





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

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# Biological Age Sensor

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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**

*Not ordered*

**GENETIC TRAITS**

*Not ordered*

**FOOD INGREDIENTS**

*Not ordered*

**DIETARY SUPPLEMENT**

*Not ordered*

**EPIGENETICS**

*Not ordered*

**DETOXIFICATION**

*Not ordered*

**BIOLOGICAL AGE**

**BURNOUT**

*Not ordered*

**MUSCLE FIBRE TYPE**

*Not ordered*

**OXIDATIVE STRESS AND RISK OF INJURY**

*Not ordered*

**OPTIMAL PERFORMANCE NUTRITION**

*Not ordered*

**SCIENCE**

**ADDITIONAL INFORMATION**





## Your biological age

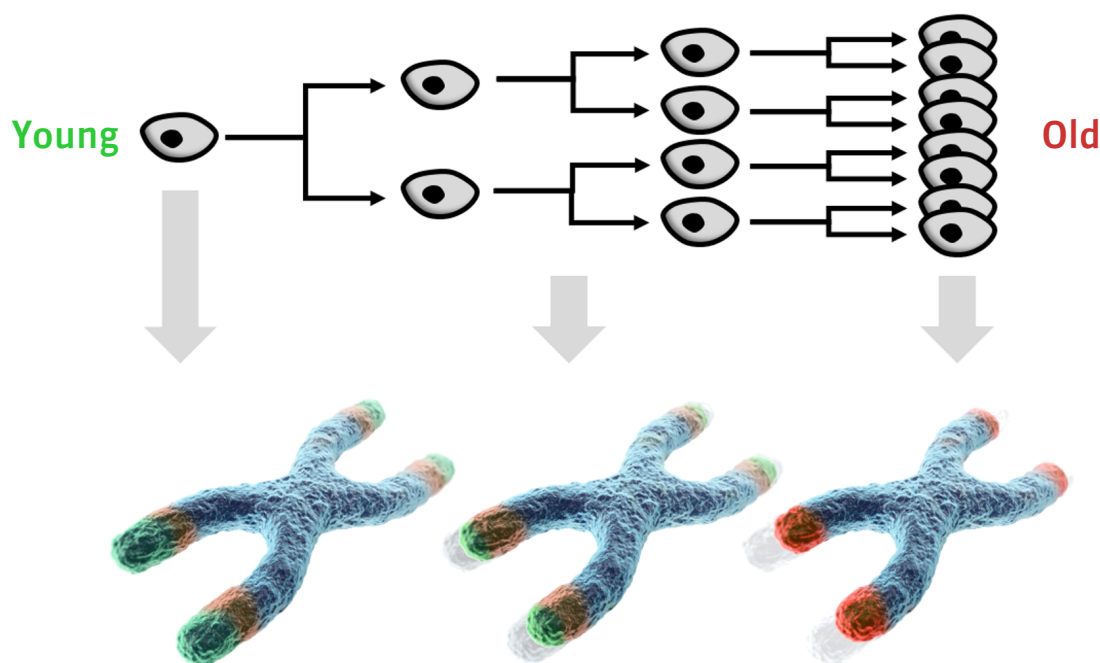
Through frequent cell division, chromosome ends (telomeres) will get increasingly shorter and accelerate aging.

## Telomeres and biological age

The entire human genetic code consists of 3.2 billion letters. They are split into 23 "packages" called chromosomes, and on average a chromosome contains about 1000 different genes.

Under the microscope, a chromosome has a typical X-shape and needs to be copied in full with each cell division. However, with each copy process, the arms of a chromosome (the so-called telomeres) become shorter.

If the arms become too short, the cell goes into sleep mode where it no longer fulfills its task properly and damages the surrounding tissue. This condition is called senescence. With increasing age more and more such "sleeping" cells accumulate. This process is called aging.



But this process also has a benefit: cells that divide frequently will eventually go into sleep mode and thus prevent cancer. Cancer cells divide rapidly but are quickly put into sleep mode by this process before they can grow into a malignant tumor.

Certain lifestyles such as smoking, illnesses and oxidative stress, as well as genetic predispositions, accelerate the decay of chromosome ends. But there is also a gene (telomerase) which can extend the telomeres again and thus rejuvenate the tissue. Certain substances contained in food can activate this gene (vitamin D3, ginkgo biloba, resveratrol from grapes, N-acetylcysteine, vitamin E) and thereby impede the aging process.

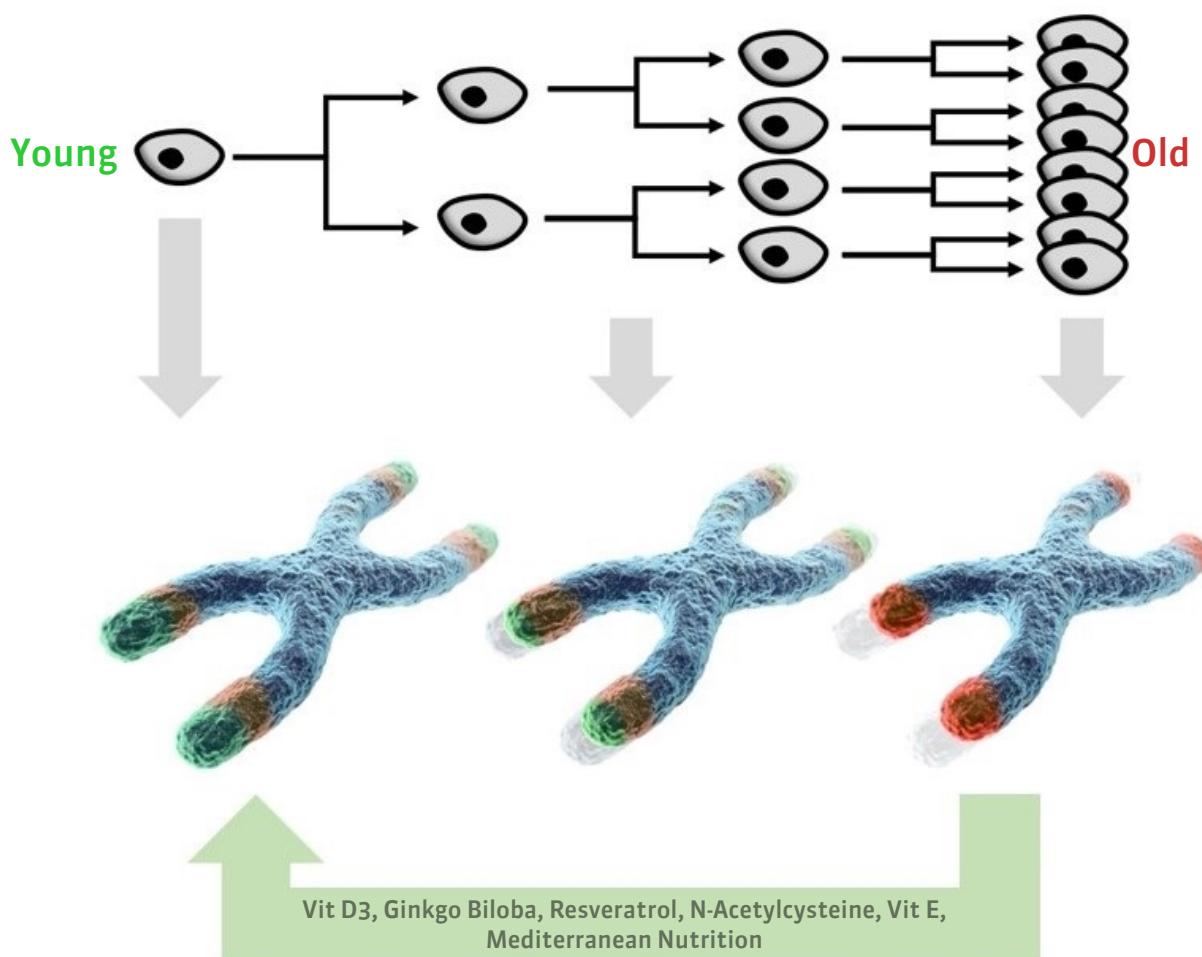
## Factors that influence telomerase activity

The activity of this telomerase gene is influenced by factors such as diet and genetics. Individuals with a specific version of the PPARG gene will be able to increase the rejuvenating effect by adhering to a Mediterranean diet. However, if you have the unfavourable variant of this gene, the Mediterranean diet has no effect on the chromosome ends.

Individuals who have a disruptive gene variation in the BICD1 gene usually have shorter chromosome ends (can be compared to a person who is 15-20 years older). The use of acetylsalicylic acid (brand name: Aspirin) also revealed that it activates telomerase and thus rejuvenates the tissue, but only in people who have a favourable gene variant in the TERT gene.

## Micronutrients that can activate telomerase

Certain micronutrients have been shown to activate telomerase. A study of vitamin D, for example, revealed that regular intake over a period of 16 weeks increased telomerase activity by 19.2%. Furthermore, substances such as resveratrol in red wine, ginkgo biloba, N-acetylcysteine and vitamin E can also activate telomerase and thus rejuvenate the tissue.



## So should one activate or block telomerase?

Active telomerase is important for keeping cells and tissue fresh. In cancer, however, active telomerase promotes the disease and is therefore not desirable. For this reason, it is recommended that healthy people activate the telomerase through an adapted diet as best as



## Genes relevant to telomere length

Scientists have already identified genes and polymorphisms that affect telomere length and, consequently, biological age. The analysis showed the following result:

Genetic traits			
SYMBOL	rs NCBI	POLYMORPH	GENOTYPE
TERT	rs2242652	C>T	C/C
TERT	rs2735940	T>C	C/C
BICD1	rs2630578	G>C	C/G
PPARG	rs1801282	C>G	C/C

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

## Summary of effects

Based on your genetic analysis, we're now able to make some recommendations based on your biological age.

Your body's ability to lengthen telomeres



You carry gene variations which cause the chromosome ends (telomeres) to decay faster as you age. People with these genetic variations usually have shorter telomeres.

Effect of a Mediterranean diet on your telomere length



The PPARG gene has an influence on the effects a Mediterranean diet has on telomere length, and consequently on aging. In respect of your genetics, a Mediterranean diet does not have a positive effect on your telomere length. Although this form of nutrition generally represents a healthy diet, it does not affect the aging of cells and tissues.

# Prevention

## What can you do to control your telomeres?

Since you have never been diagnosed with cancer, it is recommended that you ensure your telomere/chromosome ends stay as long as possible. Long telomeres keep the tissue and cells young and healthy. For this reason, you should avoid the following telomere shortening environmental influences:

- Smoking
- Obesity
- Lack of exercise
- Oxidative stress

There are certain substances that can be ingested through your diet, which extend the telomeres. The following substances increase the activity of telomerase, thus keeping the tissue young and healthy. Therefore, they should be ingested regularly via your diet:

- Vitamin D3
- Omega-3
- Vitamin E
- Ginkgo Biloba
- Resveratrol from grapes or red wine

Your personal requirement

NORMAL

ELEVATED



Cancer cells require long telomeres to survive. For this reason, it is particularly important that you restrict telomere lengthening should you be diagnosed with cancer in the future.

## Nutrigenetics - Biological age

Your nutrition is very important. Based on your genes and their associated strengths and weaknesses you should increase or decrease certain foods and nutrients. These recommendations are calculated based on your genetic profile.

**Your personalized recommendations based on this section:**



Legend: GREEN ARROWS > this nutrient or substance is classed as healthy for your genetic profile. Try to increase the intake of this substance. RED ARROWS > this substance is classed as unhealthy for your genetic profile. Try to reduce your intake of the substance. NO ARROWS > There is no effect of the nutrient on the genetics of this section. PLEASE NOTE! This interpretation only considers your genetic profile of this section.



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**MUSCLE FIBRE TYPE**

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**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.

## Biological age

### TERT (rs2242652)

RES	Genotype	POP	Possible results
X	C/C	70%	Normal telomere length
	C/T	28%	Shorter telomeres
	T/T	2%	Shorter telomeres

#### References

Campa D et al. Risk of multiple myeloma is associated with polymorphisms within telomerase genes and telomere length. *Int J Cancer*. 2015 Mar 1;136(5):E351-8.

Bojesen SE et al. Multiple independent variants at the TERT locus are associated with telomere length and risks of breast and ovarian cancer. *Nat Genet*. 2013 Apr;45(4):371-84, 384e1-2.

Pellatt AJ et al. Genetic and lifestyle influence on telomere length and subsequent risk of colon cancer in a case control study. *Int J Mol Epidemiol Genet*. 2012;3(3):184-94.

### TERT (rs2735940)

RES	Genotype	POP	Possible results
	T/T	29%	Normal telomere length
	C/T	47%	Shorter telomeres
X	C/C	24%	Shorter telomeres

#### References

Matsubara Y et al. Telomere length of normal leukocytes is affected by a functional polymorphism of hTERT. *Biochem Biophys Res Commun*. 2006 Mar 3;341(1):128-31.

Ludlow AT et al. Relationship between physical activity level, telomere length, and telomerase activity. *Med Sci Sports Exerc*. 2008 Oct;40(10):1764-71.

Sheng X et al. TERT polymorphisms modify the risk of acute lymphoblastic leukemia in Chinese children. *Carcinogenesis*. 2013 Jan;34(1):228-35.

Matsubara Y et al. Coronary artery disease and a functional polymorphism of hTERT. *Biochem Biophys Res Commun*. 2006 Sep 22;348(2):669-72.

### BICD1 (rs2630578)

RES	Genotype	POP	Possible results
	G/G	74%	Normal telomere length
X	C/G	24%	Shorter telomeres
	C/C	2%	Shorter telomeres

#### References

Mangino M et al. A regulatory SNP of the BICD1 gene contributes to telomere length variation in humans. *Hum Mol Genet*. 2008 Aug 15;17(16):2518-23.

## PPARG (rs1801282)

RES	Genotype	POP	Possible results
X	C/C	86%	A Mediterranean diet has no influence on telomere length
	C/G	12%	A Mediterranean diet lengthens telomeres
	G/G	2%	A Mediterranean diet lengthens telomeres

### References

García-Calzón S et al. Pro12Ala polymorphism of the PPAR $\gamma$ 2 gene interacts with a mediterranean diet to prevent telomere shortening in the PREDIMED-NAVARRA randomized trial. *Circ Cardiovasc Genet.* 2015 Feb,8(1):91-9.

Fitó M et al. Nutritional Genomics and the Mediterranean Diet's Effects on Human Cardiovascular Health. *Nutrients.* 2016 Apr 13,8(4):218.

*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.*

**BODY WEIGHT GENES**

*Not ordered*

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*Not ordered*

**YOUR SPORTS TYPE FOR LOSING WEIGHT**

*Not ordered*

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**OPTIMAL PERFORMANCE NUTRITION**

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**ADDITIONAL INFORMATION**



## **ADDITIONAL INFORMATION**

In this chapter you will receive useful information

# NutriMe Complete

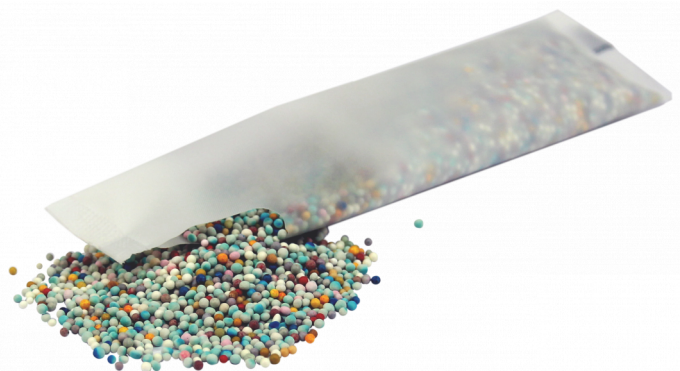
## How it works

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 micro-transporters. This allows for easy mixing of different quantities of individual micro-transporters 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](http://www.ProGenom.com)**

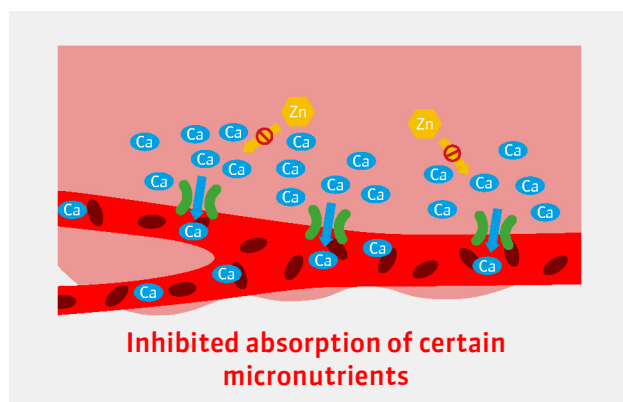
**Your recipe code:**

**DEMO\_DS**

## Optimized absorption into the blood stream

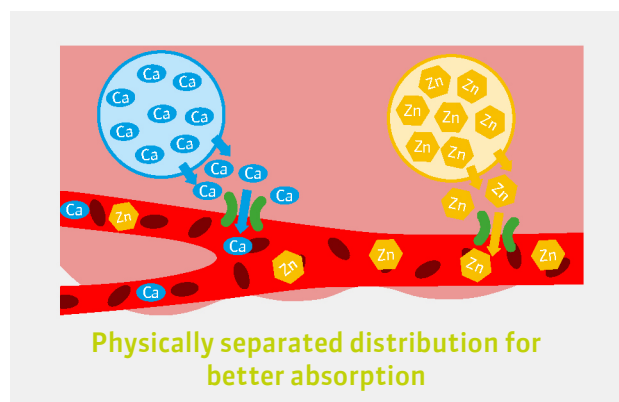
Proper absorption of micronutrients is a complex issue since many of the substances can inhibit each other's absorption. Therefore, the exact location and rate of micronutrient release in the intestine is important.

### Standard micronutrients: Mutual uptake inhibition



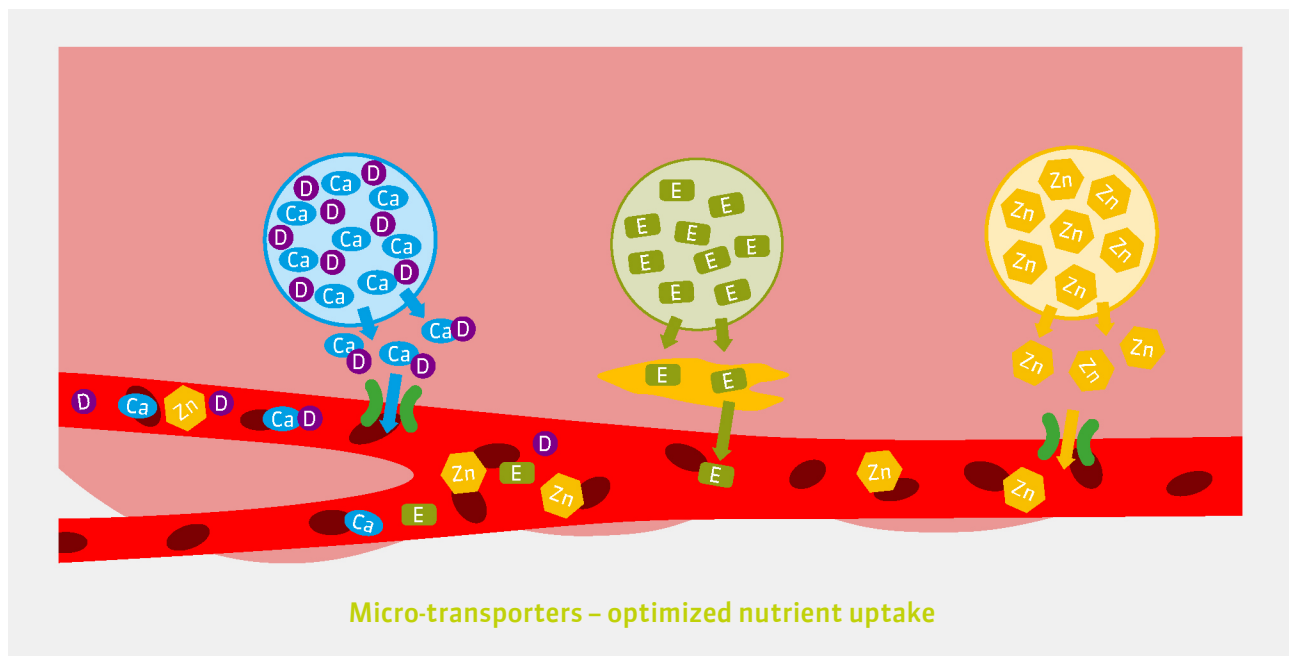
Certain micronutrients are absorbed through the same processes/channels in the body. A good example of this is calcium and zinc. If a calcium/zinc powder mixture is taken using a gelatin capsule, both components will be released in the intestine. The intestinal mucosa then starts to absorb calcium, which 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



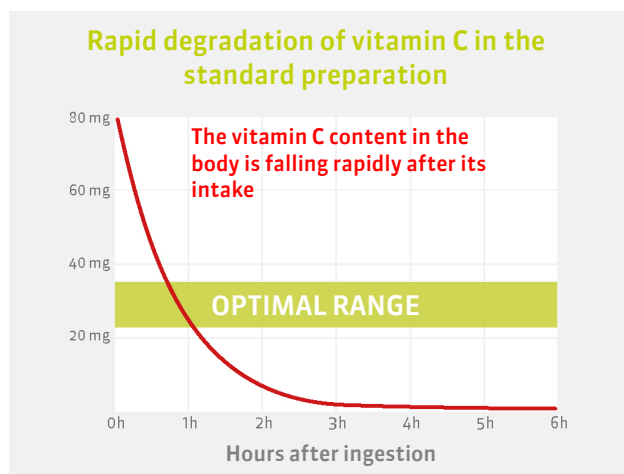
We also know that certain micronutrients can increase each other's absorption, therefore they are released together from the same micro-transporter so that absorption of the micronutrients is maximized, e.g. vitamin D and calcium.

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

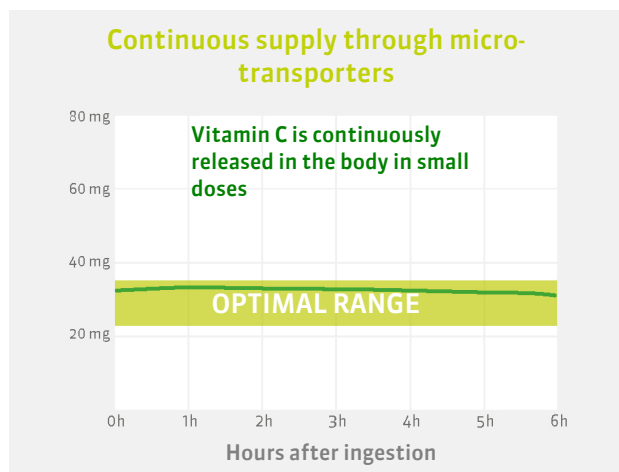
The wrong dosage can quickly result in the body receiving insufficient micronutrients. Therefore, the micronutrient supplements must release the correct micronutrients into the body at the correct time.

**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 homocysteine metabolism
- Contributes to normal mental function
- Contributes to normal formation of red blood cells
- Contributes to normal function of the immune system
- 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
- Contributes to normal cognitive function
- Contributes to normal function of the immune system
- 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
- 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 (α-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](http://www.ProGenom.com)

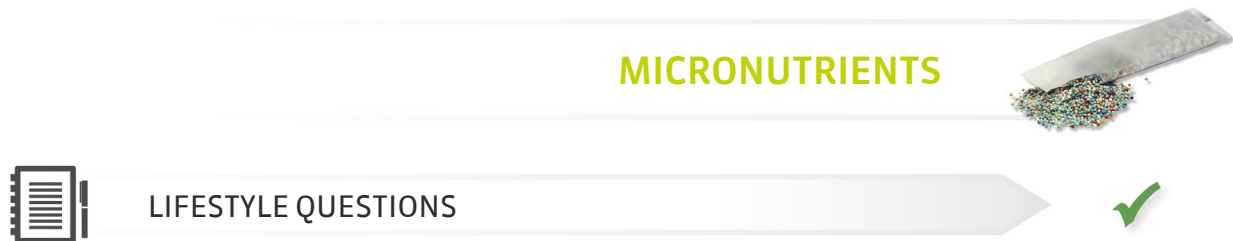
**Your recipe code:**

DEMO\_DS



## 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:



# 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>



## 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



### 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







## 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, spartime) 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 - Layout 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 improved 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 (particularly 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
- 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





## 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](mailto: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

### Order number

DEMO\_DS

### Date of birth

01/01/1990

### Established analysis methods

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

### Report generated

19/03/2021 16:05:25

### Product codes

L8AGE

### Current version

V538

### Ordering company

ProGenom GmbH  
Riedstrasse 1  
6343 Rotkreuz  
SWITZERLAND

### Analyzing company

DNA Plus - Zentrum für Humangenetik  
Georg Wrede Strasse 13  
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### Laboratory Director

Dr. Daniel Wallerstorfer Bsc.

### Laboratory Manager

Florian Schneebauer, MSc.

**NOTES:**











**Biological Age Sensor**  
Maria Musterfrau  
DEMO\_DS