reimpose control. But if you can show this in an experimental dog who has never heard of Freud, who did not grow up in Minnesota, does not know about Lutheran guilt and Garrison Keillor, then the odds are that there is a biological signal.

From an adaptive point of view, animals in the wild behave this way. If they are starving, their metabolic rates go down. When food becomes available, they overeat, lie down, go to sleep. If the wolf is startled, for instance, the animal gets up, vomits, and runs off. So these adaptive biological phenomena are triggered by inappropriate dieting.

One of our problems of confusion, the heterogeneity issue, may be resolved by better definitions. But meanwhile, we are bound by what are, in essence, cultural definitions of obesity.

If we look not only at the weight tables but also at other trends, changes in body weight of models, Miss America contestants, or Playboy centerfolds, over the last 20 years there has been an increase in height with a stable weight, meaning that the cultural ideal has gotten thinner through this time.

If we look at medical definitions, we find that the definition is heavily dependent upon culturally specific technologies, such as, weight tables, and that by relying on something which is arbitrary rather than based on more functional definitions, we are medically encouraging people to follow the cultural trend, which is to diet more and more, and there is good evidence now that people who have eating disorders, bulimia, for example, rarely have developed them without antecedent dieting.

Then we face the paradox: the more we try to diet, the more we find eating disorders. We find that the more people try to diet, the better they become at adapting, the harder it is to lose, and the more likely they are to gain back more than they lost. It appears that the yo-yo phenomenon is not simply lose 10 lb, gain 10 lb, but more like lose 10 lb, gain 12 lb, and each time dieting occurs, it becomes more and more difficult to lose weight.

A redefinition of obesity is urgently needed. Our current definitions discriminate against women more than men, and then we have this paradox that the same amount of obesity in a woman is not as hazardous as the same amount of obesity in men.

Our current definitions discriminate against older people, and they discriminate against black women, in particular. Even if one uses the most conservative definition, 60 percent of black women over 45 years of age are considered obese, and some 35 percent of white women over 45 years of age are considered obese.

Women's Health: Nutrition

Nutrition and Health— An Individual Responsibility

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Synopsis

The report of the Public Health Service Task Force on Women's Health Issues identifies five social factors which affect health and also apply to nutrition: cultural and social values, which are at the heart of issues of body size; economic status, which is associated inversely with nutrient per food dollar expenditures; labor force participation, where working mothers make less money than fathers; family, household structure, social supports, and health, where the single parent has limited resources; and interactions with a health care system that frequently identifies the woman as the victim of the problem when actually the system is the source of the problem.

Fourteen of the 40 conditions described in the report mention nutrient changes or weight maintenance. Twelve other conditions have been added to the list.

Four categories of women, based on their roles, are used to discuss major nutrition issues. The youth role focuses on body image and preoccupation with weight control. The childbearer role emphasizes the demand and burden of pregnancy because the outcome of pregnancy is linked with many behaviors during pregnancy. The menopausal woman role is that of the older woman and the health consequence of life-long dietary habits and the frequent "victim" position to which she is relegated when using the health care system. The gatekeeper role sends messages to the marketplace through demand and directs purchases

for the home. Choosing from 13,000 items makes it possible to regularly choose foods which are inadequate in meeting daily vitamin and mineral needs and can lead to use and abuse of supplements.

The final solution rests within the individual and her active involvement in seeking health care and carrying out recommendations for her nutrition and health.

A VARIETY OF FACTORS AND issues must be considered in designing messages and interventions to improve women's health. They encompass reproductive health, adolescence, the diagnostic categories that use nutrition as therapy, and aging. Fortunately, cardiovascular disease, obesity, and osteoporosis are on the conference program and are seldom discussed without mention of food and nutrients.

The report of the Public Health Service Task Force on Women's Health Issues is thorough and the organization of the document provides insights. It identifies the social factors related to women's health problems and suggests a rebalance of attention to health issues.

Women and Nutrition

The report contains an analysis of five social factors which affect women's health, and nutrition is a good example of that analysis. First, cultural and social values and attitudes are at the heart of women's issues of body size. Second, economic status is the variable which is always associated with the presence of nutrition problems. However, this situation does not occur because low-income families do a poor job of shopping. On the contrary, in comparison studies they always score high in getting more nutrient per food dollar than higher income families. Nutrition problems associated with low income families probably have more to do with related issues such as lack of exercise due to environmental factors like crime and hazardous neighborhoods, or poor food markets in their neighborhoods, than with a deficiency in nutrition skills. Third, labor force participation as a factor is demonstrated in the increased numbers of working mothers (52 percent of women 16 years or older, 65 percent of women 25-30 years) and the fact that they still are paid $.59 on the dollar compared with men. There is no extra money at those salary levels to pay for help with the food provision responsibilities of the mother. Fourth, the family, household structure, and social support trends increase the management burden of women. Female-headed households are increasing, and the vast majority of them are low income (80 percent have an income of less than $15,000). The fifth factor, interactions with the health care system, is classically demonstrated by nutrition problems where the woman is the victim of the system and is made to feel that food and nutrients could be the source of the problem.

The report consists of four chapters: 1. the social factors previously mentioned, 2. women's physical health and well-being (a comprehensive list and discussion of health problems that are women's issues), 3. health concerns of older women, and, 4. issues related to alcohol, drug use and abuse, and the mental health of women. Chapters 2-4 illustrate the dilemma that women face in dealing with their health. Chapter 2 contains a list of health problems but revolves to a great extent around the woman as childbearer, where research has been concentrated. Perhaps society, dominated by men, has been most concerned about the quality of the offspring. Since observations by scientists lead to research and, in the past, men have conducted most of the research, particularly in nutrition, it follows that the research has tended to exclude the issues that arise from internal observations of the female experience. Therefore questions regarding nutrition and menstruation, breast cancer, and arthritis, to name a few, have not been extensively researched.

The older woman depicted in Chapter 3 has had great difficulty directing serious attention to her health. However, with the increased longevity of women and the responsibility our society has assumed by providing social security and medical care through Medicare, it is time to enhance women's coping abilities. It follows that the quality of life of older women will improve as well.

Chapter 4 was startling in that it implied that one-fourth of the Task Force's attention was focused on substance abuse. Chapter 4 also tells about the stress that women are under and the common strategies used to cope, which men certainly demonstrated before women. Alcohol, used to relax and then to forget, and smoking, something to do with our hands, are examples. Compulsive eating, leading to obesity, is also a part of this phenomenon. Perhaps not as toxically addicting as alcohol, tobacco, and drugs, eating is nonetheless addictive, as those who try to modify their eating behavior will confirm.

The Task Force report is a rich information resource of commonly discussed problems among women, but such discussion is limited in the literature and this list as well. A total of 40 conditions are described. Fourteen conditions mention nutrient changes or weight maintenance. They are the following:

- colorectal cancer
- amenorrhea
- premenstrual stress syndrome
- iron-deficiency anemia
- pregnancy
- prenatal care
- high risk pregnancies
- breastfeeding
- alcohol
- osteoporosis
- obesity
- hypertension
- anorexia nervosa
- cosmetics and cosmetic surgery, megavitamins

Twelve additional conditions are listed that have nutrition considerations:

- breast cancer (fat)
- arthritis (diet experimentation)
- systemic lupus erythematosis (weight)
- thyroid disorders (weight loss)
- parathyroid disorders (calcium regulation)
- exercise and physical fitness (weight)
- endometrial (uterine) cancer (fat)
- ovarian cancer (fat)
- regulating production function (B_6, B_{12}, folate)
- menopause (calcium)
- low birth weight (weight gain)
- diabetes (food balance)

It is disappointing that nutrition is not more visible considering its array of relevant issues for women. Its low profile in the literature in spite of widespread public interest delays the discipline in gaining approval as a reimbursable service, and, therefore, as a service available in health facilities. The biggest problem for the field and the clientele who are eager to use nutrition services is that they cannot locate the nutrition service provider, and one reason is because the financing system has been unwilling to pay for nutrition services. It goes without saying that the providers cannot survive without an income. One could speculate that this is confounded by the fact that nutrition is a women's profession and that it is small. It is of interest that some physicians who practice nutrition are paid well, but it is generally nutritionists and dietitians who work with clients on the practical details so that they can carry out the food and nutrition treatments that are prescribed.

The discussion which follows provides insight into intervention strategies for nutrition problems. It is organized into four categories of women, based on their role—youth, childbearer, menopausal women and gatekeeper. The striking nutrition problems that can be expected are listed, including the reasons and the directions and issues in intervention.

Youth

In the United States youthfulness is valued. The public is relieved that President Reagan does not look or act his age, or how it thinks a 75-year-old man would normally act. It seeks out youthful images in the media and seems unfazed by the fact that the models that are liked the most are the ones who are very young, 13 or 14 years old, and are made up to look older. The population is bombarded with slim body images and runs to the mirror in hopes that the image in the mirror matches the media image. It does not. But the image has led to an obsession with weight, calories, and exercise. The public thinks little of the erratic eating habits that are the norm among young people until they become bizarre. Then it wonders what went wrong. The behavior is complicated but inextricably bound up in social acceptance and the enormous part that appearance plays in that acceptance. This obviously is an example of the cultural and social values that are a factor in the health problem of unbalanced eating.

The issue that must be dealt with is the excessive environmental influences that idealize youth and slimness and distribute food so that no one is ever more than 5 minutes from purchasing something to put into his or her mouth. There is some evidence that a fuller but muscular body is now the image. Collective efforts, discussed later, are needed for individual changes to be supported against these environmental influences. There is a sense that women have been pawns in profit sector game-playing that uses sales statistics. Women must restore their self-esteem based on the persons they are, not the image they are.

Childbearer

The emphasis in this role is women's reproductive capacity. Women are focused on self-defense, controlling the event through contraceptives and will power, making themselves the best vessel possible for the child they will nurture and bear.

There is little mention in the report about nutrient relationships with oral contraceptive use. Folate deficiency is associated with oral contraceptive use. Other nutrients such as B_6 and B_{12} are sometimes found to be marginal, but this is often because the diet had been inadequate previously and the medication exacerbates the marginality. Dr. Daphne Roe and others have written extensively on this situation.

'. . . being pregnant is a full-time job. By the time one figures in the appointments, the food, the exercise, the desirable mental attitude, and the family members and friends the woman is responsible for, she needs 8 hours a day to carry it off well.'

The discussion of nutrition in pregnancy is well documented and described—a minimum weight gain of 25 pounds is recommended. Pregnancy is not the time to start a low calorie diet. However, there is one strategy society has adopted to make certain offspring are as healthy as possible. When a behavior is identified as detrimental to the outcome of pregnancy, the pregnant woman is instructed to avoid it, and signs in public places warn her that there are hazards such as alcohol or cigarettes. A modification of this strategy that would be more compassionate, might be a sign that says, "We love you. Take care of yourself and your baby and refrain from smoking or drinking alcohol."

It is also apparent that being pregnant is a full-time job. By the time one figures in the appointments, the food, the exercise, the desirable mental attitude, and the family members and friends the woman is responsible for, she needs 8 hours a day to carry it off well. It also follows that the social factors of work and family structures are major forces to which to attend. This issue is summarized in the popular image of Superwoman. Setting priorities and developing adequate support systems are indispensable for pregnant women.

Menopausal Woman

This is not actually a role but it captures the thrust of the older woman's struggle. She must deal with aging, the emergence of new health problems, the fading of youthful features, all of which are captured in the symbolic phrase "the change of life." The menopause itself prompts nutrition treatment questions. Vitamin E has proved to be useful to some women with hot flashes. Osteoporosis, which increases after menopause, and is discussed fully elsewhere, has its root in nutrition with the low intake of dietary calcium which begins in women at age 16. It hardly seems appropriate to increase the dietary allowance when the majority of the population does not consume the current allowance. Perhaps if calcium intake was adequate throughout life, a modest increase at menopause would be beneficial.

The role of dietary fat is increasingly critical in health. Although definitive studies are yet to be done, current evidence indicates that high dietary fat may be linked to the occurrence of breast cancer, and it would be prudent for those who are at risk due to family history to decrease their dietary fat to the recommended 30 percent of calories. The Dietary Guidelines provide healthful guidance for our food choices. These include decreased fat and dietary cholesterol and an increased proportion of unsaturated fats, increased fiber, increased complex carbohydrates and decreased sugar, moderate alcohol intake, and decreased sodium intake, all of which will do no harm and very likely will foster good health.

The critical social issue for menopausal women or older women is their interaction with the health care system. Women are accustomed to using the health care system and are known to take more medications than men. Women may be guilty of being victims of the system and, as the theory goes, the victim is blamed when it is instead the system that is at fault. This means that the professionals in the system do not assume a posture of partner with the patient as the problem-solving proceeds in treating the presenting symptoms. Any solutions proposed by the patient are not taken seriously and are dismissed. In fact, talking is often treatment, and might be the preferred treatment in a medical practice. Certainly the physician's time is too costly to justify such a program but a variety of other health professionals could carry out such a treatment strategy. Providers need to ask "Am I putting the blame on the patient?" when indeed actions beyond her control are creating the symptoms that she has presented.

Gatekeeper

Although feminists would prefer to think that the role of gatekeeper with food is shared equally, the fact is that with the number of female-headed, single-parent households in society now and the number of women who continue to function as the gatekeeper by at least making shopping lists, women still have primary control of household provisions. Conversely, eating out continues to increase year by year so that the proportion of food consumed from home supplies is decreasing. But there is a positive side to this role. Through food purchases a message is sent about the food desired in the food market. There are an excessive number of food items in the

marketplace (13,000); society needs to move toward a more reasonable food supply that includes both a degree of regional self-sufficiency as well as a variety of foods from other regions which enhance the nutrients available, the taste, and the variety that every diet needs.

Related to the marketplace is the issue of vitamin-mineral supplementation. Briefly acknowledged in the report, this critical issue needs to be faced by nutritionists and other health professionals. There are estimates that between 35 and 45 percent of the population take supplements regularly. Some guidance should be given to this large segment of the population. Fortunately, this issue is being investigated, and the results will lead to a recommended upper limit of nutrients intake. Dr. John Hathcock of the Food and Drug Administration suggests that vitamin and mineral supplements should be taken in multiple tablets and that they should add up to no more than twice the U. S. Recommended Daily Allowance (U.S. RDA). This is a reasonable guideline until an individual's dietary intake is analyzed for nutrient content.

Because nutrients are interdependent, it is a dangerous practice to take individual nutrient supplements. Fortunately the body adapts to counter excesses, but sometimes a person's body cannot compensate for an abnormal intake. The Center for Food Safety and Applied Nutrition of the Food and Drug Administration is conducting an extensive research agenda. As soon as it is ethically and medically advisable, information on maximum safe intakes will be made available to the public.

Conclusion

This discussion has focused on the milieu in which women find themselves as they attempt to listen to their bodies, identify problems, seek advice, and carry out treatments that will heal or assuage the symptoms. There will be more discussion on "taking charge" of some of these issues using other health problems as examples. In the field of food and nutrition, one of the hardest tasks for women seeking advice is to find a provider in whom they have confidence. This needs to be a person who listens to their problem and prescribes an approach that makes sense in their particular life. A variety of trained professionals can be consulted including registered dietitians, qualified nutritionists, physicians with training in nutrition including board certification, and other health professionals who have additional training in food and nutrition. Sometimes certain elements in food create symptoms or problems. Then a food technologist or scientist is needed to aid in locating the food products that contain those elements.

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Although this assistance is sought and qualified authorities are located, they may not listen to you or your ideas—they may put those aside thinking they know more than you. However, you live with your body, your life, and your environment, and the approach needs to take those seriously. Unless you find a provider who does that, you will be dissatisfied and you should continue the search for another. It is impossible to become a self-educated expert in food and nutrition, but certainly study on your part will enable you to have a dialogue with the provider.

This is an unfinished agenda. Exploration is needed of the traditional wisdom that has been passed down to us by women in the form of home remedies and the traditional practices such as those of Native Americans who lived off the land and used "found" vegetation to provide comfort in their illnesses.

The nutrition agenda is becoming a well-developed component within the multidimensional approach to health which the women's health agenda fosters.