WELLNESS

DNA-Report

Intellektist.

Customer:	**JANE DOE**
Sample Number:	0654061
Date of Test:	28.07.2024

Nutrition Metabolism

Traits[1]	Genes[2]	Risk[3]	Result[4]	Score[5]
Metabolism converts food into energy and building blocks for tissue repair. Genetics and environment influence how efficiently this process occurs.				
Saturated Fat Response	APOA2, FTO, MC4R, STAT3, TCF7L2	🔴	Increased risk for higher BMI or obesity with high fat diet	0.583
Obesity Predisposition	FTO, MC4R	🔴	Increased risk of obesity	0.5
Yoyo Effect	ADIPOQ	🔴	High-risk type	1.0
Protein Intake	FTO	🟢	Typical weight loss response to protein diet	0.2
Omega-3 Levels	NOS3	🔴	Elevated risk for high triglycerides levels	1.3
Whole Grain	TCF7L2	🔴	Increased risk	1.5
Caffeine	CYP1A2	🔴	"Slow" caffeine metabolizer	2.0

Vitamins

Traits[1]	Genes[2]	Risk[3]	Result[4]	Score[5]
Genetic variations affect vitamin processing, and a DNA report can offer personalized intake recommendations.				
Vitamin A	BCMO1	🔴	Predisposed to vitamin A deficiency	0.583
Vitamin B2	MTHFR	🟢	Stay Balanced	0.125
Vitamin B6	NBPF3	🔴	Likely to have lower blood levels of vitamin B6	1.2

03

Nutrition

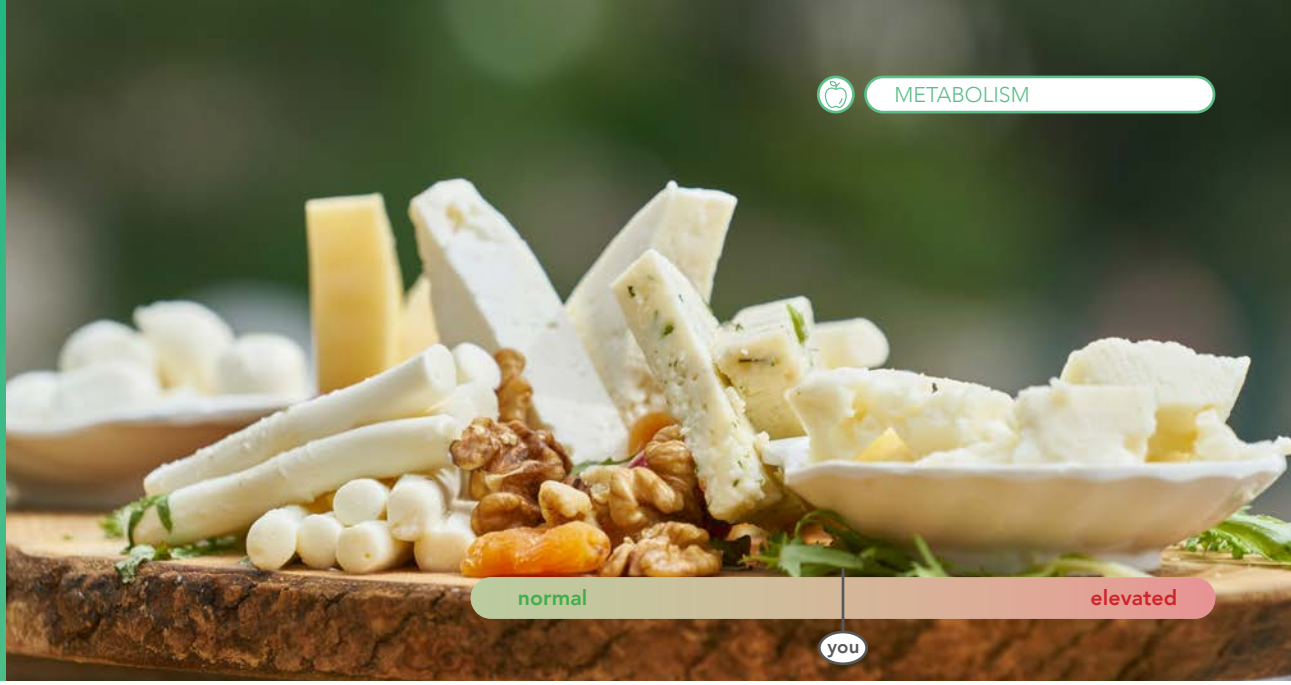
Metabolism
Saturated Fat Response
Obesity Predisposition
YoyoEffect
Protein Intake
Omega-3 Levels
Whole Grains
Caffeine

Vitamins
Vitamin A
Vitamin B2
Vitamin B6
Folate
Vitamin B12
Vitamin C
Vitamin D
Vitamin E

Minerals
Calcium
Iron
Sodium

Food Reactions
Bitter Taste
Sweet Taste
Lactose Intolerance
Gluten Sensitivity
Alcohol Flush
Peanut Allergy
Asparagus Odor

Eating Behavior
Snacking
Sweet Tooth
Hunger
Eating Disinhibition
Food Desire
Satiety (Feeling full)



Genes
FTO
TCF7L2
STAT3
APOA2
MC4R

Your Score
1.0

Saturated Fat Response

Your genes say: ***You may be predisposed to higher BMIs when consuming diets high in saturated fats.***

Condition

Saturated fats are a type of dietary fat that is solid at room temperature and primarily found in animal-based foods and some tropical oils. Many scientific studies have shown associations between saturated fats, such as those found in red meat and baked products, and health conditions such as diabetes, cardiovascular disease, and obesity.

However, the direct link between saturated fats and obesity is not yet fully understood. An accumulating number of studies suggest that the effect of saturated fat on obesity can be influenced by genetic variations, such as those in the FTO, TCF7L2, STAT3, APOA2, and MC4R genes.

Your result: ***You may be predisposed to higher BMIs when consuming diets high in saturated fats.***

Recommendations

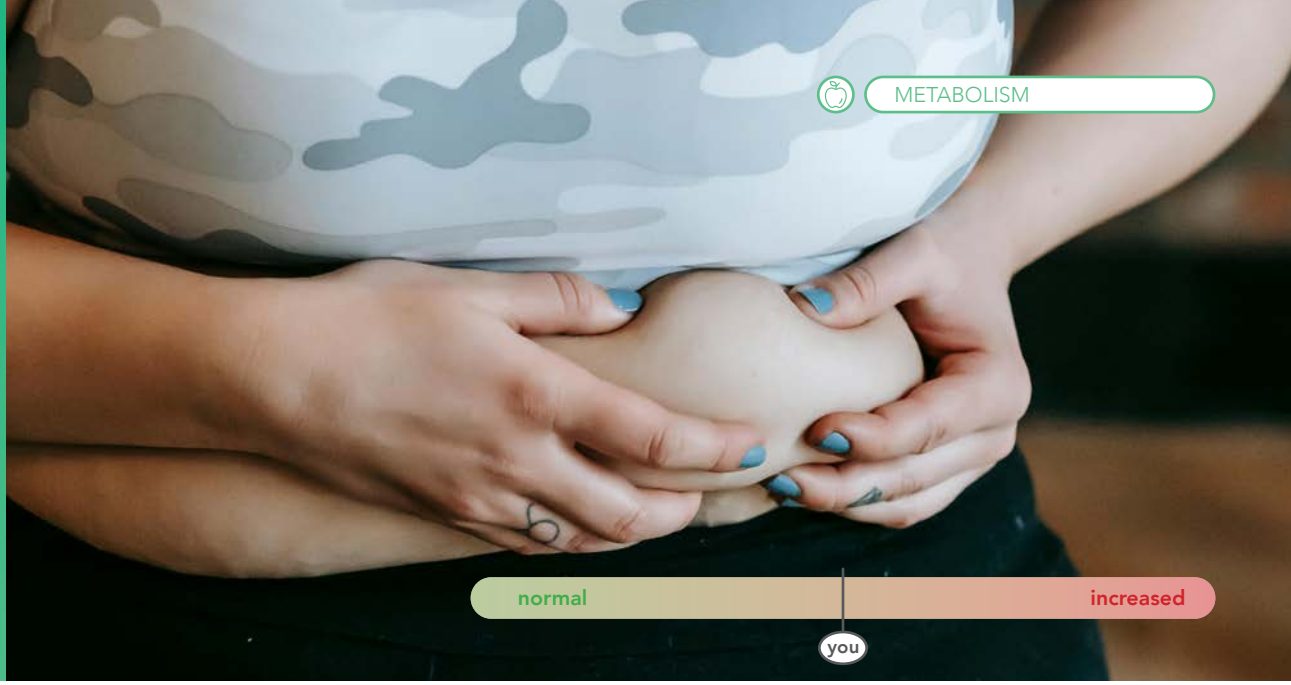
Risk type

- Limit your intake of saturated fat to less than 10% of your total energy intake.
- Monitor your saturated fat intake.

Sources of Calcium-Rich Foods

Try to avoid saturated fats in your diet and opt for foods with unsaturated fats instead.

Foods containing lots of saturated fats.	Foods containing lots of unsaturated fats.
Coconut and palm oils	Olive and vegetable oils,
Fatty meats (lamb, pork and beef)	Lean meats
Butter	Low-fat dairy products
Cheese	Fish
Fried foods	Beans, lentils, nuts/ seeds
Baked products	Soy beverages and tofu



Genes
FTO
MC4R

Your Score
1.0

Obesity Predisposition

Your genes say: ***You have an above average predisposition for being overweight.***

Condition

Your genetic predisposition to obesity is influenced by variants in the FTO and MC4R genes. Depending on your genotypes at these variants, you may have an average or above-average predisposition to obesity. However, having an above-average predisposition does not mean that you are obese. Obesity is influenced by both genetic and environmental factors, meaning you have a higher-than-average genetic likelihood for a high body mass index (BMI).

Research shows that diet and exercise can influence how our genes function. Therefore, regardless of your genetic predisposition to obesity, it is important to maintain a healthy diet and stay active to reduce your risk of obesity.

Your result: ***You have an above-average predisposition for being overweight.***

Recommendations

Risk type

- Choose a Mediterranean diet as a healthy option.
- Expose yourself to cold weather.
- Engage in additional activities beyond your daily exercise routine.
- Consider using conjugated linoleic acid (CLA) supplements.

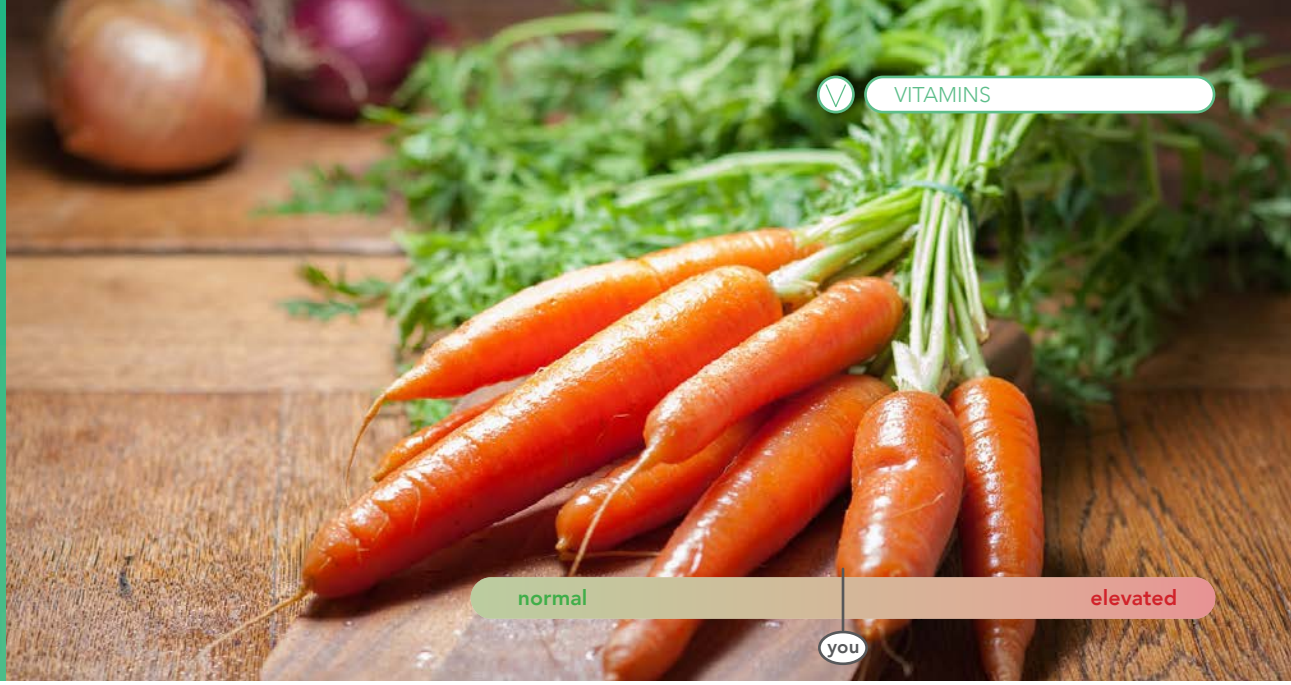
Non-risk type

To maintain or lose weight, you can:

- Follow a Mediterranean diet as a healthy option.
- Expose yourself to cold weather.
- Engage in additional activities beyond your daily exercise routine.

BMI - Body-Mass-Index

When someone has a BMI between 30 to 40 (clinically obese) or above 40 (morbidly obese), genetic factors with strong effects are likely to be involved. The association of the above-mentioned genes to obesity is well-established. The mechanism of the influence of FTO is less well-understood, but is believed to be important for controlling feeding behavior and energy balance.



Genes
BCMO1

Your Score
1.0

Vitamin A

Your genes say: You may be predisposed to vitamin A deficiencies.

Condition

Vitamin A is crucial for vision, immune function, and reproduction. Beta-carotene, a precursor to active vitamin A, is an antioxidant found in orange-red fruits and vegetables. Research has shown that individuals with the GG variant of the BCMO1 gene have reduced efficiency in converting beta-carotene to active vitamin A. Consequently, people with this variant are considered low responders to dietary beta-carotene and are therefore at a higher risk of vitamin A deficiency.

Your result: *You may be predisposed to vitamin A deficiencies.*

Recommendations

Risk type

- Focus on consuming pre-formed sources of vitamin A daily (700 mcg for females and 850 mcg for males).
- If you are pregnant, do not exceed 3,000 mcg RAE per day.

Non-risk type

- Maintain consuming sources of vitamin A daily (700 mcg for females and 850 mcg for males).
- If you are pregnant, do not exceed 3,000 mcg RAE per day.

Sources of Vitamin-A-Rich Foods

Vitamin A is essential for maintaining healthy vision, immune function, and skin health. Consuming a diet rich in vitamin A can help ensure you meet your body's needs for this vital nutrient.

Foods high in Vitamin A	Serving	µg RAE
Carrots (Cooked)	100 g	852
Bluefin tuna	75 g	530
Butternut Squash (Cooked)	100 g	558
Sweet Potato (Baked)	100 g	961
Spinach (Cooked)	100 g	524
Pink Grapefruit	100 g	58
Broccoli (Cooked)	100 g	77
Lamb Liver (Cooked)	85 g	6.615
Cod Liver Oil	1 Tsp.	1.350
Eggs	2, large	220
Acai Berry Drink Fortified	240ml	1.293

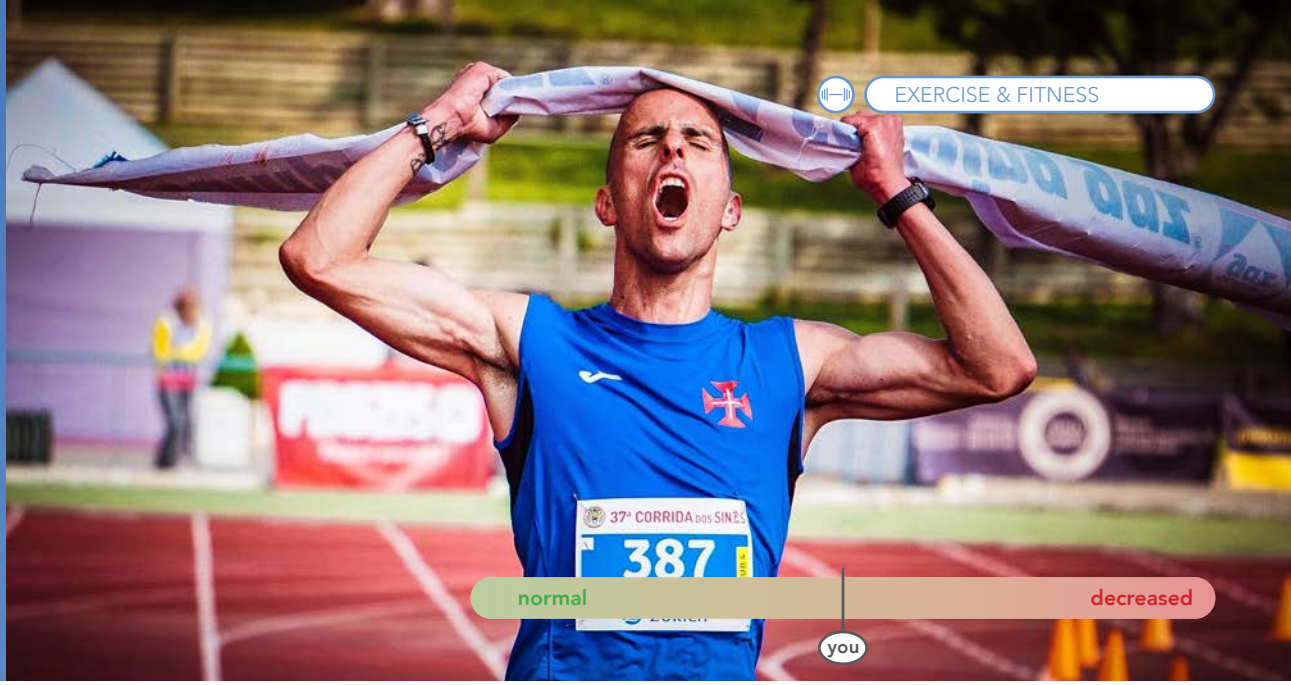
04

Physical Activity

Exercise & Fitness
Better Endurance Performance
VO2max
Strength Training
Physical Activity

Injury & Recovery
Injury Risk - Ligament and Tendon
Pain

Exercise Behavior
Motivation to Exercise



VO2max

Your genes say: ***You have a typical aerobic capacity.***

Genes
ADRB2
GSTP1
NFIA-AS2
PPARGC1A

Your Score
1.0

Condition

Cardiorespiratory fitness can be measured by maximal oxygen uptake (VO-2max), which is defined as the maximum volume of oxygen per unit time that a person uses at maximum exertion. The baseline VO2max level can vary depending on age, gender, medical history, and level of physical activity. Endurance training can increase your VO2max, even if you start with a decreased aerobic capacity.

A variant in the PPARGC1A gene, a key regulator of energy metabolism, is associated with baseline VO2max (L/min). The GG and GA genotypes are associated with „Typical" VO2max, while the AA genotype is associated with „Decreased" VO2max.

Your result: ***You have a typical aerobic capacity.***

Recommendations

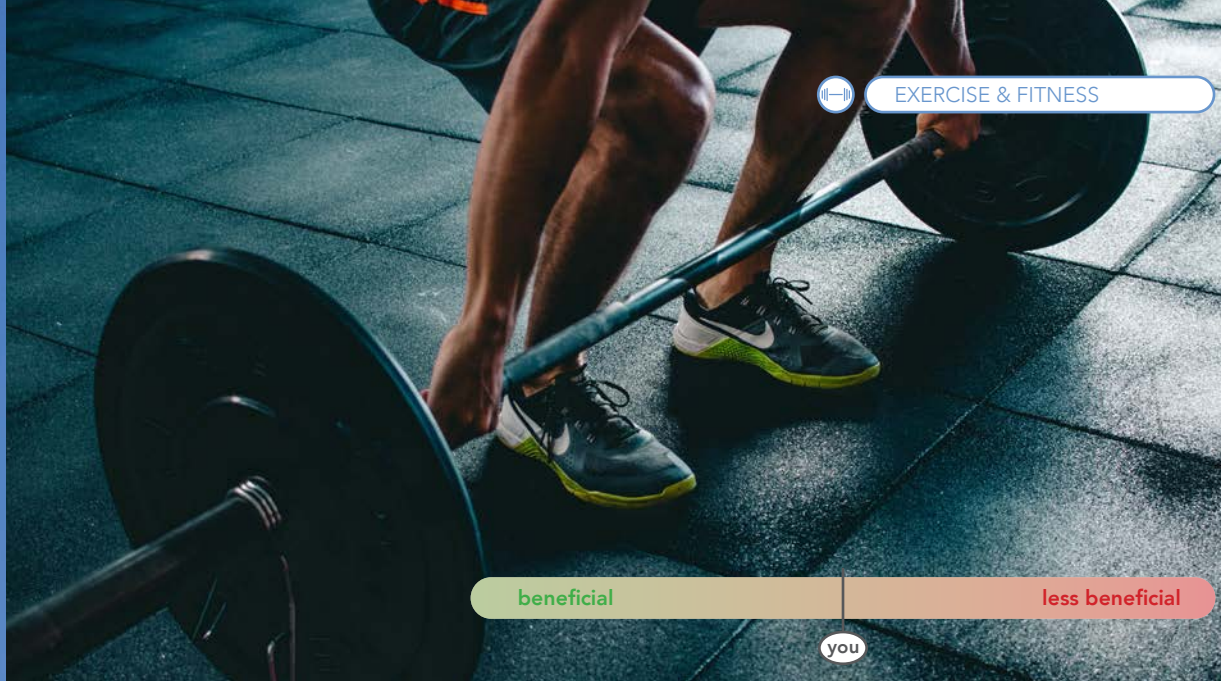
Risk type & **Non-risk type**

- If you are just starting to exercise, begin with 10 to 20 minutes of aerobic exercise per session. Gradually increase your exercise time until you can exercise continuously for 60 minutes.

Vigorous Activities

You can further determine your VO2max using indirect calorimetry.

Vigorous activities
Brisk walking (about 4.5 mph)
Bicycling at more than 10 mph
Hiking uphill
Cross-country skiing
Stair climbing
Soccer
Jogging
Jumping rope
Tennis (singles)
Basketball
Heavy yard work



Genes
INSIG2
ACTN3

Your Score
1.0

Strength Training

Your genes say: Strength training may be less beneficial for you.

Condition

Strength training involves exercises that use opposing forces to build muscle. Variations in your genome can influence how beneficial strength training is for you. Strengthening exercises are recommended as part of fitness routines for at least two days a week. Long-term systematic resistance training increases skeletal muscle size and strength in both men and women of different ages.

However, people with the CG or CC genotypes may experience increased fat volume after a long period of resistance training.

Your result: ***Strength training may be less beneficial for you..***

Recommendations

Risk type

- Strength and flexibility exercises can help you increase muscle strength, maintain bone density, improve balance, and relieve joint pain.
- Aim to participate in strengthening activities at least two days per week.

Non-risk type

- You are likely to see more gradual gains in muscle size and strength. While resistance training is important, it should be combined with aerobic exercise.
- Aim to participate in strengthening activities at least two days per week.

Strength Training

Strength and flexibility exercises will help you increase muscle strength, maintain bone density, improve balance, and relieve joint pain.

Muscle-strengthening activities
Lifting weights
Working with resistance bands
Heavy gardening, such as digging and shovelling
Climbing stairs
Hill walking
Cycling
Dancing
Push-ups, sit-ups and squats
Yoga

05

Skincare

Skin Photoaging
Wrinkles & Collagen Degradation
Tanning Response
Sun Spots (Lentigines)
Freckles (Ephelides)

Skin Texture & Elasticity
Cellulite
Varicose Veins

Skin Inflammation & Allergy Risk
Generalized Psoriasis
Acne

Skin Oxidation Protection
Antioxidation Response

06

Sleep

Sleep Quality
Sleep Movement
Snoring
Sleep Interruptions
Deep Sleep

Sleep Type
Chronotype
Short Sleep

07

Personality

Personality

Novelty Seeking

Performance under Pressure (Warrior/Strategist)

Openness

Neuroticism

Empathy

Addiction

Alcohol

Nicotine