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Relating to nutrition assistance for low income families

## HB2639

While it is well known that good nutrition helps build better bodies for children, recent data show that the nutritional stakes are higher for children than originally thought, even by experts. We now know that there are specific stages of development that are uniquely affected by malnutrition. Here malnutrition in children is defined as the condition where biological processes are impeded or damaged because of the lack of nutrient intake in their diets. While American malnutrition presents differently than malnutrition of children suffering famine in low-income countries, its harm has devastating effects nevertheless. The growth pattern of a child's body between the ages of 4 to 8 are independent predictors of type 2 diabetes and heart disease.

If a child puts on excess body fat at the age of 4-6 years so that their body mass index crosses centiles, they are at the highest risk to acquire diabetes. This risk is magnified if they were born to a mother who also carries excess body fat. It may seem counter intuitive to suggest that malnutrition during that period is synonymous with increasing body weight. However, because appetites need to be satisfied with calories, the source of calories becomes the determining factor for increasing body fat. If a child does not have continual access to wholesome foods that are full of vitamins, minerals and antioxidants, the child will likely eat less expensive nutrient poor foods high in salt, sugar and fat in order to meet their calorie needs. Such children will suffer from *high calorie malnutrition*, a general condition of many children in the USA.

HB2639 would help to protect children from a nutrient deprived diet from the time they outgrow support from WIC until they enroll in kindergarten and have access to meals thus provided. Children ages 5 to 6 years fall midway in the period of time when low nutrient growth affects not only brain development but also the body habitus that could put the child on a pathway of disease later in their lives. Behavior and cognitive problems are increasingly common among children entering school. This is partially due to poor nutrition during the period when the brain is remodeling. Thus, there is reason to believe that good nutrition, during the period that would benefit children in this bill, will help children function better in school. While this bill might be criticized for being an expensive investment, it will in fact help prevent chronic diseases in later life that are much more expensive.

## HB2626

There are several reasons why women need to have good nutrition for the first 2 years after giving birth.

1) Healthy breast milk requires that the mother have an adequate intake of nutrient-rich foods. For women who want to breast feed for one to two years, their diets are particularly important. During this time, the baby's brain and metabolic set points are determined. These developmental metabolic milestones carry their influence during the entire life of the offspring and depend on nutrients derived from the mother's tissues.

- 2) Changes in a woman's body after delivering a baby requires nutritional support. Many women have accumulated body fat during their pregnancy that will gradually diminish when women are on a healthy balanced diet. This transformation is healthy and important for the mother's long-term well-being.
- 3) As a woman "remodels" her body after a pregnancy, nutritional stores are already accumulating in anticipation of the next pregnancy. It takes many months of healthy food intake to replenish nutrient stores that were lost during the pregnancy and to build new stores. Having access to proper nutrition after a pregnancy ensures the developmental health of the next pregnancy should one occur.

In the past half-decade, scientists have discovered that social and nutritional stresses change a mother's body to make her more vulnerable to chronic disease after menopause. There is evidence that good nutrition and exercise during the postpartum period may ameliorate some of the detrimental changes that predict a dangerous outcome for the mother. Women in the WIC population are more likely to suffer these stresses and thus access to good nutrition during the postpartum period up to two years would bring substantial benefit to Oregon's population of women in low-income categories during their reproductive years.

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