Description of Nutrient Point Therapy for ONDAMED:

Karin van Huelsen, ND

Program 79 – Vitamin K / see Programm 79 – Lungs/Respiration

Location: This point is located one hand's breadth underneath the left axilla. Description: Vitamin K is a fat-soluble vitamin. Its absorption is dependent on normal pancreatic function and presence of bile salts. There are two natural forms of vitamin K, such as phylloquinone (K I) from vegetable and animal sources and menaquinone (K II) synthesized by bacterial flora and found in hepatic tissue. K I is absorbed by a saturable energy-dependent mechanism in the proximal small intestine, whereas K II is absorbed by passive diffusion in the small intestine and colon. Menaquinone intake was associated with decreased incidence of advanced prostate cancer.

Imbalances affect the blood, cartilage and bone.

Food sources: Green leafy vegetables (kale and spinach), butter, margarine, liver milk, ground beef, coffee, pears, vegetable oil and olive oil.

Program 83.1 – Fat Metabolism

Location: This point is located at the utmost to the right of the costal arch.

Description: Fats are a concentrated source of energy. This treatment is designed to support

the gallbladder.

Food support: Avocado

Program 83.2 – Carbohydrate Metabolism

Location: This point is located at the utmost to the left of the costal arch. Description: Carbohydrates in the diet are present in the form of starch, disaccharides and

glucose. They are absorbed only in the small intestine and only in the form of monosaccharides. Therefore, before absorption, they must first be digested by pancreatic

amylase and intestinal brush border.

Lactose malabsorption is the only clinically important disorder of carbohydrate absorption. Food sources: The most important carbohydrate in animal food is glycogen; the most important carbohydrate in plants is starch.

Program 83.3 – Protein Metabolism

Location: This point is located underneath the sternum below the xiphoid Description: Protein is present in food almost exclusively as polypeptides and requires extensive hydrolysis to di- and tripeptides and amino acids before absorption. Proteolysis occurs in both the stomach and small intestine. Protein is essential to build cells, hormones, muscle- and connective tissue.

Food sources: animal proteins, legumes, cereals, roots.

Program 83.4 – Pancreas Metabolism

Location: This point is located two finger's breadth above the navel.

Description: This treatment is designed to support the pancreas and to balance the pancreatic juice.

Food support: Peanut oil, L-tryptophan

Program 96.1 – Protein

Location: This point is located at the beginning of hair growth at the glabella in the middle of the hair line.

Description: Dietary protein consists of both essential and nonessential amino acids that are required for protein synthesis, whereas certain amino acids can also be used for energy and gluconeogenesis.

Imbalances are found in bone -, ligament and connective tissue, particularly during growth. Food sources: animal proteins, legumes, cereals, roots.

Program 96.2 – Vitamin C (Ascorbic acid)

Location: This point is located underneath and in the middle of the left clavicle.

Description: Vitamin C participates in oxidation-reduction reactions and hydrogen ion transfer reactions. As an antioxidant it also acts to regenerate other antioxidants such as vitamin E, flavonoids and glutathione.

Imbalances are found in weakened immune systems, scurvy, fatigue, depression, impaired bone growth and cancer.

Food sources: Citrus fruits, green vegetables (especially broccoli), tomatoes and potatoes.

Program 96.3 – Vitamin D

Location: This point is located one hand's breadth underneath the copper point. The copper point is located to the left, in the middle between the navel and the hunch bone. Description: Vitamin D is a group of fat-soluble prohormones with the two major forms D2 and D3. Vitamin D3 is produced in skin exposed to sunlight, specifically ultraviolet B radiation. It plays an important role in the maintenance of organ systems. Imbalances result in impaired bone mineralization and cancer, especially colon cancer. Food sources: fortified food, such as dairy, margarine, oil spreads, breakfast cereal, pastries and bread. Natural sources: Fatty fish, such as salmon, catfish, herring, mackerel, sardines, eel, tuna. Fish liver oils. Mushrooms and eggs.

Program 96.4 – Vitamin E (Tocopherol)

Location: This point is located underneath and in the middle of the right clavicle.

Description: Vitamin E acts as a chain-breaking antioxidant and is an efficient pyroxyl radical scavenger, which protects LDLs and polyunsaturated fats in membranes from oxidation. It is a fat-soluble vitamin.

Imbalances are found in arteriosclerosis, coronary heart disease, cancer, catabolism in muscleand nerve cells and sterility.

Food sources: Egg yolk, corn oil, soybeans, sunflower oil, safflower oil, wheat germ oil, meat, nuts, cereal grain and vegetable leaves.

Program 96.5 – Phosphorus

Location: This point is located two finger's breadth underneath the navel.

Description: Phosphorus is a major component of bone and of all other tissues and in some form is involved in almost all metabolic processes.

Imbalances result in the nervous system, bones, acid-alkaline balance, and blood

Food sources: Dairy, meat, eggs, carbonated beverages.

Program 96.6 – Iron

Location: This point is located one hand's breadth underneath the zinc point. The zinc point is located to the right, in the middle between the navel and the hunch bone.

Description: Iron is a critical element in the function of all cells and iron-containing enzymes. The major role of iron is to carry O2.

Imbalances also interact with Vitamin C. Most common are anaemia.

Food sources: Meat, poultry, fish, legumes, leaf vegetable, tofu, chickpeas, potatoes, wholegrain flour, molasses, teff and farina.

Program 96.7 – Iodine

Location: This point is located between both clavicles in the jugulum.

Description: Iodine is clearly essential. Iodide uptake is a critical first step in thyroid hormone synthesis.

Imbalances are found in goiter, hypothyroidism, cretinism and mental deficiency.

Food sources: Eggs, milk, seafood.

Program 96.8 – Vitamin B 13 (Orotic acid)

Location: This point is located four finger's breadth underneath the iodine point. The iodine point is located in the jugulum.

Description: Historically orotic acid was believed to be part of the vitamin B complex and was called vitamin B 13, but it is now known that it is not a vitamin. The compound is manufactured in the body by intestinal flora.

Imbalances may relate to concentration and loss of memory.

Food sources: Whey, milk and yeast.

Program 115.1 – Lead

Location: This point is located on the symphysis.

Description: Lead is a potent neurotoxin that accumulates in soft tissues and bone over time. It is a poisonous metal that can damage nervous connections and cause blood and brain disorders. Long term exposure can cause nephropathy and colic like abdominal pains. It has been linked to schizophrenia.

Imbalances might be caused by environmental factors.

Program 115.2 Ammonia

Location: This point is located between the lower lip and the chin.

Description: Ammonia is normally encountered as a gas with a characteristic pungent odour. It contributes significantly to the nutritional needs of terrestrial organisms by serving as a precursor to foodstuffs and fertilizers. It either directly or indirectly also is a building block for the synthesis of many pharmaceuticals. Ammonia is both caustic and hazardous. The toxicity of ammonia solutions does not usually cause problems for humans; however fish and amphibians lack the mechanism to convert ammonia by enzyme. Even dilute concentrations are highly toxic to aquatic animals and for this reason it is classified as dangerous for the environment. Solutions of ammonia are used as household cleaners. They should never be mixed with chlorine-containing products, as toxic and carcinogenic compounds are formed.

Program 115.3 - Thallium

Location: This point is located right to C7 (cervical vertebra).

Description: Thallium is highly toxic and is used in rat poisons and insecticides. It is suspected to be a human carcinogen. When present in aqueous solution, it exhibits some similarities with essential alkali metal action, particularly potassium. It can thus enter the body via potassium uptake pathways. Among distinctive effects of thallium poisoning are loss of hair and affects the peripheral nerves.

Program 115.4 – Vitamin B 1 (Thiamine)

Location: This point is located two finger's breadth to the right in the middle of the hair line. Description: Vitamin B1 is required for branched-chain amino acid metabolism and carbohydrate metabolism and energy generation.

Imbalances are found with regularly alcohol use, heart arrhythmia, dyspnoea, neuritis, neuropathy of the motor and sensory system, pain and parathesia.

Food sources: yeast, pork, legumes, beef, whole grains, milk, nuts and green vegetable.

Program 115.5 – Coenzyme Q10 (Ubiquinone)

Location: This point is located underneath the xiphoid. (same area as protein metabolism point)

Description: Coenzyme Q10 is essentially a vitamin or vitamin-like substance. Coenzymes are cofactors upon which the comparatively large and complex enzymes absolutely depend for their function. It is present in all body cells and is the coenzyme for at least three mitochondrial enzymes. A major function is to act as the catalyst in the production of energy at the cellular level. Coenzyme Q10 has been shown to be valuable in treating congestive heart failure, cardiomyopathy and high blood pressure. It has been studied in its reduced form as a potent antioxidant.

Food sources: Primarily found in fish and meat.

Program 115.6 – HCL (Hydrochloric acid)

Location: This point is located on the left side of the xiphoid.

Description: Hydrochloric acid is needed to digest protein in the stomach.

Imbalances can cause gastric problems.

Program 115.7 – Biotin (Vitamin H or B7)

Location: This point is located at the right groin.

Description: Biotin is a water-soluble B-complex vitamin. It is a cofactor in the metabolism of fatty acids and leucine and in gluconeogenesis. It is necessary for cell growth, the production of fatty acids and the metabolism of fats and amino acids. It plays a role in the citric acid cycle, assists in various metabolic reactions and helps to transfer carbon dioxide. It is also helpful in maintaining a steady blood sugar level. The intestinal bacteria generally produce an excess of the body's daily requirement.

Imbalances may affect the hair and nails.

Food sources: Royal jelly, brewer's yeast, milk, liver, egg yolk, vegetable and alfalfa.

Program 115.8 – RNA (Ribonucleic acid)

Location: This point is located between the eyebrows.

Description: Ribonucleic acid is made from a long chain of nucleotide units. Each nucleotide consists of a nitrogenous base, a ribose sugar and a phosphate.

Treating this point is based on the nucleotide metabolic function, which decomposes into uric acid.

Program 119 – Rhodium

Location: This point is located on the sternum next to the third rip and underneath the vitamin B13 point.

Description: Rhodium is a member of the platinum group and used in alloys with platinum as a catalyst. The primary use is for hardening platinum. These alloys are used in furnace windings, thermocouple elements, bushing for glass fiber, electrodes, pens and laboratory crucibles. It is also used as a filter in mammography systems. It is also possible to extract rhodium from used nuclear fuel and has a half-life of 207 days. It is not attacked by acids. Rhodium metal is, as a noble metal inert. However, when rhodium is chemically bound, it is reactive. Rhodium compounds should be considered toxic and carcinogenic. Its compounds stain the skin very strongly. Health effects of exposure have not been investigated.

Program 120 – Strontium

Location: This point is located ½ inch above the gold point and the next to the shoulder blade. The gold point is located two finger's breadth right to T4 (thoracical vertebra).

Description: Strontium is present in radioactive fallout and has a half-life of 28.90 years. Due to its extreme reactivity to air, this element occurs naturally only in compounds such as strontianite and celestide. The primary use for strontium compounds is in glass for colour television, car engines, diamond simulant, fireworks for red colour, pottery glazes, aerosol paint, toothpastes for sensitive teeth, radiopharmaceutical used for bone pain secondary to metastatic prostate cancer. Its half-life is ideal for superficial radiotherapy. The strontium acts like calcium and is preferentially incorporated into bone at sites of increased osteogenesis. An innovative drug made by combining strontium with ranelate acid has aided in bone growth, boosted bone density and lessening vertebral, peripheral and hip fractures. Several other salts of strontium such as strontium citrate or strontium carbonate are often presented as natural therapies. Strontium compounds have been used successfully since the 1950's to treat osteoporosis with no toxicity.

Program 129 – Tungsten (Wolframite) / see Program 129 - Birth Trauma

Location: This point is located at the coccyx.

Description: Wolframite was highly valued as the main source of the metal tungsten, a strong and dense material with military uses, such as munitions and armor piercing ammunition. Imbalances may affect the lung, skin, nervous system and arteries.

Program 130.2 – Vitamin B15 (Pangamic acid) / see Program 130 – Joy of Life

Location: This point is located on the left side, two finger's breadth right to the nipple. Description: Vitamin B15 is water-soluble but its essential requirement has not yet been proven. It is absorbed from the small intestine. It is needed for normal growth and brain activity, for formations of stress hormones and adrenal gland function, hair pigment and hair

growth. It brings a better supply of oxygen particularly to the cardiac and other muscles. It affects the cholesterol level and stimulates the endocrine and nervous system. Food sources: Brown rice, sesame seeds, pumpkin seeds and whole grains.

Program 142.1 – Sulphur

Location: This point is located in the middle of the line between the left shoulder and the xiphoid.

Description: Sulphur is an element needed to build cystine, cysteine and methionine. It has a close relation to vitamin B1, biotin, insulin and keratin.

Imbalances may result in hair -, nail – and skin diseases.

Program 142.2 – Methionine

Location: This point is located two finger's breadth above the xiphoid.

Description: Methionine is a sulphur-containing amino acid. It is important to build proteins. Imbalances might be caused by environmental factors.

Program 142.3 – Copper

Location: This point is located to the left, in the middle between the navel and the hunch bone.

Description: Copper is an integral part of numerous enzyme systems. As such, copper plays a role in iron metabolism, melanin synthesis and central nervous system function, the synthesis and cross-linking of elastin and collagen and the scavenging of superoxide radicals. Imbalances result in malabsorption, anaemia, infections, cancer, psychomotor abnormalities, depigmentation and mental retardation.

Food sources: Shellfish, liver, nuts, legumes, bran and organ meats. Milk has a poor source.

Program 142.4 – Bismuth

Location: This point is located at the second third from the middle sternal line of the right costal arch.

Description: Bismuth is the most naturally diamagnetic. Diamagnetism is weak repulsion from a magnetic field. Bismuth compounds are used in cosmetics and in medical procedures. It has become an increasing part as a replacement for lead.

Imbalances may also occur during chemotherapy. This point may be treated during chemotherapy.

Program 142.5 – Fluoride

Location: This point is located left to C7 (cervical vertebra).

Description: Fluoride is useful for the maintenance of structure in teeth and bone. Imbalances may result in mottled and pitted defects in tooth enamel as well as brittle bone. A few organofluorine compounds are extremely toxic and react with the cholinesterase enzyme at neuromuscular junctions and thus block the transmission of nerve impulse to the

muscles.

Food sources: Whole-grain products, fish, black tea, soybeans and nuts. In low concentration naturally found in drinking water.

Program 142.6 – Cadmium

Location: This point is located three finger's breadth left to the sacrum.

Description: Cadmium is known to cause cancer and occurs with zinc ores. It is used largely in batteries and pigments, for example in plastic products. It is accumulated by white headed mushrooms.

Imbalances might be caused by environmental factors.

Program 142.7 – Gold

Location: This point is located two finger's breadth right to T4 (thoracical vertebra) Description: Gold dissolves in mercury, forming amalgam alloys, but does not react with it. Soluble compounds such as gold cyanide, used in gold electroplating, are toxic to the liver and kidneys. Modern industrial uses include dentistry and electronics. Imbalances might be caused by environmental and dental factors.

Program 142.8 – Lecithin

Location: This point is located at the left frontal part of the shoulder

Description: Lecithin is any of a group of yellow-brownish fatty substances occurring in animal and plant tissues and in egg yolk. It is needed by every cell in the body and is a keybuilding block of cell membranes. It protects cells from oxidation and largely comprises the protective sheaths surrounding the brain. Although it is a fatty substance, it is also a fat emulsifier. It supports the circulatory system. Its choline is useful for making acetylcholine. It is produced daily by the liver if the diet is adequate. With **emphysema**, lecithin is used to

reduce the surface tension of fluids in the lungs, enabling easier elimination.

Food sources: Soy beans, egg yolk

Program 151.1 – Manganese

Location: This point is located to the left, inside the navel.

Description: Manganese is important to activate specific enzymes. It increases the vitamin B1 digestion.

Imbalances can result in bone demineralization, poor growth, ataxia, convulsions, pollen allergy and affects the endocrine – and nervous system.

Food support: Cardamom, Condurango

Program 151.2 – Zinc

Location: This point is located to the right, in the middle between the navel and the hunch bone.

Description: Zinc is an integral component of many metalloenzymes in the body. It is involved in the synthesis and stabilization of proteins, DNA and RNA. Zinc is necessary for the binding of steroid hormone receptors and absolutely required for normal spermatogenesis, fetal growth and embryonic development.

Imbalances influence the fat -, protein and carbohydrate digestion. It also affects the stomach, immune system, blood cells, kidney, diabetes, liver, thyroid, nervous system, skin and endocrine function.

Food sources: Meat, Shellfish, nuts, legumes, grains.

Program 151.3 – Acidophilus

Location: This point is located at the first third from the middle sternal line of the right costal arch.

Description: Lactobacillus acidophilus occurs naturally in the gastrointestinal tract, mouth and vagina. It assists in the production of niacin, folic acid and pyridoxine and also assists in bile deconjugation. Antibiotics will kill the beneficial bacteria.

Imbalances can result in gastrointestinal disorders, yeast infections and a weakened immune system.

Program 151.4 – Vitamin B12 (Cobalamin)

Location: This point is located at the first third from the middle sternal line of the left costal arch.

Description: Vitamin B12 is an essential cofactor for enzymes in human cells. Imbalances involve the blood, gastrointestinal tract and the nervous system.

Food sources: meat and dairy

Program 151.5 – Magnesium

Location: This point is located to the right, inside the navel

Description: Magnesium is the most abundant intracellular divalent cation. It is an essential cofactor for a multitude of enzymatic reactions that are important for the generation of energy from ATP. It is important for physiologic processes including neuromuscular function and maintenance of cardiovascular tone.

Imbalances may involve bones, tendons, teeth, blood, muscle – and nervous system. Food sources: Fish, green vegetable, legume, cocoa, potatoes, soybeans, grains and nuts.

Program 151.6 – Titanium

Location: This point is located underneath the left shoulder-blade.

Description: Titanium occurs within a number of mineral deposits, which are widely distributed in the Earth's crust and lithosphere. Its most common compound, titanium dioxide, is used in the manufacture of white pigments. Because it is biocompatible, titanium is used in a gamut of medical applications including surgical implements and implants. It has the inherent property to osseointegrate, enabling use in dental and orthopaedic implants, as well as wheelchairs, crutches and body piercing.

Program 151.7 – Silver

Location: This point is located two finger's breadth left to T4 (thoracical vertebra) Description: Silver occurs as a pure free metal and alloyed with gold, as well as in various minerals. Since ancient times it has long been valued as a precious metal, used to make ornaments, jewellery, tableware, utensils and coins. Today, silver is used in electrical contacts and conductors, in mirrors and in catalysis of chemical reactions. Its compounds are used in photographic films and dilute solutions of silver nitrate and other silver compounds are used as disinfectants. Although the antimicrobial uses of silver have largely been supplanted by the use of antibiotics, its antiseptic properties are still a useful tool in the prevention and treatment of sepsis and infections caused by antibiotic-resistant microorganisms such as MRSA. Silver ions and compounds show a toxic effect on some bacteria, viruses, algae and fungi. Now, silver-coated dressings are used in addition to silver sulfadiazine cream (SSD) and may present advantages such as pain reduction and capacity for treatment at home. In dentistry, silver dissolves in mercury to make amalgam.

Food sources: In India, foods, especially sweets can be found decorated with a thin layer of silver. Silver as a food additive is given the E number E174 and classified as food colouring.

Karin van Huelsen, ND Clinic Wolf-Dieter Kessler, MD Alter Postweg 5 26624 Victorbur Germany www.dr-kessler.com dr.wdg.kessler@t-online.de