



Burnout Sensor Maria Musterfrau DEMO_DS



COVER LETTER

Dear Ms. Musterfrau,

Your sample for the analysis arrived on in the laboratory and was evaluated according to the highest laboratory quality standards. The results were evaluated and released by two independent geneticists and molecular biologists. After obtaining the results, your personal report was compiled. We hereby convey the results to you in the format of your choice.

We would like to thank you for your trust and hope that you are satisfied with our service. We are always open to questions and suggestions. Please do not hesitate to contact us. We value your feedback. This is the only way we can continuously improve our services.

We hope the analysis meets your expectations.

Kind regards,

Dr. Daniel Wallerstorfer BSc. Laboratory Director

Florian Schneebauer, MSc. Laboratory Manager

Burnout Sensor

Personal analysis results for: Maria Musterfrau | Date of birth: 01/01/1990

Order number: **DEMO_DS**

This report contains personal medical information that is highly confidential. Data protection must be ensured.





BODY WEIGHT GENES Not ordered

YOUR NUTRITION TYPE TO LOSE WEIGHT Not ordered

YOUR SPORTS TYPE FOR LOSING WEIGHT Not ordered

YOUR WEIGHT LOSS PROGRAM Not ordered

YOUR SPORTS PROGRAM TO LOSE WEIGHT Not ordered

NUTRITION GENES

GENETIC TRAITS Not ordered

FOOD INGREDIENTS
Not ordered

DIETARY SUPPLEMENT Not ordered

EPIGENETICS Not ordered

DETOXIFICATION Not ordered

BIOLOGICAL AGE Not ordered

BURNOUT

MUSCLE FIBRE TYPE Not ordered

OXIDATIVE STRESS AND RISK OF INJURY Not ordered

OPTIMAL PERFORMANCE NUTRITION Not ordered

SCIENCE

ADDITIONAL INFORMATION



Burnout Sensor

Effective stress reduction and burnout prevention



STRESS AND BURNOUT SYNDROME

Stress and burnout syndrome

Burnout syndrome is a state of emotional, mental and physical exhaustion that is caused by high levels of prolonged stress. It occurs in people that feel overwhelmed with their responsibilities and demands, and leads to a feeling of being emotionally drained. With burnout syndrome patients lose energy, feel helpless and hopeless, and lose motivation for the work they previously enjoyed.

The signs and symptoms of burnout syndrome develop slowly over time. These are typical signs of burnout syndrome:

Physical signs

- ► feeling tired and exhausted most of the time
- ► getting sick more often
- recurring headaches and muscle pain
- ➤ changes in appetite
- sleeping more or having problems getting to sleep

Emotional signs

- ► feeling like being a failure
- ► expressing self-doubt
- ► feeling helpless or defeated
- ► feeling alone in the world
- Ioss of motivation in otherwise enjoyable activities
- ➤ a negative outlook in the future
- decreased satisfaction
- decreased sense of accomplishment

Behavioral signs

- ➤ withdrawal from responsibilities
- ➤ social isolation
- ➤ procrastination
- using food, drugs or alcohol to cope
- taking out one's frustrations on others
- irregular work attendance

Stress

While continuous stress is one of the main causes of burnout syndrome, stress by itself is a completely different state of mind. Stress typically is a state of feeling overwhelmed with demands and pressures, which can be characterized as being in a state of "too much". Stressed people typically understand it as being a temporary state that will improve, once things are under control again.



DEMO_DS -

Burnout syndrome on the other hand tends to be characterized as a state of "not enough", as it saps energy, feels empty, and devoid of motivation and beyond caring. People suffering from burnout syndrome lack the energy, motivation and belief that things will improve in the future.

Stress vs. burnout

Stress

- > Characterized by overengagement
- > Emotions are overreactive
- > Produces urgency and hyperactivity
- ► Loss of energy
- > Leads to anxiety disorders
- > Primary damage is physical
- > May cause premature death

Burnout

- Characterized by disengagement
- Emotions are blunted
- Produces helplessness and hopelessness
- > Loss of motivation, ideals and hope
- > Leads to detachment and depression
- > Primary damage is emotional
- > May make life seem not worth living





STRESS

Genes relevant to stress

Several genes and polymorphisms associated with stress-related properties have already been identified scientifically. An analysis of these polymorphisms reveals these properties:

Genetic traits			
SYMBOL	rs NCBI	POLYMORPH	GENOTYPE
СОМТ	rs4680	G>A	A/G

LEGEND: SYMBOL = Name of investigated genetic variation, rsNCBI = description of investigated genetic variation, GENOTYPE = result.

Summary of effects

Here is a summary of the impact genetic variations have on your health:

- > Normal performance in stressful situations
- > Normal emotional resistance to negative feelings
- Below average or average impulsive behavior

Performance in stressful situation	S
NORMAL	BETTER
A	

Impulsive behavior NORMAL

MORE IMPULSIVE

Emotional resistance to negative feelings NORMAL HIGHER



Prevention

People at an elevated risk of burnout syndrome or excessive stress response should be aware of the triggers and causes of stress and burnout. Recognizing environmental factors that contribute to stress or burnout syndrome allow you to change your private and professional lifestyle to reduce these factors.

Feeling like you have no control over your work

People who feel that they have little or no control over their work tend to be more stressed than people who feel that they are in charge of their professional careers. Should this be an issue, talk to your superior about how you could restructure your career to give you more control over what you do and where your career is going.

Lack of reward and recognition for good work

People, who feel that they received too little recognition for work well done tend to become more frustrated with their profession. Should this be an issue, talk to your superior about your difficulties with his/her communication style and see if you can improve the situation. In many cases the superior might not be aware of his lack of recognition for good work.

Overly demanding or unclear job expectations

Employees, who are unsure about the expectations they are required to fulfill, or who are unsure what goals and targets they are meant to reach tend to be more stressed at work. If this is an issue, talk to your superior about outlining the requirements and milestones you're meant to reach.

Work that is monotonous or unchallenging

People, who are not challenged during their profession are at increased likelihood of developing burnout syndrome. Should this be an issue, talk to your superior about your lack of challenges to see if you can take on new responsibilities at improve the situation.

Working in a chaotic or high-pressure environment

Highly chaotic co-working spaces or specific professions that are exposed to disorder and chaos increased likelihood of developing burnout syndrome. Should this be an issue, see if you can restructure your work schedule or change to a portion of home office, to change the situation.

Working too much without enough time for socializing or relaxing

Make sure you have the right work/life balance, socialize with friends and do things that you enjoy. Join clubs and be socially active to increase your social contact. Physical exercise has also shown to improve and stabilize mood states and should be encouraged.



Lack of close, supportive relationships

Try to surround yourself with friendly, positive people whose company you enjoy.

Taking on too many responsibilities

Being in charge of too many responsibilities can increase the stress levels and increase the risk of developing burnout syndrome. Try to share out your responsibilities with others around you and don't be afraid to ask others for help if you need it.

Not getting enough sleep

Sleep deprivation is a big contributor to depressive feelings and lower stress tolerance. Make sure you get sufficient hours of sleep and that you have a regular sleep schedule.

Perfectionism

Perfectionists are at an increased risk of burnout syndrome as they never have the feeling that something is good enough. This creates increased levels of stress and increases the likelihood of burnout syndrome. Perfectionists should be aware of this and should make themselves be okay with 90% performance during tasks.

Pessimistic view of yourself and the world

Pessimistic views tend to encourage the development of burnout syndrome. Try to focus on the positive things about yourself and the world.

The need to be in control

People who micro manage and need to control everything tend to become more stressed when many responsibilities arise. Try to delegate some of your work to others you trust and trust that they fulfil the task well enough.



What you should do

Try to find value in what you do

Try to find the positive aspects of your job and focus on the value your work provides.

Find the right balance

If you don't feel fulfilled in your work, find a hobby that you enjoy. Go on trips, take a few days off and mini holidays and meet up with friends.

Make friends at work

Try to socialize with your colleagues and make friends at work. This relieves stress and improves your outlook on your job.

Take time off when it is needed

If you feel close to burnout, take off time from work completely. Use a long weekend or your remaining vacation days to disconnect and recharge your batteries.

Set boundaries

Don't overextend yourself and learn how to say no to new responsibilities. Set a certain amount of time for work and a certain time for your enjoyment and don't make exceptions.

Take a daily break from technology

Define a time where you turn off your mobile, put aside your laptop and disconnect from the world to relax.

Be creative

Creativity works wonders against burnout as it awakens emotions and motivation. Start a new project, do something that has nothgin to do with work and enjoy.

Relax

Certain relaxation techniques can reduce stress and help you to recover from a stressful day. Activities such as Yoga, meditation and deep breathing activate the bodies relaxation response.

Sleep well

Set a regular sleep schedule and stick to it. Feeling rested increases your tolerance to stress and helps you cope in stressful situations.

Be social

Meet up with friends more often, be more socially active and maybe join a club.



How you should exercise

Exercise regularily

30 minutes of exercise per day would be optimal. If need be, break it up into small sessions of 10 minutes.

Do rhythmic exercises

Exercises that move your arms and legs are effective ways of lifting your mood. It increases your focus and energy and relaxes both the mind and the body. Exercises such as walking, running, weight training, swimming, martial arts or dancing are great for stress relief.

Think about your exercise

Try to focus on how it feels to move. Don't focus on your thoughts, but focus on how your feet feel when they touch the ground, how your legs feel when they move and how the wind feels in your hair. Enjoy the exercise and the break from your usual thoughts.



What you should eat

Avoid too many carbohydrates

Carbohydrates and sugars may temporarily improve your mood (which is why they are called comfort foods) but they lead to a crash in mood and energy afterwards.

Avoid mood altering substances

Substances such as trans fats, caffeine and foods with hormones can modify your mood negatively.

Increase omega-3 fatty acid intake.

Omega-3 fatty acids can improve the mood in some individuals and so these fatty acids should be increased (sources are fatty fish such as salmon, herring, mackerel, anchovies and sardines, vegetable oils such as flaxseed oil).

Avoid nicotine

Nicotine is a powerful stimulant which tends to cause higher, not lower levels of anxiety and stress.

Avoid alcohol

While alcohol might temporarily reduce worries, excessive and regular alcohol consumption may actually increase overall anxiety.





BODY WEIGHT GENES Not ordered

YOUR NUTRITION TYPE TO LOSE WEIGHT Not ordered

YOUR SPORTS TYPE FOR LOSING WEIGHT Not ordered

YOUR WEIGHT LOSS PROGRAM Not ordered

YOUR SPORTS PROGRAM TO LOSE WEIGHT Not ordered

NUTRITION GENES

GENETIC TRAITS Not ordered

FOOD INGREDIENTS Not ordered

DIETARY SUPPLEMENT Not ordered

EPIGENETICS Not ordered

DETOXIFICATION Not ordered

BIOLOGICAL AGE Not ordered

BURNOUT

MUSCLE FIBRE TYPE Not ordered

OXIDATIVE STRESS AND RISK OF INJURY Not ordered

OPTIMAL PERFORMANCE NUTRITION Not ordered

SCIENCE

ADDITIONAL INFORMATION



SCIENCE

This chapter shows the science behind the test.



SCIENCE

Burnout

COMT - Catechol-O-methyltransferase (rs4680)

The enzyme catechol-O-methyltransferase (COMT) can inactivate various substances (epinephrine, norepinephrine and dopamine) and initiate their breakdown. In addition, COMT may inhibit the effect of various drugs. The COMT rs4680 polymorphism is associated with psychological disorders, such as schizophrenia, eating disorders and alcoholism.

RES	Genotype	POP	Possible results
	A/A	15%	Higher impulsiveness
Х	A/G	44%	No impact
	G/G	41%	Better performance in stressful situations Higher emotional resistance to negative feelings

References

Stein DL et al. Warriors versus worriers: the role of COMT gene variants. CNS Spectr. 2006 Oct,11(10):745-8.

Smolka MN et al. Catechol-O-methyltransferase val158met genotype affects processing of emotional stimuli in the amygdala and prefrontal cortex. J Neurosci. 2005 Jan 26,25(4):836-42.

Zubieta JK et al. COMT val158met genotype affects mu-opioid neurotransmitter responses to a pain stressor. Science. 2003 Feb 21,299(5610):1240-3.

Armbruster D et al. Variation in genes involved in dopamine clearance influence the startle response in older adults. J Neural Transm (Vienna). 2011 Sep,118(9):1281-92.

Soeiro-De-Souza MG et al. Association of the COMT Met¹⁵⁸ allele with trait impulsivity in healthy young adults. Mol Med Rep. 2013 Apr,7(4):1067-72.

Wichers M et al. The catechol-O-methyl transferase Val158Met polymorphism and experience of reward in the flow of daily life. Neuropsychopharmacology. 2008 Dec,33(13):3030-6.

LEGEND: RES = your personal analysis result (marked with an X), GENOTYPE = different variations of the gene (called alleles),

POP = percent of the general population that have this genetic result, POSSIBLE RESULTS = influence of the genetic variation.



DEMO_DS -





BODY WEIGHT GENES Not ordered

YOUR NUTRITION TYPE TO LOSE WEIGHT Not ordered

YOUR SPORTS TYPE FOR LOSING WEIGHT Not ordered

YOUR WEIGHT LOSS PROGRAM Not ordered

YOUR SPORTS PROGRAM TO LOSE WEIGHT Not ordered

NUTRITION GENES Not ordered

GENETIC TRAITS Not ordered

FOOD INGREDIENTS Not ordered

DIETARY SUPPLEMENT Not ordered

EPIGENETICS Not ordered

DETOXIFICATION Not ordered

BIOLOGICAL AGE Not ordered

BURNOUT

MUSCLE FIBRE TYPE

Not ordered

OXIDATIVE STRESS AND RISK OF INJURY Not ordered

OPTIMAL PERFORMANCE NUTRITION Not ordered

SCIENCE

ADDITIONAL INFORMATION



ADDITIONAL INFORMATION

In this chapter you will receive useful information

NutriMe Complete How it works

Every person is unique and when testing more than 50 different genes, there are more than several hundred trillion potentially different outcomes, of which only one applies to you. Each unique genetic profile has different strengths and weaknesses and requires different substances and micronutrients for optimal health.

NutriMe Complete - This is a genetically customized micronutrient mixture with the aim of using your innate strengths and compensating for your inherited genetic weaknesses. Take your personalized micronutrient mixture to supply your body with the nutrients it needs.

Micro-transporters – optimized nutrient uptake

During processing the vitamins and minerals are packed into small beads called microtransporters. This allows for easy mixing of different quantities of individual microtransporters and their micronutrients. For some people, the final mixture contains a higher proportion of vitamin C-containing micro-transporters, for others a higher proportion of calcium-containing micro-transporters. Thus, any recipe can be created quickly and accurately through a targeted micronutrient blend. In addition, the micronutrients are better protected against oxygen by their packaging in the hard micro-transporters, and remain they stable much longer compared to dissolved micronutrients.



NutriMe Complete The genetic micronutrient mixture your body needs!

Simply take your personalized micronutrient mixture every morning to supply your body with the right nutrients at the correct quantities for your unique genetic profile.



Order now!

... through your advisor

...online at:

www.ProGenom.com

Your recipe code:

DEMO_DS

Optimized absorption into the blood stream

Proper absorption of micronutrients is a complex issue since many of the substances can inhibit each other's absorption. Therefore, the exact location and rate of micronutrient release in the intestine is important.

Standard micronutrients: Mutual uptake inhibition



Certain micronutrients are absorbed through the same processes/channels in the body. A good example of this is calcium and zinc. If a calcium/zinc powder mixture is taken using a gelatin capsule, both components will be released in the intestine. The intestinal mucosa then starts to absorb calcium, which is typically administered at a significantly higher dose. Calcium uses certain uptake channels, which are limited in number. Zinc, which should also be absorbed via these channels, is blocked by the greater quantity of calcium, and in most instances it will remain in the intestine unabsorbed until it is excreted For this reason, certain micronutrients should not be administered together in the same dosage form. Thus, it's important to be mindful of micronutrients in the form of effervescent tablets or gelatin capsules that contain, for example, mixtures of calcium and zinc.

NutriMe Complete - Optimized absorption properties



The micro-transporters are designed so that mutually inhibiting substances are not contained within the same pellets. This means that calcium is released in one location of the intestine and zinc is released in another location. In this way, each of these micronutrients is released a distance from one another, and uptake inhibition is reduced to a minimum. The slow release of micronutrients means that the uptake channels are not heavily used because the nutrients are only released at a slow and steady rate.



NutriMe Complete - Optimized uptake of all nutrients

We also know that certain micronutrients can increase each other's absorption, therefore they are released together from the same micro-transporter so that absorption of the micronutrients is maximized, e.g. vitamin D and calcium.

Certain fat-soluble vitamins such as vitamin E need fat carriers in order to be absorbed into the body. For this reason, we recommend taking vitamin E preparations with a fat-containing meal so that the vitamin E can dissolve in the dietary fat and be absorbed into the body. The micro-transporters will store the vitamin E for hours until they come into contact with fat and then be absorbed.

NutriMe Complete - Proper care throughout the day

The wrong dosage can quickly result in the body receiving insufficient micronutrients. Therefore, the micronutrient supplements must release the correct micronutrients into the body at the correct time.

Standard vitamins: To quickly be metabolized by the body



Most micronutrient preparations rapidly dissolve in water and are almost immediately released in the intestine, absorbed by the bloodstream and transported around the body. This has some important disadvantages: vitamin C is rapidly removed from the body because it has a half-life of 30 minutes - the body eliminates half of the total vitamin C from the blood every half hour. Therefore, after a typical daily dose of 80mg vitamin C, only about 5mg is left after 2 hours. After 4 hours, there is less than 1mg, and this means that the vitamin C concentration is below its effective level.

NutriMe Complete - Permanent supply



Since the body breaks down vitamin C very fast, it is necessary to supply the body with small amounts of vitamin C continuously. The micro-transporters are designed so that they release the vitamins and minerals slowly, throughout the day. This way, the body is constantly supplied with the optimal dose of vitamin C throughout the day.

NutriMe Complete - A lifelong product according to latest scientific knowledge

Science always comes up with new findings in the field of genetics, disease prevention and micronutrients. Since your personalized micronutrient mixture is pertinent for a lifetime, we have the capability to customize each new mixture individually to new circumstances, such as: your new age, new scientific findings and new recommendations for a healthy diet. Therefore, the individual micronutrient levels are adjusted from one order to the next and can be individually adapted to your new circumstances. Your personalized micronutrient mixture is formulated according to your genes and always adapted to the cutting edge of science and technology.

A product based on various analyses

Various analyses from our portfolio can influence the formulation of your personalized product. Thus, it does not matter whether you have the analysis for healthy eating, the analysis for optimum athletic performance or the analysis for optimal micronutrients for breast milk. All available results can be automatically integrated at no extra cost.

NutriMe Complete - The highest quality of raw materials

Your personalized supplement consists of a variety of different raw materials, which are selected and processed according to the highest quality standards. Special attention is paid to bioavailability (how well and quickly the micronutrient can be absorbed by the body), compatibility and purity.

Biological or pharmaceutical sources?

Vitamins and minerals can be obtained from various sources. On one hand, there are the pharmaceutical preparations containing vitamins, minerals, and salts produced in chemical reactions and then purified. On the other hand, there are the natural, biological resources. Plants, which contain a high concentration of these micronutrients are harvested and then concentrated. The resulting extract is then highly enriched with the desired vitamin. Pharmaceutically manufactured, as well as natural vitamins, have their advantages and disadvantages. Pharmaceutically manufactured vitamins are usually in higher doses and have a longer expiration period. The higher dosage can be concentrated in smaller quantities, thereby reducing the required tablet size. They are also produced as pure vitamins, allowing for very simple and accurate dosing. As a drawback, they often have a lower bioavailability.

Biological micronutrients have the advantage of better bioavailability, i.e. they are absorbed in the body much faster and better. They are usually better tolerated and represent a natural alternative due to their biological origin. As a disadvantage, even highly concentrated extracts still contain only small amounts of a particular vitamin. For this reason, a larger volume is needed to supply the body with a certain quantity of a vitamin. The tablet size is thus significantly bigger, particularly when it comes to supplying a multitude of different vitamins and minerals in one tablet.

Your personalized micronutrient mixture takes advantage of both sources and combines them into a single product. A large proportion (about 80%) of the micronutrients that are used are from biological sources. This imparts a better bioavailability and an improved tolerability of the product. The disadvantage is that a larger volume of micro-transporters must be taken as a daily dose. However, for better long-term stability, lower volume and more accurate dosing, some pharmaceutically manufactured vitamins and minerals are also used (about 20% of the total mixture). In this way, your personalized product offers the best of both micronutrient sources.

Sea magnesium, the bioavailable alternative

The magnesium used in your mixture is made from pure seawater and not chemically produced magnesium salts. Thus, it has better bioavailability and is free of contaminants.



Effect of your individual micronutrient mixture

Your micronutrient mixture consists of a large number of important vitamins, minerals and trace elements, which control various functions in the body. Based on your genetic analysis, we evaluate some of these substances as more important or less important to your health, and adjust the dosage of the product accordingly.

Here you can see a complete list of the effects you can expect from your mix according to current scientific information:

Alpha-lipoic acid

- protection of body lipids from oxidative damage
- maintenance of normal blood cholesterol concentrations
- increased beta-oxidation of fatty acids
- maintenance of normal blood glucose concentrations
- regeneration of genes, regeneration of gene transcription and the influence to activity NF kappa B

Coenzyme Q10

- contribution to normal energy-yielding metabolism
- maintenance of normal blood pressure
- protection of DNA, proteins and lipids from oxidative damage
- contribution to normal cognitive function
- maintenance of normal blood cholesterol concentrations
- and increase in endurance capacity and/or endurance
- performance

Iron

- > Contributes to normal cognitive function
- Contributes to normal energy metabolism
- Contributes to normal formation of red blood cells
- Contributes to normal oxygen transport in the body
- Contributes to normal function of the immune system
- Helps reduce fatigue and weakness
- Fulfills a function in cell division

Folic acid

- Contributes to normal tissue growth during pregnancy
- Contributes to normal amino acid synthesis
- Contributes to normal blood formation
- Contributes to normal homocysteine metabolism
- Contributes to normal mental function
- Contributes to normal function of the immune system
- Helps reduce fatigue and weakness
- Fulfills a function in cell division

Calcium

- Contributes to normal energy metabolism
- Contributes to normal muscle function
- Contributes to normal signal transmission between nerve cells
- Contributes to normal function of digestive enzymes
- > Contributes to normal blood clotting
- > Fulfills a function in cell division and specialization
- Required for maintaining normal bones
- Required for maintaining normal teeth

Copper

- Contributes to maintaining normal connective tissue
- Contributes to normal energy metabolism
- Contributes to normal function of the nervous system
- Contributes to normal hair pigmentation
- Contributes to normal iron transport in the body
- Contributes to normal skin pigmentation
- Contributes to normal function of the immune system
- Contributes to protecting the cells from oxidative stress

Lutein

- protection of DNA, proteins and lipids from oxidative damage
- protection of the skin from UV-induced (including photo oxidative) damage
- maintenance of normal vision

Magnesium

- Helps reduce fatigue and weakness
- > Fulfills a function in cell division
- Contributes to electrolyte equilibrium
- Contributes to maintaining normal teeth
- Contributes to normal energy metabolism
- Contributes to maintaining normal bones

- > Contributes to normal function of the nervous system
- Contributes to normal muscle function
- Contributes to normal protein synthesis
- Contributes to normal mental function

Manganese

- > Contributes to normal energy metabolism
- > Contributes to maintaining normal bones
- > Contributes to normal connective tissue formation
- > Contributes to protecting the cells from oxidative stress

Methyl-Sulfonyl-Methane

- contribution to normal collagen formation
- maintenance of normal hair
- maintenance of normal nails
- maintenance of normal acid-base balance
- strengthens the immune system function"
- maintenance of normal bowel function
- contribution to the normal cysteine synthesis

Phytosterol

 Contributes to maintaining a normal cholesterol level in the blood

Selenium

- Contributes to normal sperm formation
- > Contributes to maintaining normal hair
- Contributes to maintaining normal nails
- Contributes to normal function of the immune system
- Contributes to normal DNA synthesis
- Contributes to protecting the cells from oxidative stress

Vitamin A

- Contributes to normal iron metabolism
- Contributes to maintaining normal mucosa
- > Contributes to maintaining normal skin
- Contributes to maintaining normal vision
- Contributes to normal function of the immune system
- Fulfills a function in cell specialization

Vitamin B12

- Contributes to normal energy metabolism
- Contributes to normal function of the nervous system

Contributes to normal formation of red blood cells Contributes to normal function of the immune system

Contributes to normal homocysteine metabolism
 Contributes to normal mental function

Helps reduce fatigue and weakness

Fulfills a function in cell division

Vitamin B2

- Contributes to normal energy metabolism
- Helps reduce fatigue and weakness
- Contributes to normal function of the nervous system
- Contributes to maintenance of normal mucous membranes >
- > Contributes to maintaining normal red blood cells >
- Contributes to maintaining normal skin Contributes to maintaining normal vision
- > Contributes to normal iron metabolism
- Contributes to protecting the cells from oxidative stress

Vitamin B6

- Contributes to normal cysteine synthesis
- Contributes to regulation of hormone activity >
- Contributes to normal energy metabolism >
- Helps reduce fatigue and weakness >
- Contributes to normal function of the nervous system >
- Contributes to normal homocysteine metabolism >
- Contributes to normal protein and glycogen metabolism >
- > Contributes to normal mental function >
- Contributes to normal formation of red blood cells Contributes to normal function of the immune system >

Vitamin C

- Contributes to normal collagen formation for normal blood vessel function
 - Vitamin C increases the iron intake
 - Contributes to normal collagen formation for normal bone function
 - Contributes to the regeneration of the reduced form of vitamin E
 - Contributes to normal collagen formation for normal cartilage function
 - Helps reduce fatigue and weakness Contributes to normal function of the immune system during and after intensive physical activity
 - Contributes to protecting the cells from oxidative stress
 - Contributes to normal collagen formation for normal gum function
 - Contributes to normal function of the immune system
 - Contributes to normal collagen formation for normal skin function
 - Contributes to normal mental function
 - Contributes to normal collagen formation for normal teeth function
 - Contributes to normal function of the nervous system
 - Contributes to normal energy metabolism

Vitamin D3

- > Contributes to normal uptake/utilization of calcium and phosphorus
- Contributes to normal calcium levels in the blood
- Contributes to maintaining normal bones >
- > Contributes to maintaining normal muscle function
- Contributes to maintaining normal teeth >
- Contributes to normal function of the immune system > > Fulfills a function in cell division

Vitamin E D-Alpha-Tocopherol

- Contributes to protecting the cells from oxidative stress
- Zinc
 - Contributes to normal acid-base metabolism >
 - > Fulfills a function in cell division
 - Contributes to normal carbohydrate metabolism >
 - > Contributes to protecting the cells from oxidative stress
 - 5 Contributes to normal cognitive function
 - Contributes to normal function of the immune system >
 - 5 Contributes to normal DNA synthesis
 - > Contributes to maintaining normal vision
 - > Contributes to normal fertility and normal reproduction
 - > Contributes to a normal metabolism of macronutrients
 - Contributes to maintaining normal skin >
 - 5 Contributes to maintaining a normal testosterone level in the blood
 - Contributes to a normal fatty acid metabolism >
 - Contributes to maintaining normal nails
 - Contributes to a normal Vitamin A metabolism >
 - Contributes to maintaining normal hair
 - Contributes to normal protein synthesis >
 - Contributes to maintaining normal bones

Info: In the European Union, micronutrient effect statements are strictly regulated and must be specifically approved. This list includes the permissible effect promises of this product. Other effects from studies have not yet been sufficiently scientifically confirmed by the EU and are expressly NOT indicated as an effect of this product. The effects of this product are limited to this list only. No other aspects of this booklet flow into the effects of the product, and it is in no way suggested that certain genetic analysis results cause additional healing effects that reach beyond this list.

Your daily requirement of micronutrients

Micronutrient	RDA	Your requirement	Unit
Alpha lipoic acid	N/A	61	mg
Calcium	800	485	mg
Coenzyme Q10	N/A	19.5	mg
Copper	1	0.39	mg
Folic Acid	200	208	μg
Iron	14	12.5	mg
Lutein	N/A	3.4	mg
Magnesium	375	316	mg
Manganese	2	3.1	mg
Methyl-Sulfonyl-Methane	N/A	269	mg
Omega-3	N/A	700	mg
Phytosterol	N/A	231	mg
Selenium	55	99	μg
Vitamin A	800	1376	μg
Vitamin B12	2.5	6.3	μg
Vitamin B2	1.4	0.8	mg
Vitamin B6	1.4	2.2	mg
Vitamin C	80	143	mg
Vitamin D3	5	16	μg
Vitamin E (a-Tocopherol)	12	22	mg
Zinc	10	8.8	mg

The RDA values are generally defined standard values for vitamins, minerals and trace elements. However, your actual need will be determined by your genetics and lifestyle.

CAUTION! Your genetic analysis shows that both over- and under-dosing of some of these substances may be harmful to your health. Therefore, please dose the micronutrients exactly according to these values to supply your body with precise amounts of these vitamins and minerals, and to prevent harmful effects of an overdose.



Order now:

... through your advisor

...online at: www.ProGenom.com

Your recipe code: DEMO_DS



MICRONUTRIENTS

Influences on the micronutrient mixture

Your individual micronutrient mixture will be prepared based on various analyses and data. Here are aspects that affect your personal mix:

MICRONUTRIENTS



LIFESTYLE QUESTIONS



Follow us on facebook!

Follow us on Facebook to always stay up to date with news from the world of genetics.





https://www.facebook.com/ProGenom

SYSTEMZERTI	EIZIERTION	quality a	iustria 📿	qualitya	ustria		
SO 22000:2018	NR.00521/0 ISO	22000:2018	NR 00521/0 ISO 200	TEMZERTIF	IZIERT		
Q quality	austria	qualitya	austria 📿	qualitya	NR.00521/0 Austria		
SYSTEMZERTI	FIZIERT SY	STEMZERTI	IZIERT SYST	TEMZERTIF	IZIERT		
SO 9001:2015	NR.14365/0 ISO	9001:2015	NR.14365/0 ISO 900	1:2015	NR.14365/0		
Q quality	austria 🤇	qualitya	austria Q	qualitya	ustria		
SYSTEMZERTI	FIZIERT SY	STEMZERTIE	IZIERT SYS	22716:2007	NR.00010/0		
EN ISO 22716:2007	NR.00010/0 EN I	SO 22716:2007		qualitya	ustria	CERTIFICATIONS	

Certifications

Our laboratory is one of the most modern and automated laboratories in Europe and has numerous certifications and quality assurance systems that meet, and even exceed, international standards. The various areas of business are certified separately to the highest standards.

Laboratory diagnostics, manufacturing & sales

Quality management system in accordance with ISO 9001:2015

Licensed for medical genetics

Approved by the Federal Ministry of Health, Austria



BUNDESMINISTERIUM FÜR GESUNDHEIT

Cosmetic/genetic diagnostics and cosmetics manufacturing

Good manufacturing practice (GMP) in accordance with ISO 22716:2007



Food supplement manufacturing

Management system for food safety in accordance with ISO 22000:2018







VERSION HISTORY

Science continues to progress – so do our programs!

Science is progressing rapidly and almost every day new findings in the fields of medicine and genetics allow us more accurate statements. Guidelines for the prevention or treatment of health problems and recommended consumption quantities for vitamins change and improve periodically, and therefore the programs we have today are a lot more accurate than the information we had ten years ago. This is exactly the same for genetics.

Every year new genes are discovered, new effects of already known genes are identified, and the recommendations for actions that exist for certain genetic profiles change and improve over time. Since the development of our first product, we have integrated more than 400 improvements into the programs to ensure that the product is always up-to-date with latest science and technology, and remains consumer-friendly.

Although a person's genetic result stays the same for their lifetime, interpretation of the results is constantly improving with new available science. We also constantly enhance the product with improved wording, more accurate and better calculation methods for nutrition, as well as new findings in regards to how often certain mutations occur in the general population. Therefore, it is possible that a few months after you have received your report, some data and statements have changed and are more accurate than in the first version of the report. The genetic reports also consider your current body weight and your age, which is why some recommendations may differ slightly from earlier statements (that are based on a different age and body weight).

A new booklet in accordance with the latest developments in science and product development.

We do not want to withhold the positive improvements of our genetic programs from you. Therefore, you may enquire at any time if there are any new findings that might make a revision of your old genetic results with the newest interpretations, possible. In this instance, we can, for a small fee, issue a new and improved booklet for you. You may find certain deviations from the old booklet but these represent the improvements in this area.



Common improvements you might receive this way are:

Product developments:

- New food products in the food list
- > New methods to plan your nutrition better
- New ways to plan your exercise
- More accurate assessment of calorie calculation
- Adjusted values that influence program intensity
- ► Better clarity of the reports
- New and improved prevention and treatment options

Age and weight-related adjustments

- > New calculations of various numbers are based on your current age and body weight.
- New micronutrient recommendations that consider your new age.

Scientific developments:

- > New findings on the effects of already-tested genes (higher or lower risk or new validity)
- New assessment on the effects of certain treatments or medication
- > New findings on the frequency of certain mutations in the general population (that can influence the relative risk)

Current version:

➤ V538

Here you will find a version of the report's history:

- V538 Foodtable: Calculation of g/article for beverages
- improved V537 - Apple icon calculation and recommendations for soy products have been improved
- V536 Omega 3 risk calculations and recommendations have been improved
- V535 Risk calculation of increased iron uptake has been improved
- V534 Heart health risk calculation was improved and is more accurate now. This affects many other sections
- V533 Activityfactor calculation (job, sparetime) has been improved
- V532 Q10 calculation (linkage to oxidative stress) has been improved
- V531 Lutein minimum and maximum values have been improved
- V530 Fooditem rating calculation of glycemic index has been improved
- V529 Genetic risk calculation (UV protection) has been improved
- V528 Metabolic rate and kcal calculation has been improved
- V527 Fooditem rating calculation (apple icons) has been improved V526 - Recommendations for vitamin C has been improved
- V525 Recommendations for iron overload predisposition has been improved
- V524 Supplement composition has been improved >
- V523 ALA values have been improved
- V522 Influence of lifestyle questions on supplement mixture > has been improved and now is more accurate
- V521 Collagen values have been improved >
- V520 Satiety genetics have been improved
- V519 Luteine values have been improved > V518 - Genestory algorithm has been implemented >
- V517 Lavout improvements >
- V516 Lutein calculation has been improved >
- V515 Magnesium and calcium RDA calculations have been > improved
- V514 Vitamine B2 calculation has been improved and now is > more accurate

- V513 UGL values for Q10 have been adjusted >
- V512 Layout improvements, Design improvements
- V511 Beauty genetics implementation > V510 - Explanation has been added to show the influences for >
- each order on the individual micronutrient recipe V509 - The BMR calculation for data entered in the order form
- was improved and now is more accurate
- V508 Official guidelines for certain drugs have been added to the pharmacogenetics section
- V507 More drugs were implemented in the pharmacogenetic section
- V506 Pharmacogenetic calculation improvements
- V505 Report Automation: Warning when certain order details are missing
- V504 Colon health OR calculation has been adjusted
- V503 Colon health chapter has been improved
- V502 Skin health section has been improved
- V501 Pharmacogenetic improvements
- > V500 - UGL values have been improved
- V499 GRA calculation has been improved and now is more > accurate
- V498 RDA values of some micronutrients were adjusted to more accurate values based on science and international regulations
- V497 Implementation of new modules
- V496 Micronutrient ranges were better adapted to new science and legal requirements
- V495 Pharmacogenetic improvements
- V494 Layout improvements, Design improvements, Report
- adaptations for DC V493 - Further genes were included in the pharmacogenetic analysis
- V492 Performance improvements >
- V491 Implementation of new modules >
- V490 Algorithm improvements >
- V489 Advert pages have been improved >
- V488 Burnout module update >
- V487 Microbiome upgrade has been implemented >
- V486 Layout improvements, Design improvements
 - V485 Implementation of new modules



- V484 Layout improvements, Design improvements
- V483 UGL values have been improved
- > V482 - GRA calculation has been improved and now is more accurate
- V481 Toxo module update
- V480 Layout improvements, Design improvements
- V479 Implementation of new modules
- V478 OR calculation has been improved based on current literature
- V477 DHC modules have been upgraded
- V476 Epigenetics module update
- V475 Performance module update
- V474 Biological age update >
- V473 Implementation of new modules
- V472 Magnesium values were adjusted to more accurate > values
- V471 Productname integration has been improved
- V470 Rebranding options have been improved
- V469 RDA values of MSM were adjusted to more accurate values based on science and international regulations
- V468 Micronutrient (MSM) calculation has been improved V467 - CYP2D6 allele calculation (pharmacogenetics) has been
- improved V466 - Automated layoutchanges have been improved
- V465 Lung Health calculation integrated and validated >
- V464 Warfarin dose recommendation improved >
- V463 MAX micronutrient values have been improved >
- V462 UGL values have been improved >
- V461 UGL values have been improved >
- V460 GRA calculation has been improved and now is more > accurate
- V459 GRA calculation has been improved and now is more accurate
- V458 CHD OR calculation has been improved and now is more accurate
- V457 Scale bar calculation for micronutrient dosages has been improved
- V456 Calculation of recipes has been improved
- V455 Layout improvements, Design improvements, Report adaptations for DC
- V454 Rebranding options have been improved V453 Rearrangement of DHC chapters
- V452 Psychological disorder risk calculation was added >
- V451 Further genes were included in the nutrition sensor >
- V450 Improved version history V449 Improved calculation of the food list >
- V448 Improved presentation of the food list
- V447 Micronutrient recipe was improved and takes now more genes into account
- V446 Improved presentation of the nutrigenetic chapters
- V445 Improved sport tables. Icons now show the type of the > activity V444 - Weight Sensor: Low calorie snacks were improved
- >
- V443 Improved marketing and order sites make it easier for the consumer to order supplements
- V442 Rearrangement of all DNC chapters >
- V441 New nutrigenetic overviews were implemented
- V440 Population frequencies were updated according to the >
- 1000 Gene Project Phase 3 V439 - Improved calculation of disease risks compared to the average population
- V438 New improved chapter overview implemented
- V437 A calculation to produce weight management
- supplements in the form of pellets has been included
- V436 More drugs were implemented in the pharmacogenetic section
- V435 Report Automation: Warning when certain order details are missing
- V434 Odds ratio calculation was imrpoved for all metabolic problems. Population frequencies were updated according to "The 1000 Genomes Project"
- V433 Food Components: Calculation of kalium scale bar was improved and now is more accurate
- V432 Foodtable: Excel layout improvements
- V431 Foodtable: Excel bar size column was integrated. Now the exact value of the bars are shown
- V430 Foodtable: Calculation of g/article for vegetables improved
- V429 Foodtable genetic intolerance columns improved
- V428 RDA values of some micronutrients were adjusted to more accurate values based on science and international regulations
- V427 More drugs were implemented in the pharmacogenetic

section

- V426 Micronutrient ranges were better adapted to new science and legal requirements
- V425 The micronutrient dosages were adapted to new government regulations and new sciences (particularily ALA, D3, C, lycopene, luteine and copper)
- V424 The BMR calculation for data entered in the orderform was improved and now is more accurate
- V423 The quality control of entered data was improved by a second double-check
- V422 Formula restructuring
- V421 The risk for alcohol dependence calculation was improved and is more accurate now
- V420 The description of detoxification genes and their genetic variations was improved
- V419 Having a high risk of alcoholism now also affects the food recommendations for alcohol-containing foods
- V418 Report automation: Certain report sections are shown for athletic performance reports
- V417 Report update: Special requests of a distributor (JH) were implemented
- V416 The risk calculation for bone health based on genetics was improved and now is more accurate
- V415 The warning threshold for: "attention, this food contains lactose" was lowered, so food types with little lactose also
- trigger the warning V414 Report update: Special requests of a distributor (DPME) were implemented
- V413 Report update: Special requests of a distributor (DPME) were implemented
- V412 The new prostate risk calculation results are now applied to the overview scale bars at the front of the reports
 - V411 Report update: Special requests of a distributor (DPME) were implemented
- V410 Report update: Special requests of a distributor (KRSD) were implemented
- V409 The basic metabolic rate at rest was locked at a minimum of 1000kcal, irrespective of age. This is more appropriate for younger users of the weight management programs
- V408 Design improvements (colour codes)
- V407 The risk calculation for bone health based on genetics was improved and now is more accurate. Changes are now full applied
- V406 The risk for diabetes calculation was improved and is now (especially for high risk individuals) more accurate V405 - Report automation: Reports for athletic performance
- were improved for automation
- V404 The calculation for prostate risk was updated with newer science about how common these variations are in the general population. Risk calculations are now more accurate.
- V403 Report Automation: Formula update gives alert in case customer details are missing
- V402 Rarely occurring genetic variants relevant in Alzheimer's Disease were included in the formula
- V401 Report layout and text improvements for athletic performance tests
- V400 Linoleic acid risk calculation for the food list was improved and now is more accurate
- V399 The risk of some bone metabolism genes was improved and now is more accurate
- V398 The risk for certain eye disease risk calculations and the corresponding food recommendations was improved and now is more accurate
- V397 Linoleic acid risk calculation for the food list was improved and now is more accurate
- V396 Special adaptations for vegan customers using allergy testing services
- V395 Layout improvements, Design improvements, Report adaptations for a distributor (DCR)
- V394 Report update: New naming system doe new-born screening analyses
- V393 Report update: Special requests of a distributor (ASGX) were implemented
- V392 Report Automation: Warning when certain order details are missing
- V391 Report Automation: Warning when certain order details are missing
- V390 Cardiovascular disease risk and LDL cholesterol disease risk calculation was improved, especially for high risk individuals and is more accurate now. This affects many other sections
- V389 Basic metabolic rate at rest calculation was improved for



some weight management reports

- V388 Special feature for Muslims to help avoid pork
- ► V387 Certain report improvements for young patients
- V386 Report automation: Certain texts are hidden under certain conditions in some reports
- > V385 The recommendation calculation for total iron intake was improved and now is more accurate
- V384 The recommendation calculation of fructose containing food types was improved and now is more accurate
- V383 Report automation: Recipe book automation was
- improved
 V382 Report automation: Alert systems for certain conditions such as missing details were implemented
- V381 Report automation: Alert systems for missing gene results were implemented
- ▶ V380 Design, layout and text improvements
- ► V379 Report covers were improved
- ▶ V378 Scale bar and text colours for fructose risk were improved
- V377 Iron intake recommendations were linked to iron overload disorder risk in an improved way and is now more accurate. This influences many aspects of the reports such as food recommendations
- V376 Report update: Special requests of a distributor (PGNS) were implemented
- ► V375 Design and text improvements
- V374 Better BMI calculation for children implemented, making the calculations in these cases more accurate
- ▶ V373 Report update: Special requests of a distributor (SLGN) were implemented
- V372 Reports now consider the intake of calcium through nutrition more accurately. This affects many aspects of the food recommendations
- > V371 New gene for new-born birth weight added to reports
- ► V370 Text improvements
- V369 Report automation: Alert systems for certain conditions such as missing details were implemented
- ➤ V368 New BMI calculation formulas implemented for some reports. This calculation is now more accurate
- V367 Hormone replacement therapy genetic testing is now added to larger packages by default
- V366 Report update: Special requests of a distributor (DNK) were implemented
- V365 New pregnancy related gene was added
- V364 Risk calculation for diabetes Type 2 was improved and now is more accurate. This influences many aspects of the report
- V363 Risk calculations for spontaneous abortion in pregnancy was improved and now is more accurate
- ➤ V362 Risk calculations for preeclampsia in pregnancy was improved and now is more accurate
- V361 New pregnancy risk calculations were implemented
- V360 Report update: Special requests of a distributor (PGMS) were implemented
- V359 Risk calculations for bone health were improved, which influences many parts of the programs
- V358 Oxidative stress genes added to athletic performance reports
- V357 Report update: Special requests of a distributor (PHMLT) were implemented
- V356 Improved food recommendation calculation for omega 3 was implemented, which influences many aspects of the food list
- V355 Caffeine break down calculations were improved and are now more accurate
- V354 Effect of coffee on breast cancer risk in women was implemented in several reports
- V353 Caffeine recommendations based on breakdown capacity was improved
- V352 Formula restructuring
- V351 Fructose containing food recommendations were improved and are now more accurate
- V350 Fructose containing food recommendations were
- improved and are now more accurate
 V349 Report update: Special requests of a distributor (PGMS) were implemented
- V348 Recommendations for iron intake was improved
- V347 Recommendations for diabetic nutrition was improved and food list is now more suitable for diabetic patients
- > V346 Design and text improvements
- V345 Report update: Special requests of a distributor (GNBL) were implemented
- V344 Micronutrient recommendation calculations were

improved and are now more accurate

- V343 Micronutrient recommendation calculations were improved and are now more accurate
- V342 Supplement calculations: Formula adjustments for personalized supplement production were implemented
- ► V341 Certain questions that influence the athletic
- performance programs have been implemented
 V340 Scale bars that show the risk of coffee and caffeine have
- been improved
- V339 The program now can consider iron deficiency in its nutritional recommendations as well. Added benefit for iron deficient individuals
- V338 Supplement automation: New automation system for supplement manufacture implemented
- V337 Report update: Special requests of a distributor (DNK) were implemented
- V336 Report update: Special requests of a distributor (GB) were implemented
- V335 Customer details question answers are now shown in the back of some reports for reference
- V334 Report update: Special requests of a distributor (DNK) were implemented
- V333 The scale bar for lactose intolerance risk was improved
 V332 Report update: Special requests of a distributor (DNK) were implemented
- V331 Report update: Special requests of a distributor (DNK) were implemented
- V330 The food recommendation for arachidonic acid containing foods was improved and now is more accurate. This affects animal product-based food recommendations
- V329 Report update: Special requests of a distributor (DNK) were implemented
- V328 Hand written notes sheets were added to some reports
 V327 Certain reports now have a video link for video
- consultation
- V326 Report update: Special requests of a distributor (PGMS) were implemented
- > V325 Various improvements to text, layout and design
- V324 The intensity of the weight management program was adjusted and now is equally intense for all customers. This affects and improves many aspects of the weight management report
- V323 Detoxification results are shown in certain report types
- V322 Omega 3 risk calculations and recommendations have been improved and now are more accurate. This has an impact on the food list
- V321 Video consultation links have been implemented in certain reports
- V320 Supplement automation: New improvements in producing personalized labels
- V319 Supplement automation: New improvements in automating the personalized production of weight management supplements
- V318 Text improvement in some athletic performance reports
 V317 Text improvement in some athletic performance reports
- and allergy reports as well as allergy warnings
 V316 Reports can now consider milk protein intolerance and
- give better food recommendations V315 - The calculation and recommendation for fructose
- containing foods was improved and now is more accurate
 V314 Supplement automation: better automation of
- personalized weight management supplements
 V313 Report update: Special requests of a distributor (DNK)
- were implemented
- V312 Supplement automation improvement
- V311 Supplement intake recommendations were improved. Some individuals now get the recommendations to take supplements 2 times per day, but have to take a reduced volume.
- > V310 Video consultation link in some reports was improved
- V309 Supplement automation improvement
 V308 The risk calculation for thrombosis was improved and
- now is more accurate
- ➤ V307 Supplement automation improvement for label creation

Page 35 of 38

- V306 The risk calculation for thrombosis was improved and now is more accurate
- V305 Video consultation link in some reports was improved
 V304 Report update: Special requests of a distributor (DNK) were implemented
- V303 The minimum daily calories a person must eat has been defined and makes the product more suitable for users of low body weight



- ▶ V302 The basic metabolic rate at rest calculation was
- improved and now is more accurate V301 The scale bars for exercise have been improved in some >
- V301 The scale bars for exercise have been improved in some reports V300 The basic metabolic rate at rest calculation was improved and now is more accurate V299 Certain text improvements were done V298 The warning column in the food list can now be hidden or shown automatically ≻
- ≻
- ≻

Page 36 of 38





CUSTOMER SERVICE

Customer Service

Questions or comments about our service?

Our customer service team is happy to help with any enquiries or problems. You can contact us in the following ways:

- Phone +41 (0) 41 525 100.1
- office.ch@progenom.com

Our team is looking forward to your call. Customer satisfaction is our first priority. If you are not fully satisfied with our service, please let us know. We will do our best to help find a satisfactory solution to your problem.

Contact | Impressum ProGenom GmbH Riedstrasse 1 6343 Rotkreuz SWITZERLAND





TECHNICAL DETAILS

Technical details

Order number DEMO_DS

Established analysis methods

qRT-PCR, DNA sequencing, fragment length analysis, CNV assay, GC-MS, Immunocap ISAC, Cytolisa

Product codes L7BUR

Ordering company

ProGenom GmbH Riedstrasse 1 6343 Rotkreuz SWITZERLAND

Laboratory Director

Dr. Daniel Wallerstorfer Bsc.

Date of birth 01/01/1990

Report generated 19/03/2021 15:52:58

Current version V538

Analyzing company

DNA Plus - Zentrum für Humangenetik Georg Wrede Strasse 13 83395 Freilassing Deutschland

Laboratory Manager

01 004

Florian Schneebauer, MSc.



NOTES:













Burnout Sensor Maria Musterfrau DEMO_DS