



The Swissmed Protocol for Cognitive Health

Personalized and multifactorial treatment to prevent or reverse cognitive decline



Introduction

Personalized interventions have been empowering patients all over the world to prevent Alzheimer's disease and even reverse it at its early stages. In contrast to the conventional view of Alzheimer's as a singular disease, the Swissmed Protocol considers it as the result of a complex interplay of multiple factors. These factors include chronic inflammation, brain atrophy, cardiovascular issues, nutrient deficiencies, toxins, hormonal imbalances, and more.

By identifying and addressing these diverse factors, our approach works on preventing mental decline, restoring cognitive function and promoting overall brain health.

With Alzheimer's being the seventh leading cause of death worldwide and the understanding that it starts to develop years, even decades, before noticeable symptoms emerge, prevention is key. It's never too early to initiate efforts to safeguard our brain health.

Alzheimer's disease is a neurodegenerative condition affecting millions of people worldwide. It is characterized by progressive cognitive decline, memory loss, and behavioral changes, eventually leading to death.

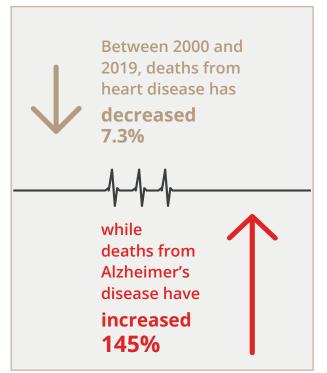
Changes in the brain often begin many years before symptoms appear. These brain-related effects which significantly influence an individual's daily life and independence, include the following:

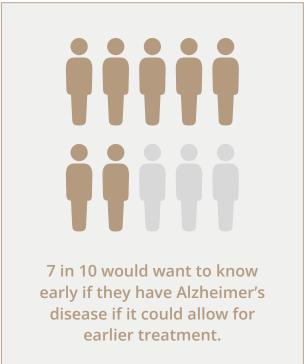
- Neurological Changes: The brain experiences physical changes, including the formation of abnormal protein clusters (amyloid plaques and tau tangles), which contribute to the disruption and eventual loss of connections between nerve cells (neurons).
- **Brain Shrinkage:** Progressive neuron loss and damage in specific brain regions lead to a decrease in overall brain volume, affecting functions associated with those areas.
- **Cognitive Decline:** Besides memory loss, Alzheimer's affects thinking abilities, attention span, problem-solving skills, and the ability to make decisions.
- **Communication Impairment:** Damage in brain regions responsible for language and communication can result in difficulties expressing thoughts or understanding spoken or written language.
- **Behavioral and Mood Changes:** Alzheimer's can bring about shifts in behavior, mood swings, anxiety, irritability, depression, agitation, and, in some cases, hallucinations or delusions.
- **Motor and Coordination Issues:** Some individuals may experience declining motor skills, affecting movement, coordination, and balance.
- **Disorientation and Confusion:** Disorientation in time, place, or familiar surroundings is common, causing confusion and getting lost even in well-known places.

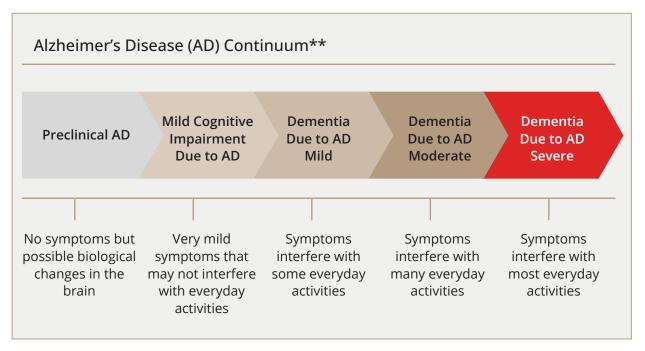




Clearly, Alzheimer's disease imposes tremendous burdens on patients, families, and the medical community. At the same time, disturbing statistics* indicate that the rate of the disease may be increasing.







^{*}Alzheimer's Association

^{**}Although these arrows are of equal size, the components of the AD continuum are not equal in duration.



Conventional treatments for Alzheimer's disease use a "brute force" approach. These treatments focus primarily on managing symptoms and temporarily slowing down the progression of the condition, without halting the progression of the disease or addressing its root cause. Most patients get the same treatment, be it cholinesterase inhibitors, memantine, or supportive therapies.

Contrary to the conventional approach, the Swissmed Protocol uses extensive assessments and custom tailors a treatment to each patient. No two treatments plans are the same. By addressing this multifactorial disease with a personalized-medicine approach that scientifically identifies and treats what each patient brain requires, the chances of success improve significantly.

Initial results from a small study are encouraging. According to a 2022 study published in the Journal of Alzheimer's Disease entitled Precision Medicine Approach to Alzheimer's Disease: Successful Pilot Project 84% of early-stage Alzheimer's patients who received personalized care were rated as improved.

The Swissmed Protocol for Alzheimer's Disease consists of the following steps:

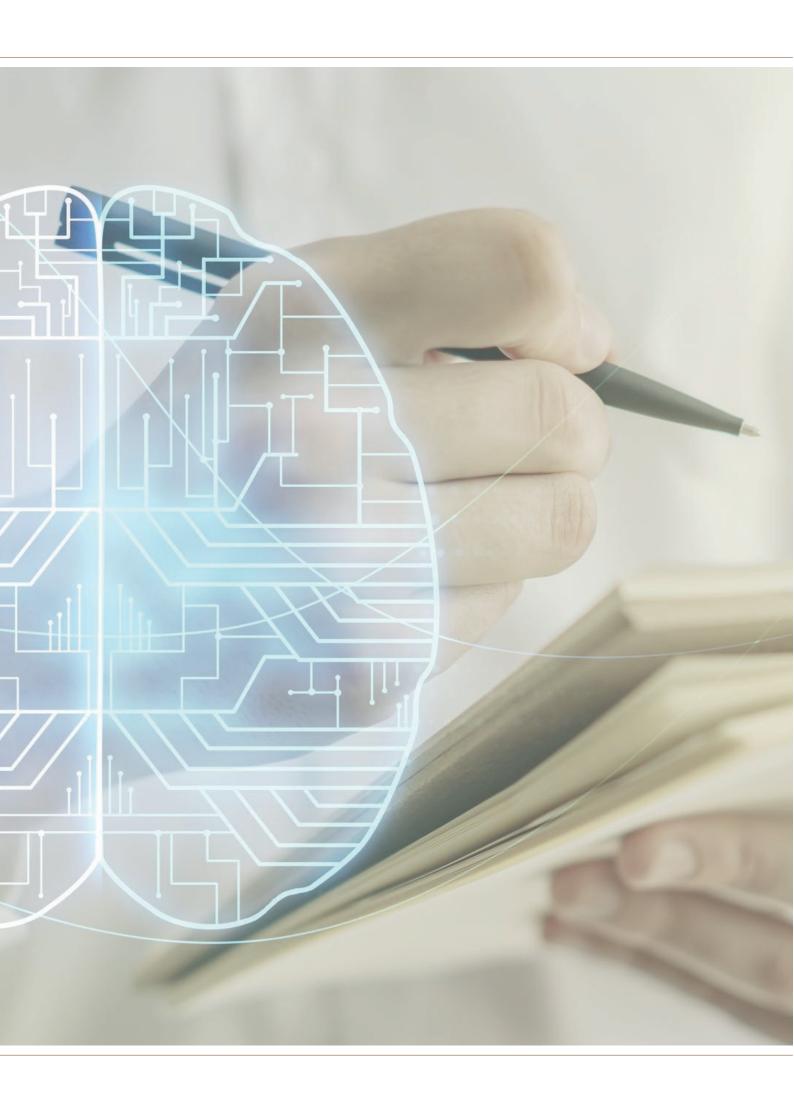
- Assess cognition
- Assess genetic risk
- Assess medical contributing factors
- Deliver personalized treatment
- Improve lifestyle choices



When patients come to us for prevention of dementia or for reversing existing cognitive decline, we first define their therapeutic goals and then we customize the five steps to accomplish those goals. Each patient is different, and, with few exceptions, there are no one-size-fits-all solutions.

Whereas this report is by no means an exhaustive discourse on Alzheimer's disease, the following pages summarize our five-step approach to personalized therapy. Improving brain health is an important choice which can lead to a healthier and more fulfilling life.

If you or someone who knows is dealing with dementia or would like to work on preventing dementia, we encourage you to contact us for more details.



Assess Patient Cognition

Cognitive assessments serve as vital tools in evaluating an individual's mental capacities and cognitive functioning, particularly in the context of diagnosing and monitoring conditions like Alzheimer's disease. The battery of assessments involves a series of tests and evaluations designed to gauge various cognitive functions, including memory, attention, language, executive function, and visuospatial skills.

These assessments provide a comprehensive overview of an individual's cognitive strengths and weaknesses, offering critical insights into their mental capabilities. What's more, they will help our doctors establish a baseline cognitive status, track changes over time, and facilitate early detection of cognitive decline.

Various tools and standardized assessments are employed during cognitive evaluations, such as the Montreal Cognitive Assessment (MoCA), and Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-Cog). These tests encompass diverse tasks and questions, ranging from recalling information, identifying patterns, solving problems, to following instructions. The treating physician in consultation with the patient will determine which cognitive assessments will be used.





Assess Genetic Risk

Chris Hemsworth, the Australian actor known for his role as Thor in the Marvel Cinematic Universe, was taken aback when he received unexpected news about his genetic test results. During a routine health assessment, Chris learned that he possessed two copies of the ApoE4 gene variant, known for its association with a heightened susceptibility to Alzheimer's disease. After finding out, he announced that he would take a break from acting to focus on his health.

And with good reason. Carrying one APoE gene increases the likelihood of developing Alzheimer's disease by two to three times over those who don't have it. Carrying two copies of the gene increases the risk of developing Alzheimer's disease tenfold. In addition, having two copies of ApoE4 is associated with an earlier onset of Alzheimer's symptoms.

The ApoE4 gene variant is involved in the breakdown and clearance of betaamyloid proteins in the brain. These proteins are known to form plaques, a hallmark characteristic of Alzheimer's disease. ApoE4 may impact how effectively the brain removes these harmful proteins, contributing to their accumulation and the subsequent neurodegeneration seen in Alzheimer's disease.

Understanding one's genetic predisposition, such as carrying the ApoE4 gene, can offer insight into their risk profile for developing Alzheimer's disease. However, it is crucial to note that genetics represent only one aspect of Alzheimer's risk, and not all individuals carrying the ApoE4 gene will develop the disease.

Consulting with your Swissmed Health treating physician for personalized assessments and guidance is essential for determining your genetic risk factors for Alzheimer's.





Assess Medical Contributing Factors

Unlike the conventional approach which views Alzheimer's disease as a single condition, the Swissmed Protocol regards it as a multicausal disease with interacting, yet different, causative factors.

The assessment of contributing medical factors involves more than 100 data points, including lab testing, genomic evaluation and a detailed medical and family history.

For the purposes of this report, we will analyze four of the multiple causative factors:

- Toxicity
- Inflammation
- Vascular issues
- Brain atrophy

A typical patient assessment would look like this and would include all the causative factors:

1	Toxicity	Patient Score (1-10)	9	Need for Support High
2	Inflammation	Patient Score (1-10)	6	Need for Support Moderate
3	Vascular issues	Patient Score (1-10)	3	Need for Support Low
4	Brain atrophy	Patient Score (1-10)	7	Need for Support High

www.swissmedhealth.com (13)



Toxicity

One of the underlying causes of Alzheimer's disease is toxic metal poisoning. Whereas heavy metal poisoning is not usually considered a source of disease by traditional medical practitioners, it can often be one of the root causes behind many symptoms and diseases, including Alzheimer's.

Heavy metal poisoning is the gradual accumulation of various heavy metals in the body. Zinc, iron, manganese and molybdenum are essential metals to our body's proper functioning. They are responsible for many useful functions, including the regulation of human metabolism, red-blood-cell formation, energy production, liver function and much more.

At the same time, the presence of metals in the body at excess levels becomes toxic and harmful. High levels of mercury, lead, arsenic, thallium, and other heavy metals can cause several disorders with each metal having unique symptoms when they accumulate at toxic levels.

Symptoms of toxicity include depression and attention deficits, eventually leading to the loss of recent and past memories. MRI scans may show shrinkage in the hippocampus and hormonal abnormalities may be evident in laboratory tests, alongside fluctuations in zinc and copper levels.

At Swissmed Health we assess heavy metal toxicity through a urine test preceded by an IV "provocation" of toxic metals in the body. Recommended treatments for toxicity include chelation therapy to eliminate heavy metals, customized IV treatments, ozone IVs, and more.





Inflammation

Inflammation is the body's natural response to harmful stimuli, such as injury, infection, or irritants. It's a protective mechanism where the immune system's cells and molecular mediators work together to eliminate the cause of damage, clear out debris, and initiate the healing process.

Chronic inflammation, however, differs from acute inflammation. While acute inflammation is a short-term and beneficial response aimed at healing, chronic inflammation is a prolonged and sustained inflammatory state. This persistent activation of the immune system can occur due to various factors, such as ongoing infections, long-term exposure to irritants, or other underlying health conditions.

Chronic inflammation in the brain, often referred to as neuroinflammation, plays a role in the development and progression of Alzheimer's disease. In Alzheimer's disease, inflammatory responses within the brain involve the activation of immune cells and the release of inflammatory molecules. This chronic and sustained neuroinflammation is thought to contribute to the accumulation of abnormal protein deposits (such as beta-amyloid plaques), neuronal damage, and the progression of cognitive decline seen in Alzheimer's patients.

Brain inflammation is commonly found in individuals carrying one or two ApoE4 alleles. Remarkably, ApoE is deemed an inflammatory gene itself. Symptoms typically emerge with an initial loss in the ability to retain new information within the hippocampus. One of the notable impacts of brain inflammation is the reduction in hippocampal volume. What's more, prolonged inflammation prompts the brain to accelerate the destruction of synapses, surpassing the rate of synapse creation.

Assessment of inflammation takes place via a battery of tests, including HS CRP, homocysteine, Interleukin 6 (IL-6), TNFa, insulin resistance and more. Treatment is highly personalized.





Vascular Issues

Cardiovascular health plays a significant role in brain health, and conditions like heart disease, high blood pressure, diabetes, and high cholesterol might contribute to an increased risk of developing Alzheimer's disease. Individuals with cardiovascular issues often display a higher likelihood of experiencing cognitive decline and are at an elevated risk of developing Alzheimer's later in life.

Vascular risk factors associated with cardiovascular disease, such as hypertension or atherosclerosis, can affect blood flow to the brain, potentially leading to reduced oxygen and nutrient supply, which in turn may contribute to brain changes and cognitive impairment observed in Alzheimer's disease. What's more, the presence of cardiovascular conditions could contribute to the buildup of amyloid plaques and tau tangles, hallmark indicators of Alzheimer's disease.

Treatments for cardiovascular issues include Plaquex IVs to reduce arterial plaque, customized IVs, Pulsed Electromagnetic Field therapy, nutritional support and more.

Managing and maintaining optimal cardiovascular health can potentially reduce the risk of Alzheimer's disease or slow its progression.



www.swissmedhealth.com (19)



Brain Atrophy

Another causative factor for Alzheimer's disease is brain atrophy. Brain atrophy, characterized by a reduction in brain tissue volume, significantly influences the progression and manifestation of Alzheimer's disease. This shrinkage in brain size is particularly noticeable in regions crucial for memory, cognition, and decision-making, such as the hippocampus and the cerebral cortex.

In Alzheimer's patients over 70 years of age, brain atrophy is often a prominent feature, and the extent of atrophy often correlates with the severity of cognitive decline. The gradual loss of neurons and the connections between them leads to the progressive deterioration of brain function, ultimately resulting in symptoms commonly associated with Alzheimer's, including memory loss, impaired thinking and reasoning, changes in behavior and dependence on caregivers.

Assessments for determining the level of brain atrophy include MRI scanning, testing for hormone levels, key nutrients and insulin resistance.

Understanding the relationship between brain atrophy and Alzheimer's disease is crucial for early detection, intervention, and the development of potential treatments aimed at slowing down or halting the progression of this neurodegenerative condition. Treatments include the optimization of hormone levels, nutritional support, brain stimulation and more.





Next Steps: Your Journey to a Healthy Brain Starts Here

At Swissmed Health, we are dedicated to increasing your lifespan and healthspan and supporting your brain health. We believe in the power of tailored treatments, personalized care plans and actionable solutions.

By comprehending Alzheimer's disease as a multifactorial condition and embracing proactive measures, you can take control of your cognitive well-being today.

Ready to take the first step towards cognitive vitality and the pushing back of dementia? Reach out to us today to begin your personalized treatment program, and let's embark on the journey to a healthier and longer life together.





About Swissmed Health

Swissmed Health is an innovative medical center located in Cyprus. We offer patients a new approach to health called personalized Swiss medicine. Developed after working with over 22,000 patients, our approach synergistically combines the best of functional medicine, biological medicine and personalized medicine. By seamlessly integrating cutting-edge diagnostics, compassionate care, and innovative treatments, we not only enhance the quality of life but also inspire a profound sense of hope and confidence in our patients and community.

Through our visionary personalized medicine approach, we strive to eradicate health limitations, enabling a stress-free and pain-free lifestyle for patients, so they can lead a life of vitality and well-being. Drawing inspiration from the belief that life should be lived to its fullest, we relentlessly pursue excellence in healthcare. Our legacy is one of authentic, personalized solutions for even the most complex conditions.

Rooted in Swiss values of precision and trust, Swissmed Health stands as a beacon of hope for patients who run out of options. We are devoted to nurturing wellness and empowering patients to take control of their lives through seamless experiences and exceptional care.

As we embrace our legacy, we are committed to not only enhancing the healthcare system but also becoming the model for a truly integrated, compassionate, and visionary healthcare approach. Welcome to Swissmed Health, where we don't just care for life-we catalyze its brilliance.





Our Philosophy

Personalized Swiss medicine differs from conventional medicine in several ways. It focuses on identifying and addressing the underlying root causes of disease rather than just treating symptoms. It also emphasizes the interconnectedness of the body's systems and the importance of addressing underlying imbalances.

What's more, personalized Swiss medicine takes a more holistic, patient-centered approach to care, recognizing that every individual is unique and requires personalized attention. Through a highly customized approach to care, our medical doctors aim to optimize patients' health and wellness using a combination of sophisticated testing, innovative, evidence-based therapies, holistic treatments as well as lifestyle modifications.

Following are some of the key principles of our philosophy:

- The body is a complex, interconnected system
- 2 Each patient is unique
- 3 Health is more than the absence of disease
- 4 The body has an innate ability to heal
- 5 Nutrition is important
- 6 Mind-body connection
- 7 Lifestyle factors matter
- 8 Prevention is key
- 9 Collaboration with the patient is essential
- 10 Evidence-based care







33 Spyrou Kyprianou, 3070, Limassol, Cyprus Tel: +357 25 010 200 I E: info@swissmedhealth.com www.swissmedhealth.com