Testimony
Before the Committee on the Budget
U.S. House of Representatives

Thursday, February 15, 2007

Statement of Dr. Deborah A. Frank, Director
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Mr. Chairman and Distinguished Committee Members:

I would like to thank you for the concern for the well-being of American citizens at greatest nutritional risk, our children. You have always shown this concern and are again showing today by inviting a pediatrician to speak. As a researcher from the Children's Sentinel Nutrition Assessment Program (C-SNAP), a multi-site project in Pennsylvania, Maryland, Minnesota, Arkansas, and Massachusetts, which provides the most current and largest dataset in the nation about the food security, health, and development of very young, low-income children, I will be sharing lots of data with you. As a clinician, I cannot forget that every number comes with a name and a face, like my patient, whom I will call "Sam." Although he was six pounds at his birth in our hospital, when we met Sam at thirteen months of age, he weighed only 17 pounds, which is the weight of a normal little boy of seven months. He seemed to be all head, eyes and ribs with long eyelashes and a skin so pale it seemed you could see right through it. His blood count was so abnormal that I initially worried that he might have leukemia. However, when we sat down to take his medical history, the reason for Sam's condition became clear. This child, his mother, and his father were living in one room on the father's minimal earnings as a part-time gardener, and Sam was being fed a diet primarily composed of cornstarch mixed with water, especially when the winter meant there was little work for his father. Sam never "went to bed hungry" since his worried mother made very sure he was really full of cornstarch, but he was clearly seriously malnourished. Once we were able to assist his mother in enrolling this youngster in WIC

and food stamps, his weight rapidly improved. But when we last saw him, he was delayed developmentally and like too many children in my clinic, on a waiting list for Head Start. It is on behalf of the many food insecure young children like Sam all over the country, who are invisible to all but their parents and their doctors, that I appear before you today.

Sam is by no means unique. As this chart shows that the surest way for an American family to suffer food insecurity, defined by the USDA as "limited or uncertain access to nutritionally adequate food for an active and healthy life for all family members," is to have a young child. This chart, based on 2005 USDA national data, groups together all children under 6 years and does not focus the microscope on the most vulnerable children of all, those from birth to three. To understand the health of those children, we must turn to the data from the Children's Sentinel Nutrition Assessment Program (C-SNAP, www.c-snap.org), which monitors the well-being of children during the critical period of brain growth between birth and three years. In the families of the most susceptible of all children, the rates of food insecurity range from more than 1 in 10 to nearly 1 in 5. For your interest, we have appended a chart for the members of the committee showing the most recent rates of food insecurity in your states, with specific data about the youngest children in the states where we are conducting C-SNAP. We welcome visits from the members of the Committee to C-SNAP sites and Grow Clinics in your states, so that you can see the problem firsthand. In addition to C-SNAP sites, there are Grow Clinics in Los Angeles, Houston, New York, and Florida to which I could readily refer you.

Now, the bland term 'food insecurity' does not sound very alarming. But whatever we call it, food insecurity, even at the mildest levels, is a well-documented threat to health and brain function at all stages of life. The effects of food insecurity are particularly devastating in prenatal life and early childhood when humans undergo unprecedented growth of body and brain. Nutrition of inadequate quality or quantity stunts this growth and development, jeopardizing the whole future trajectory of the child's life.

The nutritional status of a woman as she enters pregnancy, and the amount of weight that she gains during pregnancy, are critical predictors of whether the child will be born low birth weight, the most important cause of "infant mortality," which is how doctors refer to dead babies. Although we are getting better technically at keeping low birth weight babies from dying, the lower the birth weight the more likely that a child who survives will suffer from lasting impairments and school failure. This simple relationship explains why the nutrition counseling and healthy foods that the Special Supplemental Nutrition Program for Women's, Infants, and Children ("WIC") provides to pregnant mothers have been so effective in enhancing the survival of America's children. In a five-state study, WIC was directly responsible for lowering infant mortality rates by 25% to 66% among Medicaid beneficiaries (Mathematica Policy Research, Inc. 1993),

After birth, nutrition continues to exert major influences on health and development. At all ages, malnutrition impairs immune function leading to the infection/malnutrition cycle. With any acute illness all children lose weight. However,

in privileged homes once the acute illness is resolved, children rapidly rebound, increasing their dietary intake to restore normal growth. For many low-income families, where food supplies are uncertain even for feeding well children, once a nutritional deficit has occurred due to normal childhood illnesses, scarce resources means there is no additional food to restore a child to his/her former weight and health. The child is then left malnourished and more susceptible to the next infection, which is likely to be more prolonged and severe, and followed by even greater weight loss. It is this infection/malnutrition cycle, which explains this chart showing that infants and toddlers from food insecure families, after considering numerous background characteristics, are 90% more likely to be in fair or poor health and 30% more likely to have required a hospitalization in their short lifetimes. We have found (Black et.al, 2004) that babies under one year old who are eligible for WIC but do not receive it are 34% more likely to be seriously underweight than similar babies who receive WIC, with obvious implications for protecting babies from this deadly cycle.

With intensive nutritional and medical efforts, malnourished children can recover growth and health, but all too often malnutrition inflicts concurrent and lasting deficits on their cognitive development, posing serious implications for the malnourished child's future ability to participate in the global knowledge economy. Lack of nutrients available to the brain during any part the critical period of brain growth from the last two prenatal trimesters through the first few years of life will lead to deficits in the part of the brain under development. Even iron deficiency anemia in early life (which WIC participation decreases) ***without*** slowed growth is correlated with lowered IQ all the way to adulthood. Four to five year old children who participated in WIC in early life have higher

vocabulary and digit memory than those who did not (National WIC evaluation, USDA, 1986).

As knowledge of the importance of nutrition for proper brain functioning has evolved, awareness has also increased with regard to brain function; although brain size and structure can be most affected by malnutrition in early life, brain function can be seriously affected at any age. In older children multiple research studies all over the country including the Arkansas-Mississippi-Louisiana Delta, (Casey, Szeto et. al. 2005) have shown that food insecurity is associated not only with poorer physical health but with decreased school achievement in reading and math and more behavior and emotional problems, including risk of suicide in adolescent girls. (Jyoti, Frongillo, and Jones 2005; Casey, Szeto, Robbins et.al; 2005; Alaimo, Olson, and Frongillo, 2002)

This alarming and widely prevalent condition is threatening all of America's children, but particularly the poorest, including Hispanic and African American children and citizen children of immigrant parents, where rates of food insecurity far exceed those that I have presented for the general population. So what are possibilities for prevention and treatment? I can tell you that there are several "good medicines" for this problem but they can only be prescribed by you. The first is the Food Stamp Program, which our research has found, buffers young children in food insecure households from themselves suffering food insecurity; parents are better able to protect their children. Moreover, we know that families and children who lose food stamps suffer increased rates of food insecurity and that the children are much more likely to be in poor health. Other good medicines include WIC and school meals, which may also be diluted under the

Administration's proposals. Recent research shows that participation in the Food Stamp Program and/or WIC starting at birth is associated with decreased rates of Medicaid payments for children's anemia and malnutrition (termed "Failure to Thrive" in medical settings) under age 5. (Lee et al 2006) Moreover, participation in these programs decreases the likelihood that these children will be the subject of child abuse reports. In older children, particularly girls, food stamps have also been shown to decrease the risk of obesity (Jones, Jahns, Laraia, and Haughton, 2003) Another recent study demonstrated that among 8000 children followed from kindergarten to third grade, those whose families began to receive food stamps achieved significantly greater improvement in reading and math then those whose families stopped receiving food stamps. (Frongillo, Jyoti, and Jones, 2006)

So what is going on with these good medicines? Why haven't they cured the problem? There are two issues. First, like the flu vaccine, these medicines do not reach all of the eligible people. At least one in five children who is eligible for food stamps does not receive them. Particularly at risk for not getting the medicine are citizen children of immigrant parents who comprise 12% of all American children. For want of this "medicine" these children suffer from serious increases in rates of food insecurity and ill health, a risk even greater than those faced by other poor children. Secondly, even when America's families get food stamps, the dose is often what we in pediatrics would call "sub-therapeutic," akin to not giving enough penicillin to really cure a strep throat. The average food stamp benefit is a dollar per meal per person per day. We have shown in the report entitled, 'The Real Cost of the Healthy Diet,' that even assuming a family of

two adults and two children receive the maximum possible Food Stamp benefit ($1.40 per meal per person per day), which few real life families actually do, they would come up short about $800 a year if they tried to purchase the government recommended Thrifty Food Plan market basket shopping in Boston. (I would like to enter into the record a link to this report: (http://dcc2.bumc.bu.edu/csnappublic/HealthyDiet_Aug2005.pdf)) Similar findings have been reported across the country from cities like Seattle. Moreover, as you probably know, the Thrifty Food Plan is USDA's theoretical estimate of what it would cost to purchase a market basket list of particular amounts and kinds of food representing a minimally adequate diet. It is the government's lowest cost meal plan and does not reflect current scientific thinking about nutrition and health. As the chart shows, if our family of four tried to purchase the most economically reasonable version of the Surgeon General's most recent dietary recommendations, their costs would exceed the maximum possible food stamp allotment by nearly $2,000 a year. This is an impossible expense for families who are constantly trading off how to have money to get to work, keep a roof over their head, or keep the house warm while trying to provide healthy meals.

From what I understand, the administration's most recent budget proposal fails to address either the problem of broadening access to food stamps or of the adequacy of food stamps to purchase a healthy diet, and threatens to "dilute" the WIC 'medicine' as well. This budget proposal does contain some sensible measures, such as excluding from calculations of eligibility for food stamps retirement and college savings, and combat pay Unfortunately, at the same time, it also proposes that families who as so poor that they are currently eligible for non-cash welfare benefits will nevertheless lose their food stamps and their children may consequently lose access to free school meals. Thus 280-

329,000 American working families with children who are making the transition from welfare to work will lose this crucial work support. Currently, food stamp participants with pregnant women or young children are automatically eligible for WIC — as a result of this new policy, without food stamps, these families may also lose their WIC benefits.

WIC, one of the mere 17% of Federal programs that the OMB has given its highest rating of "Effective," also suffers under the President's budget, with a $145 million cut to Nutrition Services funding. Nutrition Services funding enables WIC to provide the invaluable nutrition education, counseling and referrals that are essential to WIC's ability to achieve positive health outcomes. Under the President's proposed cut, Nutrition Services funding would be frozen at 2006 levels with the result that there will be $1.42 less for every mother and child served with which to deliver critical public health nutrition and other social services. As a pediatrician who frequently refers pregnant women and their children to WIC, I am concerned that this cut will diminish the quantity and quality of WIC nutrition services, including loss of professional nutritionists, and thus decrease WIC's remarkable effectiveness.

For the nation as a whole, the reduction of $145 million represents the loss of nutrition counseling and health referral services to some 800,000 clients. This is especially alarming, given that the USDA is on the verge of changing the WIC food packages to align with the most recent Dietary Guidelines for Americans and the current infant feeding practice guidelines of the American Academy of Pediatrics — an exciting, long-anticipated change that will greatly help WIC to keep providing quality services that meet clients' nutritional needs, but will also require a lot of hard work by the states to implement. The proposed cut in Nutrition Services funding will jeopardize states' ability

to successfully roll out the newest and best "nutrition medicines" for children. Finally, in contradiction to the President's own WIC technology initiative embodied in the Child Nutrition and WIC Reauthorization Act of 2004, the President's budget has provided no money to meet WIC's Management Information Systems (MIS) needs, another critical component to successful issuance of the new food packages, by managing the program's integrity and containing food costs

Besides these failures of "preventive care" for children at risk of food insecurity, nothing in the current proposals would addressed the problem of increasing the "dose" of food stamps to a level that would enable families to purchase healthier diets for their children. To put things in context, one person eating the South Beach diet for one day has to spend as much as the maximum the government would allot for a family of four on that same day under the current and proposed food stamp rules.

I know that I am addressing a budget committee and not a pediatric conference, and, therefore, your obligation is to make sure that America's resources are wisely spent. However, I have described to you a miracle drug which cuts babies' chances of dying, decreases American children's ill health, hospitalizations, and behavioral/emotional problems, and increases children's level of school achievement. With your budget expertise you can readily understand the implications of the fact that one average 2-3 day pediatric hospitalization costs about $11,000, which would fund *years* worth of food stamp and WIC benefits for many children. Of course, I also realize that you are not only

struggling with the cost of domestic problems but with international ones, however, I would like to leave you with a statement made by Winston Churchill, whom no one would call a starry-eyed liberal. In the middle of World War II, when Great Britain was dealing with homeland security problems orders of magnitude greater than ours, Churchill announced on the radio, “there is no better investment for any society than putting milk into babies.” I know, as policy-makers, that you will be equally wise leaders of a society under stress.

Bibliography

Food Insufficiency and American School-Aged Children's Cognitive, Academic, and Psychosocial Development. Alaimo, K., Olson, C. M. et al. [erratum appears in *Pediatrics* 2001 September; 108(3):824b]." *Pediatrics* 2001; 108(1): 44-53.

WIC Impact on Infant Growth, Health, and Food Security: Results of a Multi-site, Multiyear Surveillance Study. Black, Maureen, Cutts, Diana. Frank Deborah A, Geppert, Joni, Skalicky, Anne, Levenson, Suzette, Casey, Patrick, Berkowitz, Carol, Zaldivar, Nieves, Cook, John, Meyers, Alan and C-SNAP Study Group. *Pediatrics,* 2004; 114(1):169-176.
http://pediatrics.aappublications.org/cgi/content/full/114/1/169

Child Health-Related Quality of Life and Household Food Security. Casey, P. H., K. L. Szeto, et al. *Archives of Pediatrics & Adolescent Medicine***.** 2005; 159(1): 51-6.

Maternal Depression, Changing Public Assistance, Food Security, and Child Health Status. Casey, Patrick, Goolsby, Susan, Berkowitz, Carol, Frank, Deborah A., Cook, John, Cutts, Diana, Black, Maureen ,Zaldivar, Nieves, Skalicky, Anne, Levenson, Suzette, Heeren, Tim, Meyers Alan and the C-SNAP Study Group. *Pediatrics*. 2004; 113(2):298-304. *http://pediatrics.aappublications.org/cgi/content/abstract/113/2/298*

Child Food Insecurity Increases Risks Posed by Household Food Insecurity to Young Children's Health. Cook, John T. Deborah A. Frank, Suzette M. Levenson, Nicole B. Neault, Tim C. Heeren, Maureen M. Black, Carol Berkowitz, Patrick H. Casey, Alan F. Meyers, Diana B. Cutts, Mariana Chilton. *Journal of Nutrition*. 2006 April; 136 (4):1073-6. http://dcc2.bumc.bu.edu/csnappublic/publications-abstracts.htm

Food Insecurity is Associated with Adverse Health Outcomes Among Human Infants and Toddlers. Cook, John, Black, Maureen, Casey, Patrick, Frank, Deborah A., Berkowitz, Carol, Cutts, Diana, Meyers, Alan and Zaldivar, Nieves. *Journal of Nutrition.* 2004; 134:1432-1438. *http://www.nutrition.org/cgi/content/full/134/6/1432*

Welfare Reform and the Health of Young Children: A Sentinel Survey in Six US Cities. Cook, John, Frank, Deborah A., Berkowitz, Carol, Casey, Patrick, Cutts, Diana, Meyers, Alan, Zaldivar, Nieves, Skalicky, Anne, Levenson, Suzette Heeren., Tim. *Archives of Pediatric and Adolescent Medicine.* 2002; 156:678-684.
http://archpedi.amaassn.org/cgi/reprint/156/7/678.pdf

Heat or Eat: Low Income Home Energy Assistance Program and Nutritional Risk Among Children Under 3. Frank, Deborah A., Neault, Nicole Skalicky, Anne, Cook, John, Levenson, Suzette, Meyers, Alan, Heeren, Timothy, Cutts, Diana, Casey, Patrick Black, Maureen, Zaldivar, Nieves and Berkowitz, Carol. *Pediatrics*. 2006 Nov; 118(5): e1293-e1302

Lower Risk of OverWeight in School-Aged Food Insecure Girls Who Participate in Food Assistance. Jones, S. J., Jahns, L., et al., Results from the panel study of income dynamics child development supplement. *Archives of Pediatrics & Adolescent Medicine* 2003. August; 157(8): 780-4.

Food Insecurity Affects Children's Academic Performance, Weight Gain, and Social Skills. Jyoti, D., Frongillo, E. et al. *Journal of Nutrition* 2005; 135: 2831-2839.

Effects of WIC and Food Stamp Program Participation on Child Outcomes. Lee, BJ, Mackey-Bilaver, L Chin, M. USDA Report No. 27, 2006

Subsidized Housing and Child Nutritional Status: Data from a Multisite Surveillance Study. Meyers, Alan, Cutts, Diana, Frank, Deborah A., Levenson, Suzette, Skalicky, Anne, Cook, John Berkowitz, Carol, Black, Maureen, Casey Patrick and Zaldivar. Nieves *Archives of Pediatric and Adolescent Medicine.* 2005; 159:551-556. *http://archpedi.ama-assn.org/cgi/content/abstract/159/6/551?ct*

Child Food Insecurity and Iron Deficiency Anemia in Low-Income Infants and Toddlers in the United States. Skalicky, Anne, Meyers, Alan, Adams, William, Yang, Zhaoyan, Cook, John, Frank, Deborah A. *Maternal and Child Health Journal,* 2006 March; 10(2): 177-184 *http://dcc2.bumc.bu.edu/csnappublic/publications-abstracts.htm*

Hunger: Its Impact on Children's Health and Mental Health. Weinreb, L., C. Wehler, et al. 2002. *Pediatrics* 110(4).

Children's Sentinel Nutrition Assessment Program Reports

1. ***Food Stamps As Medicine: A New Perspective on Children's Health***, *February 2007*.

The Food Stamp Program is America's first line of defense against hunger and the foundation of our national nutrition safety network. Physicians and medical researchers also think it is one of America's best medicines to prevent and treat childhood food security. The report demonstrates the important protective effect of food stamps on child food insecurity and for citizen children of immigrants.

http://dcc2.bumc.bu.edu/csnappublic/Food%20Stamps-Medicine%202-12-07.pdf

2. ***Safeguarding the Health, Nutrition, and Development of Young Children of Color***, *September/October 2006*.

An article summarizing C-SNAP's two reports on children of color and the buffering impact of nutrition assistance on their health and well-being as well as the way in which food insecurity puts young children of color at increased developmental risk. Published in Focus Magazine, a bi-monthly magazine of the Joint Center For Political and Economic Studies.

http://dcc2.bumc.bu.edu/csnappublic/SeptOct2006-Children%20of%20Color.pdf

3. ***Nourishing Development: A Report on Food Insecurity & the Precursors to School Readiness among Very Young Children***, *July 2006*.

A report of original C-SNAP findings demonstrating that the foundations of school readiness are laid long before the start of formal education begins.

http://dcc2.bumc.bu.edu/csnappublic/Nourishing%20Development%20Report%207-06.pdf

4. ***'The Impact of Food Insecurity on the Development of Young Low-Income Black and Latino Children;' & 'Protecting the Health and Nutrition of Young Children of Color: The Impact of Nutrition Assistance and Income Support Programs'*** - *Research*

Findings from the Children's Sentinel Nutrition Assessment Program (C-SNAP), (Prepared for the Joint Center for Political and Economic Studies Health Policy Institute), *May 2006*.

A pair of reports demonstrating the increased vulnerability of young black and Latino children from low-income households to developmental risk linked to food insecurity and the buffering effect that family support programs can have on young black and Latino children's health and growth.

http://dcc2.bumc.bu.edu/csnappublic/Children%20of%20Color%20Reports%20May%202006.pdf

5. ***The Real Co$t of a Healthy Diet: Healthful Foods are Out of Reach for Low-Income Families in Boston, Massachusetts,*** *August 2005*

A report from a research team from the Boston Medical Center Department of Pediatrics revealing that, on average, the monthly cost of the Thrifty Food Plan (upon which Food Stamp Program benefits are based) is $27 more than the maximum monthly food stamp benefit allowance. A low-cost healthier diet based on the most recent nutrition guidelines exceeded the maximum monthly food stamp benefit by $148 -- an annual differential of $1776. This is an unrealistic budgetary stretch for most families who qualify for nutrition assistance.

http://dcc2.bumc.bu.edu/csnappublic/HealthyDiet_Aug2005.pdf

6. ***The Safety Net in Action: Protecting the Health and Nutrition of Young American Children,*** *July 2004*.

A comprehensive summary of C-SNAP findings showing the positive impact of five public assistance programs on young children's food security, growth, and health.

http://dcc2.bumc.bu.edu/csnappublic/CSNAP2004.pdf

7. ***The Impact of Welfare Sanctions on the Health of Infants and Toddlers: A Report from the Children's Sentinel Nutrition Assessment Program,*** *July 2002*.

A report based on C-SNAP findings published in the July 2002 Archives of Pediatric and Adolescent Medicine. Welfare sanctions and benefit decreases have serious negative implications for infants and toddlers' health and food security.

http://dcc2.bumc.bu.edu/csnappublic/C-SNAP%20Report.pdf

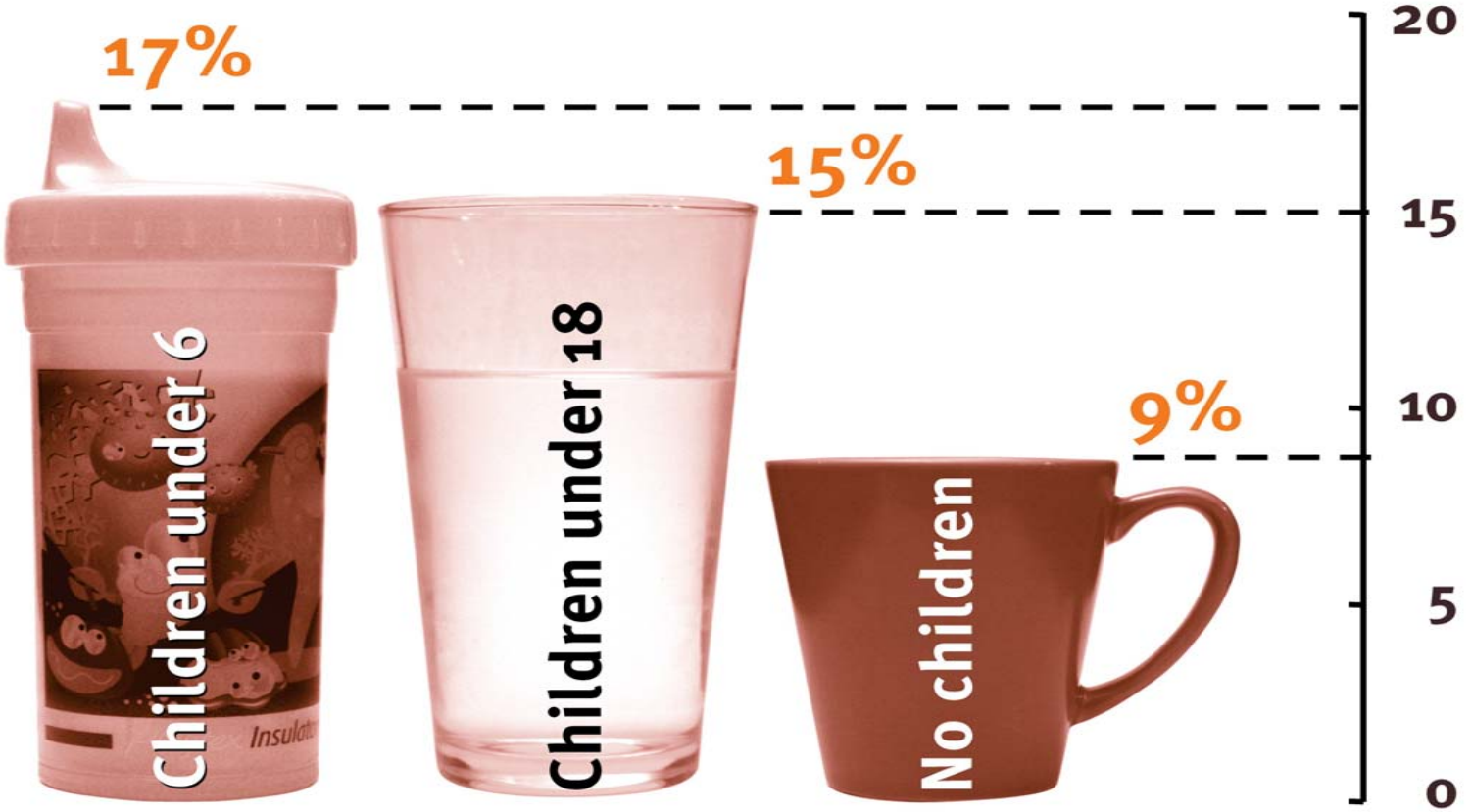
House Budget Committee Membership

Member	Average Percent of Food Insecure Households 2003-2005 by Member's State	C-SNAP Rates of Food Insecurity**
1. John M. Spratt, Jr., SC, Chair	11.0%	
2. Rose DeLauro, CT	11.0%	
3. Chet Edwards, TX	15.2%	
4. Jim Cooper, TN	11.8%	
5. Thomas H. Allen, ME	9.8%	
6. Allyson Y. Schwartz, PA	8.3%	13%
7. Marcy Kaptur, OH	9.7%	
8. Xavier Becerra, CA	13.3%	
9. Lloyd Doggett, TX	15.2%	
10. Earl Blumenauer, OR	14.2%	
11. Marion Berry, AR	13.7%	11%
12. Allen Boyd, FL	13.2%	
13. James P. McGovern, MA	7.5%	19%
14. Betty Sutton, OH	9.7%	
15. Robert E. Andrews, NJ	8.9%	
16. Robert C. "Bobby" Scott, VA	10.2%	
17. Bob Etheridge, NC	9.8%	
18. Darlene Hooley, OR	14.2%	
19. Brian Baird, WA	13.2%	
20. Dennis Moore, KS	11.5%	
21. Tim Bishop, NY	11.9%	
22. Vacancy *		
1. Paul Ryan, WI Ranking Member	8.5%	
2. J. Gresham Barrett, SC Vice Ranking Member	11.0%	
3. Jo Bonner, AL	12.5%	
4. Scott Garrett, NJ	8.9%	
5. Thaddeus G. McCotter, MI	9.6%	
6. Mario Diaz-Balart, FL	13.2%	
7. Jeb Hensarling, TX	15.2%	
8. Daniel E. Lungren, CA	13.3%	
9. Michael K. Simpson, ID	11.3%	
10. Patrick T. McHenry, NC	9.8%	
11. Connie Mack, FL	13.2%	
12. K. Michael Conaway, TX	15.2%	
13. John Campbell, CA	13.3%	
14. Patrick J. Tiberi, OH	9.7%	
15. Jon C. Porter, NV	10.4%	
16. Rodney Alexander, LA	14.4	
17. Adrian Smith, NE	8.7%	

* Rep. Lois Capps, (D-CA) resigned from the Budget Committee on January 19, 2007 to accept assignment to another Committee.

** The Children's Sentinel Nutrition Assessment Program has sites in the following states: Arkansas, Maryland, Massachusetts, Minnesota, and Pennsylvania. Sites in California and Washington, D.C. are dormant. Food insecurity rates reflect the problem among our study population, who are low-income, urban families.

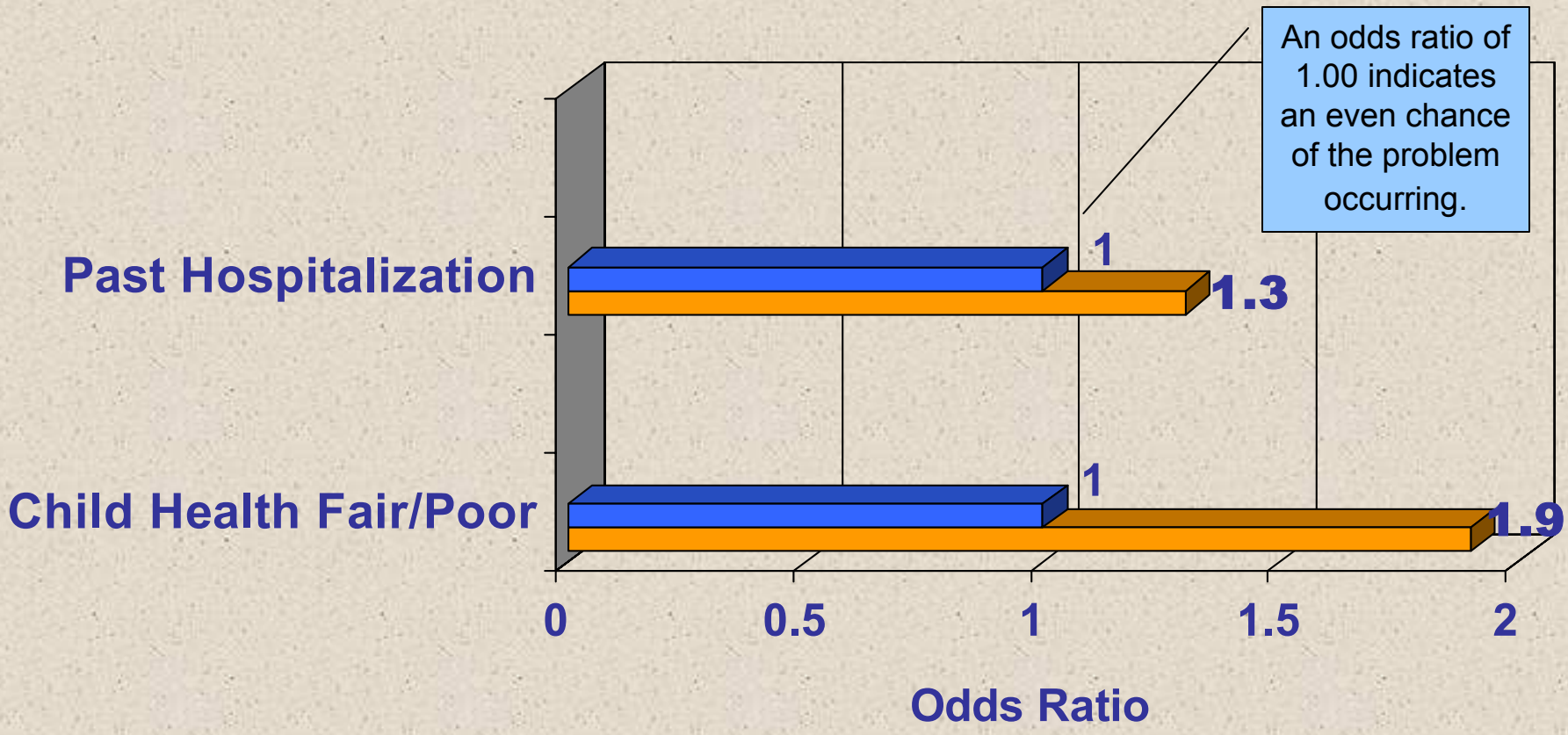
Percent of U.S. Households With and Without Children Under 18 that are Food Insecure



Babies and Toddlers in Food Insecure Households:

- *30% more likely* to have had past hospitalization,

- *90% more likely* to have fair or poor health, compared to food secure babies and toddlers.



Annual Gap Between Maximum Monthly Food Stamp Benefit & Cost of Surgeon General's Low-Cost, Healthier Diet