

Name : _____ M/F Petitioner (stamp): _____
 Address : _____ Address : _____
 Zipcode : _____ Residence: _____ Zipcode : _____
 DOB : _____ Tel.: _____ Residence : _____
 E-mail address: _____

Medication/suppletion: _____ Date of collection: . .
 Stopped? When: . .
 Interpretation, clin. data: _____ Sober?
 Shipping date: . .
 24 h Volume: _____ ml

Hereby I order the ELN/H.D.R.I. to perform the marked tests. *Bill to:* patient doctor / therapist

In case the bill goes to the patient:

Creditcard Master / Euro Card Visa American Express

Nr. _____ Exp. date _____ CVC (see backside card) _____

Signature patient : _____ **Date :** _____

Panels#

- | | | |
|--|--|--|
| <input type="checkbox"/> Elements in blood I (1R,1G,1p) | <input type="checkbox"/> Elements in hair I (H) | <input type="checkbox"/> Methylation panel (include folic acid metabolites; 2P; !) |
| <input type="checkbox"/> Elements in blood II (1R,2G,1p) | <input type="checkbox"/> Elements in hair II (H) | <input type="checkbox"/> Sulphur metabolites (U) |
| <input type="checkbox"/> Elements in blood III (1R,2G,1p) | <input type="checkbox"/> Vitamin panel 8 (2R, 1P) | <input type="checkbox"/> Neurotransmitters (U) |
| <input type="checkbox"/> Elements in urine (24U (preference) or U) | <input type="checkbox"/> Vitamin panel 12 (2R,1P) | <input type="checkbox"/> Toxic-panel in blood (P) |
| | <input type="checkbox"/> Vitamin panel 16 (3R, 1P) | <input type="checkbox"/> Toxic-panel in urine (U of 24U) |

Elements in blood (G)

- Sodium
- Potassium
- Calcium
- Magnesium
- Copper
- Zinc
- Selenium
- Cobalt
- Chromium
- Manganese
- Molybdenum
- Nickel
- Lithium (amm. hep. tubel)
- Aluminium
- Arsenic
- Cadmium
- Mercury
- Lead

Elements in serum (R)

- Sodium
- Potassium
- Calcium
- Magnesium
- Copper
- Zinc
- Selenium
- Lithium
- Sulphur (SO₄-tot.)
- Sulphur (SO₄-free)
- Sulphite (SO₃)

Intracellular elements (R,G,P)

- Sodium
- Potassium
- Calcium
- Magnesium
- Copper
- Zinc
- Chromium
- Manganese
- Vanadium

Vitamins#

- Carotene-tot. (R)
- Vitamin A (R)
- Vitamin B1 (P)
- Vitamin B2 (P)
- Vitamin B3 (P)
- Vitamin B5 (P)
- Vitamin B6 (R)
- Biotin (B7) (P)
- Folic-acid (R)
- Vitamin B12 (R)
- Vitamin C (R; !)
- Vitamin D (25OH) (R)
- Vitamin E (R)
- Vitamin K1 (R)
- Folic-acid (erythrocyt) (P)

Co-factors (R)

- Carnitine (tot.-free- acyl / tot.)
- Coenzyme Q10
- Lipoic acid
- Inositol
- Choline (total)
- Biopterin
- Glutathione-tot. (!)
- Glutathione ox./red. (!)

Neurotransmitters

- Acetylcholine (P)
- Dopamine (P; !)
- Epinephrine (P; !)
- Metanephrine
- Norepinephrine (P; !)
- Normetanephrine
- Serotonin (P; !)
- Histamin (G)
- GABA (G)
- Tyramine

- Panel I #
- Panel II #
- Panel III #

Hematology (P)

- Hematology + diff. #
- HbA1c (1p extra)
- ESR (!)

Clinical Chemistry (R)

- Basic panel #
- Glucose
- Protein (total)
- Albumin
- Urea
- Uric-acid
- Creatinine
- Bilirubin (total + direct)
- Calcium
- Phosphate
- Chloride
- Alk. phosphatase (AF)
- Amylase
- γ-GT (GGT)
- ALAT (SGTP)
- ASAT (SGOT)
- LDH
- Creatine kinase (CK)
- Homocysteine
- α-1 antitrypsin
- CRP-HS

- Cholesterol-tot.
- HDL-cholest.
- LDL-cholest (+ HDL / tot.)
- Cholest. / HDL ratio
- Triglyceride
- Oxidized LDL
- Lipoprotein A
- Apo-lipoprotein A1
- Apo-lipoprotein B

- Iron
- Ferritin
- TYBC
- Transferrin
- Fe-satur. (+ TBVC / iron)

Endocrinology (R)

- Growthhormone
- Pregnenolone (sulfate)
- Aldosterone
- Cortisol _____ hour
- Cortisol (daycurve: 9 +16 h.)
- Transcortin
- Free Cortisol (+ cort. / transcort.)
- DHEA (-sulfate)
- Osteocalcin
- PTH
- Calcitonin
- Insulin
- C-peptide
- IGF-1
- IGF-BP3

- T3
- Free T3
- T4
- Free T4
- TSH
- Anti TPO
- Anti TG
- TSH receptor as (TSI)

- Prolactin
- FSH
- LH
- Progesterone
- 17β-Estradiol
- Estriol
- SHBG
- Testosterone
- Free testost. (+ test/ SHBG)
- Dihydrotestosterone
- Androstenediol (glucuronide)

Peptide hormones (K; !)

- α-MSH
- β-MSH
- γ-MSH
- β-Endorphin
- Oxytocin
- Vasopressin
- Angiotensin II
- ACTH (corticotropin)

Immunology (R)

- ANF
- anti-DNA
- ANA
- ENA
- ANCA
- AST (ASLO)
- Anti-CCP
- MBL
- HLA-B27 (P)
- Imm. compl. (C1q / C3)
- RA-33
- IL-6

Allergy (R)

- IgE (total)
- IgE/G₄ food panel
- IgE inhalent panel

MELISA (!)

- Metals (basic) #
- Metals (extended) #
- Borrelia (lyme)

Miscellaneous

- MDA#
- Amino-acids (G; !)
- Ess. Fatty acids (G)
- SAM/SAH# (P; !)
- Nitrotyrosine (P; !)
- NO (nitric oxide) (R)
- Nagalase (P; !)
- HIPPI-panel# (2R)
- Carotenoiden-panel# (R)
- Growth hormone (24U)
- Aldosterone (24U)
- Cortisol (24U)
- 17OH/keto Steroid.+ DHEA (24U)
- ♀-Hormones# (24U)
- GABA (U)
- 6-sulf. Melatonin (24U)
- T3 / T4 (24U)
- Reversed-T3 (24U)

(Load-) Tests

- DMPS test-Hg (K)
- DMPS test-Hg+Cd+Pb (K)
- Iodine-load (K)
- Mercury-saliva (S; K)
- Cortisol-curve # (S; K)
- Intest. permeability (!)
- HOMA# (glucose + insulin)
- Kryptopyrrole
- HPL (+ kryptopyrrole)
- Albumin
- Creatinine
- Albumin / Creatinine ratio

P.T.O.:
more tests +
: explanation

Explanation codes :	<u>Enzymes</u>	<u>Tumormarkers (R)</u>	<u>Serology (R)</u>	<u>Faeces</u>	<u>Saliva</u>
G = Heparin tube, 8 ml	<input type="checkbox"/> Catalase	(G) <input type="checkbox"/> α-fetoprotein	<input type="checkbox"/> IgG	<input type="checkbox"/> Culture (basic) #	<input type="checkbox"/> ♀-Hormones# (S; K)
p = EDTA tube 4 ml	<input type="checkbox"/> EGOT	(P) <input type="checkbox"/> CA 125	<input type="checkbox"/> IgA	<input type="checkbox"/> + parasitology	Pre-menopause (28 days)
P = EDTA tube 8 ml	<input type="checkbox"/> ETKA	(P) <input type="checkbox"/> CA 15.3	<input type="checkbox"/> IgM	<input type="checkbox"/> + virulence factors	<input type="checkbox"/> ♀-Hormones# (S; K)
R = Cloth tube 8 ml	<input type="checkbox"/> ESOD	(G) <input type="checkbox"/> CA 19.9	<input type="checkbox"/> Borrelia IgG,M	<input type="checkbox"/> + secretory IgA	Post-menopause (1 day)
S = Saliva	<input type="checkbox"/> EGR	(P) <input type="checkbox"/> CEA	<input type="checkbox"/> EBV Nucl. Ag (IgG)	<input type="checkbox"/> + pancreatic-elastase	<input type="checkbox"/> ♂-Hormones# (S; K)
H = Hair	<input type="checkbox"/> EGPx	(P) <input type="checkbox"/> PSA	<input type="checkbox"/> EBV IgG,M	<input type="checkbox"/> + calprotectin	<input type="checkbox"/>
U = Morning urine	<input type="checkbox"/> MAO	(G) <input type="checkbox"/> Free PSA	<input type="checkbox"/> Herpes sim. IgG,M	<input type="checkbox"/> + α-1 antitrypsin	<input type="checkbox"/>
24U = 24-hours urine		<input type="checkbox"/> Recoverin A (!)	<input type="checkbox"/> Toxoplasma IgG,M	<input type="checkbox"/> + β-defensin 2	<input type="checkbox"/>
K = Testkit			<input type="checkbox"/> Gliadin IgA	<input type="checkbox"/> + M2PK	<input type="checkbox"/>
! = Ask for the special instructions			<input type="checkbox"/> Gliadin IgG	<input type="checkbox"/> + <i>Helicobacter pylori</i>	
			<input type="checkbox"/> Hep. A IgG,M	<input type="checkbox"/> TFT (Triple Faeces Test)	
			<input type="checkbox"/> Hep. Bs-Ag / Core		
			<input type="checkbox"/> Hep. C antibodies		
			<input type="checkbox"/> Anti-transglutaminase IgA,G		

: explanation see below

Explanation:

Elements in Blood I: Sodium, potassium, calcium, magnesium, copper and zinc in whole blood and serum. Selenium in whole blood. Sodium, potassium magnesium, copper and zinc intracellular. Zinc / copper ratio intracellular. Hematology.

Elements in Blood II: Panel elements in blood I + chromium, manganese, molybdenum, vanadium, nickel, cobalt and lead in whole blood. Selenium in serum. Calcium and selenium intracellular.

Elements in Blood III: Panel elements in blood II + mercury, cadmium, arsenic and aluminium in whole blood. Lithium in serum.

Elements in Urine: Sodium, potassium, calcium, magnesium, iron, copper, zinc, selenium.

Elements in Hair I: Calcium, magnesium, copper, zinc, selenium, chromium, manganese, cadmium, lead, mercury.

Elements in Hair II: Sodium, calcium, magnesium, iron, copper, zinc, selenium, chromium, manganese, nickel, aluminium, vanadium, silver, cadmium, lead, mercury, silicium, sulphur, phosphorus.

Vitamin panel 8: carotene (pro-vitamin A), vitamin **A** (retinol), vitamin **B₃** (niacin, nicotinamide, nicotinic acid), vitamin **B₆** (pyridoxal-5-phosphate), vitamin **B₁₁** (folic acid / vitamin B₉), vitamin **B₁₂** (cobalamin), vitamin **C** (ascorbic acid), vitamin **E** (tocopherol).

Vitamin panel 12: panel 8 + vitamin **B₁** (thiamine-pyrophosphate), vitamin **B₂** (riboflavin), vitamin **B₅** (pantothenic acid), vitamin **B₇** (biotin / vitamin B₈).

Vitamin panel 16: panel 12 + vitamin **D₃** (25-hydroxy-vitamin D₃, 25-hydroxy-cholecalciferol) vitamin **K₁** (phylloquinone, phytonadione), **CoQ10**, Carnitine.

Folic acid metabolites ("methylation pathway"): Folic acid (plasma), folinic acid (plasma), tetrahydrofolic acid (THF, plasma), 5-methyl-tetrahydro-folic acid (5-methyl-THF, plasma), 5-formyl-tetrahydrofolic acid (5-formyl-THF, plasma), 10-formyl-tetrahydrofolic acid (10-formyl-THF, plasma), methyl-cobalamin (methyl-vitamin B₁₂, plasma), folic acid (erythrocyte), S-adenosylmethionine (SAM, erythrocyte), S-adenosylhomocysteine (SAH, erythrocyte).

Sulphur metaboliten in Urine: Sulphur-total, sulphate-free, sulphite, thiosulphate, thiocyanate.

Toxic-panel in Blood (plasma): Pentane, hexane, perchloorethylene, isopropyl-acetone, benzene, methylbenzene (toluene), xylene, methyl-β-naftalene, polychlorobifenyls (PCB's), difluorbenzamide.

Toxic-panel in Urine: 2,5-Hexaandione (hexane-metabolites), muconic acid (benzene-metabolites), mercapturinic acid (benzene-metabolites), *m*-methylhippuric acid (xylene-metabolites), *p*-glyoxilic acid (ethylbenzene-metabolites), dialkyl-phosphate (DAP, organofosfate-metabolites), arolein (plastic-metabolites).

Neurotransmitters in blood: Panel I: Dopamine, Epinephrine, Norepinephrine, Serotonin. **Panel II:** panel I + histamine. **Panel III:** panel I + Metanephrine, Nor-metanephrine.

Hematology: erythrocytes, hemoglobin, hematocrit, leucocytes, MCV, MCH, MCHC, trombocytes. **Differentiation:** Neutrophils, lymphocytes, monocytes, eosinophils, basophils.

Basicpanel (clinical chemistry): Glucose, protein (total), albumin, urea, uric acid, creatinine, bilirubin (total + direct), calcium, phosphate, alk. phosphatase (AF), γ-GT (GGT), ALAT (SGTP), ASAT (SGOT), LDH, cholesterol-total, HDL, LDL, cholesterol / HDL ratio, triglyceride, iron, iron-bindingcapacity (TBYC), iron-saturation.

MELISA (metals basic): Beryllium, cadmium, gold, indium, mercury (inorganic), lead, nickel, palladium, tin, titanium.

MELISA (metalen extended): Aluminium, chromium, cobalt, copper, ethyl-mercury, methyl-mercury, phenyl-mercury, molybdenum, platinum, silver.

MDA: malondialdehyde assay (TBARS; thiobarbituric acid reactive substances assay).

SAM/SAH: S-adenosylmethionine (erythrocyte), S-adenosylhomocysteine (erythrocyte).

Hipp-panel: Euglobulin curve, haptoglobin, orosomucoid, iron, copper, IgA, IgM, IgG.

Carotenoïden-panel: α-carotene, β-carotene, α-lycopene, β-lycopene, lutein, zeaxanthin, β-cryptoxanthin.

Cortisol-curve ("stress-test"): Cortisol in saliva; 8 hour, 11 hour, 16 hour, 23 hour. Cortisol (total), DHEA (total).

HOMA: Homeostatic Model Assessment; quantification of insulin resistance (also known as HOMA-IR).

Faeces-culture (basic): pH, muscle fiber, starch, fatty soaps, aerobic / anaerobic flora (including *E. coli*, *Enterobacteria*, *Bifidobacterium* sp., *Lactobacillus* sp.), mycology culture (including *Candida* sp. *Aspergillus* sp.).

♀-Hormones Pre-menopause (28 days): DHEA, free-testosteron + cyclus data of progesteron and estradiol.

♀-Hormones Pre-menopause (1 dag): DHEA, Estradiol, Estriol, Estron, Progesteron, Testosteron.

♂-Hormonen: Androstenedion, DHEA, Dihydrotestosteron, Estrone, Progesteron, Testosteron.