



European Hormone and Metabolism Foundation

Foundation of the European Society of Endocrinology

“Hormone and metabolic health play a central role in individual and societal well-being. It is important that this is understood and supported at all layers of our society”

AJ van der Lelij (Chair of the ESE Foundation)



The overarching aim of the European Hormone and Metabolism Foundation (ESE Foundation) is for the public benefit, and people with endocrine disorders are at the core of the ESE Foundation's objectives.



Our Vision: Committed to hormone and metabolic health throughout life.



Our Mission: To promote public and political awareness, research, policies and care focused on hormone and metabolic health and disease, thereby ensuring optimal quality of life.

The ESE Foundation will focus on three main areas:

Raising Public Awareness

The overarching aim of the ESE Foundation is to improve public and political awareness of the importance of hormone and metabolic health throughout life, and people with endocrine disorders are at the core of the ESE Foundation's objectives.

Endocrine conditions like diabetes, obesity, thyroid disease, infertility and sexual dysfunction, cancer and osteoporosis affect large groups of our population, but also rare endocrine disorders have a high individual and societal impact.



Supporting Endocrine Research

The important role of endocrine and metabolic health and disease has become increasingly clear over the last decade, and specifically also during the COVID-19 pandemic.

Addressing the impact these many different diseases have on patient's lives requires increased research efforts. Research needs to focus on developing a better understanding of underlying mechanisms, designing prevention measures, improving the diagnostic tools and treatment regimens, and developing our understanding of longer-term disease outcomes and management.

The ESE Foundation aims to work with its partners to raise funding and resources to support researchers and clinicians in exploring new areas of research and develop collaborations.

Advocating for better health policies

The aim of the ESE Foundation is to advocate to the European Institutions for the important place of hormones in European Health Policies.

The ESE Foundation applauds the focus around major health issues like the need to prevent obesity and improve the management of this condition, to reduce the inequalities around rare diseases, to set ambitious targets in the fight against cancer and to reduce exposure to endocrine disruptors. The ESE Foundation can contribute by providing the expert endocrine perspective required.

The ESE Foundation will work with the institutions and like-minded organisations to achieve these ambitions.





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About endocrine and metabolic health and disease

What is Endocrinology, and what is metabolism?

ENDOCRINOLOGY is the field of medicine that relates to the human endocrine system, a network of cells, tissues and organs that produces and releases hormones into the bloodstream. The **endocrine system** plays an important role in the body's ability to maintain fundamental processes for life including heartbeat regulation, bone/tissue structure and growth, energy intake and expenditure, as well as the ability to conceive a baby, to name just a few. The combined processes involved in maintaining the living state of cells of the organism is called **METABOLISM**.

Hormones are critical to health and wellbeing throughout life.

From the day we are conceived to the day we die, hormones play a critical role in regulating our growth and development, the maturation from a child over adolescence into adult life, fertility, our mental, physical and general well-being.

What can go wrong?

Our body can produce too little or too much of certain hormones, and this can have a detrimental impact. As an example, a growth hormone deficiency in children can lead to stunted growth and short stature; a deficiency in

the production of cortisol by the adrenals can lead to life threatening situations when cortisol is needed to orchestrate the body's reaction against stress situations, a deficiency in sex hormones can lead to infertility disorders, the absence of insulin leads to the development of diabetes.

But also excess of cortisol because of an adenoma (a tumour of a hormone producing gland) is detrimental as it breaks down muscle, causes obesity and bone loss, and results in hospitalisation, surgery and long-term consequences. Also, fat tissue is an 'endocrine organ', producing more than 600 hormones involved with the maintenance of body weight. If the normal hormonal balance is lost, this shows itself in many ways.

External factors can impact on the hormones system: chemicals and compounds that have so called '**endocrine disrupting properties**' can impact on our hormonal regulation through their hormone like structures; **irradiation** can lead to damage of the endocrine glands, leading to e.g., thyroid cancer or pituitary hormone deficiencies; **unhealthy or unbalanced nutrition** can have an impact on our metabolism by exhausting the hormone levels we have to cope with normal food intake.



Endocrine disorders are amongst the biggest diseases to impact society.

Disorders of the endocrine system can cause conditions such as diabetes, obesity, thyroid disease, growth disorders, hypertension, osteoporosis, infertility and sexual dysfunction, cancer and other illnesses that affect large groups of the population. Moreover, more than 400 rare diseases with endocrine cause or components and characterised by late diagnosis, little awareness and limited therapeutic and disease management options add to the societal burden.

Research shows that endocrine related conditions impact the outcomes of patients with COVID-19. There is recent evidence that people suffering from hormone conditions, such as diabetes and obesity, have more severe symptoms and health outcomes including death.

"The European Hormone and Metabolism Foundation – committed to hormone and metabolic health throughout life."

Contact the ESE Foundation

The ESE Foundation is a legal entity registered in Brussels as a private foundation (Enterprise number is **0753.997.925**), with the European Society of Endocrinology (ESE) as the Founder. The ESE Foundation is located at Avenue des Arts 56, 1000 Bruxelles (c/o Interoffices).

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