

Fact Sheet

(CHS_FS_GNA_028)

VEGETARIAN DIETS FOR CHILDREN

These diets can be challenging when aiming for nutritional adequacy in children due to the high needs for growth and development during these years. However, with careful planning vegetarian diets can be nutritionally adequate.

TYPES OF VEGETARIAN DIETS

Lacto-Vegetarian diets include milk and dairy products

Lacto-Ovo-Vegetarian diets include milk, dairy and eggs

Vegan diets consist of plant products only. This is the strictest form of vegetarianism.

MAJOR NUTRIENTS AT RISK OF DEFICIENCY

VEGETARIAN DIETS IN GENERAL

- Protein
- Iron
- Calcium

VEGAN DIETS ONLY

- Energy
- Vitamin B12

Protein

The types of protein in animal products are *high* quality. Diets including milk, dairy and eggs can supply adequate protein.

The types of protein in plant based products are *low* quality (ie protein intake may be low in vegan diets).

When certain protein foods are combined they produce higher quality proteins.

Milk or egg products with cereal, nuts, seeds, beans or pulses
(cereal and milk, egg on toast, lentil burgers with cheese, yoghurt with fruit/nuts)

Soy milk with cereal
(cereal with soy milk, soy yoghurt with fruit/nuts)

Nuts and cereals
(peanut butter sandwich, nutloaf made with nuts/rice/breadcrumbs)

Seeds and cereals
(sesame seed roll, muesli with rolled oats/pumpkin/sunflower seeds)

Pulses and cereals
(dhal with rice, hommos with bread/crackers)

Source: Royal Children's Hospital Department of Nutrition and Dietetics
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Fact Sheet

Iron

Vegetarian diets can provide sufficient iron from beans, peas, lentils, dark green vegetables, dried fruits, nuts, fortified soy milks, breakfast cereals and wholemeal breads.

Including foods which are rich in vitamin C (including citrus fruits, capsicum, tomato, rockmelon) with every meal will help the body to absorb this iron.

Calcium

Calcium needs are highest in infancy, childhood, adolescence, pregnancy, breastfeeding and in postmenopausal women. Fortified milks, dairy products and eggs can provide sufficient calcium if included in the diet.

The low calcium content of plant foods and the poor ability for this source of calcium to be absorbed by the body puts people following a vegan diet at risk of insufficient calcium intake.

Alternative calcium containing products include fortified soy infant formula and fortified soy milk, almonds, dried peas, beans, lentils, leafy green vegetables, sesame and sunflower seeds. Calcium supplements may also be used.

VEGAN DIETS ONLY

Energy

This is a bulky diet with a limited range of food. Fussy eaters may have problems with this, which can result in less than desirable weight gain and growth.

Ways to overcome this include:

- Encourage breastfeeding or use of a soy based infant formula for 1st year of life
- Once solids are introduced include milk and milk products or soy infant formula, soy milk and nut and seed pastes for example peanut butter (only after 12 months) or tahini
- Encourage eating snacks between meals to increase overall intake

Vitamin B12

Insufficient intakes of vitamin B12 during pregnancy may result in neurological and developmental delays. B12 is only found in animal foods. Vegan diets are associated with a high risk of developing vitamin B12 deficiencies.

Pregnant and breastfeeding mothers need at least three serves of dairy products every day (1 serve = 250ml milk/200g tub yoghurt/40g cheese). Soy milk fortified with B12 or a vitamin B12 supplement may be used.

It is important to note that food fermented by micro-organisms (soy sauce, miso, tempeh), manure grown mushrooms, nodules on root vegetables, spirulina, royal jelly and yeast may contain small amounts of vitamin B12, but this is not enough to be of any practical help.

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REFERENCES

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Vegetarian Nutrition, Queensland Health Department, Division of Health Promotion.

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