

Great (British) foods to build your natural resistance. Please Share!

Most of the following 'down to earth' great British foods have a firm evidence-base for key health benefits. Other novel foods mentioned have fabulous potential for health, but without enough evidence yet to make specific claims. All can be part of a balanced diet = more plant-based, with fish twice a week minimum (at least one portion oily) inclusive of some red meat and dairy (or suitable alternatives for vegans and vegetarians) and as such have key benefits for our immune systems too.

Helpful foods suggested and a handy list of tips at the end ©

1. Vitamin D supplement 10 mcg daily, all age groups and pregnancy.

95% of our Vitamin D comes from the action of direct sunshine on our skin, so our stores are always low after the winter. Vitamin D is required by our immune cells in addition to its better-known role regulating calcium. (For healthy adults, 25mcg/ 1000IU is still well within the maximum safe daily dose.) Available in all pharmacies. If you already take a multivitamin or similar, check for its Vitamin D content.

2. Fibre (Natural prebiotic for Gut Health)

Over 80% of the cells which make up our immune system are located in the wall of our intestine. Gut bacteria here support a well-developed immunity. Fibre is a type of carbohydrate that can't be digested in the small intestine, passing instead to the colon (large intestine). Here it provides fuel for billions of these beneficial gut bacteria, which ferment it to produce many compounds essential for our everyday metabolism and the correct functioning of our gut wall. Collectively known as our 'Microbiome' and with 150x our own genetic makeup, our microbiome is to be nurtured! Our gut bacteria also have an important role activating antioxidants in some foods which are also beneficial in boosting our immunity.

Skin-on Veg and Fruit, Nuts, Seeds, grains like Oats and other Wholemeal Cereals, Brown & Wild Rice, Wholemeal Pasta, Quinoa, Beans, Peas and Pulses like Kidney & Fava beans, Chickpeas & Lentils.

3. Fermented Foods (Natural probiotics for Gut Health)

These foods have been fermented so are already brimming with good bacteria and their beneficial products of fermentation as described above.

Bio-live yogurt, Yakult, Actimel, Marmite, Vegemite, Sourdough (bacteria inactivated on cooking but beneficial fermented products still present), Blue cheese.

Less well known but wonderful! Sauerkraut, Kimchi, Miso & <u>Kefir - an ancient</u> fermented milk drink (meaning 'Live Long' in Turkish) bursting with billions of beneficial bacteria and yeasts. Now being made with British milk – UK suppliers below.

4. Fish!

Oily, pink fish are especially good choices as they contain Astaxanthin, an antioxidant and precursor to Vitamin A, both of which have a role in ensuring the cells of the immune system function correctly. Two types of Omega 3 in fish are also well known to regulate the immune system. (see below)

British trout (often good value), mackerel, salmon and even tinned sardines

5. Antioxidant-rich foods.

These micro-nutrients constantly protect us from cell damage by removing potentially harmful by-products of our 'everyday' metabolism. This ensures our cells are able to function correctly. As the immune system has many different types of cells with many different functions, antioxidants are essential. We make our own antioxidants but when our need is increased, extra from our food is a great help.

Brassica vegetables like Sprouts, Watercress, Broccoli, Cabbage, Kale and Cauliflower, colourful fruit and veg like Carrots, Tomatoes, Beetroot & Sweet Potato, Spinach Blueberries, Blackberries & Apples (skin on). Pink Fish. (Happily - Dark Chocolate, Red Wine[©], Tea, Coffee and also Green tea, Matcha tea, Turmeric and Olive Oil)

6. Vitamin C.

Our immune system has a high demand for energy due to constant cell multiplication and the movement of these immune cells to potential infection sites around the body. Vitamin C has a key role in making the energy in our food available for our body cells. Vitamin C also enables immune cells to kill germs and recover afterwards and is important in the chemical signalling which attracts immune system cells to the area in the body that needs them. We also need Vitamin C to make our own antioxidants.

Tomatoes, Watercress (weight for weight more than an orange!), Spinach and other green vegetables, Potatoes, Oranges and other Citrus fruits, Berries, Peppers, Kiwi & British Sea Buckthorn – see note at end.

7. Vitamin A. Essential to ensure immune cells are able to function correctly as well as providing 'barrier' immunity within the mucosa of our gut wall and airways.

Meat, oily Fish, Poultry, Dairy (especially whole fat as this is a fat-soluble vitamin), Liver and Kidney, Carrots, Sweet potatoes, Watercress and other leafy greens, Tomatoes.

8. Vitamin E. This fat-soluble vitamin is an important part of cell membranes and has a *vital* antioxidant role. More recently it's been associated with improved immune responses with increasing age.

Cold Pressed vegetable oils especially Rapeseed oil, Cod liver oil, Olive Oil, Nuts especially Almonds and Seeds, Wheatgerm, Potatoes, Green Leafy Veg, Fats and Spreads and fortified Breakfast Cereals.

9. Unsaturated Fats; Omega 3 and 6

Both of these in the right balance have many health benefits including essential regulation of the immune system. Two types of Omega 3 are especially important and

abundant in oily fish. Plant Omega 3 however needs to be converted by our bodies into these two forms already in fish, before we can get the same benefit, so non-fish eaters need a lot more from plant sources. (and most plants contain much more Omega 6)

Omega 3: Oily fish like trout, salmon, mackerel & sardines. Plant Omega 3: Rapeseed oil (also great for cooking as not denatured at high temperatures), Flaxseed, Walnuts, Almonds, Hemp and Algal oil.

10. Iron.

Iron is used by our body cells for every energy-zapping process. The immune system has a high requirement for energy and iron stores can easily become depleted during growth and pregnancy or intense sport training programs. Top Tip for non-meat eaters – Iron in plants (non-haem iron) is poorly absorbed by our body as it's in a different form to that found in meat (haem iron). Vitamin C and A convert this plant iron into a much more absorbable form so always make sure you have foods rich in Vitamin A and C in the same meal. (see above)

Red Meat (once weekly) Watercress & other Green Leafy Veg, fortified Breakfast Cereals, Quinoa, Wheatgerm, Bran, Tomatoes, Lentils and pulses.

11. Folic Acid (Folate) and Vitamin B12

Both of these are needed for the normal functioning of the immune system. Folate supplements are recommended before and during pregnancy when demand doubles. (400mcg daily). Vitamin B12 deficiency can occur in older age as long-term medicines and changes in the lining of the stomach can reduce our ability to absorb it from our food.

Vit B12: Fish, Meat, Dairy, Eggs, Fortified Breakfast Cereals, Marmite

Folate: Fibre-rich food (see above) including Leafy Greens, Beans and Pulses. Fortified Breakfast Cereals, Breads and Eggs.

Keep calm, keep active, get plenty of rest, eat and hydrate well

Lucy Williamson info@lwnutrition.co.uk www.lwnutrition.co.uk 07966298899





References: 1. Valdes, A.M., Walter, J., Segal, F., Spector, T (2018) Role of the gut microbiota in nutrition and health *British Medical Journal*: **361** K2179 2. Card A.C., Maggini S., (2017) Vitamin C and Immune Function *Nutrients* **(9)** 1211; doi:10.3390/nu9111211

Tips & new ideas for old British favourites!

Porridge – Add other fibre sources to the oats such as ground flaxseed, quinoa and bran and cook in the same way. Yogurt, fruit, nuts and seeds as toppers.

Kefir – 150ml half an hour before breakfast daily. <u>https://biotifuldairy.com/</u> <u>https://www.nourishkefir.co.uk/</u> Kefir grains also available to ferment your own milk!

Fish inspiration – pan fried trout 2 minutes each side then add some lemon juice. Kedgeree, fish pie, fish cakes, fish fingers, mackerel pate, 'hot smoked' salmon/ trout flaked onto warm potatoes with watercress and mayonnaise or even on pizza with a green pesto base!

Quinoa Boil with twice as much water for 10 minutes then leave off heat with lid on for a further 10 minutes. Add to couscous for a quick lunch: mix with chopped salad, sundried tomatoes & soft cheese or tinned fish, nuts & seeds. UK grown: <u>https://hodmedods.co.uk/</u>

Wild rice – cook in with ordinary rice for added fibre.

Beans, peas and pulses - add to Bolognese, casseroles & salad lunch boxes.

Watercress soup – fast version = blitz plenty fresh watercress with cooked peas a little water, and season. Heat, then serve. Many more recipes here: <u>https://www.watercress.co.uk/all-time-top-ten-watercress-recipes</u>

Fermented ideas – add Miso to stir fries for instant flavour (or try British grown Hodmedods Fava bean Umami paste), Kefir as above, Sauerkraut/ Kimchi as a side dish, Marmite on toast, Soak porridge oats overnight in milk – both begin to ferment, increasing their gut health benefits. Sourdough, delicious toasted and a great after-school snack.

Eat more veg by adding to smoothies: Carrots, beetroot and raspberries or watercress, frozen peas and tinned pears! Add milk/ kefir, oats, a few nuts, honey or chopped dates.

Homemade Pesto – eg Spinach +/or Watercress or other leafy greens. Blitz with walnuts, parmesan and olive oil. Great quick flavour and concentrated nutrients when added to pasta, beans and pulses, quiches and pizza.

These, and other high-fibre recipes here https://lwnutrition.co.uk/recipes/

Sweet Potatoes – bake whole then top with cottage cheese (left-over roasted sweet potatoes are great in salads for lunches) or add to casseroles, bolognese and curries.

British Seabuckthorn – fabulously nutrient-rich, lovingly grown in Essex, add just a few berries to smoothies or on bowls of porridge. <u>https://www.britishseabuckthorn.com/product/wholesale-frozen-berry-sales/</u>

Cold pressed Rapeseed Oil: <u>https://hillfarmoils.com/</u> Olive Oils: <u>https://www.oilvinegar.com/en-gb/</u>