Setting the Stage

The University of Maryland has been a partner with Garrett County on numerous efforts to address the quality of life of its citizens. Our primary continuing presence is through Cooperative Extension. My associate, Dr. Bonnie Braun, and I have been involved, through our Department of Family Studies in the College of Health and Human Performance, in three projects focused on Garrett County:

1) The Rural Maryland Families Speak research study;

2) The Food Stamp Nutrition Education Program; and, starting this spring,

3) The Engaging Citizens in Public Policy Project.

Each of these efforts is focused on improving the health and well-being of the individuals and families that live in Garrett County. I will be using data from these projects in my presentation to you today.
When Bev Carvell contacted Dr. Braun, Extension Family Policy Specialist, with Cooperative Extension, who I know numbers of you have worked with, regarding the possibility of coming today, Dr. Braun was eager to be here but could not because she is in California presenting findings from several health care issue forums she and other colleagues conducted last year. So, as her close associate, I was asked to come to do three tasks:

1) Share findings from our research and relevant other studies;
2) Provide some frameworks to help you develop ideas and options for action;
3) Suggest some possible next steps associated with these projects.

To meet these tasks, I’d like to begin with a question:

What does research have to say relevant to the health and well-being of Garrett citizens?

And to answer that question, I must first reveal that I am not trained in the disciplines of food & nutrition, exercise or health sciences, but rather I am a family scientist who views the world through a systems perspective which I use as a framework for examining situations; identifying action options; and then monitoring effects of those actions.

To illustrate, let's look at this model of well-being that I often use to discuss research findings from three interrelated concepts--status of health, food and economics or finances.

Our review of recent research and findings from our own studies produced evidence that health, food and income are related to the well-being of children, youth and adults. Since food is so fundamental, I'll begin this review with a focus on food.
Food--Fundamental to Health

OH I want to start with a definition of food security. This is the standard USDA definition. Having enough food to meet nutritional needs at all times is called food security. Being food secure is basic to good physical and mental health. When people, and especially children, do not have sufficient, nutritious food, their health suffers. Food is necessary for a child's normal growth and development. When inadequate, a child's academic achievements suffer (Reid, 2001). As my colleague, Bonnie Braun says,

"When children aren't adequately nourished and nurtured, they can't learn.
When children can't learn, they can't become adults who can earn.
When adults can't adequately learn and earn, they can't be productive,
contributing citizens…the key to a strong economy and democracy."

Adults are also affected by the quantity and quality of their food. You may not know, but… The first U.S. government food programs were started after the call up of men to serve in the armed services in WWII. At that time, having come through a decade of economic depression, many of the men presented symptoms of malnutrition brought on by the lack of adequate diets. Publicly funded food assistance programs, like Food Stamps and WIC, were established as part of public policy tied to the federal government's role in providing for the general defense of the people of the United States and at the same time, as a support to the agricultural sector.
We know now that nutrient deficiencies and imbalances are associated with such health problems as high blood pressure, birth defects, certain cancers, heart disease, obesity, diabetes, and mental health problems such as depression.

Because food is so vital to health, the federal government has been measuring the level of food security among our citizens for several years. Adequacy of food is considered a measure of the well-being of a society as well as of a community, a family and a child. Yet, seldom are individual children or families screened for food security by school officials or doctors and other health care givers. And research demonstrates the tie to mental and physical health and food security, as you will see in the findings I will be sharing. Scarcer yet, is the community who assesses the adequacy, safety and security of its food supply.

Thus, one step toward a healthy community for Garrett County would be to 1) assess the status of food security of its citizens. Another step would be to 2) conduct a community food security assessment to determine the availability and cost of food to all residents of the county.

Fortunately, through the University of Maryland's Food Stamp Nutrition Education Program and our Rural Maryland Families Speak study, both located in Garrett County, we have some county specific data to add to your own sources of knowledge about the health status of your citizens. Now I want to share findings from our work and compare these findings to a multi-state study and to national statistics to help us get perspective on the situation here in Garrett County.
Findings from the Rural Families Speak Multi-state Study

In 1999, the University of Maryland, under the leadership of Dr. Braun, joined 14 other states to study the lives of rural, low-income families over time. The goal of the research study, funded in large part by the USDA, was to monitor their well-being with an emphasis on their economic functioning.

Here in Maryland, our research team, collected data in Dorchester and Garrett Counties in 2000, 2001 and 2002 through a series of 2 hour interviews in such sites as Garrett Works and the Community Action Center. Earlier this month, we began another follow-up set of interviews with the Maryland mothers.

Several key findings are relevant to your thinking about health of Garrett County citizens.

Key Finding # 1:
Rural families are more likely to be food insecure than general population.

Another faculty member in our department, Dr. Sandra Hofferth, found in a USDA study that 10% of the population was food insecure with that percentage holding over the studied two year period of 1997-1999. For the multi-state study, that Garrett Co. was a part of, 50% of the families were food insecure with any improvement between the two years of 2000 and 2001--accounted for by increases in household income during a time of an expanding U.S. economy. And while we can't generalize our findings to all rural families, the evidence suggests that many low-income rural families are not getting sufficient food to be food secure.
Additionally, Stephanie Grutzmacher, a graduate student in our Department of Family Studies, and a 4-Her from Howard County who is today working at 4-H camp here in Garrett County examined two years of data from the 14 state study to determine the impact of food related life skills on food security among the participating rural families. She found:

**Key Finding # 2:**
**Food security is an indicator of economic well-being—when your income increases, so does food security.**

**OH** To better understand what increased income meant to food security status for the multi-state families, let's look at a little more data from two points in time:

First, as this slide indicates, when the families incomes increased, as they did from Year 1 to Year 2, their food security increased or improved as well. You can see how the percentages changed on several items related to food security during this 12-month timeframe.

However, although there was improvement in the second year for these families, Stephanie found these **continuing and disturbing** statistics:

- 32% were not able to afford balanced meals;
- 40% relied on a few low-cost food items;
- 25% reported not being able to provide children with well-balanced meals;
  and
- 24% reported experiencing hunger.
These multi-state findings, of which Garrett County is a part, are consistent with national findings that RURAL households are more likely to:

- have lower incomes than urban and suburban households;
- be food insecure;
- face higher prices for groceries; and
- have transportation problems that inhibit getting nutritional food.

For Garrett County, where the median income is only around $32,000, one is more likely to have a much higher proportion of its population food insecure. With 13% of the county, or nearly 4,000 people, living below the poverty level (based on the 2000 census), using our study's findings, we would suggest that as many as 2000 of these people are not getting sufficient food. Of these persons, about 25% or 500 of them are children.

Consequently we know that these individuals also are at risk of other related diseases and disability which leads me to our third key finding, this one also grounded in Garrett County.

**Key Finding # 3:**

**Garrett County citizens are particularly vulnerable to food insecurity.**

What particularly stood out in our analysis was that the majority of the rural low-income families studied in Garrett County had employed adults in their household, but their incomes still were inadequate to meet their basic needs.
To help you put this in perspective I want you to see what low-income mothers from Garrett and the other counties report they had difficulty paying for on a regular basis.

If you think about it, when housing averages about 41% of a low-income family's income (MD Budget and Tax Policy Institute, 2004), it's difficult for these families to spread the remainder money they have among necessities such as utilities, transportation costs, clothing and school supplies for children, medical and other expenses. Most recently, with the cost of gas rising, budgets are further pinched as this slide demonstrates. (I think this slide may say it all!)

Income is key to obtaining food with adequate nutrition and is related to the educational attainment and employment of mothers. The lower the educational attainment and the lower the employment of mothers, the greater the likelihood of food insecurity. For some families in the multi-state study, the use of food stamps made a difference in the second year. There were also skill differences between those who were food secure and those who were not: (Remember, food security is having enough food to meet ones nutritional needs at all times)

Mothers in low-income food secure households were more likely to know how to stretch groceries until the end of the month. They were also significantly more likely to know how to manage family bills and make a family budget. Their overall level of life skills was significantly higher than the skill levels of mothers in low-income food insecure households.
These findings have implications for availability of jobs with adequate wages; education of family members; access and use of food stamps; as well as nutrition and food resource management education all of which could be arenas for increased emphasis in your Garrett County Steps to a Healthier Community actions.

These findings also have implications for the status of health of children and their families in Garrett County. For that connection, I am going to return to the multi-state study and some national findings regarding the state of the health of Americans. The next finding has further implications of what lack of food means for our health.

**More Findings from the Rural Families Speak Study**

**Key Finding #4  Food Insecurity is associated with depression and poor physical health.**

In the most sophisticated analysis of the multi-state study done to date, Dr. Leigh Ann Simmons Wescott, just completed an investigation into the relationship between health, food security and economic well-being.

Among the Rural Families Speak families, as ones food insecurity increased, their levels of depression and poor physical health also significantly increased. This finding is consistent with the literature, which says that poor nutrition affects both mental and physical health. Dr. Simmons Wescott also found that as your economic well-being decreased so too did your health, again this is consistent with the literature suggesting that mothers with more chronic health problems and injuries or illnesses in the last year have lower economic well-being.
When the Garrett-only data were examined by our state team, the findings held:

Most of the Garrett mothers who were food insecure also presented symptoms of depression and higher than the mean number of health problems. (Overheads – OH, OH)

So, what implications do these findings have?

Research suggests that children raised by mothers with depression are at-risk of depression themselves and often experience less than desirable parenting. Also, for those families with greater health problems there is a greater risk for unemployment or underemployment which produces less income and increases the chances of scarce food. There really can become a cyclical nature to the problems many families face.

I think these results support arguments for Garrett County to find steps toward improving the mental and physical health status of rural, low-income residents, which our study shows is related to their food security status, so they can better participate in the labor market.

The reality of life in low-income, rural areas is that resources and access to health care can be limited, both causing and exacerbating negative health conditions. Thus, access to care is also an issue which leads to another key finding.

**Key Finding # 5: Limited Access to Health Care Affects Well-being**

In November 2003, the Maryland Health Care Commission reported that 90% of the state's uninsured live in working family homes...people who are employed, paying taxes and still don't have insurance. In 2001, Maryland had 90,000 people without insurance; that number rose 7 times in two years to 690,000 in 2003--the third largest increase in the nation (Governor's Office, 2003). Clearly, access to health insurance and
it's relation to health status is a step that the state, including Garrett county, needs to address in the very near future.

Lack of health insurance inhibits preventative care and leads to increased costly care, disability, and death. Such health problems as high blood pressure, diabetes, obesity and asthma, that were reported by anywhere between 6 to 17% of the mothers in our study, may go untreated due to lack of access to doctors or to the high cost of medical supplies. Left untreated, not only the individual but society pays for the increased costs of longer hospitalizations and higher costs associated with treatment of disease in later stages. And clearly, left untreated, worker productivity is negatively affected (Tooker, 2003).

**OH** Now, as indicated in this next slide, Garrett County also is not immune from medical insurance challenges.

Only 60% of the Rural Families had access to health insurance for the adults of the family, although 94% reported their children were on the state health plan. According to the 2002 census, about 1/4 of household with incomes below $25,000 and 20% of households with income between $25,000 & $50,000 were without health insurance. Garrett County, with an annual income of $32,238 compared to a median for Maryland of $52,848, suggests that up to half of the households in Garrett County could be without health insurance…at least for one or more adults. Clearly, a key step Garrett County could take is to find ways to increase health insurance coverage for its families.

Even if families see doctors, many cannot afford the costs of prescription drugs. In the Rural Families Study, medication expenses were reported to be problematic by –
almost 23% or one-fourth of the mothers. They often reported not taking prescribed medicines due to the cost. Again, Garrett County might want to consider strategies to increase access to affordable prescription drugs.

Further, many of the rural families in our study reported problems with time, cost and access to transportation to travel to Cumberland or Morgantown or even within Garrett County to see doctors and dentists.

Dental health is especially problematic for low-income families in the multi-state study. Difficulty finding dentists who accept dental plans, in addition to the prohibitive costs described above for general health care were frequently reported.

Thus, to improve the health of Garrett County citizens, may require increased availability of health care providers or assistance with transportation to health care settings.

**OH** Now, in analyzing data from the Rural Families Speak study, one finding stands out: *Social support (having friends, family and others to help you) is key to mental and physical health among these families.* Because the next key finding is that:

**Key Finding #6 -- Physical and Mental Health are Related to Social Support**

The more social support reported by the families, the better off they were economically over time. It seems that if the rural mothers believed their social supports were strong, they felt better equipped to deal with difficult financial situations, because they had people in their lives who they could potentially turn to for some financial assistance if needed. Mothers with stronger social supports also were likelier to use their supports for assistance with childcare or transportation, which could mitigate the effects of their financial difficulties, and improve their abilities to gain and maintain
employment. We know that employment, in turn, affects income, food security and health.

Additionally, social support has been demonstrated in other studies to substantially lower the rate of mortality, meaning that the less often one has positive social contact, the greater one's odds of experiencing mental and physical health problems. Research also tells us that people who are socially isolated have higher rates of suicide, tuberculosis, accidents and mental disorders (House, Landis, and Umberson) suggesting that the lack of social support could be as key a risk factor as smoking and high blood pressure. In a county like Garrett with incomes lower than the state median, social networks could play a part in improving health. Therefore, steps toward a healthier Garrett Co. might consider ways to strengthen social supports.

I thought it might be interesting to hear some words of Garrett Co. mothers themselves regarding their daily challenges: **OH, OH**

**Findings From the University Of Maryland Food Stamp Nutrition Education Program Digital Inclusion Project**

In addition to the Rural Maryland Speaks study, last year Dr. Braun and associates in the College of Health and Human Performance undertook a baseline study of food stamp households in five counties in Maryland--including Garrett County. The goal of the University of Maryland is to develop a nutrition and physical activity educational program to be delivered via computer technology. The program remains in the design stage with input being gathered from potential users to be tested this fall.
Baseline interviews were conducted with key stakeholders, perhaps some of you in this room participated, as well as interviews and focus groups with mothers in food stamp households.

Today, I want to briefly summarize some of the findings from the focus group participants. Consistent with similar studies of low-income and rural populations around the country, the findings suggest that

**Key Finding # 7:**

*Garrett citizens are vulnerable to health-related disease, disability and death associated with weight; poor nutrition and lack of physical activity.*

What does this mean they are more vulnerable?

- High food prices are a barrier to their healthy eating and travel to lower-cost stores was problematic due to lack of transportation and the remoteness of location. Not being able to buy fresh fruits and vegetables, or to stock up on more expensive foods like meat when on sale, or having to rely on more expensive neighborhood stores or high-priced chain stores were problems.

- At the same time, many had shopping strategies they used to stretch their food dollar. But all noted that food stamps were inadequate to bridge the gap and that their use carried stigma. Most knew of the emergency food assistance program, though agreed that greater dissemination of knowledge about these resources is needed. They also said that the available foods from this assistance were mostly prepared mixes, snacks high in sugar and fat or were foods unfamiliar to them.
• The most common physical activities undertaken were related to child care, household duties and walking, yet they were not able to accurately identify the recommended amount of exercise for adults or children. Lack of knowledge was a barrier particularly related to basic exercise skills and injury prevention. Half spoke of the need for specialized skills for exercising due to a person with a physical or mental disability in their family.

• Lack of child care and personal or public transportation was another barrier to exercise in safe places. Lack of affordable exercise options was of particular concern among Garrett County residents who reported that the resort area development led to new exercise facilities, but they could be used only by a few. Lack of sidewalks, poor street lighting and unsafe roadways were noted as barriers to outdoor activities. And here in Garrett County, presence of black bears was cited as a reason for not engaging in outdoor activities.

In summary, issues faced by the limited resource populations were similar across counties therefore it seems that some of the issues raised by Garrett County citizens regarding access to healthy food and exercise options further could be considered by this gathering today.

Up to this point, you may be thinking I’ve only touched on low-income persons and that is by in large true, but now I want to briefly share some data that I think will help us all be able to identify with these issues of health and health concerns we are discussing today. Because the following is Key Finding #8, which I know will not be surprising to most of you.
Key Finding # 8  Poor Nutrition and Lack of Physical Activity Costs the People of Garrett County and Beyond

For this portion of my presentation, I'm going to rely primarily on U.S. Government data focused on the problems of being overweight or obese, now considered to be the number one health problem in the nation.

In this series of slides that start in 1985, which for a time comparison was at the beginning of President Reagan’s 2nd term, you'll see by the changing colors from white indicating minimal overweight problems to light blue, darker blue, dark red and finally yellow, how we as a nation have changed in the last 20 years regarding our weight. I want us to think about how #8 affects us all.

OH OH OH OH OH OH

If you looked at the color coding for Maryland, you may have seen the good news-- that we are behind a few states that have the largest proportion of overweight or obese people but only by a few percentage points. It might not take long for us to catch up unless we find ways to stop weight gain and start weight loss. I think these slides dramatically demonstrate that diet and physical activity, resulting in weight and health-related problems are not limited to any socio-economic level, but affect us all.

So how did Americans get to be so overweight?

OH As this slide suggests we did not come to this health problem necessarily through only one track --- there are behavioral, environmental and even perhaps metabolic and genetic factors to consider.
So let me show you some of the possible explanations of how we developed this major national health problem.

**OH – adolescent soft drinks**

**OH – youth inactivity**

**OH – environmental factors**

**OH – child obesity leads to adult obesity**

**OH – obesity and health problems**

To recap: what are some of the lessons we should take away with this morning.

**OH** - recognize the importance of the relationship between obesity and food insecurity.

**OH** – recognize there is a higher health risk for children in low-income families for a variety of reasons, not the least of which are less income, greater food insecurity, and poorer nutrition.

**OH** – realize the incredibly high economic costs associated with poor health and nutrition and this relationship really does become a national security issue, since we do live in a world of limited resources.

**OH** – business slide

**OH** – what medical expenses mean most directly to citizens of the State of Maryland

In conclusion, it seems to me that:

**Targeted Actions Can Prevent, Reduce or Eliminate Effects of Negative Conditions**
So, in looking for steps you can take to improve health in Garrett County, we need to return to the systems framework I introduced at the beginning of my remarks. And we need to acknowledge that the major determinants of human health status come from cultural, social and economic factors at the individual, family and community levels.

For change to occur AND to be sustained, strategies are needed that address actions and attitudes at multiple levels which can reinforce desired change.

It is important that you draw upon the research already collected here in Garrett Co. to provide insights into possible community action.

Finally, we should not forget that this is a task not to be undertaken by a sole individual or even by one agency or organization. To help make Garrett County a healthier place to live, it will truly take the efforts of all citizens and multiple entities.

As the current Secretary of Health and Human Services has stated:

Closing Comments

These are but a few ideas associated with the key points I've presented today. Many of these ideas are not new to you. You'll have many more. I have tried to provide you with a perspective based on national and local research and especially research relevant to Garrett County.

I'm leaving with you additional information that supports my remarks in three forms: 1) a notebook with research reports upon which my remarks were based that
could be used for further consideration of actions or for use in writing grants to support your efforts (Bev Carvell will have a copy of the book), 2) the powerpoint from my presentation will be available at the Maryland Family Impact Seminar website which is noted in the handouts in your packet of materials, and 3) in those handouts several tools that you may use in your deliberations this afternoon. In particular we would like you to look at and complete the citizen engagement survey and return it to us in the envelope provided.

I'm also leaving an offer. Both Dr. Braun and I are committed to continuing our work with your county. We welcome opportunities to continue to share findings from our studies; to consult with you as you take action and/or to help you collect additional information such as the community food assessment that I spoke of earlier.

**OH - Deep Creek slide**

The good news about all of these challenges to the health and well-being of the people of Garrett County is that both individually and together we can take action to prevent, reduce or eliminate the negative effects of the conditions I’ve just described. I commend you in organizing this meeting today and I look forward to joining you in your discussions this afternoon regarding your steps of action. Coming together today clearly is the first step. Staying together will be vital to success.