

Vitalan Stool Diagnostics: *Neurotransmitters in Gut*

What are Neurotransmitters ?

The most important Neurotransmitters are: Biogenic Amines (Histamine, Serotonine), Catechol-Amines (Acetylcholine, Dopamine, Noradrenaline, Adrenaline), Amino-Acids (Glutamate, GABA), Nucleotides (ATP), Peptides (Tachykinines, Endorphines, Enkephalines) who cares for information transport between cells.

Histamine (Aminoethylimidazole): indication Food Intolerance/Allergy, Inflammation, Stress

Body occurrence: in Mast-Cells and Granulocytes in blood and epithels, is formed from the amino acid Histidine,

Effect: in gut (stomac acid, peristalsis), lungs (bronchial contraction), blood vessels (dilatation), skin (urticaria).

Desintegration by DAO Di-Amino-Oxidase,

Food occurrence: natural in Tuna, after Fermentation (Sauerkraut, Cheese, Salami, Ham, Wine),
from Additives (MSG-MonoSodiumGlutamate, Colourants, Conservants),

Inhibition of DAO: by Alcohole, Drugs (e.g. Beta-Blockers, H-Antagonists),

Clinical Findings: Food Intolerance (Histaminosis), Food Allergy (IgE, IgG), Stress, Drugs

Diagnosis: Proof in Blood, Stool, Urine, (Food) best together with Serotonine

Therapy: Cause Elimination (Food Diary, Polytoxicomania, Stress Coping, Gut Sanitation)

Anti-Histaminica, Vitamine B6, complete Micronutrients

Serotonine (Hydroxytryptamine): indication Depression/Sleep Disorder, Aggression, Addiction

Body occurrence: 95% in gut ("Enteramine" for "Belly Feeling/Instinct"), 5% in brain (Wellbeing), is formed from the amino acid Tryptophane, is preliminary stage for Melatonine,

Effect in gut (peristalsis, satiation), lungs (bronchial constriction), blood vessels (constriction), brain (sleep, wellbeing), promotes analgesia ("Truth Drug"), slows down inflammation (anti-oxidative), is promoted by day-light, fasting, sports, analgetics, gut carcinoid, coffee, nicotine, alcohole,

Desintegration by MAO Mono-Amino-Oxidase,

Food occurrence: cheese, nut, tomatoe, berries, soja, banana, grain,

Clinical Findings: by lack "starving for sweets" (suppressed by Candida ?), depression, stress, reduced concentration
Antagonists are appetite-inhibitors, LSD, Lysine, Alanine

by surplus "craving for food" (Allergy, Coffee), Agonists are Antidepressiva

Diagnosis: Proof in Blood, Stool, Urine, best together with Histamine

Differential-Diagnosis: Blood Diagnostics for Gut Carcinoid (HIAA), Abuse of Analgetics/Alcohole

Therapy: Cause Elimination (Food Diary, Elimination Diet by Allergy Blood Diagnostics, Gut Sanitation),

Griffonis/5-HTP at Depression, Neurosis, Phobias, Aggression, PMS, complete Micronutrients

Dopamine (Hydroxytyramine): indication Addiction, Stress, ADHS

Body occurrence: in gut, brain; is formed from the aminoacid Tyrosine (resp. Phenylalanine, DOPA), is a preliminary stage of Catecholamines (Adrenaline, Noradrenaline),

Effect: simpatichomimetic, in gut better blood supply, in brain (inhibits prolactine; stimulates growth hormone STH, mood, wellbeing, pleasure, perception, motivation; coordinate stress reaction and "reward expectation" resp. "craving" e.g. for sexuality, drugs), simulates blood pressure, relaxes smooth muscles;

Desintegration by MAO Mono-Amino-Oxidase

agonists are L-DOPA, Apomorphine; antagonists are Reserpine, Chlorpromazine, Haloperidole

Food occurrence: fish, meat, egg, milk, nuts, wheat, soja, banana (need for Vit. B6 in competition with Histamine)

Clinical findings: by lack exhaustion, depression, fear, impotence, craving (Malassimilation, ADHS, Parkinson)
by surplus stress, hypertonia, sports, coffeine, nicotine, alcohole, drugs (Euphoria, Wellbeing)

Diagnosis: Proof in Blood, Urine, Stool, best together with Histamine, Serotonine, Catecholamines, Tyramine

Differential Diagnosis: Pheochromozytome, Neuroblastome, Hypertonia, Cushing

Therapy: Cause Elimination (Food, Sweetener, Gut Sanitation, Lifestyle, Drugs, MAO-Inhibitors),

complete Micronutrients, Tyrosine, Levodopa

Differential Diagnosis

Histamine increased: indicates mainly Histaminosis (associated with Gut Inflammation), sometimes Food Allergy
Therapy includes Nutrition Diary (Elimination of Processed Food), Stress coping, Alcohole avoiding

Substitution of allopathic Drugs with Plant Extracts (if possible, in case of Polytoxicomania),

Elimination Diet (in case of Allergy) resp. Bland Diet (in case of Inflammation),

Full supply of Micronutrients plus Antioxidants,

Gut Sanitation including Elimination of other diagnosed Inflammation Reasons

Serotonine decreased: indicates the reason for Depression, Therapy includes up to 5g 5-HTP/day resp. 50g cheese

Serotonine increased: indicates mainly Food Allergy (associated with Gut Inflammation),

Therapy includes Elimination Diet, Substitution of Digestive Enzymes and Micronutrients,

Gut Sanitation including Elimination of other diagnosed Inflammation Reasons

Dopamine decreased: indicates the reason for exhaustion, craving; Therapy includes Tyrosine

Dopamine increased: indicates the reason for stress, hypertonia, ADHS ?; Therapy includes Lifestyle changing

Balance of Neurotransmitters in Stool**n = 500 in 4-12/2006**

<i>Histamine</i>	<i>Serotonine</i>	<i>Differential Diagnosis</i>	<i>Therapy</i>
Normal Range n=232	Normal Range n=105	No	No
Normal Range	Decreased n=99	No	5-HTP
Normal Range	Increased n=28	NSP	Elimination-Diet
Increased n=268	Normal Range n=115	NSP if necessary	Histaminosis *
Increased	Decreased n=114	NSP if necessary	Histaminosis * 5-HTP
Increased	Increased n=39	NSP ADHS if necessary Carcinoid+Abuse if necess.	Histaminosis * Elimination-Diet Malnutrition Protein

Legend: NSP = Nutrigenic Stress Profile (IgG-Antibodies against Foodstuff)

5-HTP = Hydroxy-Tryptophane (up to 5g/day, alternative 50-100 g cheese/day), Griffonia

ADHS = Attention-Deficiency-Hyperactivity-Syndrome (urine diagnostics)

* = Nutrition-Diary, Polytoxicomania, Stress, Alcohole

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