun, sweden.

ZMC+	Per Tablet
Vit C	500 mg
Bioflavonoids	100 mg
Vit B ₁	1 mg
Vit B ₃	5 mg
Mn	15 mg
Zn	25 mg
L-methionine	5 mg

Table 5: Minplex B content, alpha-plus, falun, sweden.

	Per tablet	RDI
Vit-B ₁	1.5 mg	1.1 mg
Vit-B ₃	2 mg	15
Vit-B ₆	25 mg	1.2 mg
Mg	100 mg	300 mg
Mn	1 mg	3 mg
Cr	200 µg	25 µg
L-glycin	10 mg	
L-glycin	5 mg	
L-cystein	3 mg	200 mg

Results: pH 6-7 in saliva and urine, occasionally 5 in urine when she was more careless with food intake and consumed more bread and cookies. Diabetes maintained reduced, no medication. Further decreased ache in eye and right side of body. Stools most of the time normal. Reduced or eliminated jaw locks. Maintained reduction of anti-depressants. No dandruff (dandruff had not been reported, but had been a problem for many years). More saliva.

This treatment continued for three years in periods. The woman continued taking low dose anti-depressants, two different. The basic supplements limestone, Mega B Stress together with Mg or MinplexB, and Vit E+ were taken all the time. All amalgam fillings in her teeth were eliminated after one year.

Additional symptoms after 3 years: Cataract in right eye. Surgery planned within 7 months.

Supplements: 3 Glycogenics (diabetes, stress, heart, energy, memory; Table 6), 2 teaspoons dolomitic limestone powder, 5 table spoons of ultra-clear (detox, inflammation), 2 Mg+ (daily 200 mg Mg, 4 mg B₆), 2 tablets 500-Metoxylavon (immune system, antioxidants, stress; Table 7), and 2 vitamin E+.

Table 6: Glycogenics.

	Per tablet
Vit C	375 mg
B ₁	42 mg
B ₂	48 mg
B ₃	600 mg
B ₅	225 mg
B ₆	66 mg
B ₁₂	750 µg
Pholic Acid	1200 µg
Biotine	750 µg
Choline	300 mg
Inisitole	282 mg
PABA	45 mg

Table 7: 500-metoxylavone, alpha-plus, falun, sweden.

	Per tablet	RDI
Vit C	500 mg	625
Bioflavonoides	250 mg	

Results: Seven months later no cataract was found. No surgery was undertaken.

Additional symptoms after 4 years: Feels sick after meals, diarrhoea, raised diabetes certain days and swollen lymph nodes. Stools hard again. Other symptoms have remained decreased or eliminated. Finally, cancer tumours were found in left breast and armpit. She is not willing to take surgery, which was recommended by her doctor.

Measure: Hair nutrient analysis was taken and indicated stress, as Na (178 mg/100 g of hair, normal 4-36) and K (70 mg/100 g of hair, normal 2-24) both were extremely high. Mercury was present.

Supplements (attempts to increase immune defence and balance body): One can of asparagus per day (between meals, especially anti-oxidants), 5-8 Proteazym between meals (inflammation, detox, digestion), 3 teaspoons ultra-potent C, 2 teaspoons of limestone, 2 Vitamin E+, Mighty Greens (powder of vegetables, mostly green vegetables and herbs, antioxidants, immune defence, circulatory system, energy), 5 table spoons of ultra-clear (stomach and intestines, etox), 6 table spoons Flax seed oil, 2 Alpha antioxidants.

Results: After three months the tumour that we had studied had decreased to a stable smaller diameter and was more distinct. Normal stools. She then accepted surgery and subsequent radiation. She recovered surprisingly quickly after the surgery (comment by doctor). Four years later, hair Na and K had decreased to normal levels; Na to 66 mg/100 g of hair and K to 26 mg/100 g of hair, indicating that her body was not in stress any more.

Memories and mental health: Eight years after treatment had started; she remained silent for an extremely long while when she

visited the reception. She looked out through the window without focusing on anything. After more than ten minutes she started to talk in short and broken sentences. In summary, she said:

- In the 1970's I jumped down on the railway in the subway just in front of a train. Unfortunately, I landed between the wheels, so I wasn't even able to take my own life.
- I was thrown out of the apartment that I shared with my aunt when she was in hospital. I had no one to turn to and no home.
- I was dis-regarded in the testimony of my aunt. Relatives excluded me from her will. Even though she had been like a mother, father, sister and brother for me after my parents divorced.
- I was told that my father did not want me. He just did "the thing" for his own sake, and by mistake I was born nine months afterwards.
- I was a photographer at a hospital. The pictures I took should have been taken with a Hasselblad camera, but I wasn't allowed one. The thesis the doctor wrote was perfect, except for my pictures.

After about an hour and a half she was back in reality again. She was still very sad, but felt a certain kind of relief. She had never before told anybody about her sadness, her feeling of being non-worthy or occasions when she felt unfairly treated. She had even to herself denied the memories through all the years. We talked about the memories a couple of times afterwards, and she pointed out that she had been mentally more stable ever after. After this occasion she took only one medication for her mental health. No more tumours were found for the rest of her life, 7 years after the surgery. Unfortunately, at periods her diabetes did not decrease to normal levels with only supplements after the cancer and she had to take medication, especially when she had been less careful about her diet. However, periodically supplements were enough for stable low diabetes. Other symptoms remained decreased or eliminated all through her last years in life. She was not admitted to a mental hospital more than twice during her ten last years in life when she was treated at MNV, and only for a couple of days at those occasions. The woman died due to old age at 90 years. Treatment ended a year before.

Case study 2

Woman, 55 years old.

Background, underlying health issues: Whiplash injury when hit from behind by another car. Burnout syndrome after destructive relation and hard work. Mercury from amalgam detected in her body. All mercury fillings eliminated.

Symptoms at 1st visit to MNV: Sensitive to Electro-Magnetic Fields and chemicals. Pain in eyes, ears and head when exposed to mobile phones, TV, spotlights, LED lamps. LED lamps on oncoming cars disturb when driving in darkness.

Measures: Hair sent for nutrient analysis. pH in urine 6.2, and even lower when tested some days afterwards. Advised to decrease sugar and wine, and start to eat more vegetables, especially green leaves and other green vegetables.

Goal: Be able to look at TV, work on computer, visit stores and other crowded places.

Supplements: 1 tablespoon Mighty Greens, 2 Pyridox+ (hormones, muscles and joints, stress; daily: 3 mg B₁, 202 mg B₆, 2 mg Mn), 1 Digestzym (pancreatin, lipase), Ca (500 mg), Mg (200 mg) and 2

Vitamin E+ (antioxidants, heart; Se and Vit E, Table 3).

Aim with treatment: Anti-oxidation, decrease stress, support to nervous system.

Results after 2 months: Decreased sensitive to light and electro-magnetic fields. Hair nutrient analysis showed extremely high Na (103 mg/100 g, normal 4-36) and K (58 mg/100 g, normal 2-24), indication body at stress. Sn was elevated (0.13 mg/100 g (normal 0-0.03), P extremely low (8 mg/100 g, normal 11-20) as well as Se (0.01, normal 0.03-0.16). Hg was present. The results partly mirrored her situation before treatment started, since one cuts 3 cm, approximately the growth for three months. Thus, it rather confirmed her situation before treatment at MNV.

New supplements: 8 tablespoons UltraInflamex (inflammation, detox, intestines), one can of mixed asparagus (between meals, anti-oxidants), 2 Minplex B (blood sugar balance, stress, Table 5), 1 carotene (eyes), and Mighty Greens.

Results after 6 months: Decreased Sensitivity to Electro-Magnetic Fields and radiation; sunlight, mobile phones and driving her car in darkness less irritating, but occasionally symptoms returned. Public spotlights outside window still very irritating to her eyes. No more problems with her landline.

Treatment continued. Supplements mainly as above.

Results after 1 year: Almost no problems with mobile phone, sunlight, driving in the dark, LED lamps, but the public spotlights outside her window still cause her symptoms.

Supplements: Mighty Greens, 2 Adrecomp (energy, stress-nutrients for support of the adrenal glands; Vit a, C, B₁, B₅, B₆, P, K, Zn, Betaine), 2 Gingko Biloga (circulation), 1 carotene, Vitamin E+ (Table 3), Metagest (digestion; betaine, HCl). pH occasionally decreased to 5, which could be explained by less carefulness about what she ate and drank. At such occasions eye started aching again when she was exposed to electro-magnetic fields or sunshine. Hair nutrient analysis indicated high Na and K once more and hips were aching, which could be explained by leaching Ca and Mg from bone tissues due to low pH in her body as confirmed by low pH in urine.

Supplements: 1-2 teaspoon limestone (Ca, Mg, retain pH in urine at 7), 2 ZMC+, 2 Minplex B, 2 Vit E+, 1 Carotene.

After 5 years of treatment: Almost completely healed from Sensitivity to Electro-Magnetic Fields and chemicals, but supplements are still needed, varying from time-to-time reflecting present symptoms. 1 Metagest, 2 Bcomplex (stress, hair, antioxidants; daily: 500 mg Vitamin C, 100 mg B₁, 100 mg B₂, 100 mg B₃, 100 mg B₆, 400 µg Folic acid), Antioxidants, 1 Vitamin E+, 1-2 teaspoon of limestone and 1 Mg+ are taken at present. Uranium was elevated in two hair analyses in 2016 (highest 0.3915 mg/100 g, normal <0.017), due to elevated levels in her drinking water, 15 µg/Litre. The Uranium was almost completely eliminated two years later. Supplements were chosen through the years to eliminate or decrease sensitivity to electro-magnetic fields and with reference to present hair nutrient analysis.

Case study 2, her own story: In 2015 I experienced extreme sensitivity to stress. My eyes were aching when watching TV etc., as written above. I also experienced dropping blood pressure at occasions. In the end I had to take sick leave. I was totally isolated for half a year and was forced to set up thick curtains in my windows to avoid all kinds of light. I used only candles in the darkness. Finally, it turned out that there was moisture under the floor in my

house, in the panty bottom, probably mold.

At that point I was presented to MNV. Hair nutrient analysis was performed, with subsequent supplements and I was also given food advice. Slowly symptoms decreased during the first year of treatment. At present, I am almost free from the sensitivity to light and electro-magnetic fields, but I still watch TV from a distance of 5-6 meters in order to avoid problems. When I am too close to wire-less networks, tingling occurs in the body and I feel restless.

However, most of the time I have a fundamentally normal life now, which I doubt would have been possible without the treatment at MNV.

Case study 3

Young man, 16 years old.

Symptoms: Disturbing mucus in throat, has to cough all the time. Headache and brown mucus comes up. Problems with recurrent sinusitis. One in the national team of his sport, which makes it important for him to be free from disturbing mucus in his throat and aching head. Occasionally acid reflux. Jaw locks.

Supplements (daily): 3 Ultra-flora max (lactic acid bacteria, blackberries and Vit D), 2 teaspoons Zink solution, Echinacea purpurea (aimed to prevent and relieve cold) and 3 ultra-potent C (approx. 1000 mg Vit C).

Results after two weeks: Throat a little bit more clean, feels a bit better on the whole. Two weeks later no improvement, even worse certain days.

Measures: Iris-diagnosis showed disturbed kidneys.

Supplements: 3 Ultra flora max till they run out, Zn as before, 1 teaspoon ultra-potent C, 2-3 Minplex B (for jaw locks, see Table 3), 2 B₁₂ (daily: 800 µg folic acid, 2000 µg B₁₂) and in addition, 4 Solidago KliniPLEX (diuretic; Solidago and nettle).

Results: Less tired, sinuses clean, decreasing jaw locks, recovered from cold, no problems with troubling mucus in throat. Has been able to run 1 km with only minor throat problems.

After this visit to the MNV reception he did not further contact the company. Thus, after about two months his mother was contacted by MNV. She then stated that the national team doctor did not further allow him to take the supplements, but he had taken them all until there were no more left. On the question whether he was still without problems with mucus in the throat her answer was: No, the problems came back soon after supplements had run out.

Case study 4

Young man, 19 years old.

Symptoms: Diarrhoea since more than one year, diagnosed with Crohns disease (inflamed gastrointestinal tract), irritated duodenum, emaciated and constantly tired. Takes medications, but they do not eliminate or decrease the symptoms. Scared of eating, wants almost only sandwiches, wheat buns, Corn Flakes, and daily one cooked meal. Fistula close to rectum on sick leave.

Goal: "Beach 2004", meaning that he wanted a muscular and masculine body for the beach the following summer.

Measures: Iris diagnosis indicated disturbed intestines, which confirmed his symptoms.

Supplements (daily): 2 × 8 table spoons Ultra Clear Sustain

(stomach and intestines, detox), 3 table spoons of Aloe Vera juice, 3 MaxBifidus (*Lactobacilli* and *Bifido* bacteria). Advised to eat more vegetables (boiled), chickpeas, oatmeal porridge with flax seeds, and avoid flour. Within a week he was in hospital again due to an infection close to the fistula, but recovered within two days, and was sent home again.

Results after two weeks: Less mucus in his underpants, even though he had only taken the recommended Ultra Clear Sustain. Patient surprised over results only after 2 weeks.

Supplements: Takes all supplements as recommended at the first visit to MNV.

Results after one month: Visits the toilet once a day, stools firm. Works fulltime still some mucus occasionally in his underpants. Has gained weight substantially. Stools only occasionally loose and slimy.

Supplements: Continues to take all supplements from before and adds 3 serving sizes fish oil.

Results: Still feeling well. Firm stools every morning. Improved sense of smell, as a unforeseen effect of treatment. Working full time and eats cooked fish and fried chicken, in addition to vegetables etc. Oat milk is good for him. Continues to visit the doctor at the hospital. After gastroscopy diarrhoea and ache before and after visit to toilet for some days. Lost weight again, 3 kg. Stops taking all medication, except for anti-biotics. Since elevated Fe in drinking water can be irritating to the gastro-intestinal tract, Fe in his present drinking water was analyzed. However, Fe in his well water was not elevated.

Supplements: As before, but Flax seed Oil instead of fish oil, and adds Euphorbia (for Candidiasis).

Results after 5 months: Still feeling well. No negative reaction when he forgot to take Aloe Vera juice. Still does not eat red meat. Fistula causes no problems any more. Iris diagnosis indicates weaker disturbances in intestines. Normal stools 2-3 times per day. Weight is stable.

Some weeks later, the young man starts taking soy-protein powder from the Gym, which is cheaper and in his opinion seems to be the same. To begin with he takes it in addition to Ultra Clear Sustain, but later instead of Ultra Clear Sustain. Periodically he takes probiotics, flax seed oil and Aloe Vera, but more and more seldom.

After 8-9 months of treatment, he doesn't further take any supplements from MNV.

Results after 1 year: Diarrhoea caused him to go to hospital late an evening *via* mobile call from his mother some days later, it was stated that they did not want to disturb MNV late an evening, which from MNV's point of view definitely could have been done. Different measures at the hospital did not help. Finally, ostomy surgery was performed.

Some months later his mother called and confirmed that the well water her son had used as his drinking water at the time of the debut of his diarrhoea had elevated Fe, several mg/L, >>1 mg/L, which is proven to cause intestinal problems to sensitive individuals.

DISCUSSION

Case studies

Decades ago, research literature supported that trace element

content of hair and nails reflect intake [20]. Hair nutrient analysis was performed in two of the reported case studies, in order to confirm imbalances and to expand knowledge about the patient and get more suggestions for supplements.

Metabolic acidosis is a problem of today, due to eating habits that causes acids to be formed in the body. Especially wine, coffee, and food prepared of wheat and sugar form acids when they are broken down in the gastrointestinal tract. The eating habits of case study 1 included a lot of bread and cookies, which explains the low initial pH in her urine. Consumption of wine by case study 2 was suspected to cause decreased pH in urine to occasionally 5. In a study by Anton et al. subjects with metabolic acidosis were treated with Reserveage Wholeganic Greens, containing alkalizing organic whole food vegetables, fibers, algae, and fermented cereal grasses [21]. Already on day 7, participants' mean urinary pH levels were significantly higher than at the beginning of the treatment period. Case study 1 and 2 both were treated with limestone, which is alkalizing, as well as with Greens. Greens are a combination of vegetables and herbs similar to the supplements used by Anton et al. [21]. Cancer in connection with pH has been discussed, and it was long ago shown that the intracellular compartment of cancer cells was alkaline, despite low extracellular pH [22]. The supplementation with alkalizing dolomitic limestone and Greens maybe helped decreasing the tumours of case study 1, since it might have disturbed the H⁺ distribution inside vs. outside the cancer cells [23]. In accordance with Stough et al., mentioned in the Introduction, both case study 1 and 2 were also helped by high dose vit B complex [15].

Type 2 diabetes is frequently associated with both extracellular and intracellular Magnesium (Mg) deficits [24]. Thus, diabetes in case study 1 was decreased after Mg treatment. In addition, as blood Manganese (Mn) levels were significantly lower in the diabetes group compared with the reference group (1.26 ± 0.02 vs. 1.35 ± 0.01 µg/dL; $p=0.001$) [25], Mn was successfully supplemented to case study 1. Even though diabetes was not diagnosed in case study 2, it appears that aid to the carbohydrate metabolism with certain supplements has improved her wellbeing. Supplementation with the B vitamins thiamin, pyridoxine and biotin has shown some improvement of the metabolic control in diabetic patients [26]. Since both case study 1 and 2 took long-term Vit B complex it most probably had a good effect on their carbohydrate and fat metabolism.

pH around 7 is desired in saliva, urine and body, and limestone is an effective supplement for restoring pH at 7 from lower pH, and prevent further release of mercury from dental fillings. Se is a component of glutathione peroxidase, an anti-oxidative enzyme. Hg is known to have an inhibitory effect on the activity of glutathione peroxidase [27]. This explains part of the damaging effect of Hg, particularly in liver and nervous tissue. This also explains the positive effect of supplementing Se to subjects while and after elimination of their amalgam fillings, as was seen in case study 1, and partly in case study 2. In addition, Høl et al. conclude from their study that it is indicated that persons with bad health self-related to dental amalgam might have a Se metabolism different from that of healthy people [28]. Case study 1 was administered Vit E and Se, which is in accordance [19]. Case study 2 had experienced problems with her amalgam fillings earlier and surely was helped to a better health with the Vit E and Se tablet she was given and still takes; Vit E+.

Nutrients of interest for the eye are vitamins C and E, β-carotene,

zinc, lutein, zeaxanthin, and the omega-3 fatty acids [29]. Both case study 1 and 2 were sensitive to sunlight, causing problems in their eyes, as well as to electro-magnetic fields, and they both took most of these supplements; Vit C and E, β-carotene, Zn, and omega 3 fatty acids. Electro-magnetic Hypersensitivity (EHS) is characterized by both acute and chronic inflammatory processes located mainly in the skin and nervous systems, as well as in respiratory, cardiovascular systems, and musculoskeletal system [30]. In accordance, anti-inflammatory supplements were used successfully in both subjects. Multiple Chemical Sensitivity (MCS), which is common among subjects sensitive to electro-magnetic fields was also experienced by case study 2, in accordance with Stein et al., and since impaired detoxification systems causing oxidative stress appears to be one underlying factor, anti-oxidants were important for case study 1 and 2 as health improving measures [10].

In addition to nutrient deficiency, decreased gastrointestinal secretory functions may be an additional and underestimated consequence of mal-absorption of nutrients [31]. Case studies 1 and 2 were given digestion enzymes or Betain-HCl to increase digestion of food and make it possible for the intestines to properly absorb nutrients. However, case study 3, the male with diarrhoea, recovered without supplementation of enzymes.

Case study 3 experienced problems with mucus in his throat, which was a problem when he was mountain biking. Through iris diagnosis it was stated that the kidneys needed some support. Iris diagnosis is seldom mentioned in science. However, Piesse states: "Iris diagnosis offers a useful and quick screening method that may alert the physician to underlying problems as an aid to the holistic physician in nutritional counseling" [32]. After a short period with treatment with lactic acid bacteria, Zn, Vit C, Vit B complex with Mg, and especially Solidago and nettle, which were aimed for the kidneys, there were no problems with mucus in his throat any more. In accordance to the treatment with Zn to support the kidneys, Fukushima states that patients with Chronic Kidney Disease (CKD) are Zn deficient and that supplementing Zn offers a good treatment [33]. Disturbed intestines in case study 4 were also noted through iris diagnosis. However, the problems were obvious, why iris diagnosis was not needed in this case. Treatment with especially Ultra Clear Sustain, specifically composed for stomach and intestinal health, as well as detox, but also Aloe Vera juice, and *Lactobacilli* and *Bifido* bacteria in combination all had a very positive effect on his intestines and the diarrhea was gone for a long time. However, the treatment probably should have continued for a longer time, since severe diarrhea recurred some months after treatment ended and ostomy surgery was performed. Protein powders from the gym could not replace especially ultra-clear, Aloe Vera and bacteria. Seung Wook Hong concluded that patients with intestinal disturbances, Irritable Bowel Syndrome (IBS) that were treated with Aloe Vera had significant improvements in IBS symptoms compared to placebo, indicating the usefulness of Aloe Vera in intestinal disturbances [34]. However, another study failed to find Aloe Vera superior to placebo in improving quality of life proven IBS patients [35].

Case study 1 consumed one can of asparagus for many months, since asparagus has been discussed in connection with cancer. Thus, Khan et al. suggests that asparagus adscendens could be exploited as a potential source of cytotoxic compounds with putative anticancer potential [36]. Whether asparagus did decrease her tumours or not, is hard to say, but it certainly has good effect on the body, as it protects liver cells against toxic insults [37]. Did

the treatment help the body to attach the tumor like chemotherapy does?

Iron in drinking water is harmful for sensitive humans and animals, and may cause different intestinal disturbances, especially diarrhea, but also e.g. constipation. Thus, Rosborg states that levels in drinking water, >1 mg/L, are a health risk both to humans, cattle and horses [38]. A farmer had been convicted in court for causing the death of hundreds of cows and calves during a period of almost 30 years. However, an extended water analysis stated that the well water was excellent, except for elevated Fe, 1.3 mg/L. When the farmer shifted to a well with low Fe, advice from MNV, the problems subsided. The intestinal problems for case study 4 started when his drinking water had elevated Fe concentration, >>1 mg/L. This was also the case for the 49-year-old man in case study 3 in Rosborg [39].

There was no cataract in case study 1 after treatment with multi[1] [1]vitamin and mineral supplements. In accordance, Mares-Perlman found that there was a lower risk for cataract among users of multi[1][1]vitamin supplements and stronger associations with long-term use [40]. Rosborg reported that case study 2 in that article had been healed from cataract with supplements in accordance with given supplements to case study 1 in this article.

CONCLUSIONS

- People sensitive to electromagnetic fields and to chemicals can be healed with specific nutrients.
- Iris diagnosis is a helpful tool for finding what part of the body is the origin of symptom.
- Intestines damaged by elevated iron in drinking water can be healed when treated with supplements.
- The body pH, as indicated by measuring the pH in urine, is important to maintain at neutral level, pH 7, in order to stay at good health, and when restored at pH 7 symptoms can disappear.
- Vitamin B complexes are needed for especially the nervous system.
- Cooperation between school medicine and complementary medicine is desired.

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