

CHAPTER 2

Literature Review

The literature review was done in three parts. The first part looked at how hunger and food insecurity are defined in the United States. The second part of the literature review identified survey instruments currently being used in the United States by experts in the field of hunger and food insecurity. The last part reviewed studies where these survey instruments had been utilized.

Defining Hunger and Food Insecurity

Researchers prior to 1984 (Bickel, Hamilton, Cook, et al., 1997a, p. 3) used the concept that hunger was equivalent to malnutrition. By the late 1980's and early 1990's, researchers (Bickel, Hamilton, Cook, et al., 1997a, pp.3-4) had begun to redefine the concept of hunger in the United States as they realized that to characterize domestic hunger as equivalent to malnutrition overlooked the fact that malnutrition was the result of hunger and not necessarily the only result. Hunger, especially resource-constrained hunger in the United States, did not always evolve into malnutrition; yet it did have physical, social, and psychological outcomes that would affect the development and productivity of both adults and children.

By the 1990's, researchers and anti-hunger advocates (Bickel, Hamilton, Cook, et al., 1997a, pp.3-4) had begun to address hunger both from its physical and social aspects broadening the concept of hunger to include resource-constrained "food insecurity". The Food and Consumer Services of the USDA and the National Center for Health Statistics/Centers for Disease Control and Prevention of the Department of Health and

Human Services plus a substantial number of public/private research experts in the field of food security and hunger measurement had joined together in 1992 to work on the Ten-Year Comprehensive Plan for the National Nutrition Monitoring and Related Research Program (NNMRRP). The researchers used the following definitions developed by a group of experts from the American Institute of Nutrition and published by the Life Sciences Research Office.

- Food security – Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: (1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire acceptable foods in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing, or other coping strategies).
- Food insecurity – Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.
- Hunger – The uneasy or painful sensation caused by lack of food. The recurrent and involuntary lack of access to food. Hunger may produce malnutrition over time. . . . Hunger . . . is a potential, although not necessary, consequence of food insecurity.”

(Bickel, Hamilton, Cook, et al., 1997a, p.iii)

These definitions formed the foundation for the development of the new USDA survey instrument (USDA-CFSM) and measurement scale discussed below. Researchers nationwide (Center on Hunger and Poverty, 2000) have been using the instrument to measure the prevalence and severity of resource-constrained, poverty-related food insecurity and hunger both on a national and local basis.

Survey Instruments

Two survey instruments were found to be widely utilized in food security research and are relevant to the purposes of this project: a) the United State Department of Agriculture's Core Food Security Module³ (Bickel, Price, Hamilton, et al., 1998) and b) the University of California Cooperative Extension's Emergency Food Client Questionnaire⁴ (UC Cooperative Extension, 1987).

The United State Department of Agriculture's Core Food Security Module (USDA-CFSM) is a survey that was developed by the USDA and a team of public/private researchers using the concepts of food security, food insecurity, and hunger as defined on page 10 of this thesis project. The USDA-CFSM was specifically designed to assess household situations where there was a lack of money to purchase the family's basic food. Researchers across the United States (Bickel, Hamilton, Cook, et al., 1997, pp. i-v) have been using the USDA-CFSM to measure the prevalence and severity of household hunger and food insecurity. Responses to questions on the USDA-CFSM (Questions 34 through 48 on the Client Survey, Appendix B, pp. 95-98) are used to create a scale called *The Continuum of Hunger and Food Insecurity*: food secure, food insecure without hunger, food insecure with moderate hunger, and food insecure with severe hunger (Appendix C, p. 101). The *Continuum of Hunger and Food Insecurity* is based on

3. The USDA-CFSM and related research studies can be downloaded from the internet at <http://www.ers.usda.gov/briefing/foodsecurity/surveytools/index.htm>.

4. A free copy of this survey instrument can be obtained by contacting Anna Martin at (209) 754-6477 or mailing a request to Attn: Anna Martin, University of California Cooperative Extension, San Joaquin County, 420 South Wilson Way, Stockton, California 95205.

the concept that, as resources become constrained, households exhibit coping strategies progressing from worrying about where their next meal will come from to not being able to feed their children (Price, 1997). Households first reduce the quality of their diet (food insecure without hunger), then adults reduce their food intake (food insecure with moderate hunger), and then both adults and children reduce their food intake to the extent they experience physical hunger (food insecure with severe hunger). This *Continuum of Hunger and Food Insecurity* is reflected in the *Food Security Scale Values and Status Levels Corresponding to Number of Affirmative Responses to Core Food Security Module Questions* found in Appendix D on page 103, which shows how an increasing number of affirmative responses to questions on the USDA-CFSM (Questions 34 through 48 on the Client Survey used for this thesis project in Appendix B, pp. 95-98) translates into food security scale values. The food security scale values are then coded to indicate a household's food security status level (0 = food secure, 1 = food insecure without hunger, 2 = food insecure with moderate hunger, and 3 = food insecure with severe hunger).

The University of California Cooperative Extension's Emergency Food Client Questionnaire (UCCE-EFCQ) was developed and tested by UCCE Nutrition, Family and Consumer Science Advisors in California counties beginning in 1982 (Joy, et al, 1990). Questions on the UCCE-EFCQ were designed to collect the sociodemographic characteristics of respondent households as well as the barriers and obstacles these households experienced when seeking emergency food assistance. The struggle of financially-challenged families and the demand it places on emergency food providers

has been documented using the UCCE-EFCQ by UCCE's Nutrition, Family, and Consumer Science Specialists and Advisors for more than a decade.

Domestic Hunger and Food Insecurity Research

The last part of the literature review looked at some of the recent research efforts in the field of domestic hunger and food insecurity reported by the United States Department of Agriculture; Tufts University Center on Hunger and Poverty; the University of California Cooperative Extension Nutrition, Family and Consumer Science Programs; and California Food Policy Advocates. The researcher specifically reviewed the reports that had evolved from cities, counties, and states using the two survey instruments described above.

The USDA-CFSM was included as a supplement to the Current Population Survey (CPS) in April 1995 and has continued to be included with the CPS one month out of each year since 1996. (Bickel, Hamilton, and Cook, et al., 1997a, p. i) The CPS is a joint project of the Bureau of Labor Statistics and the Bureau of the Census. The CPS is administered to approximately 50,000 households in the United States each month. The purpose of the CPS is to collect important data on the labor force and the United States economic situation for use by policymakers and legislators. CPS data is an important indicator of the United States economic situation. (Bureau of Labor Statistics and Bureau of the Census, 2001, p. 1)

In September 1999, The USDA Economic Research Service (Nord, Jemison, and Bickel, p. 17) reported on the results of the food security questions included on the CPS from 1996 to 1998. The prevalence of food insecurity with and without hunger averaged

9.7% of U.S. households or about 10 million households each year. The prevalence of food insecurity with hunger was 3.5% of households or about 3.5 million households each year. In California, the same USDA Economic Research Service study found 11.4% of the CPS survey households were food insecure with and without hunger, and 4.1% were food insecure with hunger.

Additional research using the USDA-CFSM has been done with low-income populations in California. The prevalence of food insecurity was much higher in these resource-constrained households. In April of 1998, California Food Policy Advocates collaborated with California Catholic Charities in twelve California Counties to randomly survey 823 low-income households receiving emergency food. The study and results reported (California Food Policy Advocates, May 1998) are briefly described below:

- *California Counties where Catholic Charities participated:* Monterey, Orange, Sacramento, San Diego, Santa Rosa, Fresno, Sacramento, San Francisco, Ventura, and Solano
- *Profile of Survey Respondents:* a) 97% were living at or below the poverty line with over half living at less than 30% of the poverty threshold; b) 67% were U.S. citizens with the remainder immigrants from other countries, primarily Mexico; c) the average household size was 3.6 members, with 1.8 children; d) the median income was \$650 per month; and e) the median amount paid for rent-plus-utilities was \$429.
- *Results:* a) 27% of the survey households were experiencing food insecurity with severe hunger and 33% of the survey households were experiencing food insecurity with moderate hunger—an overall total of 60%; b) 63% of the survey households

with children under 18 years of age were experiencing food insecurity with hunger; c) 59% of the 246 single adult survey respondents with no dependent children were experiencing food insecurity with hunger; and d) 71% of the 253 survey households who reported losing their food stamp benefits experienced food insecurity with hunger as compared to a 48% hunger rate among those who did not lose benefits.

In January 2000, Tufts University's Center on Hunger and Poverty released its report called "Paradox of Our Times: Hunger in a Strong Economy" (Venner, Sullivan, and Seavey, 2000). A sampling of surveys conducted by citizen groups, academic institutions, and state government agencies was summarized in the Tufts University report (pp. 5-6):

- Green Bay, Wisconsin—Convenience survey of an at-risk population accessing 21 meal sites in April and May 1998 found 66% food insecure.
- Rhode Island Department of Health (1999)—random study of 410 houses residing in poverty census tract found 24.4% food insecure.
- Wisconsin welfare "leaver" study (1998)—32% of the 375 former welfare recipients surveyed were unable to buy enough food at some time after they left welfare rolls.
- South Carolina (1999)--17% of 384 South Carolina families leaving welfare reported there were times when they had no way to buy food.
- Connecticut (1998)—22% of 421 households where benefits had been terminated reported they "sometimes" or "often" did not have enough to eat.

- Michigan (1997)—27% of sanctioned families reported not having sufficient food.

Authors of the report (Venner, Sullivan, and Seavey, 2000, p. 12) also contrasted the facts of the economic boom the nation was experiencing with startling statistics on how families living in poverty were becoming more and more financially challenged. The report highlighted how the average after-tax income in the top fifth of American households has increased 43% since 1977 while the after-tax income of the bottom fifth of households has declined by 9%. The welfare caseload has declined by almost 50% and food stamp utilization is down by over one-third, yet 15% of American households with children were food insecure each year from 1994 to 1998 (Venner, Sullivan, and Seavey, 2000, pp. 13-15).

As indicated previously in this thesis project, the problem of hunger and food insecurity was not new to UCCE Nutrition, Family and Consumer Science Advisors and Specialists. Using the UCCE-EFCQ, interviews have been conducted in many counties at emergency food pantries, soup kitchens, and commodity food distribution sites across California since 1982. Selected results from these interviews are outlined in Appendix F on page 111. Appendix F also includes the 1998 Contra Costa County hunger study conducted by the UCCE advisor even though the research instrument used was the 1997 Second Harvest Survey Questionnaire. Although the results cannot be directly compared to the other studies, the questions generated similar data and therefore have been included.

A close look at the University of California Cooperative Extension (UCCE) results in Appendix F indicates that low-income households seeking emergency food have several characteristics in common. In most of the counties, close to 50% or more are families with children. The need for emergency food is found among all ethnic groups. The majority of households in all counties except Tuolumne County were not receiving food stamps. The vast majority of households were living below the poverty level for their family size. Two counties showed that the average family was spending over 50% of its income for rent. The UCCE researchers also found 18% to 48% of the households had at least one family member working.

As the USDA, Tufts University, and UC Cooperative Extension have reported, many households are struggling to put food on the table, and food insecurity at any level means more families across the country are seeking emergency food services. This increase in demand for emergency food has been and must continue to be documented so that emergency food providers, policy makers, politicians, and concerned citizens can identify effective programs for helping these families. The chapters that follow outline the process followed in this project to develop one survey for Calaveras County based on the two survey instruments described above, administer the instrument, and analyze the responses. The survey findings and recommendations for a community action plan are presented in Appendix A in the “Calaveras County Hunger Report 2000: Voices of the People”.