

The Potential of a Western Region Mental Health and Nutrition Network

Introduction

Welcome to the inaugural Western Region Mental Health and Nutrition Network (WRMHNN) meeting. In 2019, the Western Extension Directors Association (WEDA) identified Health and Nutrition as a regional priority. Their preliminary work highlighted the need for mental health programming in

conjunction with nutrition programming. WEDA initiated the WRMHNN planning team, research and extension professionals from California, Montana, Nevada, Washington, and Wyoming, to develop this USDA funded meeting. The purpose of this meeting is to bring together individuals across the western region (WR) working in either mental health and/or nutrition. As an attendee, you are invited to join the WRMHNN, and we transition from a small planning team to regional network of mental health and nutrition stakeholders.

Background

The WR, including the 13 US states, 4 Pacific territories, and US protectorates, tends to have poorer mental health compared to other regions. **Box 1** highlights the nuances of mental health compared to mental illness (1). In 2022, Nevada, Idaho, Arizona, Wyoming, Alaska, and Oregon were ranked as having the poorest overall rating for mental health (2). In 2020, seven of the ten states with the highest rates of suicide mortality were Western states (3).

Diet and nutrition are recognized as causes, modifiers, and mediators of mental health and illness. Low availability of food is both a major factor contributing to mental illness and a potential consequence of mental illness. Food insecurity and high intake of ultra-processed foods are associated with mental illness (4–7). On the other hand, high intake of fruits and vegetables in women is related to reduced risk of anxiety, mental disorders, and depressive episodes (8). Importantly, the relationship between mental health and illness and diet and nutrition is bidirectional. Dietary interventions have been shown to

Box 1. Of note, mental illness is distinct from mental health. The American Psychiatric Association defines mental illness collectively as diagnosable conditions or disorders that involve significant changes in thinking, emotion and/or behavior such as clinical depression, anxiety disorder, bipolar disorder, or schizophrenia. In contrast, mental health involves effective functioning in daily activities, relationships, and ability to adapt to change and cope with adversity. Individuals have the capacity to flourish whether they have a mental illness or not. Similarly, many individuals free of a mental illness often do not flourish (Figure 1).

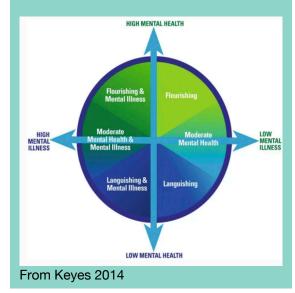


Figure 1. Continual model of mental health and mental illness.

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be an effective component in the treatment of depression and anxiety (9). Information, education, and dietary interventions are recommended as part of integrated mental health treatment (10).

The Network

The WRMHNN aims to connect mental health specialists and nutrition professionals.

Our Mission

Facilitate interdisciplinary collaboration among professionals and communities; to cultivate innovative, practical solutions; to improve food systems; and strengthen mental health and nutrition integration.

Overarching Goals

Increase collaboration and expertise regionally and enhance fund development efforts; and raise awareness of unique mental health, food system, and nutrition-care related issues in the WR.

Long-term Goals

- Conduct research and education to improve mental health outcomes through addressing nutrition and healthy food access.
- Develop resources that U.S. states and territories can add to their portfolio of mental health efforts either as a stand-alone piece or additive to ongoing efforts.
- Increase collaboration regionally and enhance fund development efforts.

Short-term Goals

- Create a roadmap outlining the existing resources and gaps.
- Define priorities for research and extension efforts in food systems, mental health, and nutrition integration.
- Connect a network of Extension and research professionals and other local and regional partners to advance research and education to address gaps.

Conceptual Model

To fulfill our mission and meet our goals, we have developed a Mental Health Nutrition Network conceptual model building off a socio-ecological model (Figure 2). To develop practical solutions, we

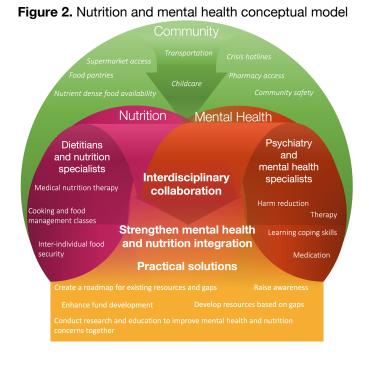
must consider how nutrition and mental health professionals can use their expertise together to strengthen mental health and nutrition integration. Additionally, we must account for community level resource availability including: food availability, healthcare access, transportation, childcare, and safety.

The Meeting

This is the inaugural USDA funded meeting of the WRMHNN. You are a key stakeholder and invitee to the WRMHNN. Welcome.

Meeting Objectives

- Convene a group of Extension and research professionals along with other partners to advance research and education related to the intersection of nutrition and mental health across the lifespan.
- Increase awareness of the relationship between diet and mental health.





Future Directions

This meeting is the beginning of the WRMHNN. As the network develops, we expect to use the "Hub and Spoke" model with the creation of working groups.

Working Groups

We aim to develop 3 to 4 working groups that will focus on topics determined through the road mapping sessions during this meeting. We have also set aside time during the meeting for the working groups to develop USDA/NIFA Hatch-Multi State projects. Although the focus of the WRMHNN is regional, multi-state projects are national. This means that our work can start locally and be applied nationally. If you are new to this, that is OK we have people here to help you. Part of our meeting is about how to develop a strong multi-state proposal and we time set aside for working groups to come up with ideas. Members of the planning committee have experience developing and working in multi-state projects and are here to help.

Steering committee

By the end of the meeting, we will additionally develop a steering committee. The steering committee will act as the hub for the working groups. Made up of three to four people, the steering committee will meet with representatives from each working group to facilitate knowledge transfer. This can be accomplished, for example, through a quarterly newsletter distributed to all WRMHNN members.

Directory

Finally, we will compile a WRMHNN directory. This will allow members of the network to quickly find and contact experts in both mental health and nutrition.

Conclusion

From 2019 to today, WEDA and the planning team have been working to integrate mental health and nutrition programming. We are excited to transition from a small team to member led network composed of a steering committee and working groups. We hope to harness the spirit of western collaboration to improve the health and safety of our region. We look forward to joining you in this effort.

The planning team

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References

- 1. C. L. M. Keyes, in *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach*, G. F. Bauer, O. Hämmig, Eds. (Springer Netherlands, Dordrecht, 2014; https://doi.org/10.1007/978-94-007-5640-3_11), pp. 179–192.
- Ranking the States. *Ment. Health Am.*, (available at https://www.mhanational.org/issues/ranking-states).
- 3. Suicide Rates by State | Suicide | CDC (2022), (available at https://www.cdc.gov/suicide/suicide-rates-by-state.html).
- 4. C. A. Myers, Curr. Nutr. Rep. 9, 107-118 (2020).
- 5. M. Maynard et al., Int. J. Environ. Res. Public. Health. 15, 1424 (2018).
- 6. D. J. Arenas, A. Thomas, J. Wang, H. M. DeLisser, J. Gen. Intern. Med. 34, 2874–2882 (2019).
- 7. M. M. Lane et al., Nutrients. 14, 2568 (2022).
- 8. D. Guzek, D. Gła bska, B. Groele, K. Gutkowska, Nutr. Rev. 80, 1357-1370 (2021).
- 9. T. Burrows et al., Nutr. Diet. 79, 279–290 (2022).
- 10. R. S. Opie et al., Nutr. Neurosci. 20, 161–171 (2017).

