



FACT SHEET

A VEGETARIAN DIET

* There is no single vegetarian pattern of eating. The main types are:

- *Vegan* - diet has NO foods of animal origin
- *Lacto Vegetarian* - includes dairy products, excludes meat, poultry, fish, eggs.
- *Ovo-Lacto Vegetarian* – includes dairy products and eggs; excludes meat, poultry, fish

Each vegetarian diet must be looked at individually to assess its nutritional adequacy.

* Growing scientific evidence suggests that vegetarian eating can be protective against cancer (particularly colon cancer), heart disease, obesity, hypertension and diabetes. The vegetarian diet may be low in total fat (low in saturated fat, high in unsaturated fat), high in fibre and complex carbohydrate.

* The basic vegetarian diet (ovo lacto) and the relative quantities eaten should include:

Eat Most - vegetables, legumes (dried peas, beans, lentils, baked beans), nuts, fruit, bread, cereals (rice, pasta, couscous, infant iron enriched cereals (under 12 months), adult iron enriched cereals (over 12 months).

Eat Moderately - milk, yoghurt, fortified soy drinks, cheese, tofu, eggs, seeds, fortified meat analogues (eg vegetarian meats, chicken, mince, burgers, sausages)

Eat in Small Amounts - butter, polyunsaturated/monounsaturated margarine, sugar, oil.

Infants and children have increased needs for energy, zinc, iron, and calcium. The above can be adapted to meet their requirements. Reduced fat milk and dairy foods can be used after 2 years of age. Skim milk should not be used before 5 years.

* Infants - Breast milk, infant cow's milk formula, infant soy formula or infant goat's milk formula is suitable and should be continued to 12 months (breast milk can be continued for as long as it suits mother and baby). Around *6 months (but not before 4 months)* solid foods *can be* introduced. There is no set order for the introduction of solids but first foods are usually iron fortified infant rice cereal, pureed vegetables and fruits, yoghurt, custards (dairy and/or soy). *Foods introduced next include* fine wholemeal bread, rice, pasta, iron fortified mixed infant cereal and infant muesli, smooth nut (providing there are no allergies to nuts) and seed pastes, minced meat analogues such as vegetarian mince/ mashed legumes (eg baked beans), fork mashed vegetables and fruits, cooked egg yolk, mashed tofu, grated cheese. From about 10 months offer whole cooked egg and wholegrain bread.

* Children - after 12 months breastfeeding and infant formula may be replaced with whole cow's milk or a fortified soy drink as a major source of calcium, vitamin B12, and vitamin B2. (*Refer to Fact Sheet on Soy Formulas and Drinks*). Vegetarian children should include a wide variety of foods outlined in the basic diet above. Plant foods contain non-haem iron which is not absorbed as efficiently as haem iron. However vegetarian diets are usually high in vitamin C which enhances non-haem iron absorption (*Refer to Facts about Iron*). As children have a small stomach capacity and most vegetarian foods are bulky, regular meals and snacks are important so that all nutrient requirements are met.

* ***Vegan diets are not suitable for infants and young children.*** They are very low in fat and high in fibre which may affect the absorption of calcium, zinc and iron and low in other important vitamins and minerals. Vegan foods are poor sources of vitamin D so regular sunlight is needed, poor in Vitamin B12 so supplementation is required and vitamin B2 (riboflavin) may also be at risk of deficiency.

* Plant sources of protein (grains, legumes, vegetables, seeds and nuts) will provide adequate amounts of essential and non essential amino acids providing the plant sources are varied and daily kilojoule/calorie intake is sufficient to meet daily energy needs. Conscious combining of grains, legumes, vegetables, seeds and nuts is not necessary.



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* Vegetarian children tend to be lighter and smaller in stature than non vegetarians. Growth is slower and menarche is often later.

* Vitamin B12 is important for the formation of red blood cells and DNA and is also required for making the lining of the nerve cells. It is found exclusively in animal foods - meat, milk, eggs, cheese. Plant foods such as spirulina, tempeh and mushrooms have been claimed to contain B12. These foods contain an inactive form of B12 that the body cannot use. Vegetarians will get adequate B12 by including dairy foods, eggs, fortified soy drinks and fortified meat analogues (vegetarian burgers/steaks/sausages/chicken – read labels) in their diets. Vegans are at risk of Vitamin B12 inadequacy and will require a supplement. Infants born to mothers who are vegan or have been strict vegetarians for a long time may be at risk of B12 deficiency if mum's stores are low. The mother's breast milk may also be low in B12 and a supplement may be required.

References.

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