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FORUM

Government food program can promote dental health

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A popular food program of the U.S. Department of Agriculture (USDA) can help promote dental health, and many pediatric dentists probably aren't even aware of it. They also probably aren't aware of the Academy's support of it [see accompanying story].

The Special Supplemental Food Program for Women, Infants, and Children — commonly known as WIC — strives to improve the health and nutritional status of low-income pregnant, breastfeeding, and postpartum women, as well as infants and children up to age five. Begun in 1974, WIC now serves about 3 million needy individuals.

Besides low income, eligibility for the program is based on the applicant's "nutritional risk" — a term used to indicate abnormal weight gain during pregnancy, a history of high-risk pregnancies, low birth weight, obesity, anemia, or an inadequate diet. A qualified health professional such as a physician, nurse, or nutritionist, must certify this risk. When space in the program is limited, applicants are ranked according to nutritional need and admitted as openings become available.

WIC is operated by more than 7,000 health clinics or other authorized health facilities in all 50 states, the District of Columbia, the Virgin Islands, Puerto Rico, and Guam. Federal funds are distributed to local public or private nonprofit agencies through participating state health departments or comparable state agencies.

How WIC Works

WIC improves the health and nutritional status of participants by providing specific supplemental foods, nutrition education, and access to health care. Let's look at each of these services and the ways in which dental health can be and *is* being promoted.

Specific Supplemental Foods. WIC is the only federally assisted food program that provides participants with individually tailored monthly food packages. Health professionals determine the content of the packages based on federal guidelines and the nutritional needs of each participant.

For example, although WIC encourages breastfeeding, bottle-fed infants through the age of 3 months can get iron-fortified formula. Older infants — 4-12 months — may receive formula, iron-fortified infant cereal, and fruit juices high in vitamin C. If prescribed by a physician, an infant may receive non-iron-fortified or special therapeutic formulas.

Depending on the circumstances, women and children get fortified milk and/or cheese; eggs; hot or cold cereals high in iron; fruit and vegetable juices high in vitamin C; and either peanut butter, dry beans, or peas. Breastfeeding women and women and children with particular dietary needs receive special packages.

In most states, WIC participants receive food vouchers to purchase the specified foods at approved local grocery stores. In other areas, food is delivered to participants' homes or participants pick up the foods from warehouses.

Nutrition Education. Through nutrition education, WIC participants (and, whenever possible, other members of their families) learn how to use the foods they receive to their best nutritional advantage. They also learn how to develop better food habits and about the relationship between good nutrition and good health, including good *dental* health. Participants are given at least two counseling sessions every six months.

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Access to Health Care. Since WIC is run by local health clinics which provide medical and health screening services to participants, and since WIC staff encourage the use of these services, WIC mothers and children are drawn into the health community early. The result: many of them continue regular health care once they leave the program.

WIC has a proven track record in this area. A 1976 study by the Urban Institute showed a dramatic 77% increase in children's visits to health facilities after participation in WIC. Pregnant mothers' visits also increased, In addition, the study showed that former WIC mothers had their children immunized more often.¹

And, thanks to WIC, pregnant women now seek prenatal care significantly earlier than when the program began. Many local WIC directors say they see expectant mothers as early as the second or third month now, as opposed to the eighth or ninth month a decade ago.

WIC's close ties to the health community have introduced a number of people to proper health care, including dental health. A Chicago WIC site has a full-time dentist on its staff. The WIC director pushed for this because so many of the participants had poor dentition, and many of the children brought in with stomachaches and other symptoms were really suffering from toothaches.

WIC Accomplishments

During its brief 11-year history, WIC has come a long way toward achieving its goal of improving the health and nutritional status of its participants. The babies born to WIC mothers are the best evidence. Numerous studies, including one by the Massachusetts Department of Health in 1981, have shown positive trends in reducing the incidence of low birthweight babies and neonatal mortality among prenatal WIC participants.²

Low birth weight correlates closely with neonatal mortality. A low birth-weight infant is much more

likely to die than a normal-weight baby. Low birth weight also is associated with a higher freqency of developmental abnormalities, such as deafness and blindness, increased medical costs, and longer hospital stays.

An evaluation prepared at the Harvard School of Public Health in 1979, and another presented to the Missouri Public Health Association in 1983, suggest that prenatal WIC participation is cost-effective in terms of its potential to reduce medical costs associated with low birth weight.³

Some research has shown that infants and children participating in WIC have decreased rates of anemia and accelerated rates of growth. Other research published in 1982 in the American Journal of Public Health suggests that WIC may be contributing to improved mental performance by some infants and children.⁴

Additional research and evaluation is underway and, as it is completed, it may suggest new directions for the program. Two questions that the USDA is asking are: Is WIC serving those at the greatest nutritional risk? And, are there better screening techniques that can be used to identify high-risk participants?

Whatever the outcome of this review, one thing is clear — WIC can make a positive contribution to the health and nutritional well-being of needy mothers and children.

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- Hicks L, Langhan RA, Takenaka J: Cognitive and health measures following early nutrition supplementation: a sibling study. Am J Public Health 72:1110–18, 1982.

Quotable quote: sleeping less

Tufts University professor Ernest Hartmann, one of the country's leading sleep researchers, finds definite types of personalities associated with different sleeping habits. Short sleepers, those who require six hours or less, are more energetic, confident, successful, happy, and less introspective. And if you're not one of these enviable creatures, you supposedly can become one by following the advice of a 1981 book entitled *Sleep Less, Live More*. The book claims that a program of gradual sleep reduction can cut eight-hour sleepers back to five hours and that they can stay there indefinitely, wide awake and chirpy as can be, their lives enriched by the additional hours.

Ebisch R: Sleeping sickness? TWA Ambassador, July, 1984.