

# Because Hormones Matter

What are they and how do they impact our lives?



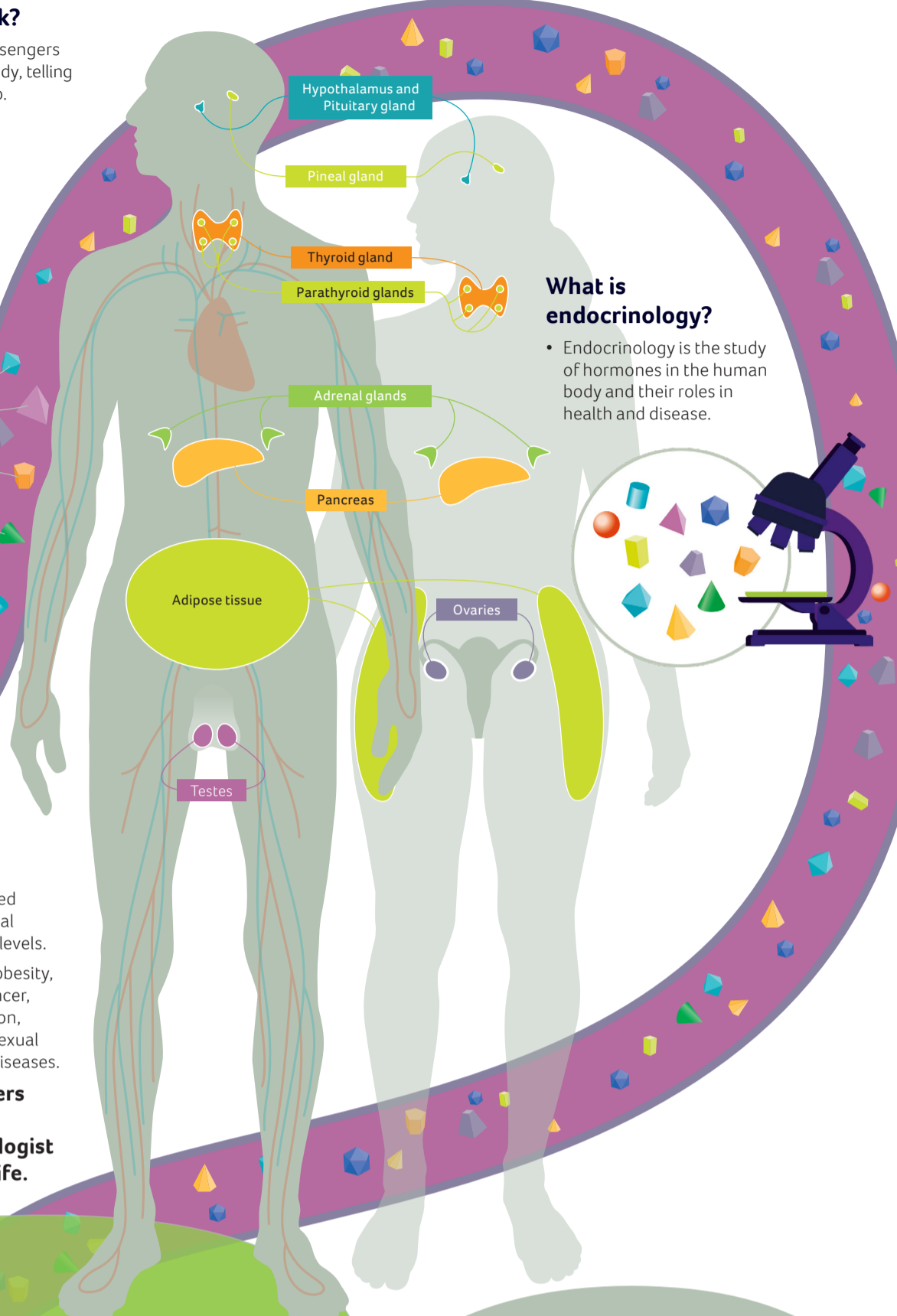
## European Hormone Day

Because Hormones Matter  
24 April 2024

### 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.**

# Because Hormones Matter

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

#BecauseHormonesMatter  
#EuropeanHormoneDay

### 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



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.

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

#BecauseHormonesMatter #EuropeanHormoneDay

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

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

<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)