

# Because Hormones Matter

What are they and how do they impact our lives?



**European Hormone Day**  
Because Hormones Matter

## How do hormones work?

- Hormones are biological messengers that travel throughout the body, telling our cells and organs what to do.
- Hormones are essential. They:
  - help us grow and mature
  - cope with stress
  - help us stay fit and healthy
  - manage our metabolism
  - determine our sexual function
- There are many hormones, each with its own essential function.

- Insulin
- Cortisol
- Testosterone
- Leptin
- Adrenaline
- Oestrogen
- Melatonin
- Prolactin
- Thyroxine
- Growth Hormone
- and many more

## What is endocrinology?

- Endocrinology is the study of hormones in the human body and their roles in health and disease.

## What are endocrine disorders?

- Endocrine disorders are caused and characterised by abnormal (too high / too low) hormone levels.
- Endocrine disorders include obesity, diabetes, thyroid disease, cancer, growth disorders, hypertension, osteoporosis, infertility and sexual dysfunction, and many rare diseases.
- **More than three quarters of the population will need an endocrinologist at some point in their life.**

Join European Hormone Day at:  
[www.europeanhormoneday.org](http://www.europeanhormoneday.org)

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 **European Society of Endocrinology**  
[www.eese-hormones.org](http://www.eese-hormones.org)

 **European Hormone and Metabolism Foundation**  
[www.eese-foundation.org](http://www.eese-foundation.org)

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It is time to recognise the role of hormones in preventing, treating and living with some of the most prevalent diseases in the world.



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## Cancer



**CANCER** is the second leading cause of death and morbidity in Europe<sup>i</sup>

**3,7 million** cases per year<sup>i</sup>

**1,9 million** deaths per year<sup>i</sup>

Median survival of neuroendocrine tumours is **41 months**<sup>ii</sup>

More than **90,000** new cases of thyroid cancer per year<sup>iii</sup>

### POLICY ASK

Strengthen the endocrine perspective and acknowledge endocrine cancers in the Beating Cancer Plan and Horizon Europe research calls.

## Endocrine Disrupting Chemicals

Exposure through inhalation, food and water consumption, skin



and transfer from mother to foetus

Over **1,500** chemicals of concern in plastics contribute to many incidences of endocrine cancers, obesity, diabetes, thyroid disease, osteoporosis and infertility<sup>iv</sup>

**Between €157 and €270 billion per year** in health care expenses and lost earning potential in Europe<sup>v</sup>

### POLICY ASK

Implement all legislation relevant to EDCs without any further delay to ensure a more healthy and sustainable European society for the current as well as future generations.

## Obesity

Those living with obesity have been found to have a life expectancy five years shorter than those with a "healthy" weight status<sup>vi</sup>

In adults, a **5–10% weight loss** may lead to health benefits from decreasing obesity-related comorbidities<sup>vii</sup>

In Europe, **200,000** new cancer cases are linked to obesity per year<sup>vi</sup>

Overweight and obesity cause more than **1.2 million deaths** across the WHO European Region every year<sup>vi</sup>

Almost **6/10** of adults and nearly **1/3** children live with obesity or overweight in Europe<sup>vi</sup>

### POLICY ASK

Recognise obesity as a chronic relapsing endocrine disease by all stakeholders at European and national levels, focus on prevention and develop new treatment options.

## Rare Endocrine Diseases

Rare diseases affect approximately **30 million** in the EU<sup>viii</sup>

Over **400** rare diseases are related to the endocrine system<sup>ix</sup>

Rare diseases are often chronic and life-threatening.

Key issues to address are:

- late diagnosis
- need for access to expert centres
- many diseases have no cure

### POLICY ASK

Allocate the resources to mature the critical role of the European Reference Networks, drive the development of registries and innovation in diagnosis and treatment.

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<sup>i</sup> [https://www.who.int/europe/health-topics/cancer#tab=tab\\_2](https://www.who.int/europe/health-topics/cancer#tab=tab_2)

<sup>ii</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6239108/>

<sup>iii</sup> [An innovative non-invasive tool for thyroid cancer screening | News | CORDIS | European Commission \(europa.eu\)](#)

<sup>iv</sup> [Enabling a circular economy for chemicals in plastics | Elsevier Enhanced Reader](#)

<sup>v</sup> [High disease costs attributed to EDC exposure | Food Packaging Forum](#)

<sup>vi</sup> [WHO European Regional Obesity Report 2022](#)

<sup>vii</sup> [Thyroid Fact Sheet | IARC | World Health Organisation](#)

<sup>viii</sup> [Rare diseases | European Commission \(europa.eu\)](#)

<sup>ix</sup> [eurreca-core-registry-conditions-dictionary-v3.2.xlsx \(live.com\)](#)