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# Nutrition Knowledge Assessment of Lund Family Center Residents

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## Introduction

### What is the Lund Family Center?

- Since 1890, Lund has provided residential treatment for pregnant and parenting women with substance abuse and mental health issues.
- Lund also provides parenting education, transitional housing, job training, case management, and counseling.

### Project Background

- Nutritional education deficits have been observed among the residents at Lund.

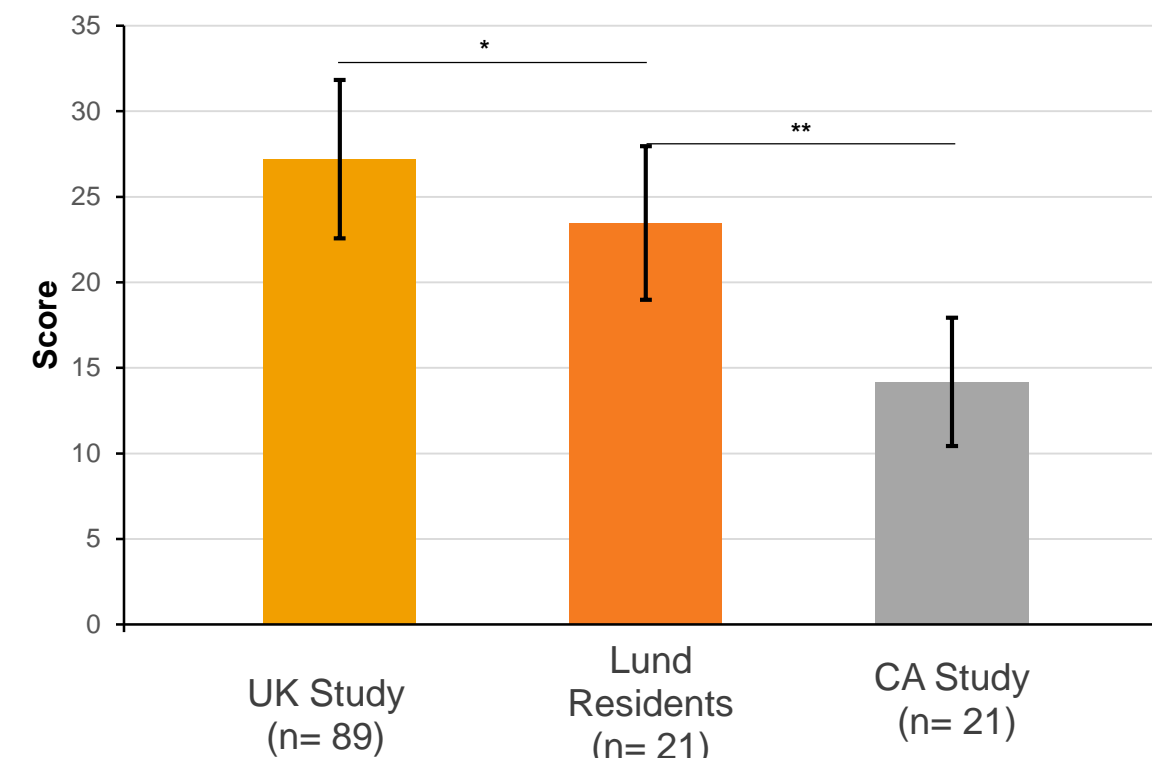
### Project Objectives

- Assess the level of nutritional knowledge among Lund residents compared to groups more representative of the general population, using an externally validated and efficacious General Nutrition Knowledge Questionnaire.<sup>1</sup>
- Identify areas for future educational intervention.
- Develop teaching modules on a variety of nutrition related topics to be made available to Lund staff.

## Methods

- Administered the revised General Nutrition Knowledge Questionnaire (GNKQ-R, Section 2) to assess knowledge of basic food groups and nutrients.<sup>1</sup>
- Compared results to two prior GNKQ study populations.
- Demographic data was also elicited, as well as qualitative personal assessments of health status by the Lund residents.
- Surveys were distributed to the 24 residents at Lund, 21 were completed and returned.
- To compare average scores between studies, a student's t-test was used.

## Results

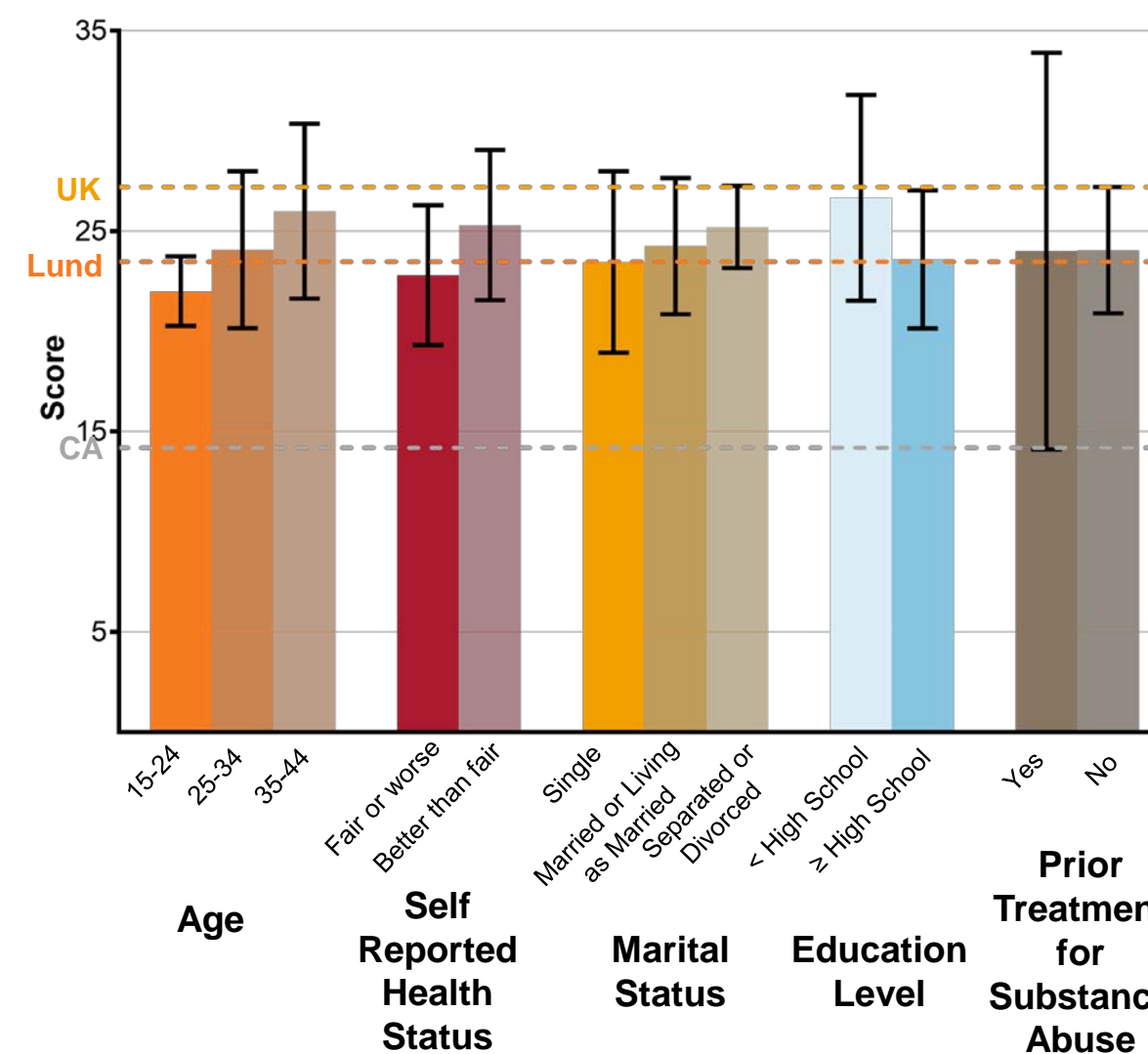


**Figure 1.** Performance on Section 2 – Food Group of GNKQ-R. Error bars indicate standard deviation; \* = p value < 0.05; \*\* = p value < 0.001.

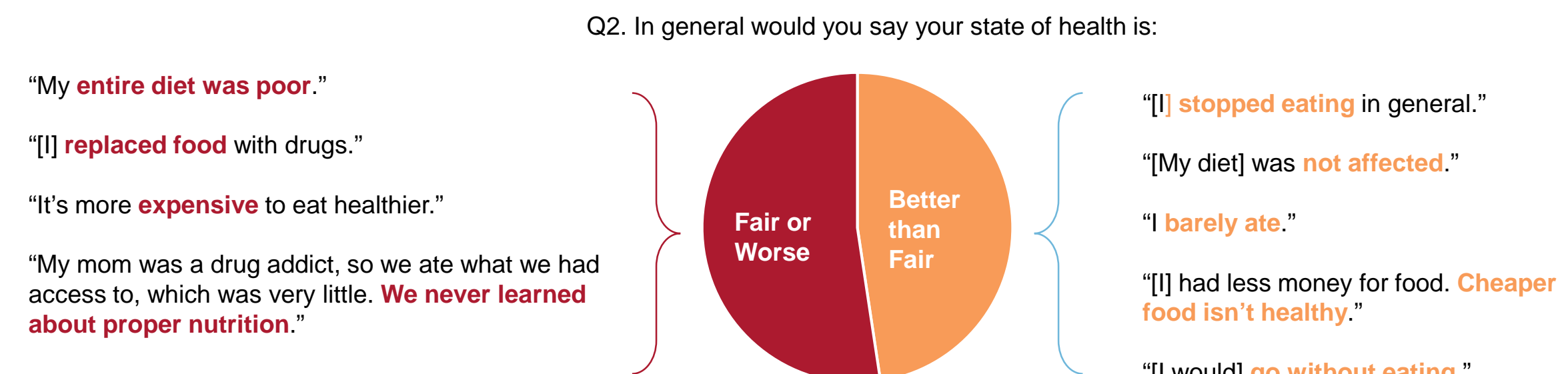
Question & Domain Assessed	Average Score (SD)
Q1. Added Sugar	68% (16)
Q2. Salt content	51% (21)
Q3. Fiber content	66% (22)
Q4. Protein content	79% (22)
Q5. Starchy foods	78% (12)
Q6. Types of fats	48% (33)

**Table 1.** Average score on selected individual questions on Section 2 – Food Groups of GNKQ-R.

Our study population scored significantly lower than the UK population ( $p = 0.002$ ) on Section 2 of the GNKQ-R, however, our study population scored significantly higher than the CA study population ( $p=0.0001$ ).



**Figure 2.** Average scores on Section 2 of GNKQ-R by demographic subgroup. Error bars indicate standard deviation. UK = 27.2, Lund = 23.48, CA = 14.19.



**Figure 3.** Qualitative remarks for nutrition status during time of substance use by self reported health status.

## Discussion

- The results of our survey suggest a number of gaps in the nutrition knowledge of our sample and indicate a need for a nutrition education curriculum.
- Based on the underperforming questions, we recommend at least one module on salt and fat content of food.
- Of note, the Lund residents scored higher than participants in the California based survey,<sup>2</sup> who were more highly educated than our sample, on average.
- Age, education level, and self-reported health status show a positive relationship with nutrition knowledge (not statistically significant).
- Educational modules were created based on our study results as well as input from Lund staff.
- Educational modules will be presented to Lund residents.

## Limitations & Future Studies

### Limitations

- Small, homogenous sample size
- Time constraints
- Reading level
- Differences in wording between the surveys

### Future Studies

- Follow up on nutrition curriculum efficacy – administer the survey after the curriculum has been presented to the residents to determine change.

## References

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 2. Jones, A M, et al. “Reliability and validity of nutrition knowledge questionnaire for adults.” *J Nutr Educ Behav*, vol. 47, no. 1, 18 Sept. 2014, pp. 69–74. *PubMed*, doi:10.1016.