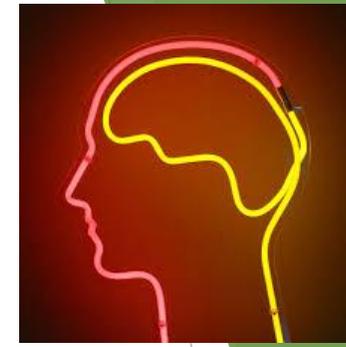


Mental Health Overview: Mind Body Connections



How emotions affect the body



Emotion	Physical sensation
Sorrow	Hollow, empty feeling in stomach, body feels weak
Fear and Anxiety	Tight muscles, racing heart, dry mouth, sweating
Anger	Tense body, chest pressure, nostrils flare, fists curl
Guilt	Feeling burdened, weighed down
Joy and Love	Muscles relaxed, energetic, feeling warm

BRAIN
Glial cells support
85 billion neurons
100 neurotransmitters identified
Produces **50%** of all dopamine
Produces **5%** of all serotonin
Barrier restricts blood flow to brain

SECOND BRAIN
Glial cells support
500 million neurons
40 neurotransmitters identified
Produces **50%** of all dopamine
Produces **95%** of all serotonin
Barrier restricts blood flow to second brain

SPINAL CORD

VAGUS NERVE

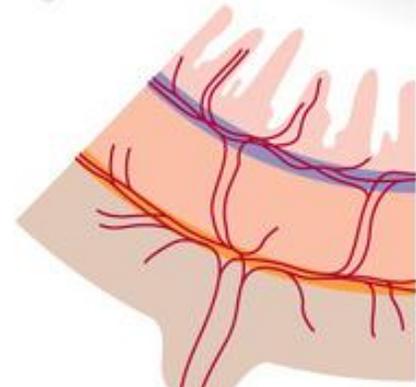
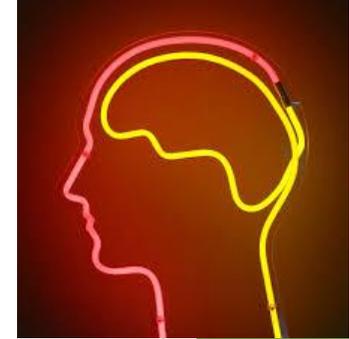
PELVIC NERVE

STOMACH

LARGE
INTESTINE

SMALL
INTESTINE

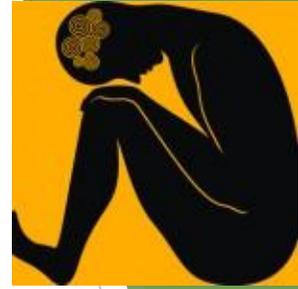
The enteric nervous system
comprises a network of neurons
spread throughout two layers of
gut tissue, the submucosal plexus
and the **myenteric plexus**.





Depression

- ▶ Unusually sad mood most the day
- ▶ Loss of interest or enjoyment in activities that used to be enjoyable
- ▶ **Difficulty sleeping** or **sleeping too much**
- ▶ Loss of interest in food or eating too much. May cause **weight loss** or **weight gain** .
- ▶ **Moving more slowly or being restless** that is observable by others
- ▶ **Fatigue** or low energy
- ▶ Difficulty concentrating or making decisions
- ▶ Feeling worthless, or feeling guilty, though not really at fault
- ▶ Thinking about death often, or wishing to be dead



Depression

- ▶ Medical illness can cause depression, and depression increases the risk of medical illness
 - ▶ 28% of women with diabetes and 18% of men with diabetes have depression
- ▶ May need treatment even if the cause is understood (like recent bereavement or missing family)
- ▶ Primary care providers miss 50% of depressed patients without routine screening

Anxiety - Physical Symptoms



- ▶ Pounding heart, chest pain, rapid heartbeat, flushing
- ▶ Breathing fast, feeling short of breath
- ▶ Dizziness, headaches, sweating, tingling, numbness
- ▶ Feeling of choking, dry mouth, stomach pains, nausea, vomiting, diarrhea
- ▶ Muscle aches and pains (especially neck, shoulders, and back), restlessness, tremors and shaking, inability to relax

Anxiety: psychological and behavioral symptoms



- ▶ Excessive fear and worry
- ▶ Mind racing
- ▶ Decreased concentration
- ▶ Irritability, impatience, anger
- ▶ Restlessness, sleep disturbance
- ▶ Avoidance of situations that cause anxiety



Depression screening

- ▶ During the last 2 weeks, have you often had little interest or pleasure in doing things? Yes, No
- ▶ Durante las últimas 2 semanas, ¿se ha sentido varias veces con poco interés o deseo de hacer cosas? Si, No
- ▶ During the last 2 weeks, have you been feeling down, depressed or hopeless? Yes, No
- ▶ Durante las últimas 2 semanas, ¿se ha sentido desanimado, deprimido o sin esperanzas? Si, No



Refugee Health Screen 15

- ▶ Administer RHS-15 if either question is answered yes, even if they can explain why they answered yes
- ▶ Administer RHS-15 if **you sense** they are anxious, depressed, or traumatized **even if they answer no** to both questions
- ▶ **Offer referral for mental health treatment if RHS 15 is positive**, even if you or they can explain why they gave those answers. They can decide if they wish to pursue the referral. Document referral was offered, and if it was accepted or refused.

CAGE Questions (developed at UNC 1984)

- ▶ Have you ever felt you should **Cut down** on your drinking or drug use?
 - ▶ ¿Ha sentido alguna vez que debería reducir su uso de alcohol y/o drogas?
- ▶ Have people **Annoyed** you by criticizing your drinking or drug use?
 - ▶ ¿Se ha sentido alguna vez molesto por las críticas de la gente acerca de su uso de alcohol y/o drogas?
- ▶ Have you ever felt bad or **Guilty** about your drinking or drug use?
 - ▶ ¿Alguna vez se ha sentido culpable o mal debido a su uso de alcohol y/o drogas?
- ▶ Have you ever taken a drink or used drugs first thing in the morning (**Eye-opener**) to steady your nerves or get rid of a hangover?
 - ▶ ¿Alguna vez ha necesitado alcohol y/o drogas temprano en la mañana para calmar sus nervios o ayudarlo con la resaca?

Yes to any 2 questions scores positive

- ▶ Have you ever felt you should **Cut down** on your drinking or drug use?
 - ▶ ¿Ha sentido alguna vez que debería reducir su uso de alcohol y/o drogas?
- ▶ Have people **Annoyed** you by criticizing your drinking or drug use?
 - ▶ ¿Se ha sentido alguna vez molesto por las críticas de la gente acerca de su uso de alcohol y/o drogas?
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How commonly will my patients score positive (answer yes to two questions?)

▶ 38% of Latino migrant farmworkers score positive on CAGE

Alcohol Consumption and Risk for Dependence Among Male Latino Migrant Farmworkers Compared to Latino Nonfarmworkers in North Carolina.

[Arcury TA](#)^{1,2}, [Talton JW](#)³, [Summers P](#)^{1,2}, [Chen H](#)^{2,3}, [Laurienti PJ](#)⁴, [Quandt SA](#)^{2,5}

[Alcohol Clin Exp Res.](#) 2016 Feb;40(2):377-84

How good is the CAGE?

- ▶ Two affirmative responses are 77 percent sensitive and 79 percent specific for **alcohol abuse and dependence**
 - ▶ out of 100 farmworkers with actual alcohol abuse, these questions identify 77 of them correctly as having alcohol abuse and miss 13 with actual alcohol abuse
 - ▶ Out of 100 farmworkers without alcohol abuse, these questions correctly identify 79 as not having alcohol abuse and incorrectly identify 21 as having alcohol abuse
- ▶ only 53 percent sensitive and 70 percent specific, respectively, for **unhealthy alcohol use**

What is unhealthy drinking?

- ▶ Amounts of alcohol that increase health risks have been estimated in terms of a “standard drink”
 - ▶ 5 ounces of wine
 - ▶ 12 ounces of beer
 - ▶ 1.5 ounces of 80 proof spirits
- ▶ For men under age 65, unhealthy use is more than 14 standard drinks per week or more than 4 drinks on any day
- ▶ For women and older adults, unhealthy use is more than 7 standard drinks per week or more than 3 drinks on any day

How common is unhealthy drinking and drug use?

- ▶ Fully 28 percent of adults in the United States have unhealthy alcohol use
- ▶ 10.2 percent (of those age 12 years and older) report any illicit drug use, including nonmedical use of prescription drugs