

## The McDougall Diet for Pregnancy



As a medical doctor and the father of three grown children, and the grandfather of three growing grandsons (ages, 2, 4, and 7), with one more grandbaby due in August of 2011, I have spent decades studying the science behind the nutritional advice given to couples beginning their family. There are fatal gaps between the truth about the right diet for making a healthy baby and what prospective parents are told. The result is parents' dreams for the perfect child are unnecessarily destroyed by infertility, miscarriages, stillbirths, birth defects, difficult deliveries, Cesarean sections, failure to thrive, larger-than-normal growth, and retarded physical, mental, and emotional development.



Thirty-eight years ago, as a general practitioner working on a sugar plantation on the Big Island of Hawaii, I had the opportunity to catch over 100 babies (without dropping one). The nutritional advice I was taught to give pregnant women back then was to eat a "well-balanced diet" from the four major food groups, with an emphasis on four servings of dairy products and three servings of "protein" (meat, poultry, fish and eggs) daily. Few of my patients followed my counsel because they were from recently immigrated, low-income Japanese, Chinese, and Filipino families still eating traditional rice-based diets. This basic food resulted in pregnancies and deliveries

that were largely uneventful.

Over the past four decades doctors and dietitians have successfully persuaded expectant mothers to eat "a well-balanced diet," and as a result, pregnancy has become synonymous with sickness. Women spend nine months in misery: fat and fatigued with chronic indigestion and constipation. At least one in ten becomes very ill with a condition known as "preeclampsia" and one in twenty develops "gestational diabetes." Too often all of this suffering ends with major surgery and an imperfect child.

The facts speak for themselves:

\* Obesity in the general population, as well as in pregnant women, has doubled over the past three decades. Now [two-thirds](#) of adults in the United States are overweight and 34 percent are obese. The [rise](#) in incidence of gestational diabetes has paralleled that of type-2 diabetes.

\* The national United States Cesarean section rate was 4.5 percent, near an optimal range of 5 to 10 percent, in 1965, when it was first measured. Now [31.8 percent](#) of births in the United States are through the mother's abdominal wall (Cesarean births in 1997). Worse yet, in a few other developed countries more than half of all women deliver their babies in an operating room. For example, in Brazil the Cesarean rate is 77.2 percent for women who attend private clinics.<sup>1</sup>

\* [Rates](#) of birth defects, preterm births, and low birth-weight babies have been rising steadily since the mid-1980s. [Birth defects](#) occur in 1 in 33 births (3 percent); however, when developmental disabilities, which become fully apparent in older children, are included, the rates have been estimated to exceed 10 percent of births.

**Pregnancy Does Not Change the Human Diet**

Reproduction of the species is the primary biologic purpose of a woman. Nature's laws dictate that during this critical time she should be at her physical, mental, and emotional best. The heightened nutritional demands of pregnancy cause women to consume an additional 80,000 calories and two pounds of protein to grow her baby. For the human being, just like all other animals, the proper source of these nutrients remains the same whether pregnant or not.

[All large populations of trim](#), healthy people throughout verifiable human history have obtained the bulk of their calories from starch. Examples of once thriving populations include Japanese, Chinese, and other Asians eating sweet potatoes, buckwheat and/or rice; Incas in South America eating potatoes; Mayas and Aztecs in Central America eating corn; and Egyptians in the Middle East eating wheat. Meat provided very few, if any, nutrients, and dairy foods were nonexistent. Therefore, scientific documentation of what most people have eaten over at least the past 13,000 years convincingly supports my claim that the ideal diet for pregnant women is based on starches (rice, corn, potatoes, beans, etc.) with the addition of green and yellow vegetables and fruits.

### **Obesity Leads to Cesarean Births**

Dr. Robert Roy in his article "A Darwinian View of Obstructed Labor" argued, "Evolution is essentially survival of the most reproductively fit."<sup>2</sup> Difficult labor would have been naturally selected out of our (as well as all other) species. Yet in modern societies following the Western diet one-third or more of all women give birth unnaturally. Something major must be wrong.

Many explanations, including women's laziness and doctors' greed, have been proposed for the high rates of Cesarean sections seen these days. However, one answer is obvious: In addition to the expanding epidemic of obesity among adults caused by the rich Western diet, this same food causes babies to grow too large to fit through their mothers' birth canals. The larger the mother, the larger the baby, and the higher the risk of emergency Cesarean birth and injury to mother and infant.<sup>3</sup> Full-term infants weighing eight to twelve pounds cannot easily fit through their mothers' birth canals, which are designed for five- to seven-pound babies. Doctors euphemistically refer to this as "feto-pelvic disproportion" and the defining result is "failure to progress in labor," which ends in "an emergency Cesarean section."

Anticipating trouble because of the common occurrence of large babies and unfit mothers, [elective](#) Cesarean sections are also on the rise and have resulted in many infants being delivered before term. The average time a fetus spends in the womb has fallen by seven days in the United States since 1992. California Watch reported in February of 2010 that the number of women who die each year from causes directly related to childbirth had more than doubled in California since 1996. Early birth adversely affects lung and brain development and increases the risk of infections and death of newborns. Meddling doctors have been up to little good, and creating much harm.

### **Preeclampsia Is Serious Sickness of Pregnancy**

Preeclampsia is a set of conditions that include hypertension with generalized damage to the blood vessels, kidneys, and liver, and occurs in as many as 10 percent of pregnancies, usually in the second or third trimester. This condition results from the rich Western diet and is less common in women following a diet higher in fiber and potassium, both nutrients reflecting a plant food-based diet.<sup>4,5</sup>

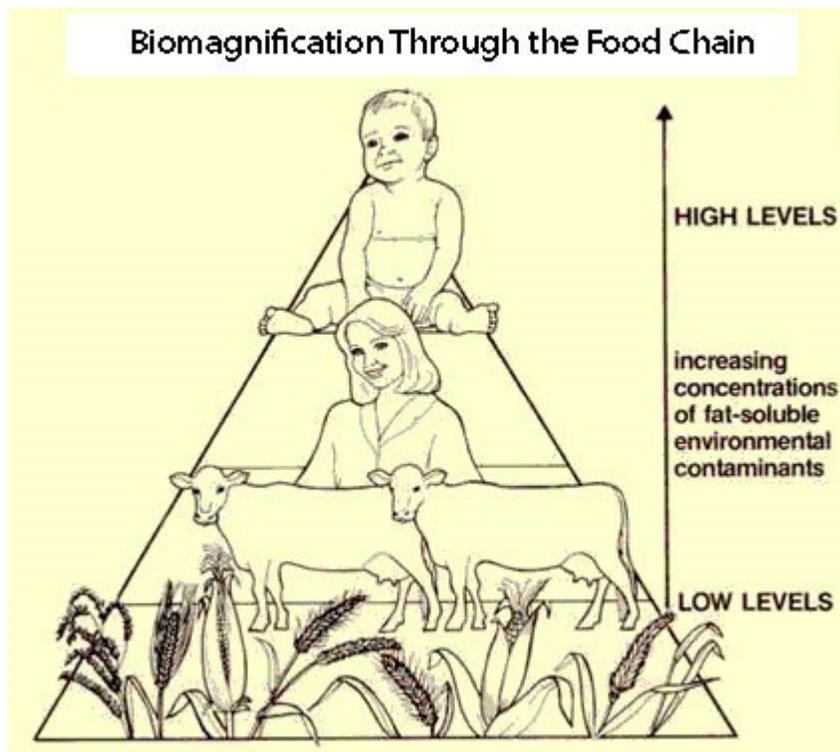
"[The Farm](#)" is a community of young people in Summertown, Tennessee. Members follow a vegan diet (no animal-derived foods) and the outcomes of pregnancy have been reported to be excellent.<sup>6</sup> The maternity care records of 775 vegan mothers found no symptoms of preeclampsia, and only one case that

met the clinical criteria. In 1987 a research article about the Farm experience proposed that preeclampsia is due to the unrestrained consumption of "fast foods" (foods having high levels of saturated fat) and rapid weight gain of the mothers-to-be. A vegan diet was proposed as the solution.

### Morning Sickness Protects Babies from Meat

Drs. Samuel M. Flaxman and Paul W. Sherman in their classic article "Morning Sickness: A Mechanism for Protecting Mother and Embryo," explained how nausea and vomiting during the first trimester of pregnancy cause pregnant women to physically expel and subsequently avoid foods that cause harm to mother and infant.<sup>7</sup> Approximately two-thirds of women experience nausea or vomiting during early pregnancy. Women who develop morning sickness have less risk of miscarriages and a better chance for survival of their infants. Their research revealed that aversions were greatest to meats, fish, poultry, and eggs. In an analysis of 20 traditional societies in which morning sickness has been observed and seven in which it has never been observed, they found the latter were significantly less likely to have animal products as a dietary staple and significantly more likely to have only plants (primarily corn) as staples. Reducing the intake of toxic chemicals found in high concentrations in animal products would be one of the greatest benefits from morning sickness.

The vast majority (89 to 99 percent) of synthetic chemicals, including pesticides, herbicides, building materials, and industrial wastes that are known to cause an increase in infertility, spontaneous abortions, recurrent miscarriages, and birth defects gain access to the body through food. More specifically, the foods with the highest levels of chemical contamination are those that are high on the food chain: meat, poultry, fish, and dairy products.<sup>8-12</sup> The reason that these animal foods are the primary source of pollution is because their fatty tissues attract and concentrate chemicals—a process known as "bioaccumulation." Consuming organic foods would be another big step to having a cleaner body.



### Plant Foods Repair Genetic Damage

The human body has detoxification systems that have evolved over 300 million years to protect animals from natural toxins. These same systems will also rid the body of synthetic pollutants.<sup>13-16</sup>

Much attention has been given to the ability of plant-derived folate (a water-soluble B vitamin) to synthesize and repair our genetic materials (DNA), especially during times of rapid cell division and growth, such as occurs during pregnancy. In the 1960s, research linked folate deficiency in a woman's diet to severe birth defects, especially those of the nervous system (for example, spina bifida). Because the Western diet is deficient in folate (plant foods) there is an almost universal recommendation for

women in their reproductive years to take a supplement containing 0.4 mg of folic acid daily.<sup>17</sup> In many countries this goal has been met by fortifying cereals and flours with this vitamin. The result has been a definite reduction in birth defects, especially those of the nervous system. (Folate is the natural form of this B vitamin and folic acid is the synthetic form given as supplements.)

Eating a diet high in plant foods is also essential for making good male sperm. Men with high folate intake have been found to have lower overall frequencies of several types of aneuploid sperm."<sup>18</sup> Aneuploidy is a condition where one or a few chromosomes are above or below the normal chromosome number, and is associated with birth defects, such as Down syndrome. Decreased folate metabolism in mothers has also been associated with increased risk of having an infant with Down syndrome.<sup>18</sup>

The bottom line is that a plateful of meat and dairy—devoid of starches, vegetables and fruits—is a set-up for genetic damage leading to a less than perfect baby.

### **Prenatal Vitamins Do Not Compensate for a Bad Diet**

The story of folic acid supplementation is not all good. Taking isolated concentrated nutrients in the form of vitamin pills or fortified foods creates [nutritional imbalances](#) that can place mother and baby at increased risks. Folic acid supplements may increase the risk of autism and asthma in the child.<sup>19,20</sup> In adults, [folic acid supplementation](#) at levels recommended to reduce birth defects definitely increases the risk of heart disease, cancer, and death.

Taking "prenatal vitamins" (supplements of multivitamins) has been linked to illness in mothers and birth defects in babies. For example, among the babies born to women who took more than 10,000 IU of preformed vitamin A per day, estimates are that about 1 infant in 57 had a malformation attributable to the supplement.<sup>21</sup> Prenatal vitamins have also been associated with low birth weights and congenital heart defects.<sup>22-24</sup> (Vitamins as naturally found in plants are never toxic.)

Fixing the problem with recommendations for a healthy diet of plant foods for men and women throughout life, rather than forcing folic acid and other supplements (pills) on the population at large, is the right approach. The only supplement I recommend during pregnancy is vitamin [B12](#) (at least 5 micrograms daily).

### **Fish and Omega-3 Fats Adversely Effect Pregnancy**

Stories of the possibility of brain damage from not getting enough omega-3 fatty acids (like DHA and EPA from fish) easily stroke people's emotions, especially when the stories are about unborn or young children.<sup>25</sup> There is no evidence to show that increasing intakes of DHA in pregnant and lactating women consuming diets that meet requirements for the basic fats made by plants (n-6 and n-3 fatty acids) have any physiologically significant benefit to the infant.<sup>26</sup> In fact, there is substantial evidence that higher intakes of fish fat can have an adverse effect on pregnancy for both mother and child. Fish-eating prolongs gestation, increasing birth weight, which results in an increase in birth injuries and Cesarean section births.<sup>27-31</sup> There is also an increase in infant mortality in fish-eating populations.<sup>29,30</sup> Taking fish oils during pregnancy can cause hypertension in mothers.<sup>32</sup> In one study, feeding fish oil supplements to lactating mothers resulted in offspring (seven-year-old boys) with higher blood pressure and body weight, and lower physical activity.<sup>33</sup>

If the above findings are insufficient to keep prospective parents away from seafood, please note that fish are the primary source of highly toxic methylmercury found in pregnant women's bodies. Mercury poisoning of the brain results in motor dysfunction, memory loss, and learning disabilities, as well as depression-like behaviour.<sup>34</sup> Even very low doses may cause damage to the developing brain of the fetus.<sup>35</sup> The January 28, 2008 issue of the [New York Times](#) reported that six pieces of sushi from most of the restaurants and stores would contain more than 49 micrograms of mercury. This level is of concern to the FDA and EPA.

# WARNING!

Nearly all fish and seafood contain some amount of mercury and related compounds, chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. Certain fish contain higher levels than others.

Pregnant and nursing women, women who may become pregnant, and young children **should not eat** the following fish:

**SWORDFISH · SHARK · KING MACKEREL · TILEFISH**

They should also limit their consumption of other fish, including **fresh or frozen tuna**.

**Fish and seafood** can be an important source of nutrients and an important part of a balanced diet. However, the federal Food and Drug Administration advises pregnant and nursing women and women who may become pregnant to limit their consumption of fish to no more than 12 ounces per week.

Fish that tend to have little or no mercury include salmon (fresh, frozen, or canned), shrimp, and scallops. Mercury levels in canned tuna vary, but on average are lower than levels in many other fish. Chunk or chunk light tuna has less mercury than solid white or chunk white tuna.

The California Department of Health Services ("DHS") recommends certain steps you can take to reduce mercury exposure:

- Eat a variety of different types of fish;
- Eat smaller fish rather than older, larger fish;
- Begin following these guidelines one year before becoming pregnant.

For more information consult the following websites:

U.S. Food and Drug Administration ("FDA") [www.cfsan.fda.gov](http://www.cfsan.fda.gov)  
 U.S. Environmental Protection Agency [www.epa.gov/mercury](http://www.epa.gov/mercury)  
 California Department of Health Services  
[www.dhs.ca.gov/ps/deodc/ehib/ehib2/topics/mercury\\_in\\_fish.html](http://www.dhs.ca.gov/ps/deodc/ehib/ehib2/topics/mercury_in_fish.html)

or call the FDA toll-free at **1-888-SAFEFOOD (1-888-728-3366)**.

## Calcium and Protein Are Merchandizing Messages

Even after learning the hazards of eating meat and dairy products rather than starches, parents are perplexed because of the misinformation taught about the necessity of these food groups in order to get adequate [protein](#) and [calcium](#), especially for the unborn. These are messages from industry solely designed to sell their products and are completely false. Plants supply sufficient amounts of protein and calcium to grow the muscles and skeletons of the largest animals that walk the earth, including the elephant, hippopotamus, giraffe, horse, and cow. You can safely assume that there are sufficient quantities of both of these nutrients in vegetable foods to grow relatively small human beings, including their developing babies, and without the risks to the family discussed above.

## Fighting for a Successful Pregnancy

Having a normal baby and a healthy mother are not simply a matter of luck. Ideally, plans for a family should be started long before conception. Estimates are, because of the large amount of food consumed during the early growing years, that 50 percent of the lifetime exposure to pesticides occurs during the first five years of life.<sup>36</sup> So feed your children well for the sake of your grandchildren. When possible, lose excess body fat long before conception. In this way stored pollutants will be eliminated as the body fat is dissolved.<sup>37,38</sup> This is good, especially when the diet you are using to cause the weight loss is free of pollutants and full of detoxifying substances—a diet of starches, fruits, and vegetables—and even better, a

diet focusing on organic plant produce.

Tobacco, alcohol, coffee, medications, and illicit drugs are known to harm mother and baby, so these should be avoided. Sunshine (for vitamin D and more) and moderate exercise round out the McDougall Program for Pregnancy. With the foundation of a starch-based diet—which should be a moral and professional obligation of all dietitians and doctors worldwide to teach people—chances are excellent for every parent's dream for the perfect baby to come true.

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