



Community Gardens and Nutrition & Eating Habits

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INTRODUCTION

- **Food Inequity in the U.S.**
 - Lack of access to healthy, affordable, fresh produce
 - Disproportionately affects low-income communities
 - Contributes to \$240 billion / yr in health costs
- **Root Causes**
 - Part of a large web of issues → systemic racism, healthcare, & poverty
 - Food deserts were assumed cause until recently
- **Community Gardens**
 - Can create a collective movement
 - Supply fresh produce to a community
 - Allow for nutritional education



Figure 1: Example of a community garden.

RESEARCH METHODOLOGIES

- ★ Qualitative Data
- ★ Implementation of a community garden at Palo Alto High School
- ★ Modeled after Collective Roots Community Garden in East Palo Alto, CA
- ★ Pre and post surveys administered to measure impact of community garden on nutrition and eating habits

- ★ Effectiveness determined by statistical significance tests

Research Question

How does a locally-organized community garden impact the healthy food practices of students at Palo Alto High School?

DATA AND FINDINGS

Overall, do you feel you eat healthily?
13 responses

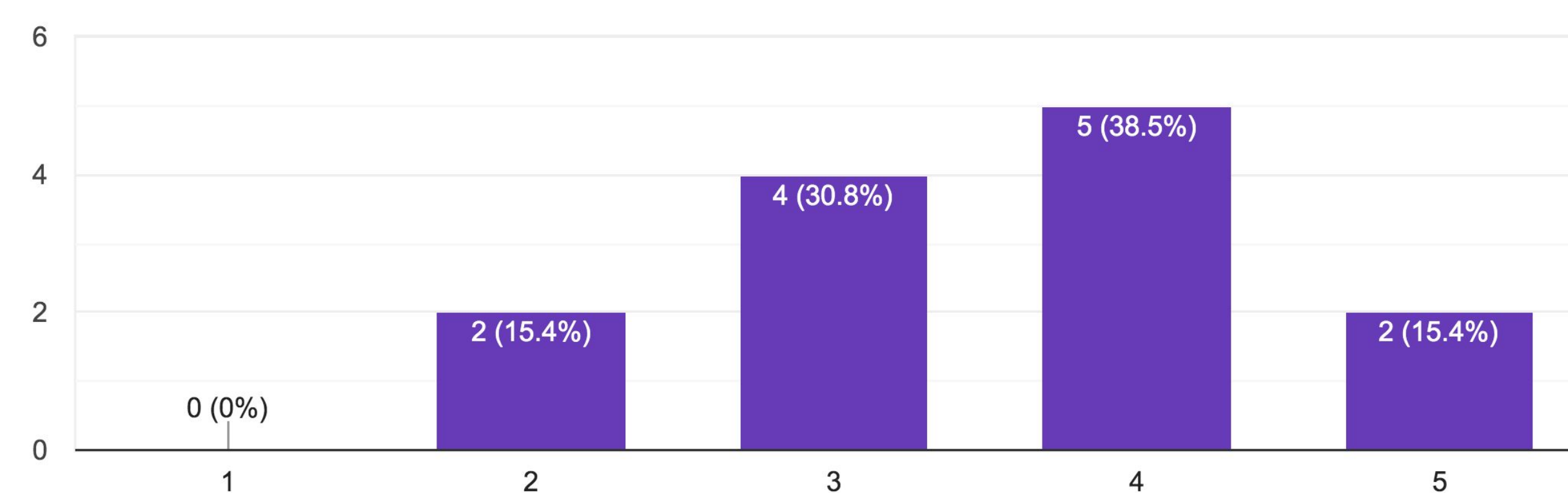


Figure 2: Pre-survey responses. Data collected by Kate O'Connor

Overall, how would you categorize your eating habits?
13 responses

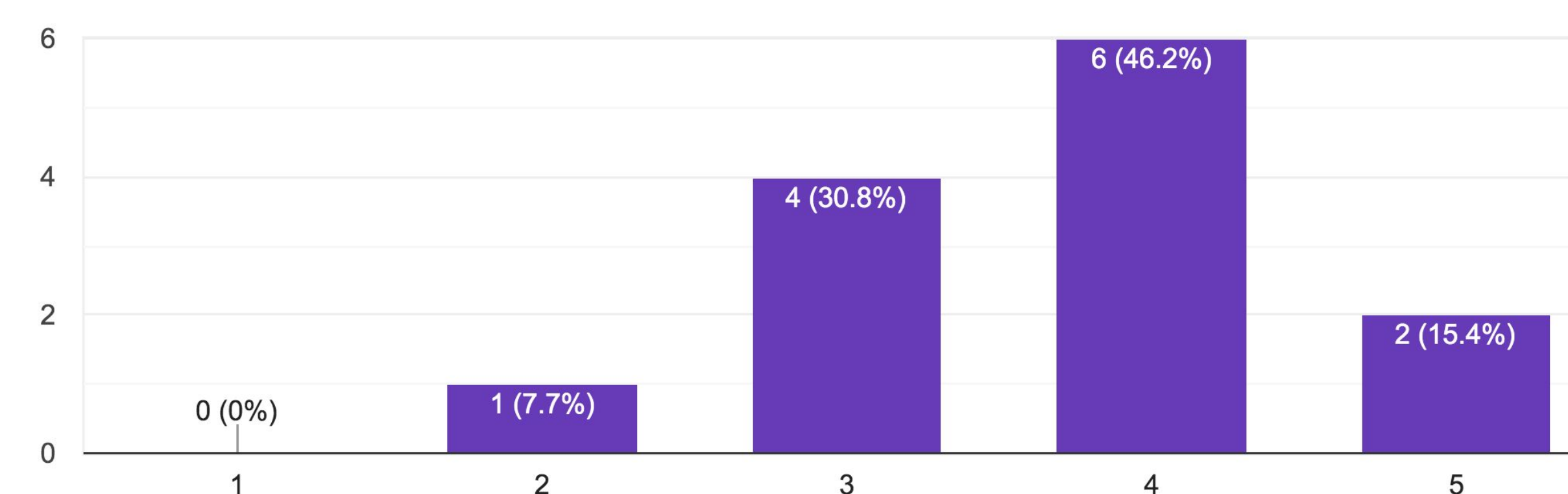


Figure 3: Post-survey responses. Data collected by Kate O'Connor

Response to question was measured on a scale of 1 to 5:

1: Extremely Unhealthy

5: Extremely Healthy

IMPLICATIONS AND NEXT STEPS

1. **Implementation of community gardens**
 - Schools for youth involvement & education
 - Community centers
 - Many organizations like this are already in place
2. **Not a permanent solution**
 - Community gardens are great for short-term education and engagement
 - Long-term solutions to food inequity will require government reform, dismantling racist / discriminatory systems, and fixing the wealth gap in the U.S.

3. Further research

- Long-term effects of community gardens on a community's health
- Replicating this research with other high schools or a larger sample size
- Other potential solutions to food inequity
 - SNAP / government assistance
 - Elimination of fast-food options

CONCLUSIONS AND ANALYSIS

The data collected show a **strong, positive correlation** between **community gardening** and **healthy eating habits**. This means that after participating in a community gardening session, participants were **more likely** to eat more fruits and vegetables and value healthy eating.

Community gardens can serve as a way to educate individuals on nutrition and healthy eating habits, while bringing people together and creating a usable product.

Note: The sample size for this study was small (n = 13), so the results may be slightly skewed.

ACKNOWLEDGEMENTS / REFERENCES

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Works Cited:

- Allecott, H., Diamond, R., Dubé, J. P., Handbury, J., Rahkovsky, I., & Schnell, M. (2017). Food deserts and the causes of nutritional inequality. *National Bureau of Economic Research*. doi:10.3386/w24094
- Holt-Giménez, E., & Wang, Y. (2011). Reform or transformation? The pivotal role of food justice in the U.S. food movement. *Race/Ethnicity: Multidisciplinary Global Contexts*, 5(1), 83-102. doi:10.2979/racethmultiglocon.5.1.83
- Kirkpatrick, S., & Tarasuk, V. (2009). Food insecurity and participation in community food programs among low-income Toronto families. *Canadian Journal of Public Health*, 100(2), 135-139. Retrieved from <http://www.jstor.org.ez.pausd.org/stable/41995224>
- Slocum, R., & Cadieux, K. V. (2015). Notes on the practice of food justice in the US: Understanding and confronting trauma and inequity. *Journal of Political Ecology*, 22(1), 27-52. <https://doi.org/10.2458/v22i1.21077>