

INTRODUCTION

Eating disorders are disabling and usually chronic conditions characterized by aberrant patterns of feeding and weight regulation.

They have a complex etiology involving social and biological factors, and parallel with severe neuroendocrine dysfunctions.

Brain reward systems are suggested to play a major role in the development and/or maintenance of eating disorders.

OBJECTIVES

Do we understand the physiological dysregulation that lies beneath symptomatology?

→ Improvement of therapeutic approaches and outcomes.

REGULATION OF FEEDING

Food consumption can be caused by:

- Energy imbalance
- A cognitive decision \leftrightarrow reward

Eating disorders and reward

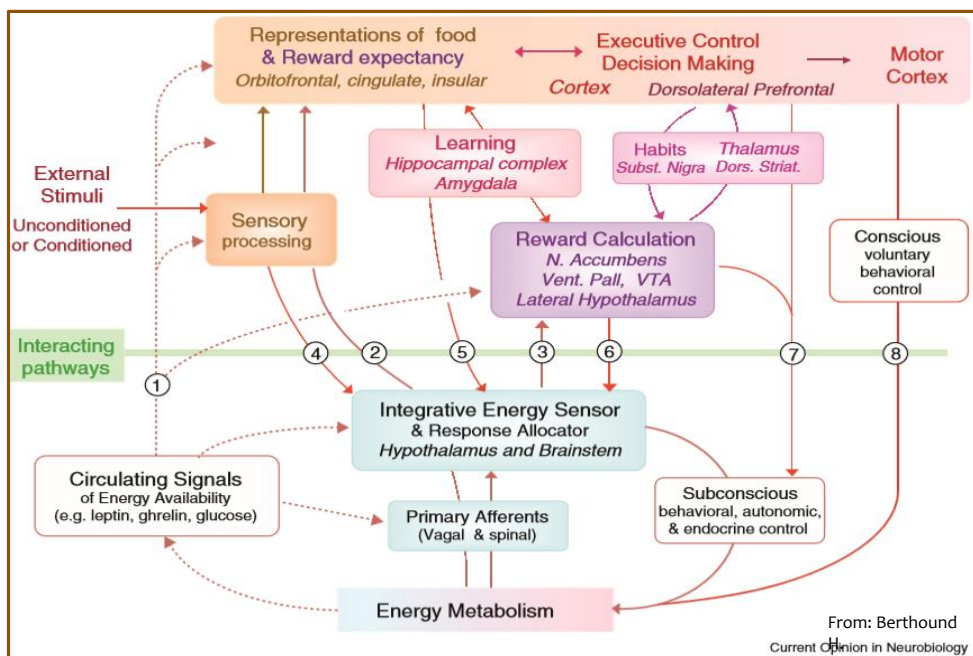
Anorexia Nervosa (AN): ascetic traits, ability to delay reward

Bulimia Nervosa (BN): novelty – seeking & reward – seeking behaviors

Dopamine signaling in eating disorders:

BN, obesity and substance abuse might share dopamine D2 receptor vulnerabilities (lower D2 – R availability / function)

INTEGRATION OF FOOD AND FOOD – RELATED STIMULI:



CONCLUSIONS

Eating disorders have yet to be completely understood. That said, reward and self – control might be as important as the energy balance component.

MAIN REFERENCES

- Berthoud H. Metabolic and hedonic drives in the neural control of appetite: who is the boss? *Current Opinion in Neurobiology*. 2011; 21:888–896
- Baik J.H. Dopamine signaling in reward – related behaviors. *Front Neural Circuits*. 2013; 7: Article 152