

Ohio Farmers' Self-Report on Six Health Behaviors

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INTRODUCTION

Little information exists in the literature regarding Ohio farmers' health habits. OSU Extension (OSUE) offices are in every Ohio county, providing healthy living recommendations to audiences of all ages.

A recent needs assessment of Ohio agricultural workers was conducted by Ohio State University. Research was a cross-sectional study of 505 farmers; where they self-reported practices about: sun exposure, sleep, physical activity, dietary habits, mental health, tobacco, alcohol and illicit drug use.

ABSTRACT

A health behaviors assessment of Ohio agricultural workers was conducted by Ohio State University in 2020. The importance of this data is that it provides OSU Extension, community hospitals, health departments, federal qualified centers, and agencies a better understanding of the health behaviors of the rural farming community. Future collaboration may see development of targeted health and wellness projects and programming, and/or partnerships with OSU Extension. Establishing these connections can create long-term community-based alliances supporting the needs of our agricultural producers and farm families.

This poster reports data received from a Qualtrics cross-sectional study of 505 farmers where respondents self-reported their practices on six health behaviors: sun exposure, sleep, physical activity, dietary habits, mental health, and alcohol. The participants were predominately male, white, married, working full-time. The majority of farmers self-reported working in high intensity sun 6-or-more hours/day. Reliable survey scales indicated most farmers had problems sleeping and 10% had a mental health score indicating a major depression disorder is likely. Fruit and vegetable servings were less than nutritional recommendations, with obesity scores highest among farmers aged 55-64 years. Physical activity was self-reported at lower than recommended rates. One-third of males and more than one-quarter of females could be categorized as hazardous drinkers.

BACKGROUND

- Agriculture is a hazardous industry. Studies report farmers to be at risk for:
 - Higher rates of work-related injury compared to other occupations;
 - Increased obesity rates; and
 - High prevalence of stress.
- This OSU research study was designed in two phases:
 - Part One - Services & outreach offered by health care providers (agencies and institutions) serving farmers.
 - Part Two - Self-report health behavior survey of Ohio farmers.
- Goal: Compare services offered and farmer needs for alignment of services and future opportunities for outreach education.

OBJECTIVES

- Describe self-reported health practices of Ohio farmers.
- Provide rural health care professionals with a better understanding of OSU Extension's role in rural Ohio counties.
- Find common health disparities to connect and collaborate with OSU Extension faculty to promote better health practices in agricultural populations.

MAIN FINDINGS (n=505)

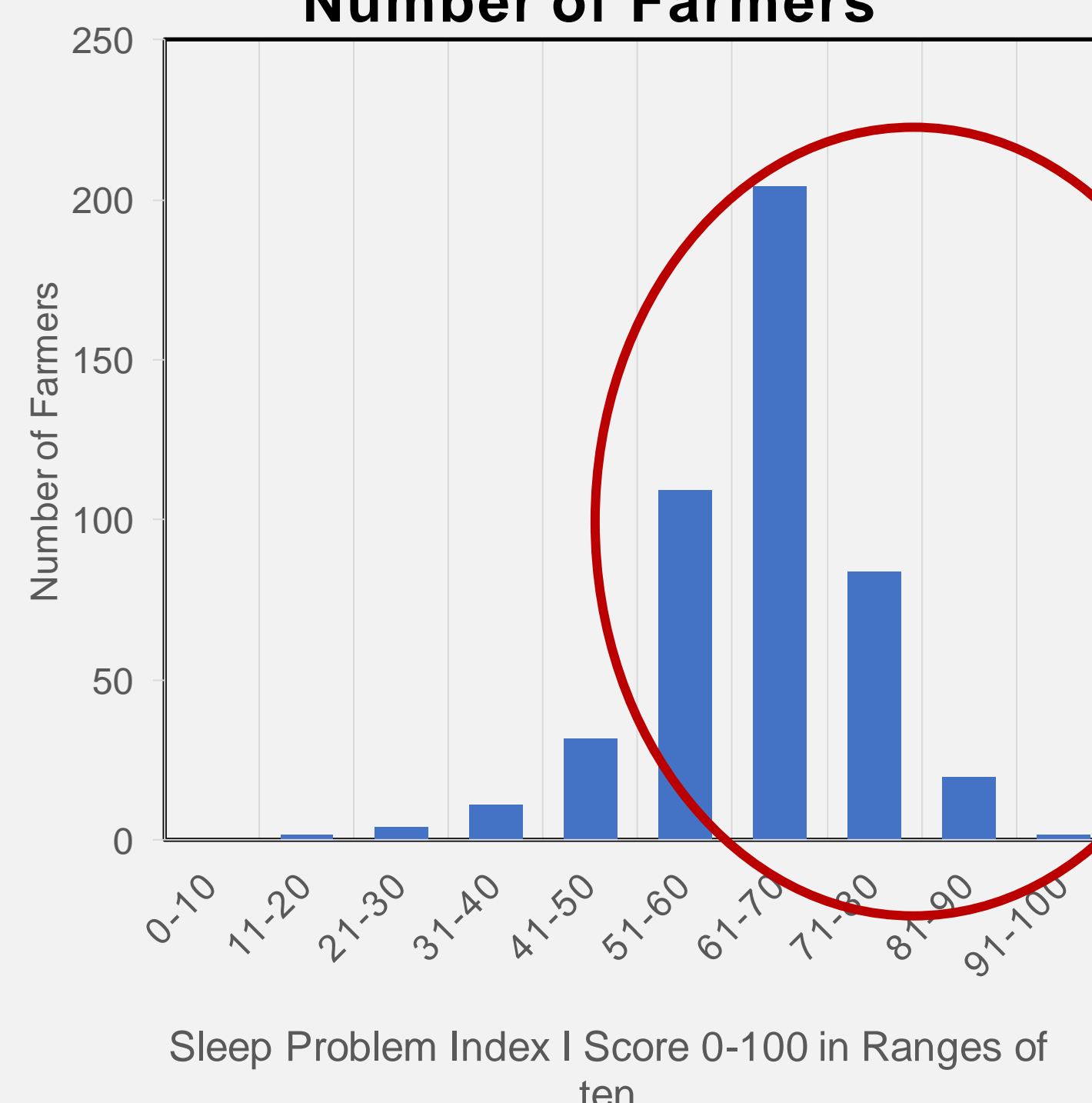
Respondents' Distribution of Farm Commodities



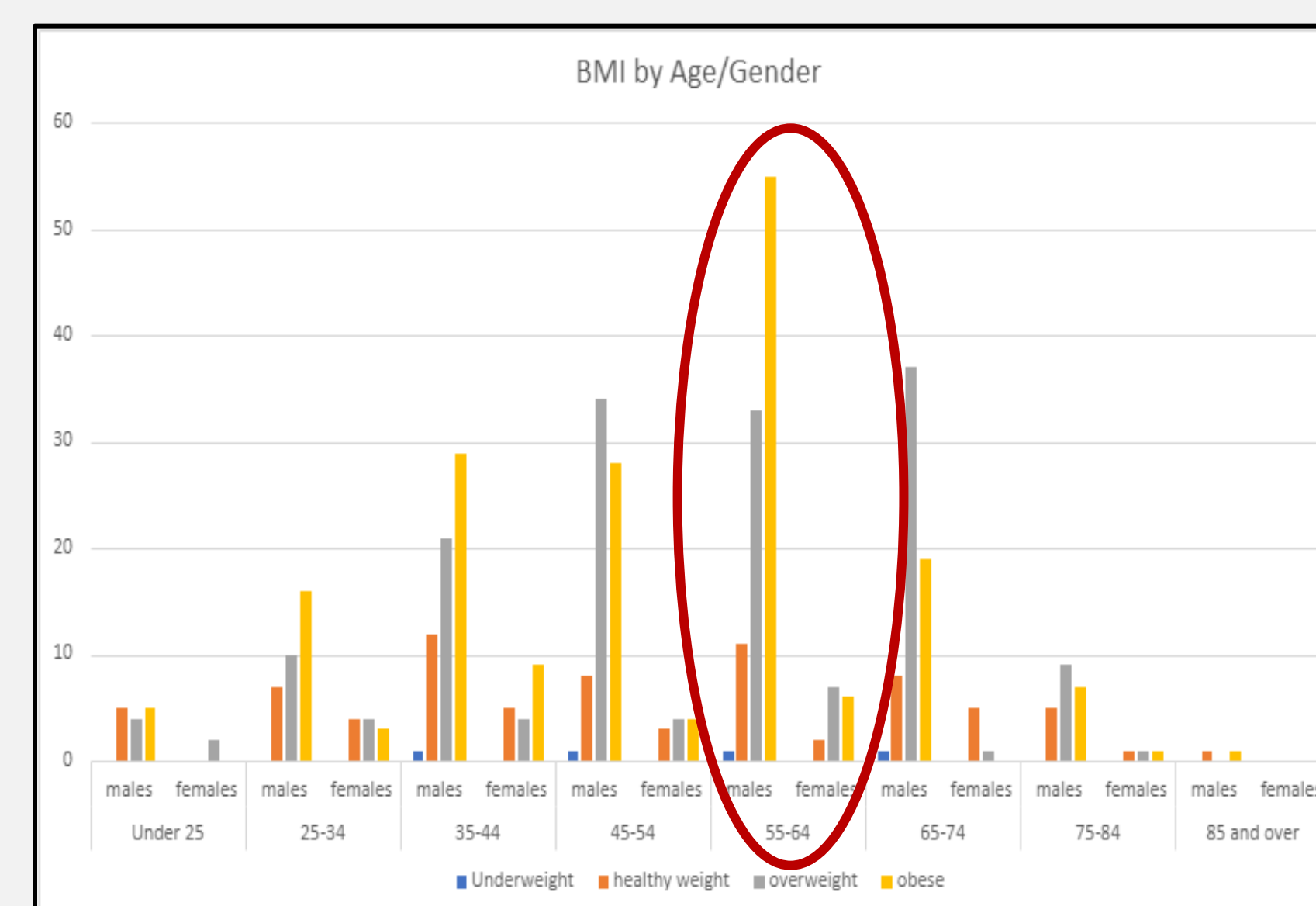
Hours worked outside in the sun in three descriptive seasons and days of the week workdays

	1 hour or less % (n)	2 hours % (n)	3 hours % (n)	4 hours % (n)	5 hours % (n)	6 hours % (n)	no response % (n)
During summer workdays on the farm (N = 463)	3.10% (15)	8.90% (43)	13.25% (64)	15.11% (73)	18.01% (87)	39.96% (193)	1.65% (8)
During summer holidays and/or non-farm working days (N = 470)	10.43% (49)	6.81% (33)	17.65% (83)	16.60% (78)	13.62% (64)	23.19% (109)	1.70% (8)
During spring and fall farm workdays (N = 472)	4.03% (19)	6.70% (33)	7.63% (36)	11.86% (56)	15.68% (74)	51.48% (243)	2.33% (11)

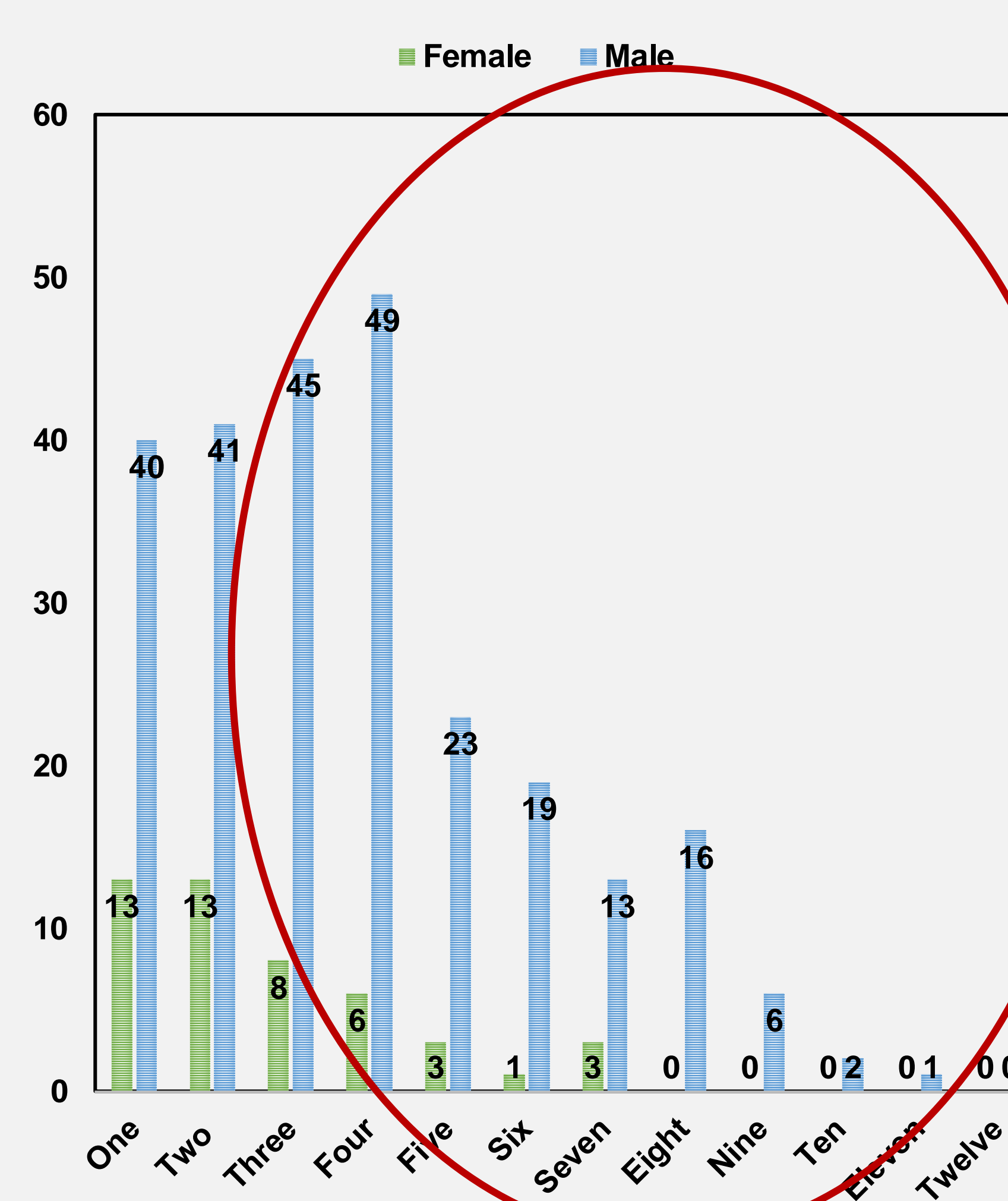
Sleep Problem Index I vs. Number of Farmers



Self-report anthropometric height and weight



AUDIT-C vs. Gender



Patient Health Questionnaire-2 (PHQ-2)

	Not at all % (n)	Several days % (n)	More than half the days % (n)	Nearly every day % (n)
Little interest or pleasure in doing things	64.33% (303)	26.96% (127)	6.79% (32)	1.91% (9)
Feeling down, depressed or hopeless	69.85% (329)	23.57% (111)	4.25% (20)	2.34% (11)

METHODS

- Reliable and valid survey questions and health behaviors scales were gathered into a Qualtrics survey, and pilot tested.
- A convenience sample of Ohio farmers who attended geographically dispersed Department of Agricultural pesticide certification trainings or received a county Extension newsletter were invited to participate through a Qualtrics link or QR code.
- Survey Instrument:
 - 40 questions of mixed format: multiple choice, matrix tables, sliders, and optional text entry for comments;
 - 7 demographic questions;
 - 2 self-reported anthropometric questions;
 - 20-30 minutes to complete.

RESULTS

- The survey was accessed by 541 persons, with 505 eligible based on their agricultural employment status (i.e. they perform farm work)
- Majority self-identified as:
 - Male
 - Married/domestic partner
 - White, Non-Latino
 - Worked full-time on the farm
 - Farms were representative of Ohio's agriculture

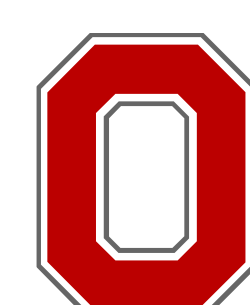
Study results indicating concerns

- Farmers were **at-risk for intense sun exposure** for 6 hours per day.
- The SLP6 of the Medical Outcomes Study indicated that most farmers **did** have problems sleeping as almost 90% scored greater than the midpoint of the subscale score.
- Fruit & vegetable servings sizes were less than the recommendations given by the Dietary Guidelines for Americans, 2020-2025.**
- Physical activity results were less than recommendations of the Physical Activity Guidelines for Americans.**
- A prevalence of **obesity was highest among Ohio farmers aged 55-64** (14%) followed by farmers aged 35-44 (9%).
- AUDIT-C scores almost **one-third of males and more than one quarter of females can be categorized as hazardous drinkers.**
- PHQ-2 were calculated **10% of farmers has a positive score for a likely for depression** that seeks to be addressed by health care providers and health educators.
- While the findings of Ohio farmers may not be generalizable to other state farming communities, this survey can serve as a model for other assessments.

Implications for action and Future Research

- The need assessment data will allow OSUE, community hospitals, health departments, & medical services better understand the health behaviors of the farming community.
- Future collaboration may see development of farm health & wellness projects and programming, or partnership with OSUE to provide outreach to farmers.
- Establishing these connections may create long-term community-based partnerships supporting the needs of farmer stakeholders.

References available on request



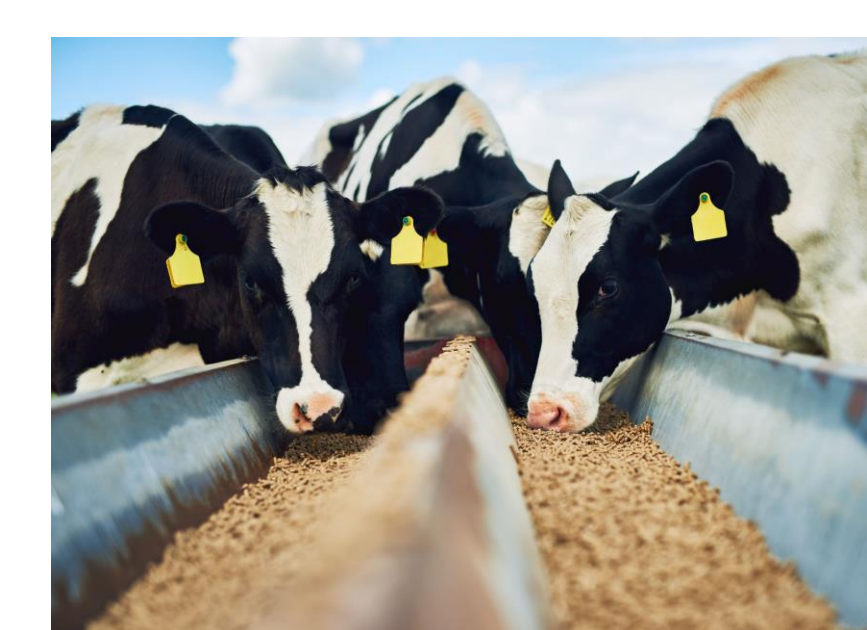
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