Feiolix®

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Healthy Ageing

Feiolix for healthy ageing

The average age of the global population is rising due to declining fertility, large age cohorts reaching older years, and increasing longevity. The population over the age of 65 increased from 6% of the global population in 1990 to 9% in 2019 and is projected to rise to 15% (1.5 billion people, or 1/6 people) by 2050. This age distribution is unprecedented and is expected to bring sweeping changes in population needs and capacities, with potentially significant implications for healthcare.[1]

In addition to longer lifespan, it's becoming increasingly important for ageing to be accompanied by a longer health-span, meaning good health, a sustained sense of well-being, and extended social engagement and productivity. Metabolic health is at the foundation of both lifespan and health-span. How the body metabolises energy changes with age. Without deliberate lifestyle and dietary interventions, digestion and metabolism slow. This contributes to weight gain, a redistribution of body fat to the abdomen and around vital organs (visceral fat), and systemic inflammation which is often felt in the joints.[2]

Feiolix can mitigate the age-related downward metabolic spiral by increasing mitochondrial thermogenesis, increasing insulin sensitivity, and decreasing inflammation and joint pain, allowing for increased activity and energy utilisation.

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Metabolic Decline	Feiolix Supports Healthy Ageing
Lean muscle and brown adipose tissue support a healthy metabolic rate, due to high numbers of mitochondria. Mitochondria are energy utilising organelles present in each cell and responsible for the burning of energy, and for thermogenesis: the production of heat. Unfortunately, lean muscle declines with age and brown adipose tissue shifts to white adipose tissue. White adipose tissue is less metabolically active and disrupts the endocrine system, creating a pro-inflammatory environment that reduces insulin sensitivity.	The abscisic acid in Feiolix increases the number of mitochondria in adipose tissue, effectively converting white adipose tissue to brown adipose tissue and supporting existing brown adipose tissue.[3] The abscisic acid in Feiolix increases the metabolic activity and glucose utilisation of the mitochondria in skeletal muscles and brown adipose tissue. This speeds up metabolism and increases thermogenesis.[4]
Reduced insulin sensitivity is extremely common with age, and a key part of the downward metabolic spiral that aging populations often find themselves in.	The abscisic acid in Feiolix supports both increased insulin secretion from the pancreas and increased glucose absorption from the blood stream into skeletal muscles and brown adipose tissue.[5] Once inside skeletal muscles and brown adipose tissue, Feiolix improves glucose utilisation by the mitochondria.[4]
Not only does reduced insulin sensitivity contribute to weight gain, but it also contributes to dyslipidaemia and increases the risk for inflammatory diseases such as cardiovascular disease, non-alcoholic fatty liver disease, cognitive decline, and arthritis.	The unique combination of bioactives in Feiolix support healthy blood lipid profiles by significantly reducing triglycerides, cholesterol, and LDL cholesterol while maintaining HDL cholesterol levels.[7]
The systemic inflammation that occurs during metabolic decline is felt most acutely in the joints where fluids accumulate, putting pressure on nerves and contributing to reduced activity levels. This pain and inflammation is partially mediated by pro-inflammatory cytokines which recruit inflammatory immune cells.	The potent anti-inflammatory bioactives in Feiolix target joints, reducing inflammatory pressure and pain. Aged mice consuming Feiolix had decreased inflammatory cytokines (TNF-α, TNF-β, and IL-4). In mice with osteoarthritis, Feiolix was as effective as the drug methotrexate at increasing foot pressure and running speed in mice, benefits which can also be attributed to decreased inflammatory cytokines (TNF-α, IL-2, Interferon-γ).[6,7,8,9]

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