



Consuming

- Mostly plant based meals with fresh ingredients, homemade and where possible locally grown
- A wide variety of vegetables and some fruits
- Healthy fats
- Whole grains
- Lots of herbs and spices

Limiting

- Meat
- Sugar
- Alcohol

And removing

- Processed foods and fast food
- Refined CHO and sweetened drinks

Let's go into this in slightly more detail.

Protein and being mostly plant based

Protein is made up of amino acids, they are the building blocks of life. Every living thing has some amino acids in it, even broccoli. There are 20 amino acids; 9 are essential as our body cannot make them, therefore we need to consume those 9 essential amino acids every day. The term 'complete protein' means it contains all those 9 essential amino acids (it may also contain some of the non-essential ones too).

Complete proteins are:

- Meat and fish
- Eggs and dairy
- Quinoa, amaranth, chia seeds, buckwheat, hemp and soy products

Pulses, legumes, brown rice, flax seeds, and other nuts and seeds are almost complete proteins. You can combine non-complete proteins together for complete protein intake. They do not have to all be at the same meal, just over the course of a day's eating. This is why we do not need to eat animal products every day whilst still able to ensure our protein needs.

Examples of Complementary Proteins – it is important to look at what amino acid is missing to work out pairing¹, but some classic examples would be:

- Rice and beans
- Hummus and pita bread

¹ <https://www.nomeatathlete.com/vegetarian-protein/>



- Legumes with nuts or seeds
- Or add in a complete protein like quinoa or eggs.

Another reason for eating more pulses is their fibre content. This feeds our gut microbiome which supports our immune system, improves gut motility, plus all the vitamins and minerals they provide.

A note on soy products:

Soy is a massively over-produced crop that is now processed very differently than it was originally in South East Asia. The by-products of tofu e.g., soy milk, was not consumed in large amounts as it is now with soy yogurts, milks on cereal, in lattes etc.

Fermentation of this bean makes it much more digestible.² If consuming a soy product regularly, fermented is fine i.e., tempeh, miso or soy sauce but otherwise always go for organic and limit things like tofu to 2 x week.

The menu for the school has a limited amount of tofu in it and we try to use tempeh where possible instead. Coconut yogurt is used in place of soy yogurts for dairy free options.

Vegetables

We want to be eating a rainbow of colour every day; red, yellow, green, purple, and white. We want to eat an unlimited supply of greens, preferably at every meal.

Cruciferous and alliums are important, we should be eating lots of these daily.

Ensure that you eat some *raw* cruciferous every day for the sulforaphane³, a major antioxidant, sulforaphane is easily destroyed by heat⁴. This is easy to do if you add a cruciferous rich salad of rocket, watercress, radish and spring onion! Or make a slaw with cabbage, radish, shallot, carrot and fennel.

Alliums are needed for their sulfur compounds and quercetin, a major antioxidant⁵. You can find these in garlic, onions, shallots, leaks and even spring onions and chives, easy to add these into your daily meals.

Healthy fats

Healthy fats are essential for our brain, hormones and our cell walls to function properly. If we consume too much 'bad fat' e.g., trans fats, or fats that have been oxidised like fried foods, this may create inflammation⁶. Most of the dishes on the school menu are baked rather than fried to reduce this impact on the children's health.

² <http://www.whfoods.com/genpage.php?tname=dailytip&dbid=291>

³ <https://www.nature.com/articles/s41598-017-14520-8>

⁴ Yuan GF, Sun B, Yuan J, Wang QM. Effects of different cooking methods on health-promoting compounds of broccoli. J Zhejiang Univ Sci B. 2009;10(8):580-8

⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4926454/?fbclid=IwAR2YSpZRWNrQAVSpTeq1c-cZ_uZWfvuXc5CGpPBjPCC1YnMw-p9liTwpjKQ

⁶ <https://openheart.bmj.com/content/5/2/e000898>



We need to be consuming a broad range of healthy fats to help our brain to function optimally, for concentration and for learning. For this we need omega 3 fatty acids and choline:

Plant based sources of omega 3:

- Chia seeds, hemp seeds, flax seeds and walnuts

Choline

- Eggs, soy products, cruciferous vegetables, beetroot, rye and bulgur wheat, buckwheat and quinoa⁷.

The school ensures there are lots of the other healthy fats in the menu:

- Olive oil rich in polyphenols
- Coconut
- Avocado
- Even Butter is fine, so long as it is good quality, organic or grass fed and in small amounts. Margarine is not healthy⁸; it is a highly processed oil that ends up grey then is dyed yellow to make it appetising.

Herbs and spices

Herbs and spices are full of volatile oils and polyphenols that work on our anti-inflammatory pathway⁹, we use a lot of them in the school's menu to freshen dishes and add flavour. All of these beautiful flavours add so much more to meals, they are power houses of vitamins, minerals and bioactives (antioxidants and anti-inflammatories)¹⁰.

- Rosemary, basil, thyme, coriander etc. all contains volatile oils that benefit our health.

Other dried herbs and spices are easy to incorporate into our cooking.

- Turmeric in particular works as an anti-inflammatory, an antioxidant and as an antibacterial.¹¹
- Cinnamon helps uptake of blood glucose to cells and sweetens food.
- Cumin and other spices can calm the digestive tract, lower inflammation and more.

⁷ https://chrismasterjohnphd.com/tools/2019/04/17/the-choline-database?fbclid=IwAR0f9HyF2l7t2x8_-xHkehl9pz2e3hXK3HYkOMbTycbY1UZ2as9XA9Ryrww

⁸ <https://www.healthline.com/nutrition/butter-vs-margarine#benefits-of-butter>

⁹ <https://pubmed.ncbi.nlm.nih.gov/21118053/>

¹⁰ Ninfali, P., Mea, G., Giorgini, S., Rocchi, M., & Bacchiocca, M. (2005). Antioxidant capacity of vegetables, spices and dressings relevant to nutrition. *British Journal of Nutrition*, 93(2), 257-266

¹¹ <https://pubmed.ncbi.nlm.nih.gov/31622191/>