

Ordered by

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#### Report for

#### Musterbefund Labor (\*1970-01-01)

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## Your HS Fatty Acid Profile

### using the Omegametrix Method for your cell quality

#### 26 important factors for improved quality of life

This report provides you with information about the fatty acid composition of your red blood cells and thus all the other cells in your body. It explains the influence of fatty acids on cell quality and their broader role for your overall health. For this purpose, your 26 most important fatty acids have been analyzed, evaluated and summarized in this HS Fatty Acid Profile. This information allows you, if necessary, to improve the fatty acid composition of your cells and thus your overall health and quality of life.

### Overview of your results

Final report, as medically validated from Prof. Dr. med. C. von Schacky.

	value	Target range	Evaluation	Development
HS-Omega-3 Index®	9.82 %	8 % – 11 %	optimal 🎸	<b>3.3</b> % → <b>9.82</b> %
HS-Trans Index <sup>®</sup>	0.65 %	<1.04 %	optimal 🎸	<b>1.7</b> % → <b>0.65</b> %

AA:EPA 2.5 unknown

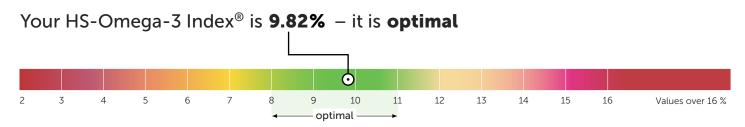
A detailed review of your results is provided on the following pages.





## What your HS-Omega-3 Index® means

The HS-Omega-3 Index<sup>®</sup> was invented, defined, and developed by Prof. Dr. med. Clemens von Schacky. It represents the amount of the two important marine Omega-3 Fatty Acids, EPA and DHA, in your body. Using the Omegametrix Method, we measure the 26 most important fatty acids in the cell membrane of your red blood cells and give you the proportion of EPA and DHA as a percentage. The fatty acid composition of your cells affects their proper functioning, and healthy cells are vital for your body's organs and physiological processes. The target range for the HS-Omega-3 Index<sup>®</sup> is 8–11%.

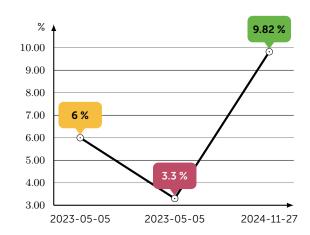


#### Our recommendation for you:

Your HS-Omega-3 Index® is within the optimal range. Maintain your current intake of EPA and DHA. We recommend a control measurement in one year if your dietary habits do not change.

Since your last test, your value has increased and it is now within the optimal range.

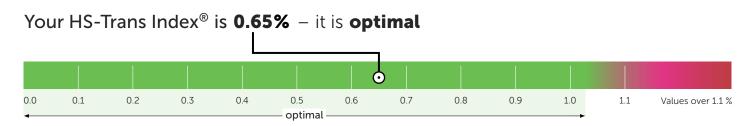
We have arranged all of your results up until now chronologically. This way, you can keep a good overview and optimize your intake of EPA and DHA when necessary.





## What your HS-Trans Index® means

The HS-Trans Index<sup>®</sup> was invented, defined, and developed by Prof. Dr. med. Clemens von Schacky. It represents the amount of harmful Trans Fatty Acids (Trans-Oleic Acid and Trans-Linoleic Acids) in your body. Using the Omegametrix Method, we measure the 26 most important fatty acids in the cell membrane of your red blood cells and give you the proportion of harmful Trans Fatty Acids as a percentage. The fatty acid composition of your cells affects their proper functioning, and healthy cells are vital for your body's organs and physiological processes. The target range for the HS-Trans Index® is below 1.04%.

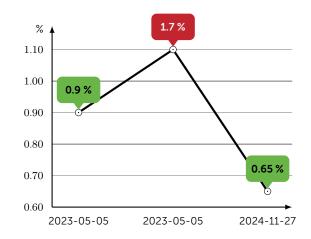


#### Our recommendation for you:

Your HS-Trans Index® is within the optimal range. There is no reason for you to change your diet in this respect. An elevated HS-Trans Index® (>1.04%) is associated with increased mortality, especially from heart disease. Sources of harmful Trans Fatty Acids can be foods prepared by frying or deep-frying in reused fat. However, other sources include industrially produced foods from countries lacking legislation that prohibits the formation of Trans Fatty Acids in their products. Industrially produced foods from central Europe or the USA, on the other hand, are generally safe.

Since your last test, your value has decreased and it is now within the optimal range.

We have arranged all of your results up until now chronologically. This way you can keep a good overview and, if necessary, further reduce your intake of harmful Trans Fatty Acids.



# <u>Q</u> metrix

## **HS-Indices Areas of Action**

Why it pays to keep the HS-Indices of your cell membrane within the optimal range

Our analysis has shown that your HS-Omega-3 Index® is optimal. By maintaining your index value within the target range, your health and quality of life will profit from many diverse benefits, such as:



#### Heart

An optimal HS-Omega-3 Index<sup>®</sup> reduces the risk of sudden cardiac arrest, heart attack, other cardiovascular diseases, or the development of heart failure.



#### **Muscles and Sport**

With an optimal HS-Omega-3 Index<sup>®</sup>, "agerelated" muscle loss is reduced and cognitive performance, such as reaction time, is improved.



#### **Brain**

The structure, maintenance, blood flow, and function of the brain, as well as other aspects of brain health, depend on the HS-Omega-3 Index<sup>®</sup>. This applies from before birth into old age.



#### **Psyche**

Psychiatric illnesses (e.g. autism, ADHS, major depressive disorder) are more prevalent in people with a low HS-Omega-3 Index<sup>®</sup>. Such conditions can be improved by raising the Index to within the optimal target range.



#### Eyes

If the HS-Omega-3 Index<sup>®</sup> is too low, both dry eye syndrome and "age-related" macular degeneration can occur earlier. Raising the Index can slow down the progression of these diseases.



#### **Pregnancy**

Fewer complications occur during pregnancy with a higher HS-Omega-3 Index<sup>®</sup>. Increasing the Index also reduces premature births and birthing complications for both mother and child.



#### Skin

Our data shows that increasing the HS-Omega-3 Index<sup>®</sup> can improve acne. The results for other skin conditions such as psoriasis or atopic dermatitis are also very promising.



#### **Fertility**

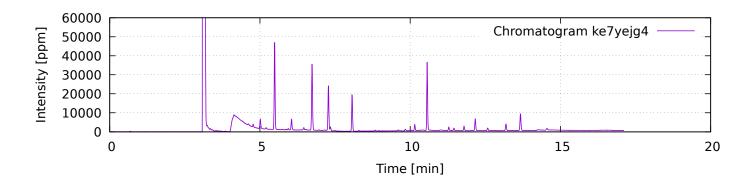
A higher HS-Omega-3 Index<sup>®</sup> is associated with increased fertility in both men and women. Greater success rates in assisted reproduction are also seen.

Our analysis has shown that your HS-Trans Index® is optimal. Maintaining a HS-Trans Index® within the optimal range contributes to a long and healthy life. Just as marine Omega-3 Fatty Acids have a positive effect on health, harmful Trans Fatty Acids have a negative impact.



## Your Chromatogram

Here you can see your own **chromatogram**, which was analyzed after our standard protocol. The peaks represent the different fatty acids in your red blood cells, thereby providing your test results.



#### The Omegametrix Method:

Healthy cells have a beneficial effect on the body's overall health. Strengthening cell quality, therefore, has positive effects on the body, promoting a better quality of life. Fatty acids have a significant influence on cell quality. We provide scientifically sound findings based on data from the fatty acid composition of cells. Based on these findings, people can take appropriate measures to improve their own health. We use a strictly standardized and quality-controlled method to analyze the 26 most important fatty acids in red blood cells. Stringent standards and quality control measures are vital, as the results of fatty acid analyses are sensitive to an array of factors, such as the geometric form of the reaction glass or the evaluation method used for chromatography. With the Omegametrix Method, we record all the fatty acids relevant for quantifying the HS-Omega-3 Index<sup>®</sup> and HS-Trans Index<sup>®</sup>. This differentiated analysis of the 26 fatty acids facilitates not just the research of a few fatty acids (e.g. Omega-3), but instead can decipher the medical significance of all the other fatty acids piece by piece. With the standardized Omegametrix Method, we are making our contribution to this important field of research.

#### The Omegametrix Laboratory:

We are Omegametrix®, the experts in fatty acid analysis and the developers of the Omegametrix Method, the HS- Omega- $3 \text{ Index}^{\text{\tiny B}}$ , and HS-Trans  $\text{Index}^{\text{\tiny B}}$  — the world's leading and accessible-to-all fatty acid analysis indices. With our standardized Omegametrix Method we provide meaningful data and diagnostics on the 26 most important fatty acids in the body and thus deliver valuable insights into cell quality to promote greater quality of life. The Omegametrix Method is accredited according to the DIN EN ISO 15189 standard, reflecting its unsurpassed reliability and accuracy. We work with the world's most renowned scientific research groups, such as the Karolinska Institute, the Charité Berlin, Framingham, the University of Munich, as well as major physicians, therapists, other specialists, and laboratories. More than 400 publications in international scientific journals are based on our Omegametrix Method and around 50 research projects are running (as of January 2024) — all to develop the largest and most comprehensive scientific dataset possible. The influence of fatty acids on the cells in our body is significant. The better we understand them, the better we can target them to promote a greater and longer quality of life.



# Your complete fatty acid analysis

Omega-3 Fatty Acids	2023-05-05	2024-11-27
Alpha-Linolenic Acid (ALA, 18:3ω3)	0.59 %	0.59 %
Eicosapentaenoic Acid (EPA, $20:5\omega3$ )	1.00 %	4.22 %
Docosapentaenoic Acid (DPA, 22:5ω3)	1.13 %	1.13 %
Docosahexaenoic Acid (DHA, 22:6 $\omega$ 3)	1.50 %	5.60 %
$\Sigma$ Omega-3 Fatty Acids (6.20 – 17.60% $^*$ )	4.22 %	11.54 %

Omega-9 Fatty Acids	2023-05-05	2024-11-27
Oleic Acid (18:1ω9)	21.30 %	16.00 %
Gadoleic Acid (20:1ω9)	0.40 %	0.40 %
Nervonic Acid (24:1ω9)	0.44 %	0.44 %
$\Sigma$ Omega-9 Fatty Acids (12.60 – 22.80% $^*$ )	22.14 %	16.84 %

Omega-6 Fatty Acids	2023-05-05	2024-11-27
Linoleic Acid (LA, 18:2ω6)	24.29 %	14.49 %
Gamma-Linolenic Acid (GLA, 18:3ω6)	0.17 %	0.17 %
Eicosadienoic Acid (C20:2ω6)	0.35 %	0.35 %
Dihomo- $\gamma$ -Linolenic Acid (DGLA, 20:3 $\omega$ 6)	1.83 %	1.83 %
Arachidonic Acid (AA, 20:4ω6)	16.00 %	10.50 %
Docosatetraenoic Acid (DTA, 22:4ω6)	1.25 %	1.25 %
Docosapentaenoic Acid (22:5 $\omega$ 6)	0.18 %	0.18 %
$\Sigma$ Omega-6 Fatty Acids (22.50 - 36.30%*)	44 07 %	28 77 %

Saturated Fatty Acids	2023-05-05	2024-11-27
Myristic Acid (14:0)	0.75 %	0.90 %
Palmitic Acid (16:0)	19.86 %	24.86 %
Stearic Acid (18:0)	12.80 %	14.80 %
Arachidic Acid (C20:0)	0.22 %	0.22 %
Behenic Acid (C22:0)	0.52 %	0.52 %
Lignoceric Acid (24:0)	0.46 %	0.46 %
$\Sigma$ Saturated Fatty Acids (23.80 – 35.80 $\%$ *)	34.61 %	41.76 %

Omega-7 Fatty Acids	2023-05-05	2024-11-27
Palmitoleic Acid (16:1ω7)	0.42 %	0.42 %
$\Sigma$ Omega-7 Fatty Acids (0.10 – 1.30%*)	0.42 %	0.42 %

Trans Fatty Acids	2023-05-05	2024-11-27
Trans-Palmitoleic Acid (16:1ω7t)	0.03 %	0.03 %
Trans-Oleic Acid (18:1t)	0.95 %	0.35 %
Trans-Linoleic Acids (18:2ω6tt/tc/ct)	0.75 %	0.3 %
$\Sigma$ Trans Fatty Acids (0.10 $-$ 1.30% $^*$ )	1.73 %	0.68 %

HS-Indices	2023-05-05	2024-11-27
HS-Omega-3-Index <sup>®</sup>	3.3 %	9.82 %
target range: 8–11 % HS-Trans-Index®	1.7 %	0.65 %
target range: <1.04 %		

Fatty Acid Ratio	2023-05-05	2024-11-27
Arachidonic Acid: Eicosapentaenoic Acid	16	2.5
target range: unknown.		

<sup>\*</sup> The range is derived from ca. 25000 randomly selected measurements with optimal HS-Indices. This can vary in different population groups.