MOLECULES OF EMOTION- 1997

By Candace B. Pert, Ph.D



WHY YOU FEEL THE WAY YOU FEEL

INTRODUCTION

Candace B. Pert's "Molecules of Emotion" (1997) delves into the intricate connections between our emotions, mind, and body, presenting groundbreaking insights from her research in neuroscience and pharmacology.



A pioneer in healthcare

The ideas Candace began researching and talking about in the 80s are now woven into the way we do science and how our healthcare system functions, even though she was ridiculed when she started her research.



1945-2013

Neuroscientist & neuropharmacologist

A brilliant scientist



She changed the course of medicine

She refused the reigning philosophical paradigm that saw the body as a kind of meat sack rather than somewhere where our consciousness, or mind, could reside and change, that started with the French scholar Renè Descartes' writings in the 1600s. "I think, therefore, I am"



Discovered Peptide T

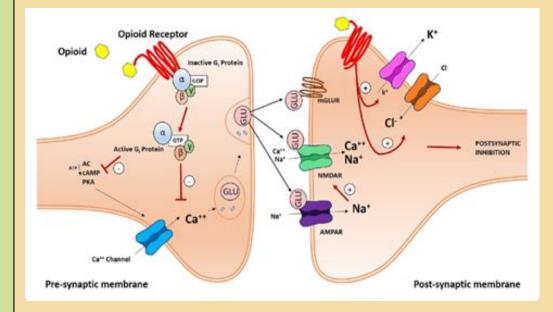
The AIDS revolution. Candace created Peptide T (the underground AIDS drug featured in the film *Dallas Buyers Club*) in an effort to help people battling with this devastating syndrome and its effects on the brain and body.



Synopsis: Pert introduces the concept of receptors—specific molecules on cell surfaces that receive chemical signals.

She discusses her discovery of the opiate receptor, highlighting its significance in understanding how emotions can influence physiological.processes.

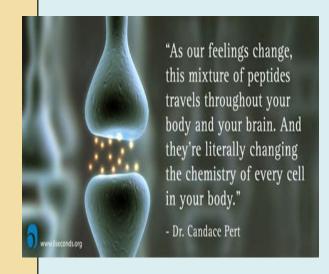
- 1. **Discovery of the Opiate Receptor:** Pert's identification of the opiate receptor demonstrated that the brain produces its own pain-relieving substances, leading to the discovery of endorphins.
- 2. Receptor-Ligand Interaction: She explains how receptors and ligands (molecules that bind to receptors) interact, likening the process to a key fitting into a lock, which initiates specific cellular responses.



The Body as a communication network

Synopsis: This chapter explores the body's complex communication system, emphasizing the role of neuropeptides and their receptors in transmitting information between the brain and various bodily systems.

- Neuropeptides as Messengers: Pert describes how neuropeptides serve as chemical messengers, facilitating communication between the nervous, endocrine, and immune systems.
- 2. Emotions and Immune Function: She provides evidence that emotional states can influence immune responses, suggesting that positive emotions may enhance immunity, while negative emotions could suppress it. (page 16 in Bio booklet)



Refutes the paradigm

Innate intelligence

Our mind and body are one, Pert said.

RT said, "I love, therefore, I am."



emotions

Chapter 3

The Chemistry of Emotion

Synopsis: Pert delves into the biochemical basis of emotions, explaining how specific neuropeptides correspond to particular emotional states and how these chemicals affect our overall health.

- 1. Serotonin and Well-being: She discusses how serotonin, a type of neuropeptide, is associated with feelings of well-being and how its imbalance can lead to mood disorders. (page 15 in Bio booklet)
- 2. Endorphins and Pain Relief: Pert explains how endorphins, the body's natural painkillers, are released in response to stress or pain, reducing discomfort and promoting a sense of euphoria.

The Emotional Connection

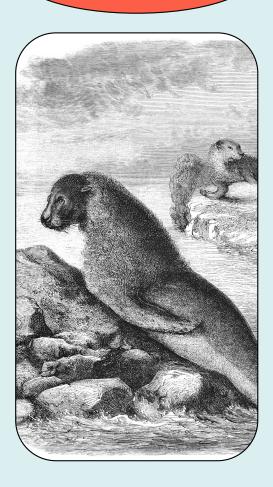
Synopsis: This chapter examines the interplay between emotions and physical health, highlighting how unresolved emotional issues can manifest as physical ailments.

Examples:

- 1. Stress and Ulcers: Pert illustrates how chronic stress can lead to the development of ulcers by disrupting the balance of neuropeptides in the digestive system.
- 2. **Grief and Immune Suppression:** She discusses cases where prolonged grief has been linked to weakened immune function, increasing susceptibility to illnesses.

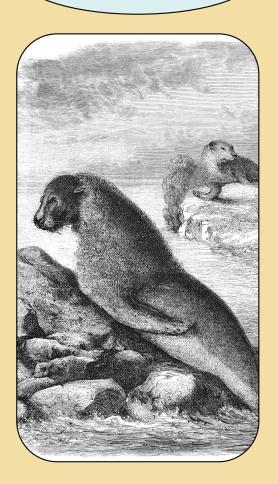
Chapter 5: The Mind-Body Connection

Synopsis: Pert emphasizes the inseparability of mind and body, arguing that mental and physical health are deeply interconnected through biochemical pathways.



The Mind/Body Connection

Chapter 5



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- 1. Placebo Effect: She explores how the belief in a treatment's efficacy can lead to real physiological changes, mediated by neuropeptide activity. Like Lipton's placebo/noceba studies
- 2. Meditation and Hormonal Balance: <u>Pert presents evidence that</u> <u>regular meditation can alter neuropeptide levels</u>, promoting hormonal balance and reducing stress.

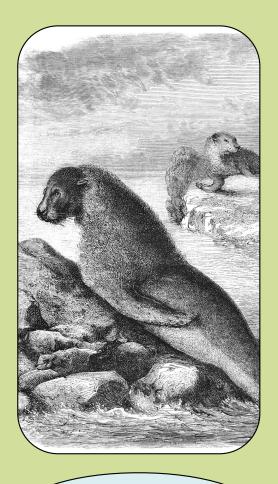
Science of Psycho-Neuro Immunology

Chapter 6

Synopsis: Introducing the field of psychoneuroimmunology, Pert discusses how psychological factors, the nervous system, and the immune system interact to influence health. (p25 in bio Booklet)

- 1. Laughter and Immune Boosting: She cites studies showing that laughter can increase the production of natural killer cells, enhancing the body's ability to combat infections.
- 2. **Depression and Susceptibility to Illness:** Pert explains how depression can suppress immune function, making individuals more prone to diseases.





Emotions & Disease

Chapter 7

Synopsis: This chapter explores the role of emotions in the development and progression of diseases, suggesting that emotional well-being is crucial for physical health.

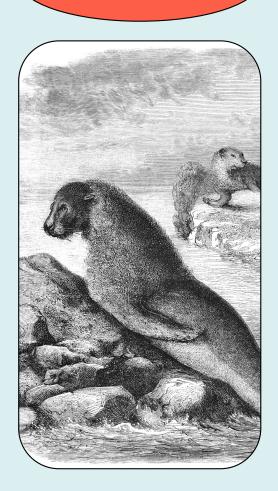
- 1. Anger and Heart Disease: Pert discusses research linking chronic anger to increased risk of cardiovascular diseases due to elevated stress hormones.
- 2. Hope and Cancer Recovery: She highlights cases where a hopeful outlook has been associated with better outcomes in cancer patients, potentially through positive effects on the immune system.

Healing & the Mind

Chapter 8

Synopsis: Pert examines how harnessing the power of the mind can facilitate healing, advocating for integrative approaches that consider both emotional and physical aspects of health. le: Biodanza:)

- 1. Visualization Techniques: She describes how patients use visualization to imagine their immune cells attacking cancer cells, leading to improved health outcomes.
- 2. Biofeedback: Pert explains how biofeedback mechanisms can help individuals gain control over physiological functions, such as heart rate, by modulating emotional states.



Synopsis: In the concluding chapter, Pert envisions a future where medicine embraces the mind-body connection, leading to more holistic and effective healthcare practices.

- 1. Integrative Therapies: She advocates for combining conventional medical treatments with practices like acupuncture and yoga to address both physical and emotional health.
- 2. Personalized Medicine: Pert discusses the potential for treatments tailored to individuals' emotional and biochemical profiles, enhancing efficacy and reducing side effects.

