Episode Summary

Stress: The Hidden Mechanism That Destroys Your Body from Within.

Video link: click here

1. Stress is a biological survival system, not just an emotion

Stress isn't "imagined" — it's a real physiological response to perceived danger. The brain activates the stress axis, and the adrenal glands release adrenaline and cortisol, preparing the body for fight or flight. In the short term, this response is protective.

The problem begins when stress becomes chronic. The body remains on constant alert, day and night, gradually overloading systems responsible for health and regeneration.

2. Chronic stress alters brain structure and function

High cortisol levels reduce the volume of the hippocampus, the brain region responsible for memory and learning. This is why chronic stress impairs focus, memory and decision-making.

At the same time, the amygdala — the brain's fear centre — becomes overactive. This leads to increased anxiety, irritability and emotional exhaustion, and over time raises the risk of depression.

3. Stress places a heavy burden on the heart and circulatory system

Adrenaline speeds up the heart rate and raises blood pressure. While harmless in short bursts, chronic stress keeps blood vessels in a constant inflammatory state.

Studies show that people living with long-term stress have a significantly higher risk of hypertension, heart attack and stroke. The heart is not designed to operate permanently in alarm mode.

4. The gut strongly reacts to psychological stress

The brain–gut axis means stress immediately affects digestion. Cramping, bloating, nausea, diarrhoea or loss of appetite can occur even without dietary mistakes.

Chronic stress also disrupts the gut microbiota, reducing beneficial bacteria. This weakens immunity, worsens IBS symptoms and negatively affects overall wellbeing.

5. Stress accelerates skin ageing

Cortisol increases sebum production, promoting acne and skin inflammation. At the same time, it slows wound healing and weakens the skin's protective barrier.

Long-term stress reduces collagen production, leading to loss of firmness, dryness and premature wrinkles. The effects of stress are often visible on the skin.

6. The immune system weakens under chronic stress

Short-term cortisol suppresses excessive inflammation, but when levels remain elevated, immune function deteriorates. Immune cells become slower and less effective.

This results in more frequent infections, slower wound healing and increased disease susceptibility. Chronic stress effectively leaves the body's defences compromised.

7. Stress affects body weight and fat distribution

Cortisol increases appetite, particularly for sugar and fat, as the body seeks quick energy for survival. When the threat isn't physical, this excess energy is stored as fat.

Most often, it accumulates around the abdomen — the most metabolically dangerous area. Stress doesn't just affect what you eat, but where your body stores fat.

8. Stress disrupts sleep and reinforces its own effects

A stressed body remains in a state of alertness, making it difficult to fall asleep or stay asleep. Even when sleep occurs, it is lighter and less restorative.

Poor sleep further raises cortisol levels, creating a vicious cycle: stress worsens sleep, and lack of sleep intensifies stress and fatigue.

9. Chronic stress accelerates cellular ageing

Stress shortens telomeres — the protective caps at the ends of DNA strands. Shorter telomeres mean faster cellular ageing and accelerated biological ageing overall.