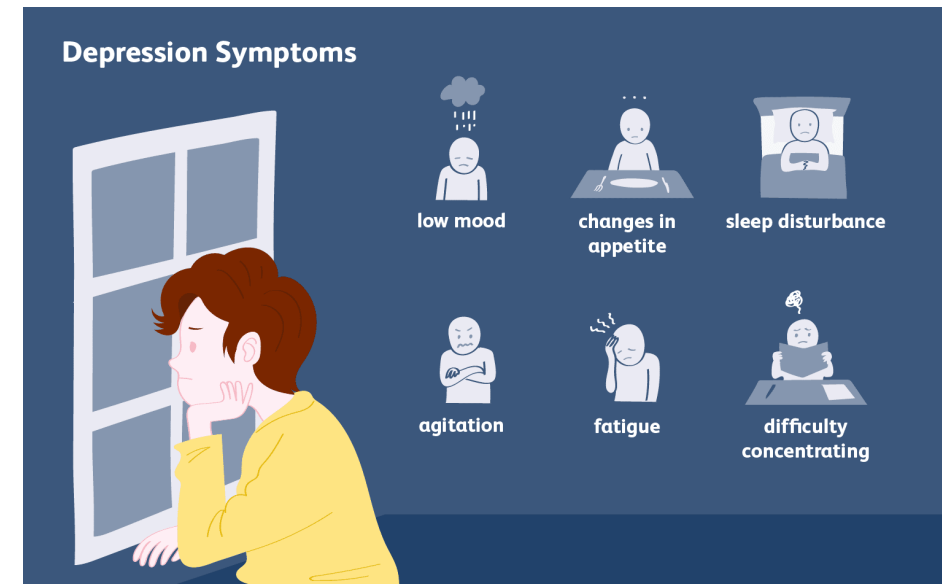


Nutrition and MDD

LILA LEHTOLA, PA-STUDENT

Background

- ▶ MDD affects around 288 million people worldwide
- ▶ Leading cause of disability worldwide
- ▶ Annual incidence of MDD has increased during the course of covid pandemic, increase of 27.6% which is about 53.2 million cases globally
- ▶ Bidirectional relationship between MDD and malnutrition, and depressed individuals often lack certain critical nutrients along with an aberrant dietary pattern.

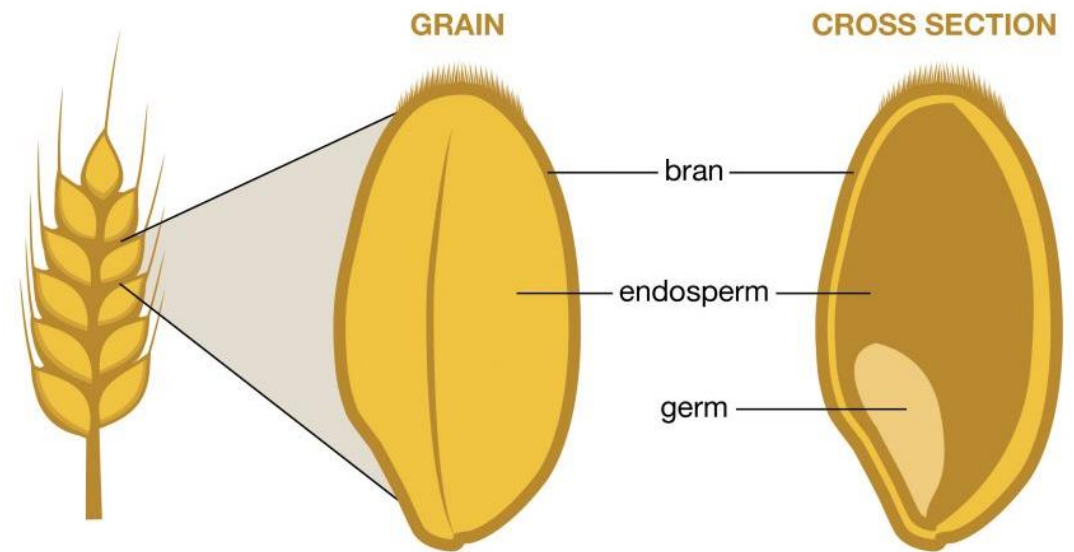


Clinical Question

- ▶ Does nutrition play a role in MDD? If so, what diet is best?

Malnutrition and MDD

- ▶ Malnutrition can come in the forms of undernutrition, overnutrition, or an imbalance of specific nutrients
- ▶ Malnutrition can drive several biological changes that can lead to the onset and progression of MDD



Nutrition

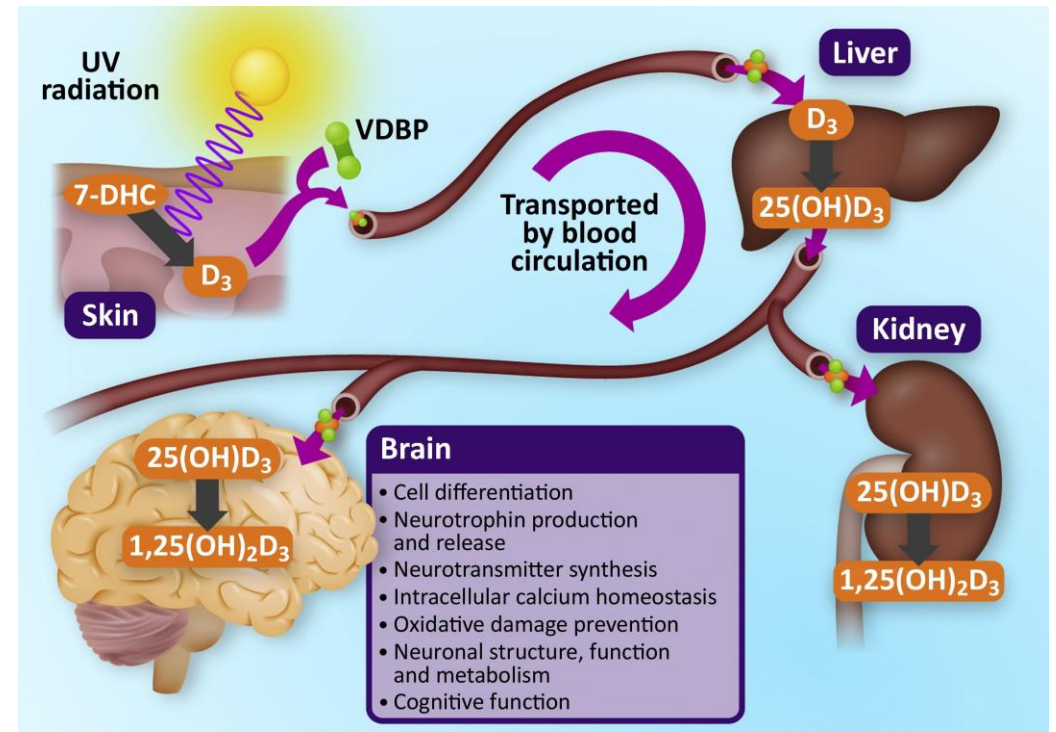
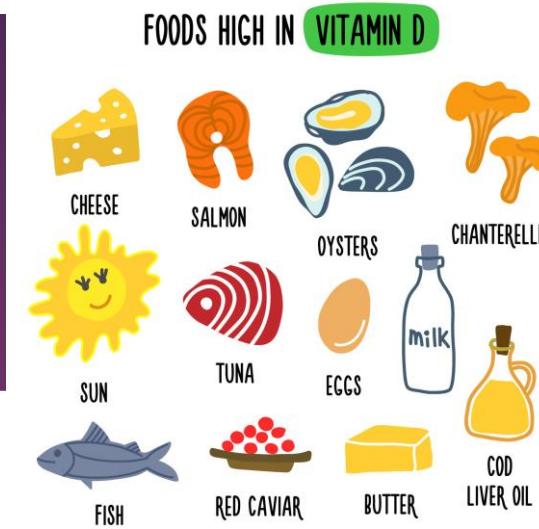
- ▶ Higher median levels of body weight, waist circumference, hip circumference, and waist-to-hip ratio were found in patients with MDD
- ▶ Often not enough protein, too many refined carbohydrates, low vitamin D and B vitamins are associated with MDD

SIMPLE  **COMPLEX**
CARBS **VS.** **CARBS**



Pathophysiology

- ▶ Lack of these nutrients can affect neurotransmitter synthesis
- ▶ Affect the immune system-inflammation
- ▶ Promising, but inconclusive still



Mediterranean Diet

- ▶ Healthy fats, protein
 - ▶ Fish—omega 3s
 - ▶ Nuts
 - ▶ Olive oil
- ▶ Whole grains
- ▶ Fruit
- ▶ Vegetables
- ▶ High in polyphenols



References

- ▶ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9370795/>
- ▶ <https://www.cell.com/trends/neurosciences/fulltext/S0166-2236%2819%29300062>
- ▶ <https://pubmed.ncbi.nlm.nih.gov/37571376/>