

NUTRITION NOTES

Good nutrition is the first standard of good childbearing, and for optimal outcome should be observed by both parents preconception. The body, however, has enormous powers of recovery and provided a woman is reasonably well nourished at the time of conception she can improve her chances of having a normal labour and delivery, and a healthy baby if she takes special care with her nutrition during pregnancy. Unfortunately most women pay little attention to their pregnancy nutritional requirements until about three months gestation, by which time her foetus has multiplied in size 2,600,000 times since conception. Therefore, any major deficiencies have already been incorporated into the most critical period of its development.

There are six main culprits which cause damage to the unborn child:- poor diet, the Pill, smoking, alcohol, pesticides and metal poisoning. (Prescription drugs of course would rate seventh though it is hoped that most women and ALL doctors are aware of the dangers of taking drugs during pregnancy.)

If a woman follows sound nutritional principles preconception and during her pregnancy she has a greater than 90% chance of having a normal labour and delivery and giving birth to a mentally and physically healthy and normal baby.

Whilst the baby is in utero, it is a parasite on its mother's body. If the mother's diet is deficient in any nutrients, the baby will take what it needs from her body; i.e. reserves in her bones, blood etc leaving her body deficient. If both the mother's body and her diet are deficient in essential nutrients, the baby's mental and physical development will be impaired, the mother will experience complications in either or both pregnancy and labour and will be unable to breastfeed satisfactorily.

If a woman wishes to breastfeed her baby she must continue to pay close attention to her diet after giving birth to her baby. More protein and calcium are required to lactate than to 'make' a baby. A woman who is completely breastfeeding her infant expends more energy just producing milk each day than a miner expends in a day down the mines (and he can usually come home and put his feet up!!!).

Foods fall into two basic categories;- (1) foods that feed your body and (2) foods that deplete your body. Unfortunately almost all the pre-prepared, modern convenience foods fall into the second category, as

well as the two foodstuffs which form the basis of the average person's diet:- refined flour and refined sugar.

The four most basic elements of good nutrition are:-

1. Eat as much raw fruit and vegetables as possible - these should form the basis of every meal.
2. Avoid coffee, alcohol and tobacco and eliminate them from your diet completely during pregnancy.
3. Avoid refined carbohydrates - refined sugar and flour and any foods which contain these. A good meal of vegetables, fruit and a protein food - meat, fish, egg, beans etc, can have its nutritional value depleted or completely ruined by following it with a dessert which includes refined carbohydrates, or finishing off with a cup of coffee and a cigarette.
4. Avoid food which are artificially coloured or flavoured or contain preservative agents.

Supplementation with tablets etc. is not generally recommended. ALL the nutrients required should be obtained through one's diet. However, there will be times and circumstances in some people's lives which prevent this, there may also be deficiencies caused by past illnesses (extreme nausea during pregnancy may also prevent adequate nutritional intake) or past dietary bad habits, which may indicate the necessity for supplementation. Because of the synergistic relationship amongst vitamins, minerals etc in the human body, it is important to seek advice from a nutritional specialist before popping tablets which may further upset the balance in one's body. (It is important to note that most G.P.s are not nutritional specialists. G.P.s have no specific training in nutrition during their years at Med. School.)

### PROTEIN

Adequate intake of protein is essential to all tissue growth and repair. A complete protein is made-up of 22 essential amino acids which the body cannot synthesise. (There are a number of other amino acids in protein which the body can synthesise.) In order for the body to be able to utilise protein efficiently, all 22 amino acids must be available in each meal.

Foods which contain all the essential amino acids include:-

meat, fish, poultry, eggs, milk and milk products, soya beans, tofu, brewers yeast, spirulina

At least one of these foods should be included in every meal, unless one combines foods which will make up a complete protein eg brown rice and lentils, legumes and cereals, nuts and beansprouts etc

Function:- Proteins provide the amino acids required for the formation, growth and repair of body cells, and for the formation of some of the secretions they produce eg hormones. They also provide the amino acids required for the formation of proteins which are present in the blood. (Your growing baby's food!).

If there is insufficient carbohydrate in the diet, they can be broken down to provide energy and heat.

Note: Red meat increases the body's need for calcium.

Milk is mucus forming and depletes the body of calcium and magnesium.

Brewers Yeast has a high phosphorus content so should be taken with foods which have a calcium content.

Raw protein has twice the food value of cooked protein.

## MINERALS

### Calcium

Functions:- bone & tooth formation - baby lays down the basis of its bone structure and dentition in utero, if the mother's diet is deficient in calcium it will be taken from her bones and teeth.

- essential to muscle growth and contraction, therefore essential to normal labour and delivery.
- assists nerve tranquilisation and nerve transmission.

Sources:- green leafy vegetables, sesame seeds, oranges, almonds, chick peas, dates, molasses, kelp, yoghurt, liver etc

Supplement - kelp, cell salt - Calcium Fluoride (helps cure varicose veins and haemorrhoids)

Note - ALL calcium ingested is destroyed if combined with or followed by refined carbohydrates, as these change the ph of the intestinal tract and cause the calcium salts to be precipitated out and eliminated rather than being absorbed.

Depleted by - lack of exercise, refined carbohydrates, milk, excess fat, stress, a diet which produces a large amount of acid ash. (Foods which produce acid ash - meat, fish, eggs, refined carbs, all cereals except millet and buckwheat. Foods which produce alkaline ash - all fruits and vegetables except legumes and plums.)

Note - Milk is not a good source of calcium because it has a high phosphorus content therefore requires additional calcium to bring the phos:calc ratio into the correct balance. Milk also depletes the body of magnesium.

Calcium assimilation is enhanced by Vitamins A & D.

### Iron

Functions - haemoglobin production - prevents anaemia  
 raises stress and disease resistance  
 essential for growth in children

Sources - green leafy vegetables, molasses, eggs, organ meats, fish, apricots, kelp, brown rice, lentils, brewers yeast, nettles, raspberry leaf tea, rice bran, black beans, chick peas etc.

Supplement - kelp, cell salt - ferrum phos., MY - Iron tablets

Note - The body cannot absorb inorganic iron very well i.e. ferrous sulphate and ferrous gluconate prescribed by many doctors. These tend to produce either constipation or diarrhoea and deplete the body of Vitamin E. (Supplementation in early pregnancy with inorganic iron can therefore lead to congenital abnormalities)

Iron levels in a pregnant woman's body maintain a fairly normal level until the last 6 - 8 weeks of pregnancy when her baby is laying down its iron stores. Previous to this iron is conserved by lack of menstrual blood loss.

Absorption:- The main factor governing absorption is always the body's need for iron.

Other factors - In order for the body to utilise iron it needs an adequate supply of calcium, Vitamin C, protein and copper. (Molasses is a good source of iron because it contains copper and sulphur) Phytic acid in the hulls of grain binds up iron just as it does calcium and therefore

hinders the absorption of both, as do large amounts of fibre in the diet.  
Depleted by - smoking, coffee, tea.

### Zinc

Functions - aids in phosphorus and protein metabolism  
essential to the development of sex organs  
promotes healing (forms basis of white blood cell manufacture)  
assists liver function - therefore helps prevent toxemia

Sources - Brewers Yeast, Pumpkin seeds, liver, seafood, mushrooms,  
soyabeans, spinach, sunflower seeds, black-eyed beans

Note - The oral contraceptive pill depletes the liver of B vitamins and  
zinc predisposing a woman to toxemia during pregnancy.

If a woman suffered severe side effects from using the pill, the  
symptoms she experienced may recur at about 6 months pregnant  
when her body naturally attains the same hormone levels as those  
artificially induced by the pill.

An unborn baby's blood serum levels rise during labour. To  
neutralise this a newborn needs zinc. Colostrum has a high zinc  
content so serves this function.

Depleted by - excess calcium (especially dolomite tablets), excess copper  
alcohol, lack of phosphorus, oral contraceptive pill

### Magnesium

Functions - Nerve stabiliser - deficiency predisposes to post-natal  
depression

Involved in the metabolism of calcium and Vit. C

Helps maintain acid/alkaline balance of body

Forms part of genetic protein (DNA, RNA) structure - deficiency  
can therefore predispose to spina bifida etc.

Assists in blood sugar metabolism

Essential for contraction of muscles

Sources - Wholegrain breads, kelp, bran, green leafy vegetables, nuts,  
honey, seafoods, tuna, soyabeans, beet greens etc

Supplement - Cell salt - magnesium phosphate (also for asthma)

Note - Unusually strong Braxton-Hicks contractions, ticks or tremors  
may be indicative of low magnesium levels. (Raspberry Leaf tea  
can also cause some women to have strong B/H contractions so it

may be advisable for them to either stop drinking it or increase their Magnesium intake to counteract these.

Depleted by - milk, fluoridated water, x-rays, alcohol, oral contraceptives, high acid ash forming diet, antibiotics, diuretics and I.V. fluids

### Potassium

Functions - muscle contraction  
 nerve tranquilisation  
 antagonistic to sodium in the body - helps keep the correct balance of fluid in the tissues. (Adequate intake especially important during pregnancy to help prevent oedema.)  
 Important in brain function

Sources - cider vinegar, most vegetables (Potassium broth - celery, potatoes, carrots, parsley & onions) tomatoes (esp. high) kelp, molasses, seafood, apricots, bananas, figs, dates, butternut squash, black beans, papaya, avocado, spinach etc

Note - Diuretics contain a high concentration of inorganic potassium which impairs carbohydrate metabolism and upsets the body's electrolyte balance.

Depleted by alcohol, excessive sugar, excessive salt, coffee, cortisone, stress, laxatives, diuretics

### Manganese

Functions - activation of the enzyme  
 reproduction and growth  
 sex hormone production - therefore important because of its part in the production of prostaglandins which stimulate the onset of labour  
 carbohydrate metabolism  
 essential to the utilisation of Vit.E and Vit.B<sub>1</sub>

Sources - Bran, bananas, celery, wholegrains, egg yolks, green leafy vegetables, liver, nuts, pineapple

Note - Raspberry leaf tea also stimulates the production of prostaglandins, therefore prepares the muscles of the uterus for the onset of labour.

Meals containing high concentrations of carbohydrate, refined or otherwise deplete levels of the enzyme tryptophane, and

and inhibit the onset of labour.

Depleted by - high levels of calcium and phosphorus, marijuana,  
excessive iron

## VITAMINS,

### B complex Vitamins

These vitamins are essential to a healthy pregnancy and a healthy baby. At least one of the complex is essential to every structure and function in the body.

Deficiencies lead to brain and nervous system damage in the foetus and impairs the formation of antibodies and red blood cells.

Vitamin B<sub>6</sub> deficiencies and zinc deficiencies contribute to nausea in early pregnancy. These deficiencies also contribute to the likelihood of Post-natal Depression.

The B-complex vitamins are synergistic therefore should not be taken singly or in inorganic form. (An excess of one of the complex can lead to a deficiency of one or some of the others.)

Vitamin B<sub>12</sub> is especially important during pregnancy as lack of this vitamin inhibits the production of red blood cells in the bone marrow leading to low haemoglobin levels.

It is important to take B<sub>12</sub> in the diet as its absorption is dependent on:- folic acid (green leafy vegetables)

normal thyroid function (the iodine content of kelp ensures healthy thyroid function)

Calcium

Gastric HCL

For these reasons an injection of Vit B<sub>12</sub> can be both ineffective and dangerous.

Sources - Raw unpasteurized milk, salt water fish, comfrey, kelp,  
liver, cheese, tuna, raw bran, eggs

Depleted by - refined sugar, alcohol, excessive sunlight, coffee,  
laxatives, deficiencies of Calcium, Iron and Vit B<sub>6</sub>

### Vitamin A - (Retinol)

Functions - body tissue repair and maintenance

resistance to infection

visual purple production (necessary for night vision)

RNA synthesis

Essential for healthy mucous membranes

Sources - green and yellow fruits and vegetables esp. sorrel, carrots  
and squash, dandelion greens  
milk and milk products  
fish liver oil

All babies especially those who reach about six months old in winter could be given cod liver oil daily as this helps develop healthy mucous membranes. It is also very common for children to develop colds and/or chest infections after each vaccination - daily doses of cod liver oil or halibut liver can help to prevent the onset of a virus which all too often can only otherwise be cured by antibiotics. If the body is deficient in Vit D this will cause the depletion of Vit A. (Vitamin D deficiency is not usually a problem in N.Z. where we have a high number of sunlight hours each week.) However should Vit D deficiency occur fish liver oils contain both Vitamins A & D

Depleted by - alcohol, coffee, cortisone, excessive iron, mineral oils

Deficiency of Vitamin A leads to soft tooth enamel, sinus trouble, susceptibility to infection and allergy, night blindness

#### Vitamin E

Functions - is a component of the blood clotting factor - therefore important in the prevention of post partum haemorrhage  
reduces blood cholesterol  
essential to fertility in women and potency in men  
helps lung tissue to cope with the effects of pollutants  
essential in muscle and nerve maintenance

Sources - green leafy vegetables

eggs

liver

cold pressed oils esp. Wheatgerm, sunflower and safflower  
almonds, beet greens, leeks, blackberries

Note - Vitamin E is the only vitamin that is unstable in freezing. Its presence in food is severely reduced by processing. Oils in particular may vary greatly in Vit E content according to their processing and handling. Rancidity destroys Vit E so proper storage is essential. Vitamin E requires inositol (a B vitamin) and manganese and phosphorus in order to function properly. Inositol is found in molasses, citrus fruits, brewers yeast, nuts and wholegrains.

Depleted by - birth control pills  
 rancid fat or oil  
 pollution  
 chlorine

Deficiency can predispose to miscarriage

### Vitamin C

Functions - bone and teeth formation  
 collagen production  
 digestion  
 iodine conservation  
 healing burns and wounds  
 red blood cell formation and haemorrhage prevention  
 shock and infection resistance  
 aids oxidative processes in body

Sources - yellow and orange fruits, green peppers, broccoli,  
 strawberries, rosehips, black currants, papaya

Note - Because iron needs Vit C to enable its proper function, anaemia can be caused in part by lack of Vit C as well as iron deficiency. Vitamin C cannot be properly utilised unless calcium and magnesium are also present in adequate quantities in the body.

Depleted by - antibiotics, aspirin, cortisone, high level stress,  
 tobacco

Deficiency can lead to bleeding gums and dental cavities.

### Vitamin K

Function - Blood-clotting factor

Sources - green leafy vegetables, safflower oil, blackstrap molasses,  
 egg yolk, soyabean oil, oatmeal, beef liver, alfalfa

Note - Vitamin K deficiency not only predisposes to haemorrhage but also to miscarriage. If a pregnant woman has been on a moderately hefty dose of antibiotics even 12 - 18 months before pregnancy she should take alfalfa (tea, sprouts, tablets) to boost her Vit K levels during pregnancy. Antibiotics destroy the intestinal flora so the body cannot synthesise either Vit K or Vit B. Unsugared natural yoghurt will help recolonise the

intestine, which will in turn, enable the body to synthesise its own Vitamin K.

Depleted by - aspirin, antibiotics, mineral oil, radiation - x-rays

Vitamin F - Fatty Acids

Functions - prevents hardening of arteries - destroys cholesterol  
normalises blood pressure  
assists glandular activity  
vital to organ respiration

Sources - Pure, cold-pressed vegetable oils, wheatgerm (fresh and raw)  
sunflower seeds

Depleted by - radiation - x-rays

Nutritional Aids For Common Ailments of Pregnancy

Morning Sickness

Tea of - peach leaves, alfalfa, goldenseal, ginger root, liver herbs tea -  
(Salus-Floradix Brand)

Increase intake of B-Vitamins and Zinc

Supplement - B-complex Vitamins

Homeopathic remedies - Nux Vomica for vomiting

Ipecacuaha " " and nausea

Phosphorus

Heartburn

Cut down intake of carbohydrates even wholegrains

Supplement - Cell Salt - Na. Phos.

Homeopathic - Capsicum 30

Varicose Veins and Haemorrhoids

Increase intake of fresh fruit and vegetables.

The extra progesterone secreted during pregnancy relaxes the smooth muscle in the small intestines and gut contributing to constipation which in turn predisposes to haemorrhoids.

One tsp to one Tbsp of fresh raw bra taken with morning cereal and fruit may help.

Eating prunes, figs and molasses may also help avoid constipation.

May need to supplement Vitamins C & E.

Cell Salt - Ca Flour - for varicose veins

Homeopathic - Pulsatilla  
Aesculus (local)

Local treatment for haemorrhoids - witch hazel soaked pads  
pilewort (greater celandine) as  
poultice and/or tea  
plantain poultice

### Thrush

Cut out all refined carbohydrates, also dry fruits and honey.  
Cut out foods which contain yeasts or moulds e.g. breads, cheeses, mushrooms  
Any foods which contain any form of sugar feed thrush  
Eat plain, unsweetened yoghurt and use as local application  
Paint vagina with gentian violet  
Local application of aloe vera or calendula lotion/cream  
Drink chickweed tea and use as poultice  
Increase intake of green leafy vegetables and sprouts  
Douche - 1 tsp vinegar to 1 cup of warm water. If this seems to help  
after three to five days douche with 1 tsp baking soda to  
one pint warm water.

Homeopathic - Fagopyrum  
Candida

### Cystitis

Cod liver oil - up to 36 weeks pregnant (after this may stimulate the  
onset of labour.  
Couch Grass/Kikuya tea every 2 - 3 hours. Pull it up roots and all,  
bruise it, put it into a pot and cover with boiling water. Simmer  
for five minutes. Strain and drink.  
Raw parsley and parsley tea.  
Supplement - Vit C (best source Cal-C powder) and Calcium (organic)  
and Vit E.

### High Blood Pressure

Garlic

### Oedema

Cut back sodium/salt intake  
Increase intake of potassium rich foods (Refer back)  
Supplement - Kelp tablets  
Also add pinch of Epsom Salts to vegetables after cooking.

Toxaemia

As for oedema.

Also go onto a diet of 75 - 80% alkaline ash forming foods. Cut right back on meat, fish, milk products and eggs. Drink only minimal amounts of ordinary tea and no coffee.

Foods which enhance alkaline levels - coconut, sesame seeds, almonds, sprouts, green leafy vegetables.

All fruits except plums form alkaline ash.

All vegetables except legumes form alkaline ash.

All grains except millet and buckwheat form ACID ash.

Increase zinc and Vit. A intake (brewers yeast, liver, sunflower seeds)

Sleeplessness & Muscle Tics etc

Molasses drink - 1 tablespoon molasses, pour over boiling water, add a little milk and pinch of epsom salts.

Cell Salt - Mag Phos

Cramps

Increase intake of Vitamin E, calcium and magnesium

Homeopathic Cal Carb.

References & Additional Reading

Diet for a Small Planet

Recipes for a Small Planet - Frances Moore-Lappe

Let's Get Well

Let's Have Healthy Children - Adele Davis

Nutrition Handbook - Dr Carlton Fredericks

Hypoglycaemia, A Better Approach - Paavo Airola

Nutrition Almanac

Laurels Kitchen - Laurel Robertson, Carol Flinders, Bronwen Godfrey

Vitamin Bible - Earl Mindell