### - Children—nutrition

# Raising healthy children

The Sun (Malaysia) · 2 Aug 2022 · 9 · By Adelyn Loo Adelyn Loo is with the Malaysian Vegetarian Society. Comments: letters@thesundailycom

IS plant-based diet safe and healthy for growing children? Will my child get enough nutrition on plant-based diet? My children are young, where will they get their protein, iron and calcium from? These are common questions raised by many parents who are new to this organic way of eating and viewing food.



The world's largest organisation of nutrition professionals, the Academy of Nutrition and Dietetics, says that vegan diets are appropriate for all stages of the life-cycle, including infancy, childhood and adolescence.

The Academy of Nutrition and Dietetics in 2016 also endorsed that "appropriately planned vegetarian, including vegan diets are healthful, nutritionally adequate and may provide health benefits for the prevention and treatment of certain diseases".

The key here is a well-planned meal. As a parent to an 11-year-old boy, well-planned meals are essential for growing children, whether it is plant based or any type of diet a parent decides to raise their children on. One should ensure that all meals contain sufficient nutrition.

# Health benefits

I was not raised as a vegetarian nor vegan, and had little knowledge about this diet even though vegetarian is a common religious practice among the Chinese.

In 2017, I decided to give up my favourite food, which consisted of fish, cheese, butter and yogurt, upon learning that these foods do not provide many benefits to my health.

As I conducted an in-depth research, I learnt that plant-based diet is rich in phytonutrients, vitamins, minerals and fibre, which are often lacking in a typical Malaysian diet. I did not wait long to switch my son, who was then seven-years-old, to a plant-based diet.

It did not take him long to adapt and accept this radical change because he was also given the opportunity to learn about foods that he ate and the nutrition he was getting on his plate.

Plant-based foods come in a variety of colours, flavours and textures that provide a broad nutritional experience for children. Along with this, our family was also able to learn valuable life lessons, such as environmental stewardship and compassion towards living beings.

My concerns for nutrition intake are no different from other parents raising their children on meat-based diet. Young children should be introduced to a wide variety of plant-based foods at an early age. Many books and parenting classes have taught us to introduce mash vegetables and fruits, assorted beans and grains when a baby starts weaning, hence, there must be great benefits in these foods.

Furthermore, the Centre for Disease Control and Prevention recommends five or more servings of fruits and vegetables per day. According to the Malaysian Dietary Guidelines, vegetables and fruits now form the base of the Malaysian Food Pyramid.

Most Malaysians, both adults and children, do not come close to meeting the recommended amount, with some not even having one serving a day. Usually a plate of chicken rice comes with rice, a portion of chicken, few slices of cucumber and a few sprigs of coriander for garnish. Yet many just eat the rice and chicken and leave the cucumber and coriander leaves.

The same scenario can also be seen in children, where they would pick out the greens from their plate because they are not used to eating vegetables. Would these children on non plant-based diet get enough nutrition? What more, with them exposed to junk food and processed food since young? The common question I am often asked by many adults is, "do plant-based foods have proteins, iron, calcium, Omega-3 Fatty Acids and Vitamin B12?" A well-planned plant-based diet can provide children with the key nutrients and calories they need to grow and thrive.

However, we need to realise that there are certain nutrients which are naturally lower in plant-based diet. Similarly, there are nutrients that are lower in meat-based diet compared with plant-based diet, for example fibre, Vitamin C, to name a few.

Hence, when raising children on plant-based diet, care is required to ensure that they get adequate amount of nutrients.

How much protein does a child need?

Protein is an important macronutrient for building, repairing and maintaining bones, muscles, skin and blood. It also provides the building blocks for enzymes, hormones and vitamins.

Can our children get enough protein on a plant-based diet? Children who eat a variety of plant-based diet can easily meet the requirement of protein.

A healthy plant-based protein source includes beans, nuts, seeds, soy (tofu and tempeh), whole grains and vegetables. Almost every plant foods contain protein.

#### Calcium

Calcium is a mineral that is needed for the growth of strong and healthy bones. A common perception among non plant-based friends and family members is that children raised on a plant-based diet are generally smaller in size and weaker.

In general, children who are on plant-based diet may be smaller in size and tend to weigh less because the food they eat are nutrient dense and not high in calorie or fats. This does not mean they will have stunted growth, are weaker or have unhealthy bones.

So, without dairy, where can children get their calcium? Broccoli, kale, tofu, soy milk, almond milk, tahini, beans are all excellent sources of calcium.

According to the Pediatric Plant-based Nutrition Quick Start Guide published by the Plantrician Project, one cup of tofu can meet the daily calcium requirement of a pre-schooler.

Interestingly, the guide also points out that studies have not shown a strong link between how much calcium we take and how strong our bones are. Children should get strong, healthy bones through play and physical activities everyday, combined with sunshine for adequate Vitamin D, to help calcium absorption.

Omega-3 Fatty Acids

Omega-3s are essential fatty acids vital for brain development, maintaining heart health, kidney function, eye and skin health. Physicians Committee for Responsible Medicine explains that plant-derived Omega-3s come in the form of alpha-linolenic acid (ALA), which is the only essential Omega-3 Fatty Acid.

Our bodies cannot synthesise it, so we must consume ALA through our diets. The body naturally converts ALA into longer chain Omega-3 Fatty Acids, docosahexaenoic acid (DHA), which is import-

ant for brain health, and eicosapentaenoic acid (EPA).

Fish contains both DHA and EPA. But that does not mean that those following plant-based diets are deficient in these longer chain Omega-3s. So, what should we feed our plant-based children? Omega-3 Fatty Acids is available in a variety of plant foods including walnuts, flaxseeds, chia seeds, hemp seeds, edamame, seaweed and algae.

Consider plant-based supplement

A common perception is that a plant-based diet may lead to deficiencies in Vitamin B12 and iron. These nutrients are essential to prevent anaemia and nervous system damage. Common beliefs are it can only be found in animal and milk products.

However, iron deficiency is common among children and adults, even for those on a non plant-based diet due to malabsorption. Iron-rich food should be paired with Vitamin C-rich food to enhance absorption. This means, eating iron-rich food with strawberries or citrus will boost the absorption of iron into our body.

Children on plant-based diet should include plenty of beans, chickpeas, lentils, tofu, pumpkin seeds, sesame seeds and nut butters, which are high in iron content.

On the other hand, Vitamin B12 does exist in some plant-based foods such as fortified cereals, nutritional yeast, fermented foods and some fortified plant-based milk.

Supplementation of Vitamins B12 may be necessary as most experts agree that this is the most reliable way to ensure adequate B12 intake. Get expert advice when considering plant-based supplements for the right amount and type of supplements. And seek consultation with doctors, pediatrition, nutritionist and health coaches who support and practice plant-based eating.

Eating a whole plant-based food with your family is rewarding, healthy and easy. For most people, including me, making the personal change and moving the family towards a plant-based diet can be overwhelming, especially in the beginning. Transitioning and getting everyone on-board, especially when it involves older children, can be challenging. But knowing that children raised on plant-based diet will set them for a lifetime of good health makes it worthwhile.

Interesting tips: 1. Keep fruits and vegetables accessible

Keep washed and cut vegetables and fruits easily available for after meals or as snacks. Make it a point to make the food presentable and pleasing to the eye because our eyes eat first! I use healthy fats like nuts, hummus, plant-based creams, nut butter, and even dark chocolate to add flavours to our food and as healthy treats.

## 2. Choose what works for your family

Your family may have chosen to go plant-based for several reasons – for health and wellness, the environment, animal welfare, or a combination of these. It is helpful to speak to your children about the why(s) and how. I find that watching documentaries and discussing about the content together help too.

### 3. Explore new foods together

Exploring new food can be exciting for most children but some can be sceptical. Check out plant-based cuisine restaurants around your area and try out your favourite dishes prepared using plant-based ingredients. Also, try different cuisines available in the plant-based menu.

# 4. Get children involved

Food preparation can be fun for children. Most of the time, children get excited and are willing to eat everything they make themselves. This will also provide them an opportunity to learn about the food they eat and the nutrition on their plate.

In a nutshell, children who are raised on a plant-based diet naturally eat more fruits and vegetables, legumes, beans, grains, nuts and seeds. These are foods associated with a life-long of good health.

Last but not least, plant-based diet allows children to put into practice compassion for animals, as well as keep a sustainable healthy planet for the next generation.

According to World Wide Fund for Nature, adopting a plant-based diet can reduce food-based greenhouse gas emissions by at least 30%, wildlife loss by up to 46%, agricultural land-use by at least 41% and premature deaths by at least 20%. This is something we can do several times a day, just through our food choices, to lower the environmental impact.