

## Detoxification & Nutrition in Pregnancy

by

Pramod Vora, Holistic Educator & Anti-Aging Counselor to Doctors  
International Faculty Member Anti-Aging Medicine

E-mail: [consult@space-age.com](mailto:consult@space-age.com)

Web: [www.space-age.com](http://www.space-age.com)

**Question:** I am planning to conceive after one year. Do you recommend undergoing detoxification & nutritional programs before I attempt to conceive?

**Answer:** A lot of young women face substantial discomfort (nausea / vomiting) especially during the 1<sup>st</sup> trimester of their pregnancy. This is due to the body trying to eliminate toxins in order to create a clean terrain for the development of a healthy fetus. Thus women with higher levels of accumulated toxins face more discomfort than others. This is one of the auto detoxification processes that nature has provided women. Vomiting is recognized as one of the standard detoxification procedures in Ayurveda and is known as Vamana.

It would be prudent to begin the process of detoxification at least one year prior to the planned date of conception. It would also be advisable at this stage to run a few blood tests such as Renal Profile, Liver Function Test to determine the efficiency of these organs and the build up of toxins therein. Follow-up testing after an elaborate detoxification program will help establish the efficacy of the detoxification process. For more information please visit:

<http://www.space-age.com/detox.html>

It's also recommended to check CBC, serum iron, ferritin, serum zinc, copper, magnesium, calcium, phosphorous, electrolytes and numerous vitamin levels to ensure that these are not at marginally lower levels. A lot of nutritional reserves are used up during the pregnancy. It would therefore be prudent to use this one year period, prior to the planned date of actual conception, to work to bring these nutritional levels to their Optimum Levels (at the higher end of their Standard Reference Range). For more information please visit:

<http://www.space-age.com/pathology.pdf>

A lot of nutritionally depleted young women who go into pregnancy find to their utter dismay, their bodies manifesting symptoms of high blood pressure and / or diabetes during the 3<sup>rd</sup> trimester of the pregnancy. This invariably means resorting to putting prescription drugs (chemicals with multiple known side effects) into their body (and subsequently the fetus), and / or facing the risk of premature delivery. Worse still could be ending up with postpartum depression right after delivery when the baby needs you the most.

An increasing number of cases of postpartum depression and hormonal imbalance are being reported nowadays. Zinc deficiency results in hormone imbalance / hypothyroidism. This results in symptoms of mental confusion, depression, suicidal tendencies, anger, irritability, irrational behavior and the consequential inability to quickly release the weight put on during pregnancy. Normal breast feeding during the first year should easily accomplish this weight loss. Chromium deficiency also

results in higher levels of serum insulin and the subsequent accumulation of body fat and an inability to release body weight. Furthermore, low ferritin levels are also known to increase hair loss during pregnancy. All this can also happen during the lactation period when the daily nutritional requirements of the baby are going up by leaps and bounds.

The scary part could be that a nutritionally depleted mother would unknowingly pass on her nutritional deficiencies to her child at birth, who may then have to grow up with the hardships associated with these nutritional deficiencies.

### **A case in point:**

Many mothers enter pregnancy with hemoglobin levels in the range of 10.00 to 12.00 g/dL. No attempt is made to check the serum iron or ferritin (intracellular reserves of iron) levels to assess the iron reserves in the body.

Many a times, the attending OB/GYN assures them that ***“nothing will go wrong”*** as they have handled thousands of such cases with lower hemoglobin in the past and it was not dangerous for the mother nor the child. But the question here is, ***“will everything go right”?*** Will my baby turn out to be bright and intelligent in school or will my baby be called “stupid” because of iron deficiency and suffer the onslaught of scolding from parents and teachers because of being ***“so stupid”?*** Children with iron deficiencies are known to have disorders in learning and other skills and often suffer ridicule from fellow classmates .

### **Children with Iron deficiency**

Children with iron deficiency anemia perform more poorly in cognitive and motor skills tests and show delayed social and emotional development. Anemia also affects physical growth and mental development. Other consequences—including reduced levels of energy and productivity and impaired immune system function—develop as children mature. Even before they are deficient enough to get anemic, children who are iron deficient, are associated with a decrease in attention span, alertness, and learning ability. Memory and school performance are decreased. Athletic performance suffers. Kids with anemia tend to get sick more often. Prolonged or severe anemia can cause marked irritability, decreased appetite, and delayed growth. Untreated anemia can cause physical and mental delays in infants and children in areas such as walking and talking.

Each pregnancy depletes 500 mg to 1000 mg of iron from the reserves of the mother’s body. This means that, in order not to pass on iron deficiency to her new born baby, the ferritin (intracellular iron reserves) in the mother’s body should be brought up to 200 ng/mL, with a corresponding hemoglobin of 14.5 g/dL prior to the date of planned conception.

<b>Anemia Profile - Females</b>			
	<b>Hemoglobin</b>	<b>* Serum Iron</b>	<b>** Ferritin</b>
<b>Standard Reference Range</b>	11.5 to 15.0 g/dL	43 to 150 µg/dL	10 to 291 ng/mL
<b>Optimum Value</b>	14.5 g/dL	100 µg/dL	200 ng/mL
<b>Anemia Profile - Males</b>			
<b>Standard Reference Range</b>	12.5 to 17.0 g/dL	43 to 150 µg/dL	10 to 350 ng/mL
<b>Optimum Value</b>	16.5 g/dL	100 µg/dL	250 ng/mL
<b>Note:</b>			
* Ensure Optimum Values of Creatinine at 0.8 mg/dL and Serum Uric Acid at 4.0 mg/dL. Serum Iron levels tend to show falsely elevated values in case of some kidney insufficiency.			
** Optimum Value of Ferritin is determined after optimizing serum B <sub>12</sub> levels to about 600 pg/mL. Poor levels of B <sub>12</sub> tend to show falsely elevated values of Ferritin which can be quite misleading.			

### Serum Ferritin

*Serum ferritin concentrations of 70 ng/mL or greater are required to stop hair fall, while 100 ng/mL or greater are required to stop greying hair and promote hair regrowth.*

**Critical Ferritin Levels at which Chronic Anemia passes over to Acute Anemia = typically below 50 ng/mL**

**Optimum Value of Ferritin for Females = 200 ng/mL**

**Optimum Value of Ferritin for Males = 250 ng/mL**

**Therapeutic dose of Intracellular Organic Iron required to be given to correct Ferritin levels below 50 ng/mL:**

100 mg Elemental Iron with other supporting Nutrients when orally delivered at **Intracellular levels**, bid, for **minimum of six months** will help to raise below critical levels of Ferritin to above 100 ng/mL.

Around this time please do a CBC, Serum Iron and Ferritin Test after discontinuing all Iron supplements for a **minimum period of 7 days**.

Continue Iron supplements thereafter till Ferritin reaches Optimum Values given above.

Do not use prophylactic doses of Iron designed to work at serum levels to correct Ferritin levels. These formulations typically containing Ferrous Sulfate are not designed to penetrate intracellular spaces to correct Ferritin Values.

Taking prescription strength therapeutic doses of nutritional supplements like zinc, magnesium, calcium, chromium etc., especially designed to alter intracellular levels will help to correct these type of nutritional deficiencies given a period of 6 to 12 months.

Nutritional deficiency passed on from mother to child at birth can result in health challenges later on in life as the child grows up and reaches adulthood. For example, magnesium deficiency is known to cause convulsions in babies and high blood pressure later on in their life; and chromium deficiency has the propensity to cause type 2 diabetes later in life.

It is equally important to understand the need to have digestion working at peak efficiency in order to ensure that the nutrition being administered orally and through diet is being absorbed and retained in the body.

Increasing the flow of gastric juices (e.g. hydrochloric acid in particular) will ensure proper digestion of food in the stomach and the extraction and absorption of the nutrition from the food we eat and nutritional supplements we take. Next we need to detoxify the liver in order to ensure proper flow of bile into the small intestines where further digestion and basic absorption of nutrition will occur.

The enzyme flow from the pancreas must also be increased to ensure the digestion of proteins, carbohydrates and fats from the food we eat.

Rejuvenation of the entire digestive system is recommended prior to the date of planned conception. This will also speed up the entire digestive process and automatically reset the body's biological clock to give two bowel motions, one in the morning and one at bedtime.

Detoxification and rejuvenation of the whole body will ensure minimal discomfort during pregnancy and a healthy baby, with minimum medical complications during pregnancy and a lowered risk of postpartum depression.

Furthermore, the energy and nutritional levels of the mother will be maintained after delivery to ensure proper nurturing and optimum growth of the child.

**by**  
**Pramod Vora,**  
**Holistic Educator &**  
**Anti-Aging Health Counselor to Doctors**  
**International Faculty Member Anti-Aging Medicine**

*SpaceAge*

*Natural Health Center*

**92 Corporate Park, Ste. C #705**

**Irvine, CA 92606**

**USA**

**Tel: +1 - 949 - 861 - 8164**

**Fax: +1 - 949 - 861 - 8165**

**E-mail: [consult@space-age.com](mailto:consult@space-age.com)**

**Internet: [www.space-age.com](http://www.space-age.com)**

## FAQs

**Question:** Is there a way to reduce the effect of hereditary diseases?

**Answer:** We know that nutritional deficiencies do pass from mother to baby. It is now well understood that a lack of some nutrients like magnesium, zinc, chromium, to name a few, are responsible for chronic diseases like hypertension and type 2 diabetes. It therefore clearly follows that the present thinking that these are “hereditary diseases” are actually nutritional deficiencies passed on from your maternal grandmother to your mother and then through you to your future baby.

For example, if your maternal grandmother was deficient in say Chromium, because say the soil conditions were poor in the geographical region she lived in, then your mother would also have inherited this deficiency, assuming she took no nutritional supplements all her life. It will then get passed on through you and then onwards to your planned baby.

You can break this cycle by taking care of your own nutritional deficiencies and making sure that the future generation is born healthy.

***There is really no merit in the theory of “hereditary diseases” like high blood pressure, type 2 diabetes, other cardiac disease which have been wrongly classified as chronic diseases when they are merely symptoms of nutritional deficiency and are fully reversible in nature. For more information:***

***<http://www.space-age.com/aging.html>***

The question therefore arises is, what really is hereditary. It is your “right to good health” as you can be born with a perfect body. How you maintain it thereafter is your choice.

**Question:** If it is so important for a potential mother to correct her nutritional deficiencies before planned conception, what role does my husband’s nutritional profile play in planning a baby?

**Answer:** Basically, as the fetus grows inside the womb, the nutrition of the mother is of prime importance and the only source of nutrition for the fetus.

The husband’s role here is only to provide healthy sperm and to provide emotional support for his wife.

However, it is important to understand that to conceive, the husband should have fairly good levels of testosterone to ensure, no erectile dysfunction and sustained erection to lead a normal sex life. Nutritional deficiencies in zinc, selenium, vitamin c, etc. are know to lower testosterone levels and the quality of the sperm creating fundamental problems in successful conception.

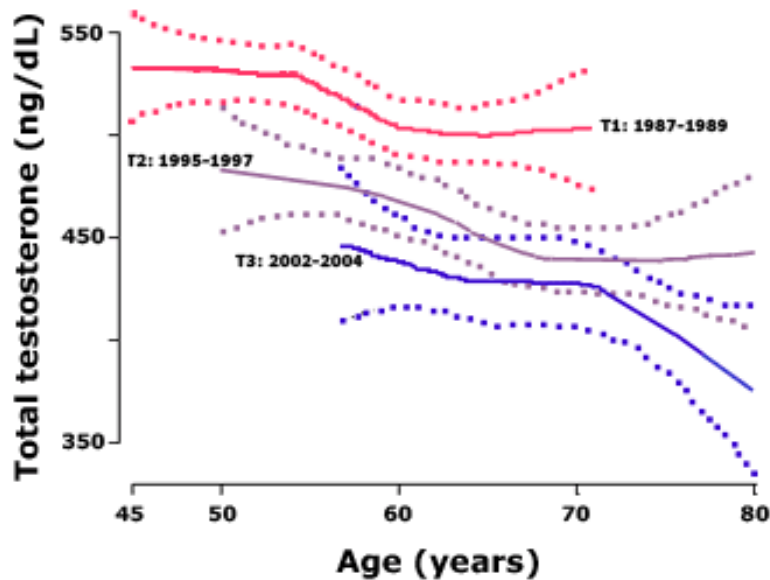
So it will be helpful if the husband is in fairly good health to deliver quality sperm for conception.

Here is a table showing optimum testosterone levels in males of different age groups. Maintaining testosterone at these levels will also aid to prevent premature aging and the onset of senility.

Testosterone	Standard Reference Range	Optimum Values
Total Testosterone	200-1200 ng/dL	26 - 35 yrs - 1200 ng/dL 36 - 45 yrs - 1000 ng/dL 46 - 55 yrs - 800 ng/dL 56 - 65 yrs - 800 ng/dL
Free Testosterone	8.69 to 54.69 pg/ml	25 to 50 pg/ml

### Optimum Testosterone Levels in Males

An additional advantage and incentive for males to maintain above average testosterone levels, is that, it will make a marked difference in their professional life, (e.g. the speed, efficiency and precision with which decisions are arrived at and in their ability to deliver CEO level bottom line results in the corporate world). For more information: <http://www.space-age.com/andropause.html>



Declining Total Testosterone Levels over the years

With the over cultivation of agricultural land and declining nutritional levels in the top soil, it is clear that we are now no where close to the previously healthy standards for testosterone in males. With each passing year it is only getting worse. For more information please visit:

<http://www.space-age.com/nutri-farm-seminar.doc>

Today we have approximately 25% males in the age group of 20 to 35 years with exceedingly low testosterone levels, similar to those encountered in 75+ year old people. They have the physical body of a 25 year old, but the emotions, mental and muscular capacity of a 75 year old. This shocking fact is little know or spoken about in society. For more information please visit: <http://www.space-age.com/ed.pdf>

**Question:** I never knew about all these things before. I just had a baby six months back. Neither my gynecologist nor my pediatrician warned me about these things. Is there anything I can do about it now?

**Answer:** *“It is never to late to make amends”* – so the saying goes. If you are still breast feeding the baby you can start on doses of nutritional supplements as per your blood reports to build up your own depleted reserves and also to ensure that henceforth the baby gets enough nutrition from breast feeding. Nutrition is very important as the baby is now growing rapidly. I would also like to recommend that you regularly begin administering multivitamin cum mineral drops to the baby.

Watch the child as it grows up. Is it mentally sharp, has good memory retention and recall capabilities, and does not tire easily during physical exercises like crawling and trying to standup and walk or later on in life at school sports? Does the child’s physical stamina appear low compared to other above average kids in his age group? Are the grades obtained good and above average? Is the physical growth the same or equal to the above average kids in his age group?

Remember the rule: ***Vitamins create “expensive urine” in the absence of other supporting minerals.*** Use a malt based iron and multivitamin + minerals tonic during the growing years right up to high school.

**Question:** I have just entered the 3<sup>rd</sup> trimester of my pregnancy. My heart rate is very high, occasionally exceeds 100 beats per minute and I become breathless if I try to climb even one flight of stairs or engage in daily chores around the house. Is there anything that can be done nutritionally to ease my situation as I have another 3 months to go and would like to have a normal full term pregnancy?

**Answer:** What you have developed is medically known as tachycardia. This is principally a magnesium deficiency and the severity of these symptoms can be reduced substantially within a few weeks. Please use therapeutic doses of magnesium in an organic compound form like a lactate, gluconate, orotate, aspartate, ascorbate, etc. to quickly resolve this situation.

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