

Vegan & Vegetarian Diets in Children

Children can live a healthy life if they eat a balanced vegan or vegetarian diet. However, there are important areas of nutrition to consider:

- Children have high nutrient needs as they grow and are at high risk of nutrient deficiencies if they do not eat a balanced diet.
- Children between 6 months and 2 years are most at risk of deficiencies. They may struggle to eat enough to meet their nutrient needs on a strict vegan or vegetarian diet.
- Special care and planning is needed if considering a vegan or vegetarian diet for your child.
- Seek help from a doctor and dietitian to avoid health issues related to nutrient deficiencies.
- If your child eats a *vegan* diet, it is recommended you speak to a health professional about supplementation. Children cannot get enough nutrients through food alone.

KEY NUTRIENTS

PROTEIN

Protein is used for building and repairing muscles. It's also used for fighting off infection! Many plant foods don't contain all nine essential amino acids though. It's important for your child to eat different plant protein foods daily so they can receive all these essential amino acids. To help with this, offer a mix of soy foods, legumes, nuts, seeds, wholegrains and grains (e.g. quinoa, amaranth) every day.

PLANT-BASED PROTEIN FOODS:

- **Dairy foods** (for vegetarians): cheese, milk, yoghurt, yoghurt dips
- **Eggs** (for vegetarians)
- **Soy products**: fortified soy milk, tempeh, tofu, edamame beans
- **Legumes, nuts & seeds**: all types!
- **Wholegrains**: oats, wholegrain pasta/bread, barley, buckwheat
- **Foods containing all 9 essential amino acids**: hemp seeds, quinoa, amaranth



Include a variety of these high-protein foods in your child's meals each day:

SOY PRODUCTS



WHOLEGRAINS



LEGUMES & BEANS



SEEDS & NUTS



IRON

Iron is needed for growth and brain health. It's also used to carry oxygen around the body and fight off sickness. When a child is 6 months, the iron stores they had built up in pregnancy begin to fall. This is why they need plenty of iron-rich foods offered between 6 to 12 months. Iron in plant foods (called *non-haem iron*) is not absorbed well by the body. Because of this, iron-rich foods need to be offered and eaten daily to help make sure your child's iron needs are met.

Plant sources of iron should be served with *vitamin C* foods – this increases the absorption of iron. Try offering an orange as part of their meal or snack. High calcium foods can stop the absorption of iron. Be careful consuming these foods often with iron-rich meals.

PLANT-BASED IRON SOURCES

- **Legumes & beans:** lentils, chickpeas, kidney beans, baked beans
- **Soy products:** tempeh, tofu, edamame beans
- **Seeds:** chia seeds, pumpkin seeds, sesame seeds, hemp seeds, flaxseeds
- **Nuts:** almonds, cashews, pine nuts, macadamia nuts
 - Do not give whole nuts to children under 3 years. These can be a choking risk.
- **Wholegrains:** iron-fortified cereals (e.g. wheat biscuits), quinoa, rolled oats, wheat bran, wholegrain bread/pasta
- **Other:** tomato paste, dried apricots, **iron fortified** plant-based meat alternatives (e.g. burger patties)
- **Leafy greens:** spinach, kale, swiss chard, collard greens, broccoli, cabbage
 - Cooking greens increases their iron absorption. However, due to the light weight of these foods, it's hard to eat enough of these to obtain a lot of iron.



✓ VITAMIN B12



Vitamin B12 is important for blood health and a healthy nervous system. If your child is on a strict vegan diet or not eating much dairy or eggs, it is recommended you talk to your doctor about starting a vitamin B12 supplement.

PLANT-BASED VITAMIN B12 SOURCES

- **Dairy foods** (for vegetarians): cheese, milk, yoghurt, yoghurt dips
- **Eggs** (for vegetarians)
- **Nutritional Yeast:** this *must be fortified with vitamin B12*
 - This is different to normal baking yeast. It can be found in the health food aisle
- **Vitamin B12-fortified products:** Some vegan products (e.g. plant milks, meat alternatives) have vitamin B12 added to them. Check the product's nutritional panel to see if vitamin B12 is included.



✓ CALCIUM

Calcium is needed for nerves, muscles and building strong bones and teeth. Bone growth is high during childhood, so getting enough calcium during this time is important.

PLANT-BASED CALCIUM SOURCES

- **Dairy foods** (for vegetarians): cheese, milk, yoghurt, yoghurt dips
- **Calcium-fortified plant milks:**
 - **Fortified** soy milk is best. Check the label and look for 100-120mg of calcium per 100mL
- **Plant-based yoghurt:** **calcium-fortified** plant-based yoghurts (e.g. soy yoghurt)
- **Cereal:** **calcium-fortified** breakfast cereals
- **Tofu:** Tofu needs to be 'calcium-set' for it to be a good source of calcium. Look for 'calcium' in the ingredients list
- **Nuts & seeds:** almonds, brazil nuts, sesame seeds, tahini, chia seeds
- **Legumes:** all legumes, particularly chickpeas, white beans and pinto beans
- **Vegetables:** cooked broccoli, spinach, kale



✓ IODINE

Iodine is used for making thyroid hormones and helps keep our metabolism healthy. It is also needed for brain and bone health.

Foods: iodised salt, dairy products, eggs, fortified bread (unless marked 'organic' or 'no salt'), seaweed, seafood (for pescatarians)

✓ ZINC

Zinc plays a key role in our immune system and helps with wound healing. As zinc is poorly absorbed in plant-based diets, it's recommended that vegetarians and vegans eat 50% more zinc in their diet than non-vegans/vegetarians.

Foods: dairy products, fortified cereals (check the label), nuts, tofu, miso, legumes, sundried tomatoes, wheatgerm and wholegrains

✓ OMEGA-3 FATTY ACIDS

Omega-3 fatty acids are needed for nerve, brain and cardiovascular health. Plant-based sources of this nutrient are very poorly absorbed. Those not consuming fish often or on a strict vegan diet will require supplementation.

For pescatarians, the main source of omega-3 comes from oily fish (e.g. sardines, salmon, tuna).

Foods: flaxseeds/linseeds, chia seeds and omega-3 fortified margarines/spreads.



If you choose to provide a vegetarian or vegan diet for your child, remember:

Key nutrients are harder to obtain in these diets. Some nutrients found in plant foods are poorly absorbed and used less effectively in the body. Because of this, your child's nutrient targets may be higher than normal. This is especially true for iron, calcium, vitamin B12 and zinc.



Meals and snacks must be offered regularly to help babies and children meet their very high energy and nutrient demands.

Plant protein foods can contain less types and amounts of essential nutrients needed for growth and good health. Offering a variety of plant foods in your child's diet is crucial.



Children may need regular blood tests to check they're meeting their nutrient demands. But did you know some nutrient deficiencies can't be shown in a routine blood test? This is why it's important to seek advice from your doctor and dietitian to help maintain your child's nutritional status and start supplementation if necessary.

If replacing cow's milk with a plant milk alternative, calcium-fortified soy milk is the best choice. If a lower protein or lower fat milk alternative is given, make sure your child's protein and fat intake are being met from other foods.



TIPS:

- Aim for 2 protein foods per meal
- Buy seeds and nuts in bulk to save cost
- Focus on wholefoods over processed foods – these are more nutrient-dense. Try swapping biscuits with roasted chickpeas or edamame beans for snacks.
- Sprinkle seeds into your child's meals. Add them to toast, cereal, in smoothies or on yoghurt.
- Try a new vegetarian or vegan recipe each week to help with diet variety.
- Stock your cupboard with different cans of legumes & beans. These can be strained & easily added to salads, stews, tacos, lasagnes and more family favourites!
- Choose wholegrain options. These will include more of the nutrients needed in a plant-based diet

