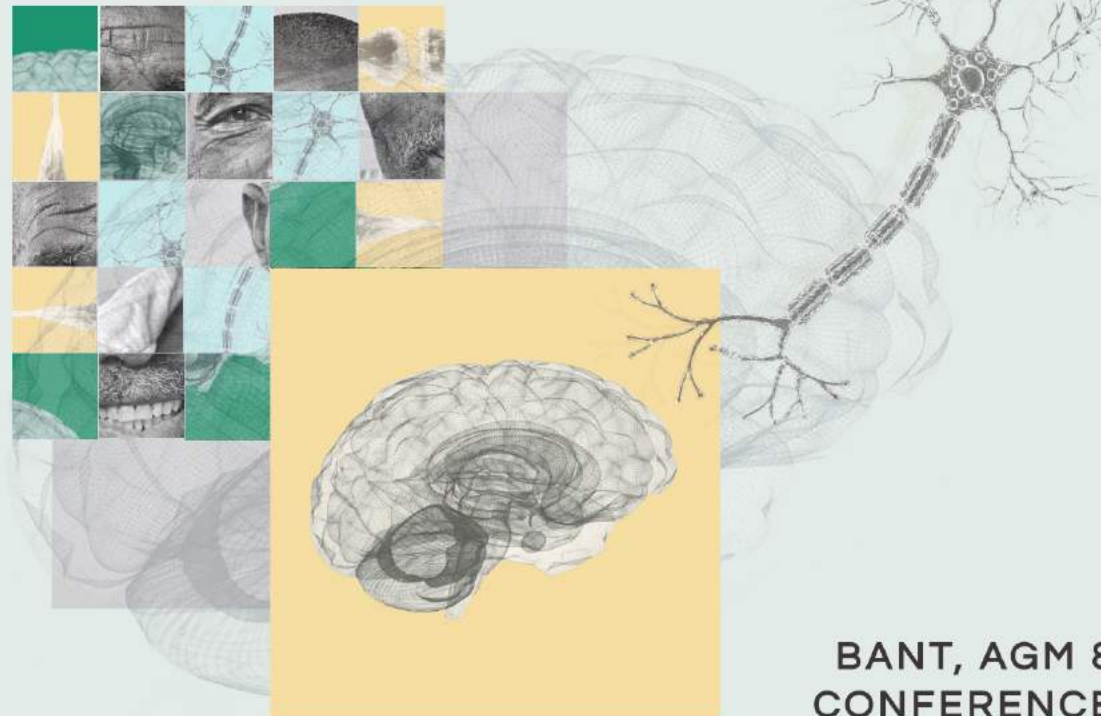


MENTAL HEALTH, PRECISION NUTRITION, & LIFESTYLE MEDICINE:

Translating Evidence to Clinical Practice



BANT, AGM &
CONFERENCE

Bridging the Gap Between Research & Clinical Care in Nutritional Psychiatry

Uma Naidoo MD

Harvard Medical School

USA

Uma Naidoo, MD

Harvard Medical School

Director of Nutritional &
Metabolic Psychiatry
Massachusetts General Hospital

- Nutritional Psychiatrist
- Author
- Professional Chef
- Culinary Instructor
- Nutritional Biologist



What Is Nutritional Psychiatry?

Nutritional psychiatry offers clinical guidelines based on nutrition science and evidence-based research for the use of whole foods and nutrients to improve mental wellbeing.

Uma Naidoo MD



FOOD & DRINK

Feed Your Head: Foods That Target Depression and Anxiety

Based on mounting research, doctors are prescribing nutrient-rich foods as a recipe for better mental health. With the help of high-profile chefs, they're doing it deliciously, too.

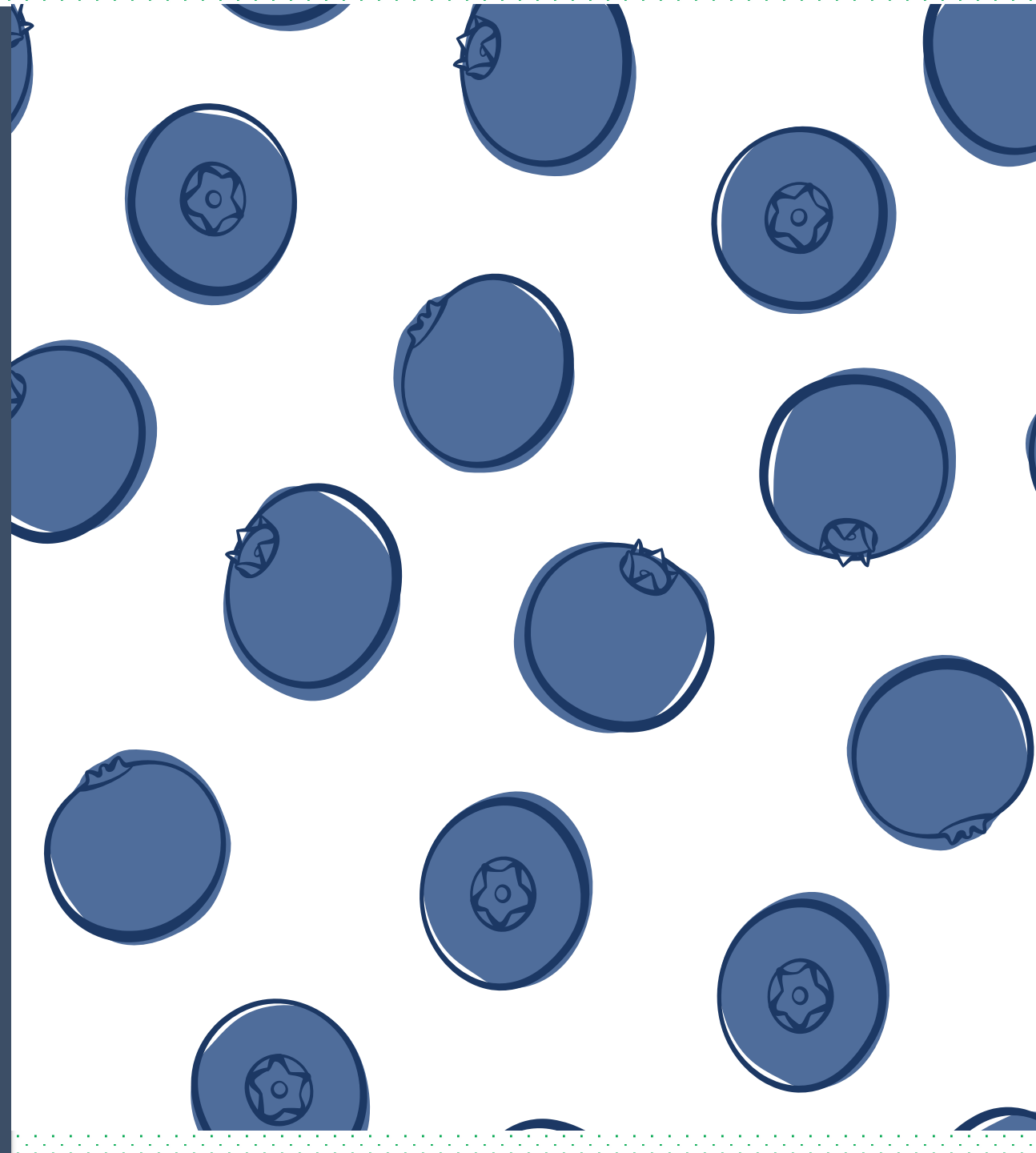


What Nutritional Psychiatry Is **Not**:

“It’s *not* about
10 mg of Prozac or
10 blueberries...” —*WSJ*

Food and nutrients do not replace medication & other therapies but rather *work in synergy* and offer *broader options* to improve mental wellbeing.

Uma Naidoo MD



There is a public health crisis:
Bad Diet is the #1 cause of poor health in the US and Worldwide



Number of Deaths Related to the 17 Leading Risk Factors in the United States, 2016

A Risk factors and related deaths

Risk factors

Dietary risks

Tobacco use

High systolic blood pressure

High body mass index

High fasting plasma glucose

High total cholesterol

Impaired kidney function

Alcohol and drug use

Air pollution

Low physical activity

Occupational risks

Low bone mineral density

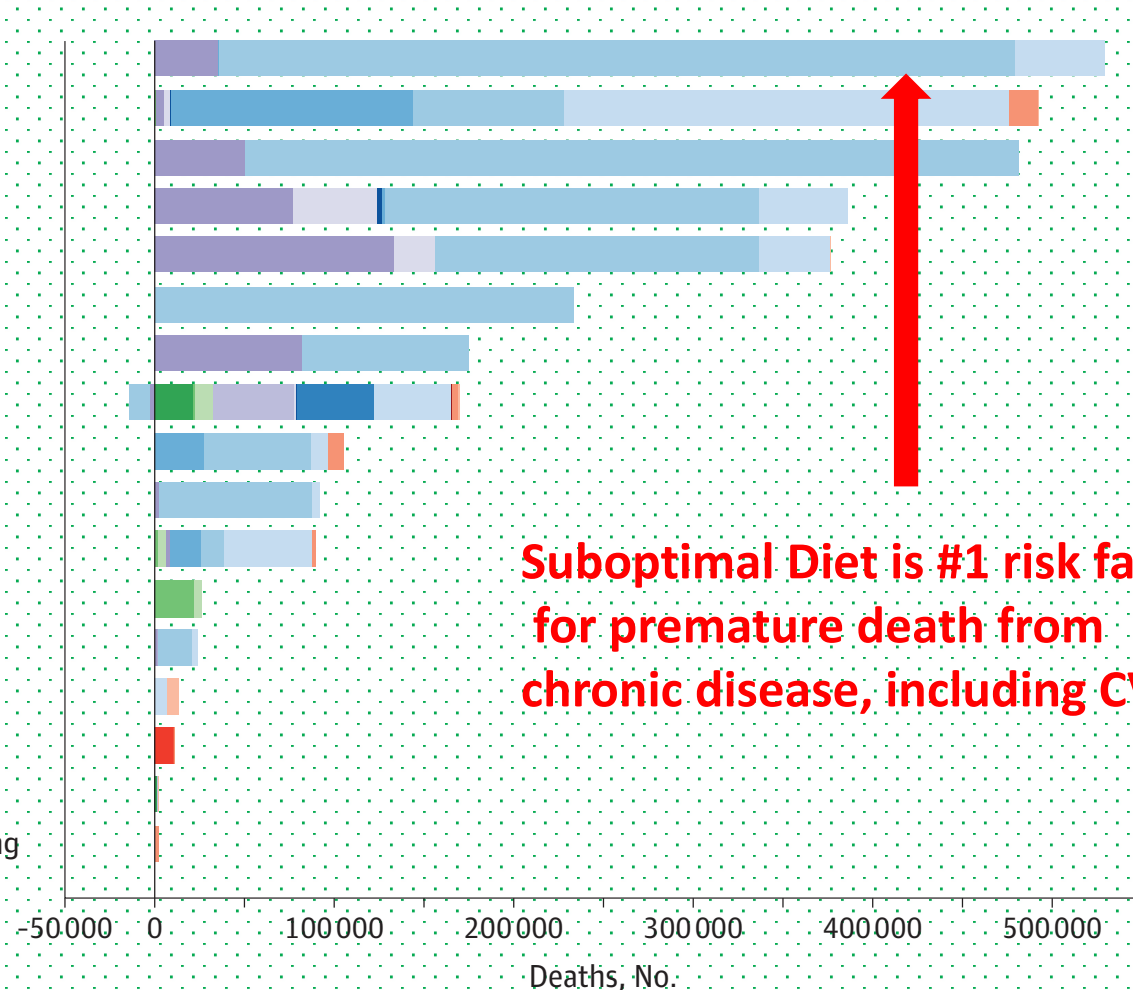
Residential radon and lead exposure

Unsafe sex

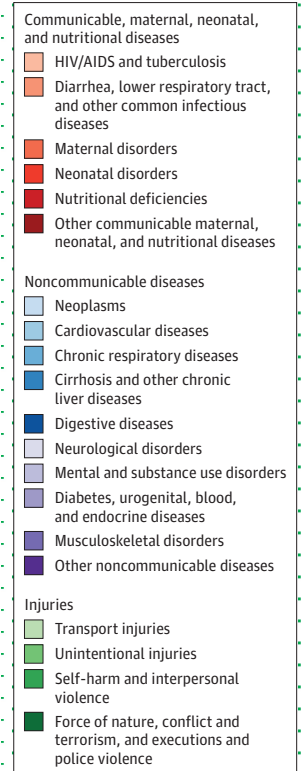
Child and maternal malnutrition

Sexual abuse and violence

Unsafe water, sanitation, and handwashing



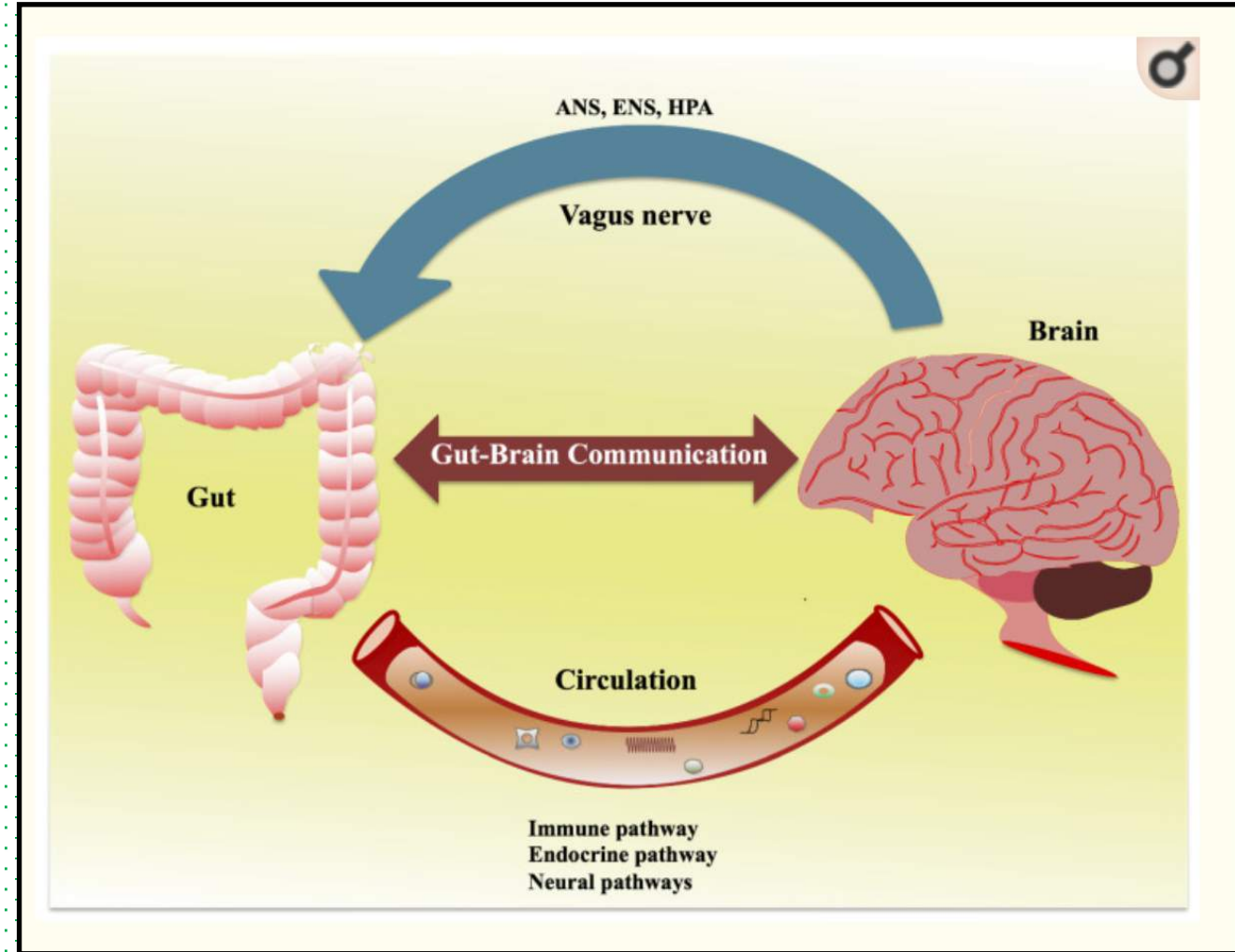
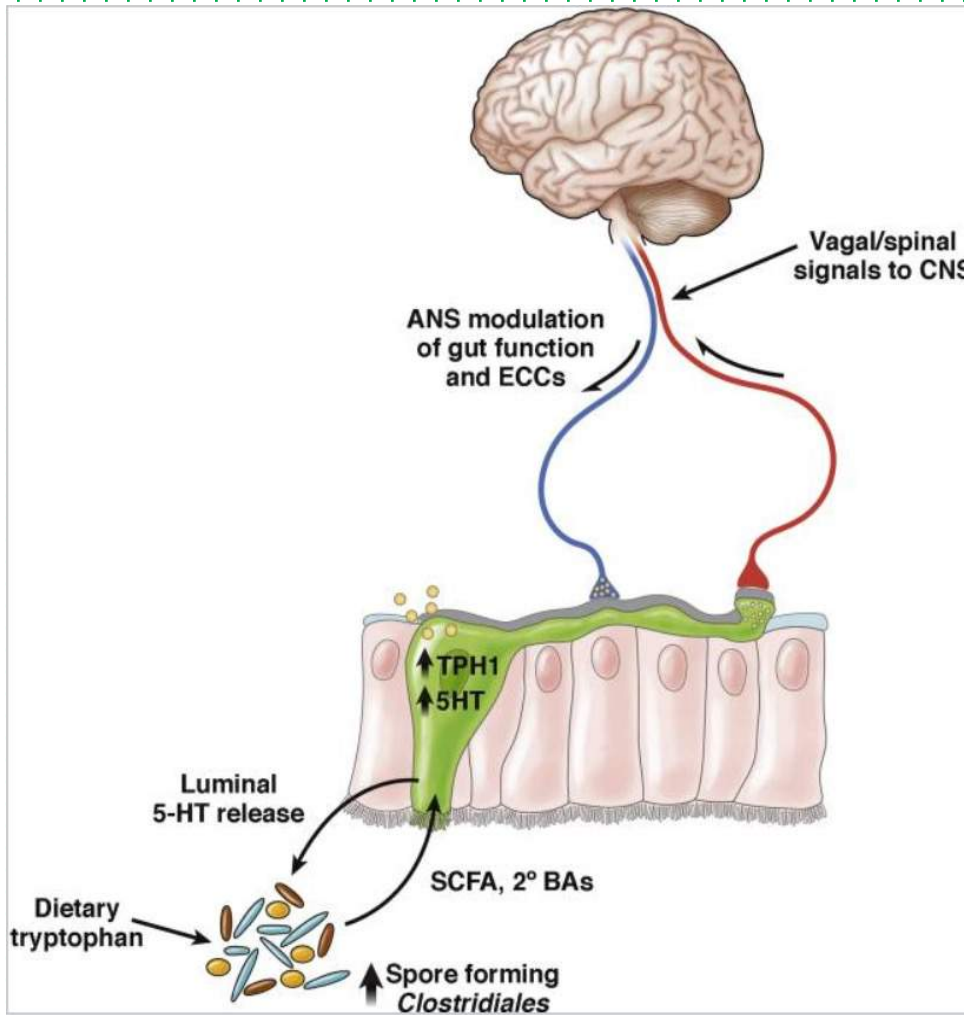
Suboptimal Diet is #1 risk factor for premature death from chronic disease, including CVD





GUT-BRAIN CONNECTION





Source:
[Cell Mol Gastroenterol Hepatol.2018](#); Published
 online 2018



Gastrointestinal microbiota have been implicated in several neurobiological pathways related to mental illness

- Modulation of BDNF
- Serotonin neurotransmission
- Immune function
- HPA axis-mediated stress response

Gut-Brain Connection and Mental Health

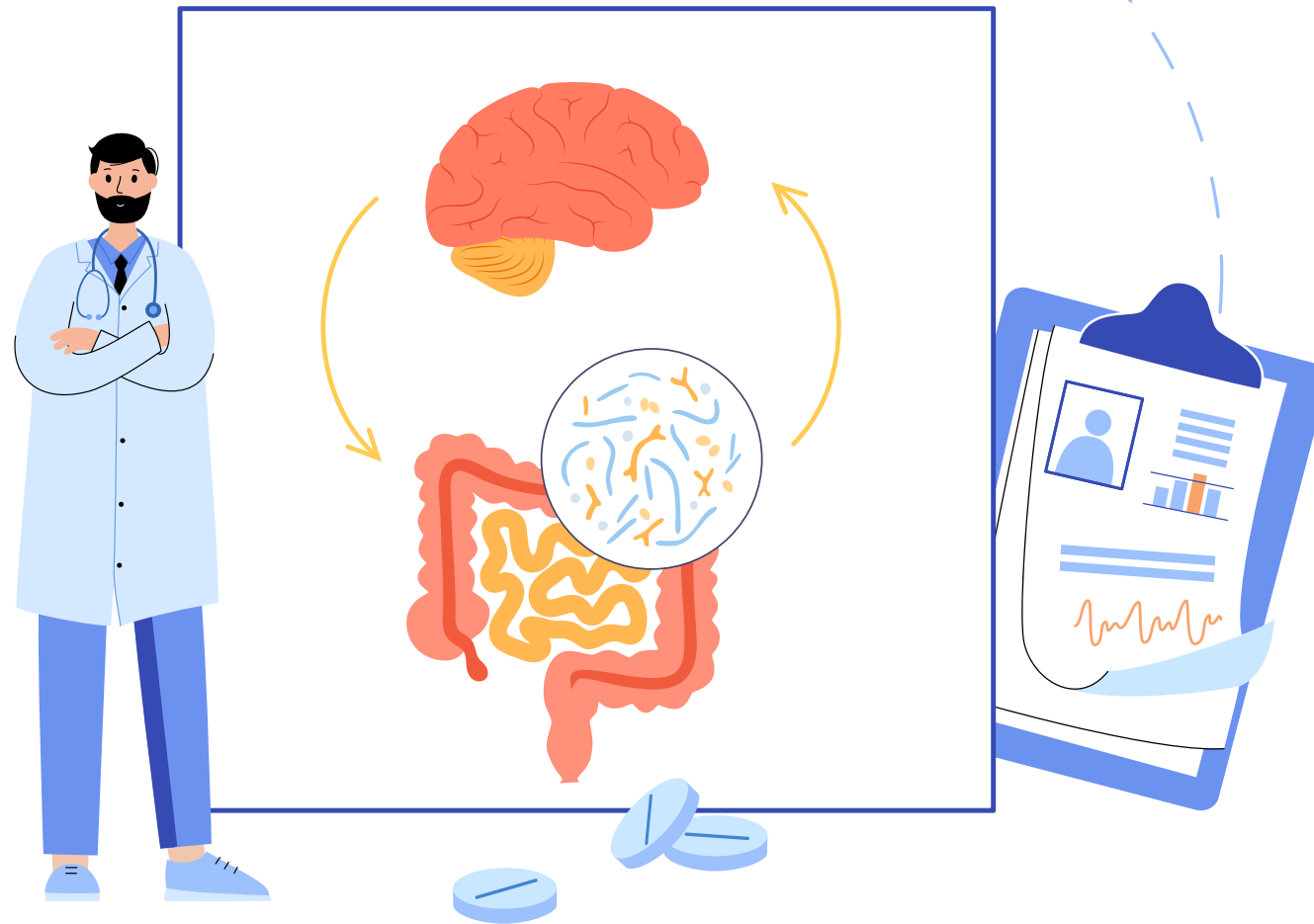
Dysbiosis and inflammation of the gut have been linked to causing several mental illnesses including anxiety and depression.

Studies have also shown that probiotics were effective in lowering anxiety and depressive symptoms, similar to traditional prescription medications.

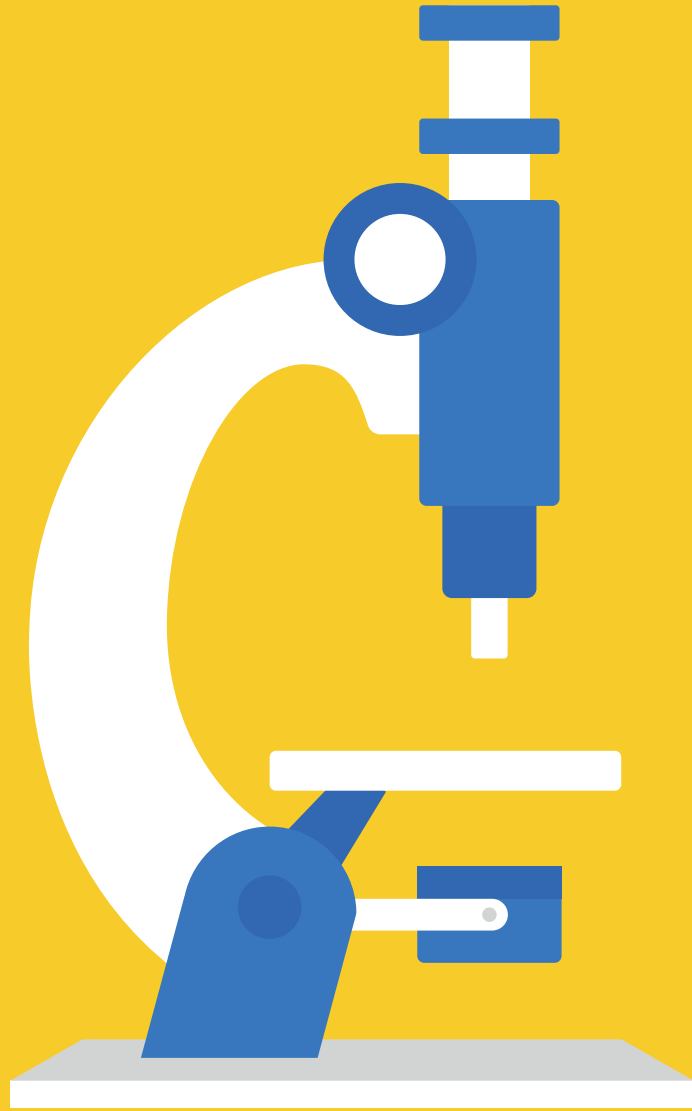


1. Neufeld KM et al. *Neurogastroent Motil.* 2011;23:264, e119.
2. Benton D et al. *Eur J Clin Nutr.* 2007;61:355-361.
3. Steenbergen L et al. *Brain Behav Immun.* 2015;48:258-264.
4. Schmidt K et al. *Psychopharmacology (Berl).* 2015;232:1793-1801.
5. Lyte M. *Bioessays.* 2011;33:574-581.

Inflammation and Gut Microbiome in Depression and Anxiety



Peirce JM et al. *J Neurosci Res.* 2019;97(10):1223-1241.
Felger JC. *Handb Exp Pharmacol.* 2019;250:255-286.



Nutritional Psychiatry Lessons Learned From The Pandemic

The pandemic taught us that we have *little to no* nutritional resiliency

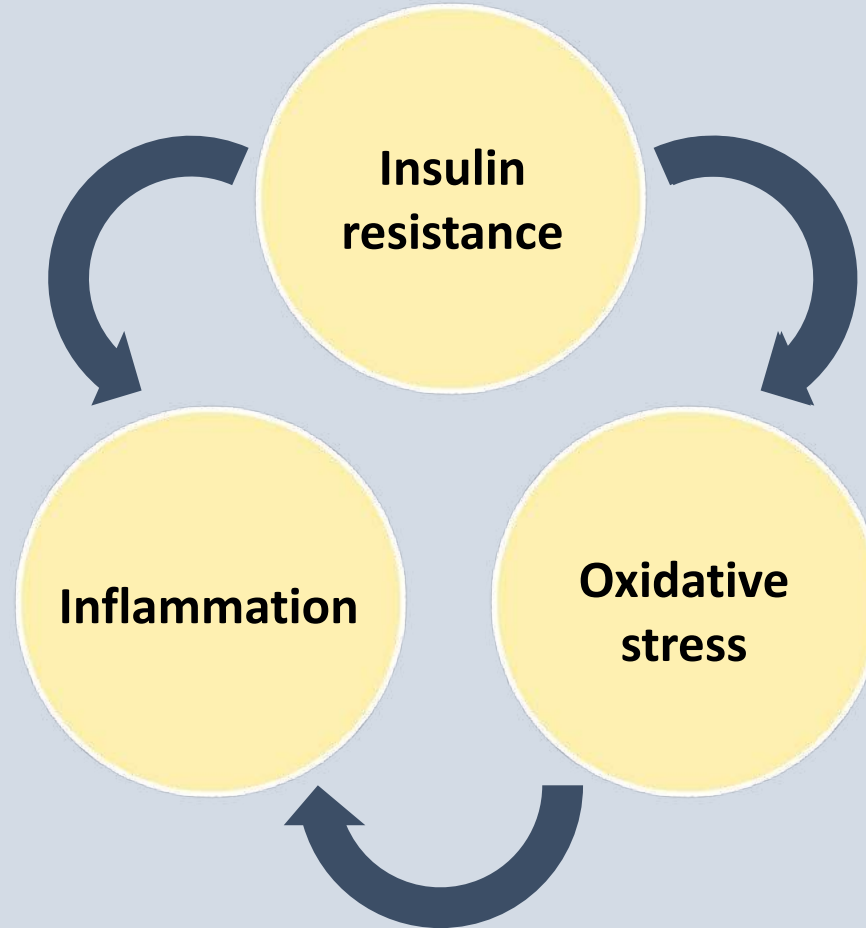
88% of Americans have some element(s) of poor metabolic health¹

Preexisting conditions led to higher death rates and poorer outcomes

Survivors may be struggling with brain fog, fatigue, and a higher incidence of new mental health diagnoses

1. Cefalu WT et al. *Cell Metabolism*. 2021;33(3):473-478.

Metabolic Diseases Are on the Rise



Connecting the Dots Between Metabolic Health and Mental Health





The Ongoing Impact of the Pandemic on Nutritional Status

- Processed food sales
- Stress eating
- Angst & stress
- Children's vaccine worry
- Booster worry
- Return to the office
- Hybrid school & work
- Abuse increased
- Increased drugs and alcohol
- Zoom fatigue
- Zoom dysmorphia
- Social media
- Coronasomnia
- Uncertainty & fear persists



Individuals living with serious mental illness face an increased risk of having chronic medical conditions

Scott KM et al. Association of Mental Disorders With Subsequent Chronic Physical Conditions: World Mental Health Surveys From 17 Countries. JAMA Psychiatry. 2016 Feb;73(2):150-8. doi: 10.1001/jamapsychiatry.2015.2688. PMID: 26719969; PMCID: PMC5333921.

During late June, 40% of U.S. adults reported struggling with mental health or substance use*

ANXIETY/DEPRESSION SYMPTOMS



STARTED OR INCREASED SUBSTANCE USE



TRAUMA/STRESSOR-RELATED DISORDER SYMPTOMS



SERIOUSLY CONSIDERED SUICIDE†



*Based on a survey of U.S. adults aged ≥18 years during June 24-30, 2020

†In the 30 days prior to survey

For stress and coping strategies: bit.ly/dailylifecoping

CDC.GOV

bit.ly/MMWRB1320

MMWR

2020 Statistics

Bidirectional Associations Between COVID-19 and Psychiatric Disorders

Neurologic and Psychiatric Outcomes in COVID-19 Survivors



[https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(20\)30462-4/fulltext#seccestitle10](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30462-4/fulltext#seccestitle10)

Taqet M et al: *Lancet Psychiatry*. 2021;8(2):130-140.

2022 Statistics



OPEN ACCESS



Check for updates

Risks of mental health outcomes in people with covid-19: cohort study

Yan Xie,^{1,2,3} Evan Xu,¹ Ziyad Al-Aly^{1,3,4,5,6}

ABSTRACT

OBJECTIVE

To estimate the risks of incident mental health disorders in survivors of the acute phase of covid-19.

DESIGN

Cohort study.

SETTING

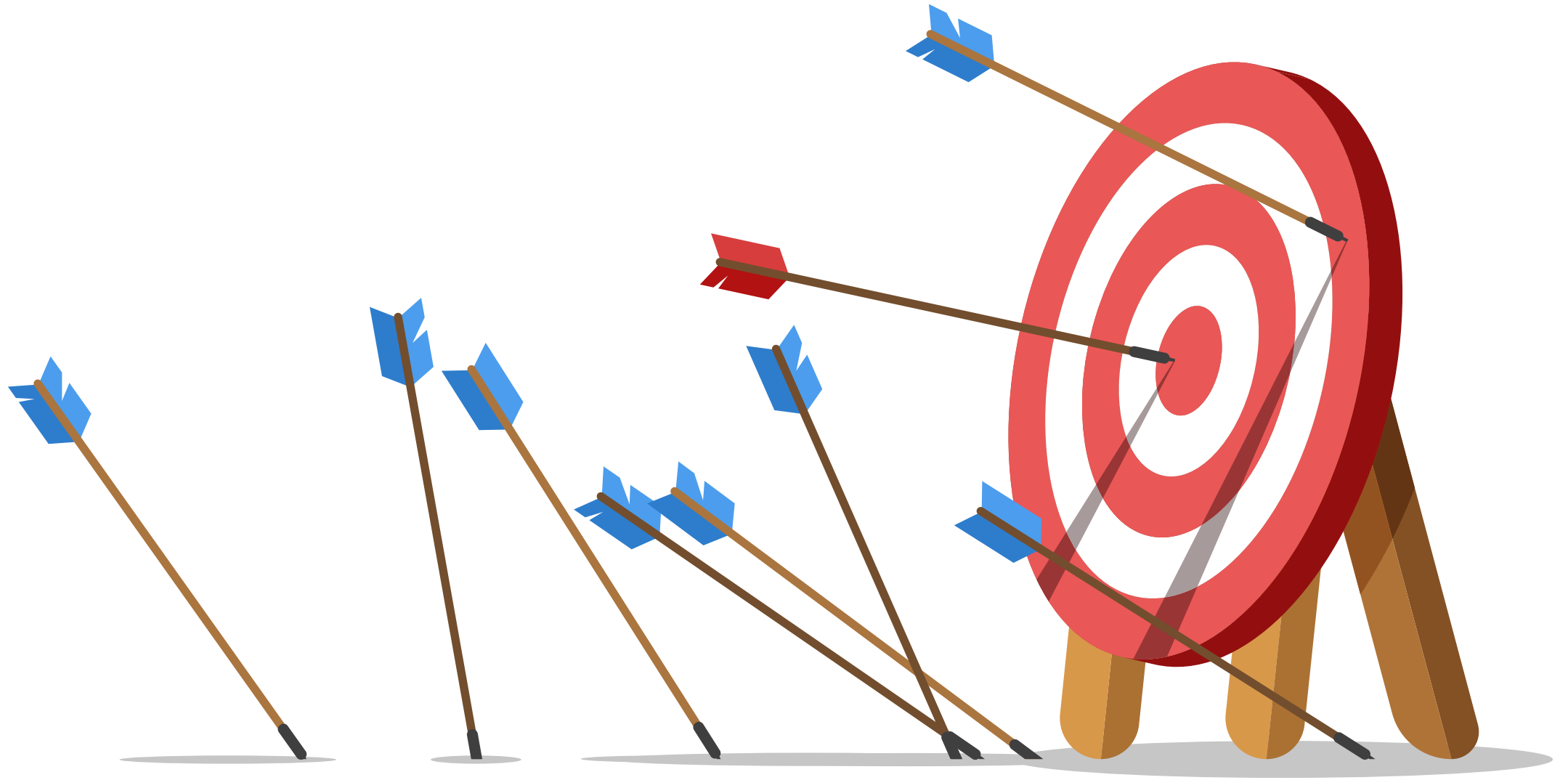
US Department of Veterans Affairs.

to 1.43); 13.29 (11.71 to 14.92) per 1000 people at one year), and use of antidepressants (1.55 (1.50 to 1.60); 21.59 (19.63 to 23.60) per 1000 people at one year) and benzodiazepines (1.65 (1.58 to 1.72); 10.46 (9.37 to 11.61) per 1000 people at one year). The risk of incident opioid prescriptions also increased (1.76 (1.71 to 1.81); 35.90 (33.61 to 38.25) per 1000 people at one year), opioid use disorders (1.34 (1.21 to 1.48); 0.96 (0.59 to 1.37) per 1000 people at one

¹Clinical Epidemiology Center, Research and Development Service, VA Saint Louis Health Care System, Saint Louis, MO 63106, USA

²Department of Epidemiology and Biostatistics, College for Public Health and Social Justice, Saint Louis University, Saint Louis, MO, USA

³Veterans Research and



Nutritional Targets = Food & Nutrients



Nutritional Targets

- Prebiotic foods: garlic, leeks, onions, jicama
- Fermented foods: kimchi, sauerkraut
- Fiber: vegetables, berries, beans, nuts, seeds
- Clean proteins
- Healthy fats: avocado, extra-virgin olive oil
- Spices and herbs
- Omega-3 fatty acids: wild sockeye salmon, sardines, walnuts, chia
- Antioxidant and anti-inflammatory

Step 1: Clean up How We Are Eating

Limit:

Fast foods

Processed & ultra processed

Trans fats

Added sugars

Refined grains

Cereals

Processed meats

Sugar-sweetened beverages

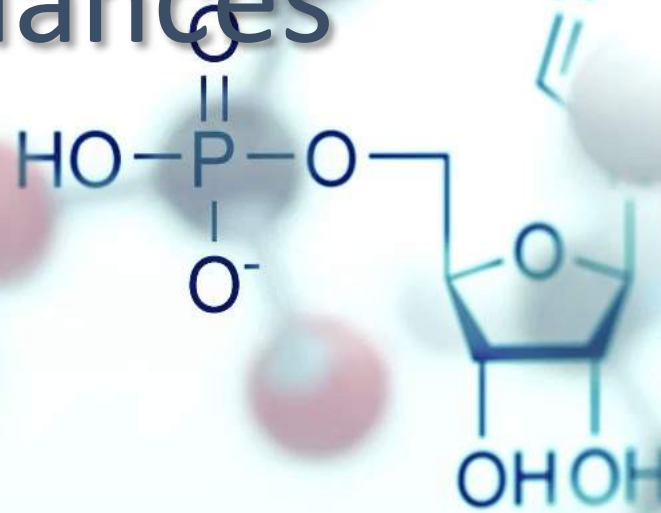
Unhealthy oils

Sweeteners

Junk foods (gluten-free/fat-free/lactose-free/low-calorie/sugar-free)



Nutritional Psychiatry Nuances



Overlooked: Nutrient-Dense & Fiber-Rich Nutrients



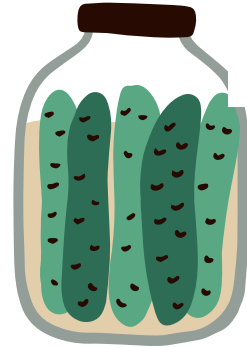
Fermented Foods



SOY SAUCE



KOMBUCHA



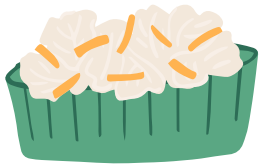
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VEGETABLES



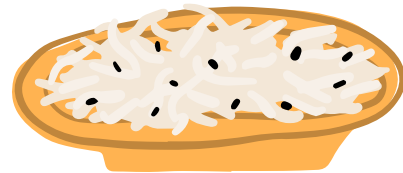
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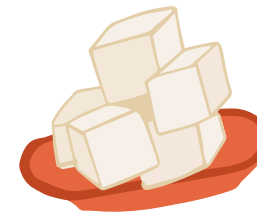
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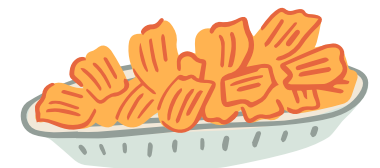
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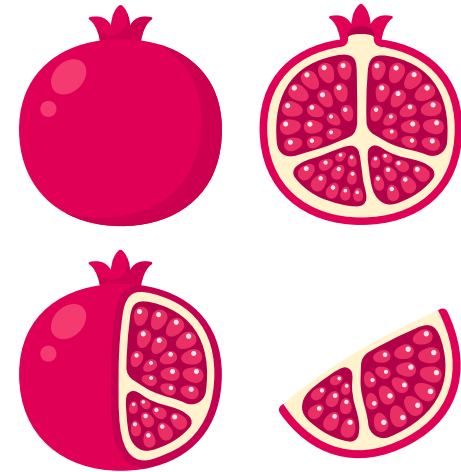
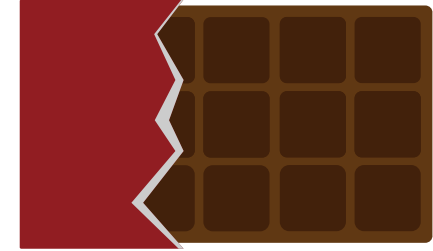
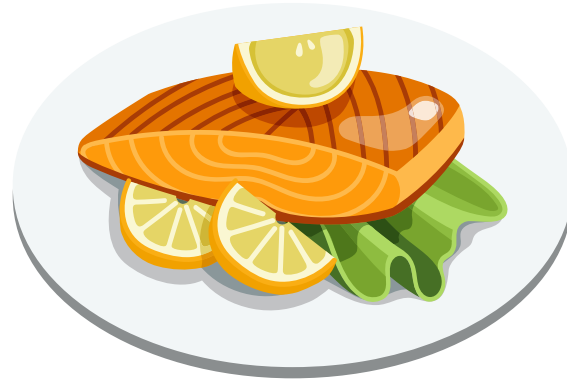
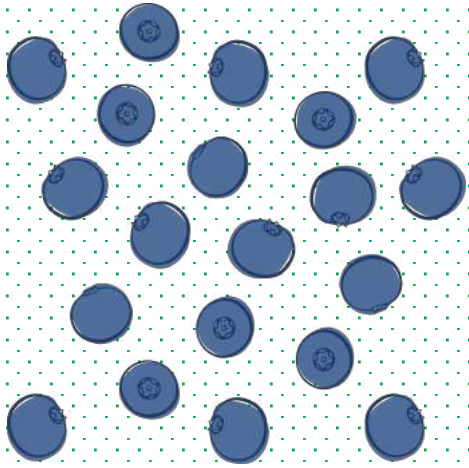


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KIMCHI

Targeting Anxiety & Mood



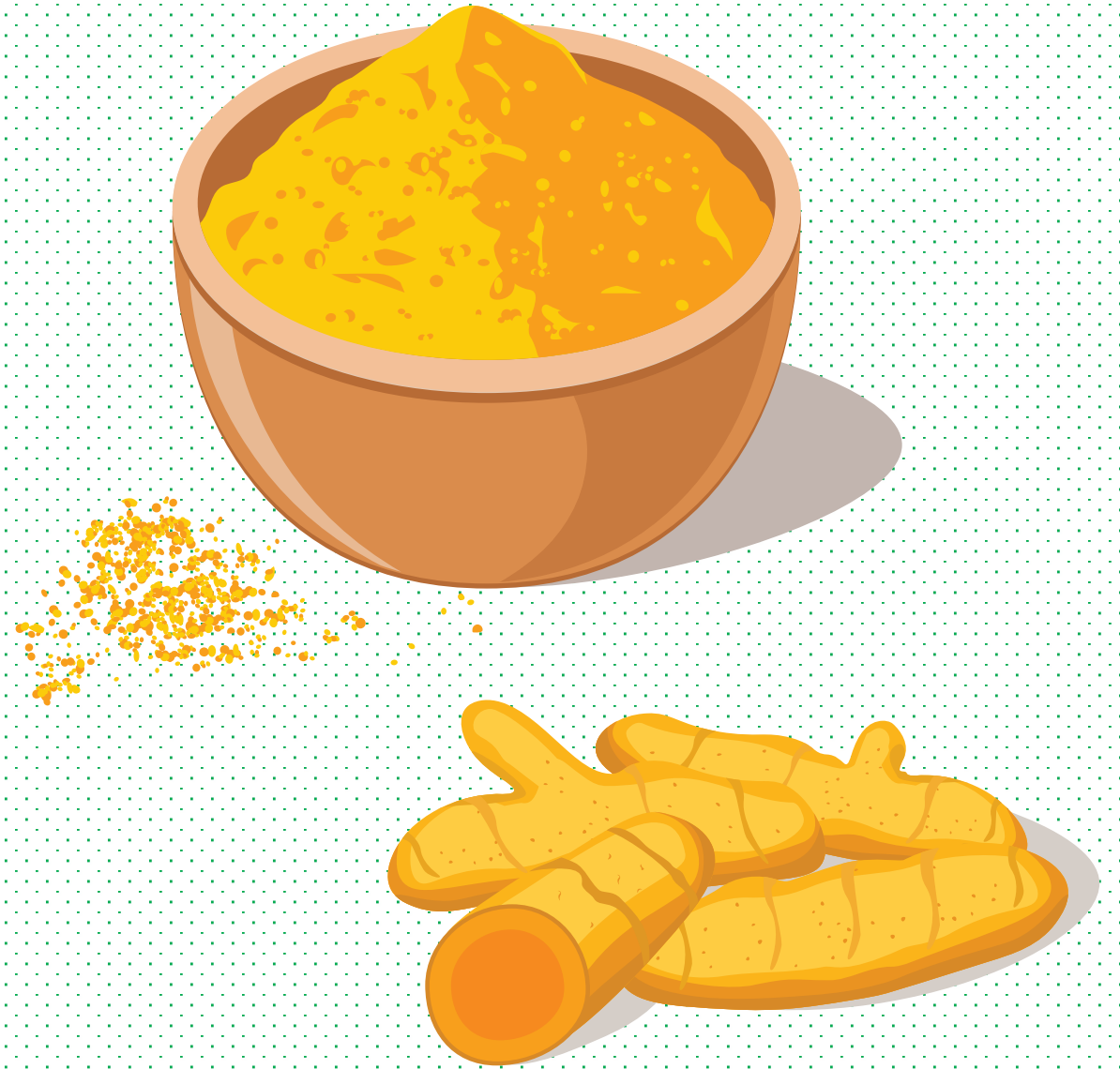


Non Seafood sources:

- Flax seeds
- Chia seeds
- Basil seeds
- Sea vegetables
- Algae
- Supplements

Omega-3 Fatty Acids

Spices and Herbs: Role in Anxiety & Depression





Source of Food Calories vs. Portions

Food insecurity
Food deserts
Hunger
Community collaboration



“There is joy in
food, and eating should
be enjoyed...”

—Uma Naidoo MD



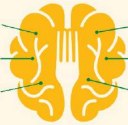
NATIONAL BESTSELLER

"When it comes to cooking and eating to improve mental health, nobody does it better than Dr. Naidoo" —WILLIAM W. LI, MD, author of Eat to Beat Disease

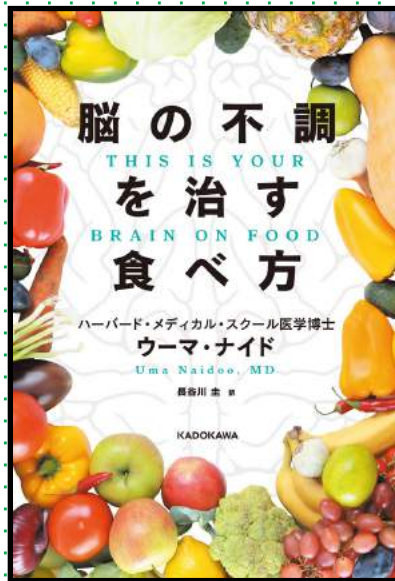
THIS IS YOUR BRAIN ON FOOD

AN INDISPENSABLE GUIDE TO THE SURPRISING FOODS THAT FIGHT

DEPRESSION ANXIETY
PTSD OCD
ADHD AND MORE



UMA NAIDOO, MD
Nutritional Psychiatrist, Harvard Medical School



THIS IS YOUR BRAIN ON FOOD IS NOW GLOBAL !!

** The Food Mood Connection
*Available Soon



USA



CANADA



UK**



FRANCE*



ITALY*



SPAIN*



POLAND*



PORTUGAL



SOUTH AFRICA**



CHINA*



RUSSIA*



BRAZIL*



GERMANY*



AUSTRALIA**



UKRAINE*



TURKEY*



JAPAN

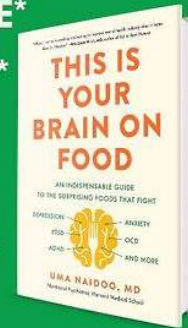


INDIA**



KOREA*

@DRUMANAIIDOO
This Is Your Brain On Food



D^{re} Uma Naidoo
Psychiatre et experte en nutrition

ANXIÉTÉ • DÉPRESSION • SOMMEIL

La révolution nutrition



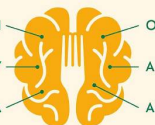
Découvrez les liens surprenants entre alimentation et santé mentale



THE FOOD MOOD CONNECTION

AN INDISPENSABLE GUIDE TO THE SURPRISING FOODS THAT FIGHT

DEPRESSION ANXIETY
TRAUMA OCD
ADHD AND MORE



UMA NAIDOO, MD
Nutritional Psychiatrist at Harvard Medical School

Cérebro e ALIMENTAÇÃO



Inclui desenhos de receitas e ementas

Um Guia Completo Sobre os Alimentos Extraordinários Que Combatem a DEPRESSÃO, a ANSIEDADE, a PERTURBAÇÃO OBSESSIVO-COMPULSIVA, a FADIGA e muito mais.

Dra. Uma Naidoo
Psiquiatra • Nutricionista • Chef

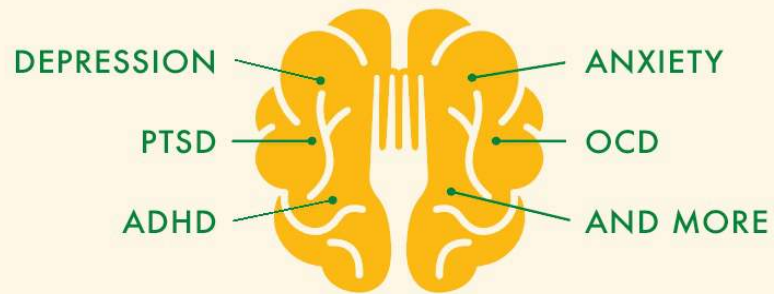


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