

Nutritional Tips for the Pregnant Teenager

Jordana Berk

Biochemistry Program, Beloit College, Beloit, Wisconsin

ABSTRACT

A study done in 2004 indicated that every 41 out of 1000 girls in the United States ranging from ages 15-19 gave birth. This number continues to rise. Many of these young women found themselves pregnant and scared and with no substantial nutritional advice. The goal of my research was to design a viewer friendly poster that indicated healthy and affordable dietary choices for a pregnant teenager. I collected information and based my recommendations on the research discussed in peer-reviewed literature. Particular nutrition hazards during pregnancy are explained. Helpful nutrition tips are provided that will allow a young woman of modest financial resources to ensure her own health and the health of her baby without breaking her pocketbook.

INTRODUCTION

As many as 40% of America's women find themselves pregnant before age 20. Many of these teenagers are on their own financially and emotionally (1). Some high schools, like Beloit Memorial High School, offer nutrition classes for these women (2). However, far too many communities shun these pregnant teens and do not provide them with adequate knowledge to maintain their health and the health of their unborn child. This situation is extremely dangerous because women are physically vulnerable when pregnant. These teenagers can face many health problems if they do not make the proper choices for themselves and their unborn baby. Pregnant teenagers are still growing. When pregnant, it is important that they make proper choices for their growing body. If bone structure is not fully developed, they risk injuring their spines and pelvic bones. It is also well known that the irresponsible behaviors some teens exhibit may put them at risk for sexually transmitted diseases which can be harmful to them and their babies. They are also at risk for such pregnancy complications as premature labor, anemia, and high blood pressure (3). Pregnant teenagers also need to gain the most weight of any pregnancy age group. It is necessary for them to gain 35 pounds during pregnancy (4). However, they often ignore this and do not gain the proper weight to support them and their baby. Newborns of teenagers risk premature birth, low birth weight, spinal bifida, not fully developed organs, and fetal alcohol syndrome. Studies have proven that teenage women are more likely to drink and smoke during pregnancy. A healthy diet allows pregnant teenagers to avoid most of these dangers (5). My hypothesis was that a food pyramid could be created to display some of these important foods and that 2-3 weeks of groceries based on this pyramid could be purchased from Cub foods for \$50 or less.

METHOD

Peer-reviewed literature was explored to create nutritional recommendations based on scientific evidence. This evidence was then used to design a food pyramid to organize some of these suggestions. A food pyramid was used because it is an easily recognizable information organizer for viewers to process. I also went to Cub Foods, as it is a commonly patronized food store in Beloit, and compared prices of products that fulfilled nutritional recommendations presented in the pyramid. A shopping list was then created for a low-budget expectant teenager.

Important Tips: *Drink to your baby's health, stick with water.*

Don't be a fool: eat folic acid enriched cereal.

Figure 1: Pregnancy Food Pyramid

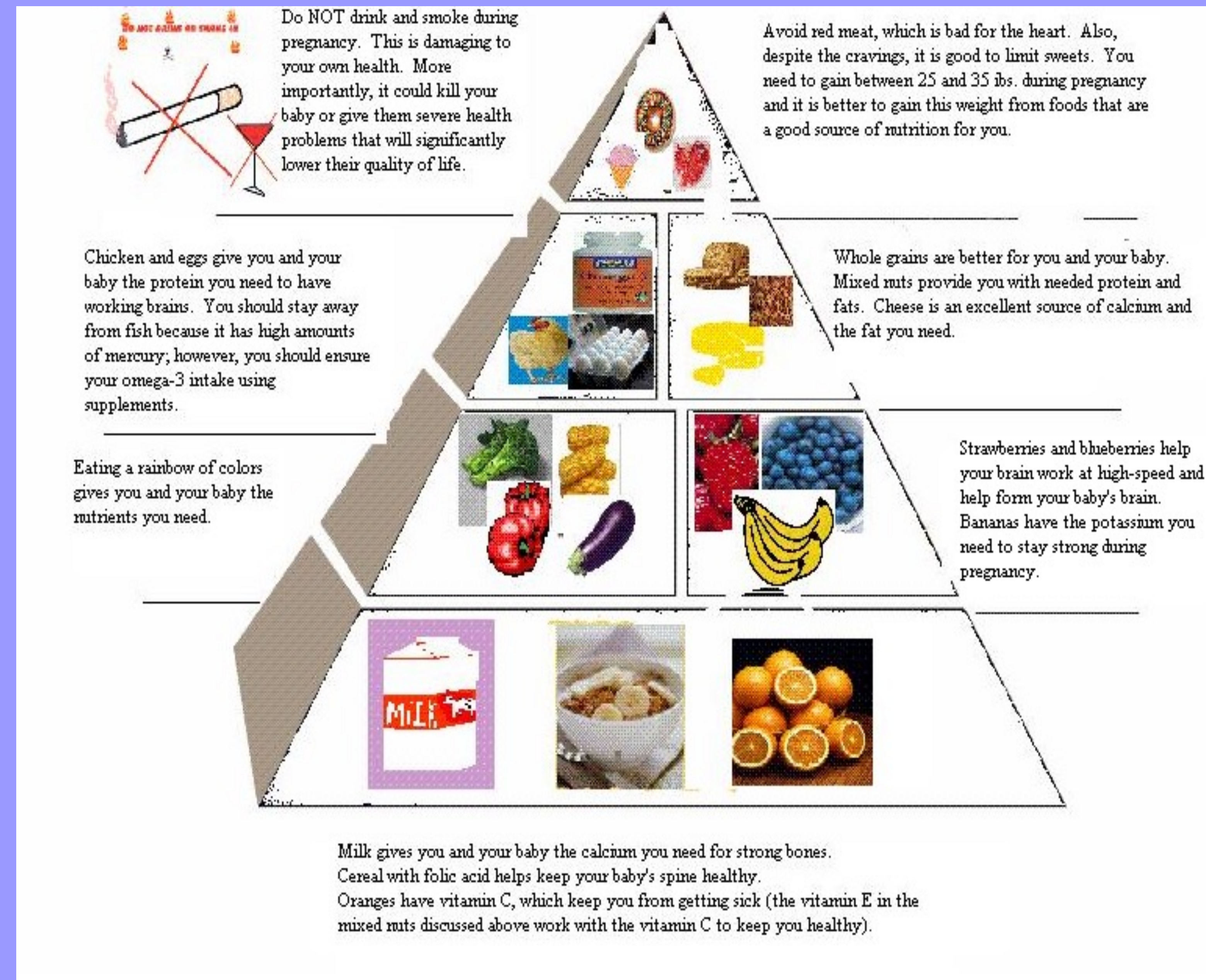


Figure 2: Shopping List

2 boxes of cereal (Total brand) \$7.52
Twin pack of 2% milk (Cub brand) \$4.58
10 oz of nuts (Cub brand) \$4.89
One brick of cheese (Cub brand) \$3.14
Frozen California greens (Cub brand) \$1.69
Mixed vegetables (Cub brand) 2 for \$3
2 loafs of whole grain bread (Brownberry brand) \$6.38
Frozen strawberries (Cub brand) 2 for \$4.50
Frozen blueberries (Cub brand) 2 for \$4.50
2 lbs. of bananas \$.98
Fish oil pills (Daily Source brand) \$2.98
Vitamin C pills-500 mg and 500 capsules (Daily Source brand) \$6.99
8 frozen chickens (Cub brand) \$7.98
18 eggs (Cub brand) \$1.17
34 oz. of extra-virgin olive oil (Cub brand) \$10.77
Pasta sauce (Cub brand) 2 for \$3.50
Box of whole grain pasta (Cub brand) \$1.39

Total: \$75.96

DISCUSSION

My hypothesis that a food pyramid could be formed for a pregnant teen is valid. There is a way to organize the information dictated by the peer-reviewed journals in a simple and creative way. I do think that my creation needs to be improved on in many ways; however, it is an excellent start. Two to three weeks worth of groceries could not be purchased for \$50 or less that catered to the nutritional advice of the pyramid. I exceeded my \$50 budget by \$15.96. However, I realized after I created the list that items such as the vitamin C and fish oil supplements and the olive oil would last for over a month. But the excess \$15 is essential to fulfill all requirements. Many underprivileged teenagers go to McDonald's three or more times a week because they think it is cheaper, more fun and easier than cooking (11). A week's worth of fast food could cost more than this grocery list. Depending on what one orders, it could cost \$2 per meal at McDonald's(12). If you multiply that by 3 and then by 14, it equals \$84. This is \$9.96 more than the Cub Foods grocer list. It is not cheaper to eat McDonald's. It is more cost effective for a pregnant teenager to buy food that is easier to prepare, like pasta and frozen vegetables, than to go to fast food restaurants. This poster can help these pregnant teens to realize that it is affordable to eat well. Once this is realized, their health and the health of their babies will increase, without sacrificing essential funds.

REFERENCES

1. Coughlin, Laura. *AAP report on pregnancy in adolescents. (Practice Guideline Briefs)(American Academy of Pediatrics). American Family Physician 72.7* (Oct 1, 2005): 1398.
2. <http://www.sdb.k12.wi.us/memorial/>
3. *Pregnancy in Adolescents*
4. Strauss, Richard and Dietz, William. *Low Maternal Weight Gain in the Second or Third Trimester Increases the Risk for Intrauterine Growth Retardation.* Journal of Nutrition (1999)
5. *Nutrition Management of Pregnant Adolescents. Journal of the American Dietetic Association. (J Am Diet Assoc) 1989 Jan; 89(1): 105-9*
6. Gardens, Krug, Tsang, Guo, Miodovnik, and Prada. *Pregnant Adolescent and Adult Women Have Similarly Low Intakes of Selected Nutrients.* Journal of the American Dietetic Association 100 no.11 (2000): 1334-40
7. Gigante, Rasmussen, and Victora. *Pregnancy Increases BMI in Adolescents of a Population-Based Birth Cohort.* Journal of Nutrition 135 no 1 (2005): 74-80
8. Halton, Willet, Liu, Manson, Stampfer, and Hu. *Potato and French Fry Consumption and Risk of Type 2 Diabetes in Women.* American Journal of Nutrition (2006): 284-90
9. Janas and Hymans. *New Jersey school nurses' perceptions of school-based, prenatal nutrition education.* The Journal of School Health no. 0022-4391 (1997): 62-7
10. King, Janet. *The Risk of Maternal Nutritional Depletion and Poor Outcomes Increased in Early or Closely Spaced Pregnancies.* Journal of Nutrition. (2003)
11. Spurlock, Morgan. *Super Size Me.* Morgan Spurlock and the Con (2004)
12. www.mcdonalds.com/usa