

Food News

Volume 9, issue 6

June 2023

Welcome to Food News. With World Environment Day being on 5th June 2023 we thought it would be fitting to cover a 'truth or myth' feature on sustainable eating in this months issue.

We also look at improving the dining experience for people living with dementia. As always, we will take a look at what foods are currently in season and discuss a topic that has been in the media recently – the supply, or lack of, fruit and vegetables and how this could lead to raised blood pressure.



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Warwickshire Food Forum

Food News is produced by the education & choice subgroup of Warwickshire Food forum.

The forum is a multi-agency partnership aiming to improve food choices for people in Warwickshire.

The focus is on making food affordable, sustainable and providing information to help people make healthy choices. The group will also ensure that there is Warwickshire wide help for people who have difficulty affording food.

Truth or Myth Is a plant-based diet really more sustainable?

Yes—there is no denying that the evidence shows that a plant-based diet is more sustainable for our planet than a diet rich in animal produce. However, there are other things which also need to be considered, even with a plant-based diet, to reduce the negative impact we have on the planet.



Sustainable diets are those that; have low environmental pressure and impact, being respectful of biodiversity and ecosystems, are accessible, affordable, safe, nutritionally adequate and culturally acceptable, whilst also optimising natural and human resources to protect the present and future generations— as defined by FAO and WHO.

Omnivore diets (those that include meat) have the highest carbon footprint of all diets, when compared to flexitarian (reduced meat intake), pescetarian (includes fish in the diet but no meat), vegetarian (includes eggs and/or dairy but no meat or fish) and vegan diets (includes no products from animal sources of any kind). Whilst a vegan diet is believed to contribute 75% less greenhouse gases (GHG) than an omnivore diet, reducing your intake of meats to include some vegetarian days (flexitarian) can reduce GHG contributions by 40% - highlighting the importance of Western diets moving away from daily meat consumption, especially where meat is consumed at most meals. This means you don't have to cut out all animal produce to help our planet out.



Food production contributes to up to 33.5% GHG emissions globally, with approximately 65% of this coming from livestock farming (beef in particular) or production of feed for livestock. Whilst some meat eaters may argue that they only purchase meat from local suppliers to be more sustainable, most of the carbon footprint occurs at farming level and therefore the small reduction in GHG emissions from reduced transport and packaging is, of course better but, still not enough to significantly reduce the overall impact on the environment. Even the “greenest” sources of meat still produce more GHG than plant-based proteins.

In addition to GHG emissions, food production also contributes to 50% of available land use, 70% of available freshwater use, 78% of eutrophication (a disruption to the biomass in a body of water which can be detrimental to aquatic habitats) and 86% of biodiversity loss from farming. Livestock farming is also one of the leading causes of deforestation (land use), soil and water pollution, water use and produces more GHG's than any other food product.



Clearly, amongst production, distribution and our overall food consumption our current food system is not sustainable and needs improving. Based on the BDA One Blue Dot Report and the EAT-Lancet Commission here are some tips on how to make your diet more sustainable:



- Limit red meat as much as possible— switch to some plant-based sources of protein including soya products (tofu/tempeh), legumes, beans and lentils. If you don't want to cut meat out altogether, try reducing your intake by mixing lentils or soya mince or mycoprotein mince with minced meat, and opting for local meat/poultry/fish with sustainable farming practices in place.

Truth or Myth Is a plant-based diet really more sustainable?

- Try having some meat free days every week.
- Buy local fruit and vegetables and eat seasonally as much as possible. This ensures less transport (air/road/ship miles), less packaging and less use of chemicals to optimise growth in less favourable conditions.
- Consume dairy in moderation– You may wish to use dairy alternatives. A range of plant-based milks are now widely available from milk delivery services in reusable glass bottles, reducing single use plastic and Tetra Paks (of which the latter are very rarely recycled).
- Where possible drink tap water. All other drinks have a higher carbon footprint and contribute to plastic/packaging use.



- Prevent waste! Almost ten million tonnes of all food produced is wasted in the UK every year with the majority (71%) occurring at home and 60% of all food waste being avoidable. Food waste should be recycled where possible either through collection services or composting– however, minimising food waste is all together more effective. Food leftovers can be added into dishes (add that left over carrot to your Bolognese sauce for example), or recipe generators can be looked at to base a meal around ingredients you have left (such as those found at lovefoodhatewaste.com). And if you regularly have left over portions of meals that you don't eat then consider services that promote delivery to elderly neighbours (mealmakers.org.uk). Other ways to reduce food waste:



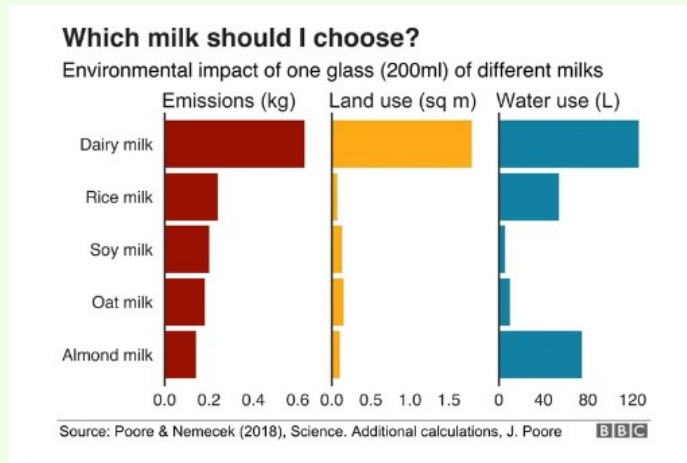
- Weekly meal plans, especially if keeping to a shopping list.
- Batch cooking and freezing meals.
- Using tinned and frozen fruit and vegetables if you're unlikely to use full portions of their fresh equivalent.



Of course, plant-based foods don't come with 100% sustainable guarantee. Air-transported fruit and vegetables can create more GHG emissions per kilogram than poultry meat. In April's edition of Food News (volume 9, issue 4), we discussed how avocados can have a negative impact on our environment and they're not alone. When local foods are out of season or exotic foods are wanted in areas they'd never naturally grow, they are flown in from other continents and come with a much bigger carbon footprint than locally grown produce. Some fruits and vegetables require a lot of water to grow, plus storage conditions and packaging are also factors that can contribute to heavy carbon footprints. The secret is shop **local and seasonal!**

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According to the WWF, soy is the second largest agricultural driver of deforestation worldwide after beef, however, only 6% of soy is grown for human consumption in products such as soy milk, tofu and edamame, while roughly 81% is grown to feed livestock, mainly cows, pigs and chickens. When it comes to deforestation, soy accounts for just a fraction of Amazon deforestation compared with 80% for cattle farming.



Above shows the environmental impact of different milks. Whilst rice and almond milk use more water than other plant-based milk, it is still lower than cows milk and have much lower land use and emissions.

Not only are plant based diets more environmentally friendly they are also known to have health benefits as many plant-based proteins tend to be higher in fibre, have improved fat profiles and lower energy density (excluding some ultra-processed products) and therefore can help to reduce some health burdens associated with current Western diets, including cardiovascular disease and type 2 diabetes. In addition to this, in the midst of a food price crisis, plant-based proteins are generally less expensive than their meat based alternatives, saving you money along the way too.



It is clear that our government also needs to encourage change to save our planet, suggestions have included: more dietary guidelines addressing plant-based protein, iron and calcium sources to help people to make more sustainable choices, considering policies such as carbon taxes (similar to the sugar tax but for foods with high carbon footprint) and subsidies on foods with lower carbon footprint, addressing current unsustainable farming practices (including monoculture farming) and support for soil regeneration and regenerative farming.

In short, reducing our intake of animal products will protect our planet, as well as our own health, and should be encouraged, however big or small the reduction is.

Dementia: how the dining experience can make a difference

Dementia is a progressive disease affecting cognition. As dementia progresses, the risk of malnutrition becomes greater as it can affect appetite and nutritional intake. For some, their awareness of hunger and thirst diminishes and therefore meals may be missed and insufficient fluid taken in, whilst others may experience changes in their taste and smell; foods which used to be enjoyed may no longer be liked, resulting in unfinished meals or complete refusal. Preparation of food, and even the ability to use cutlery, can become more challenging. Chewing and swallowing may become more difficult, resulting in modified texture needs and a longer time needed to take foods and drinks. A person living with dementia may experience one of the above, but it is also possible to experience all of the above at some stage of the disease progression. Limiting the effect that this has on nutritional intake is imperative for preventing malnutrition. Here are our tips to do so:

1– Remove distractions.

Limit the number of distractions on the dining table such as flowers, patterned table cloths or any objects not directly needed for the meal. Coloured plates and cups have been shown to increase food and fluid intake through maintaining attention. Reduce background noise as much as possible, turn off the TV or radio.

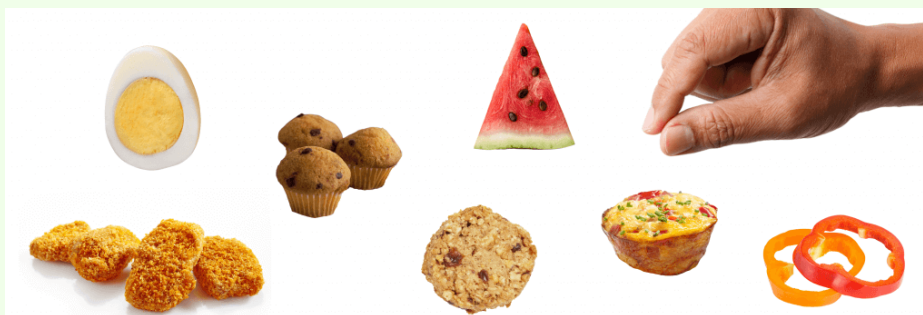


2– Allow sufficient time.

Most people living with dementia take longer to eat their meals. Try to be patient and allow sufficient time for them to finish their food. Serving food on pre-warmed plates or using insulated bowls can help meals stay warmer and therefore more palatable for longer.

3– Consider eating and drinking aids.

It is important to encourage independence for as long as possible and this can be achieved through tools to allow individuals to keep feeding themselves when using standard cutlery and other items becomes difficult. Non-slip plates, adapted cutlery, twin handled cups or spouted beakers can be important items to enhance intake. Some people find that they get on better with finger foods than foods requiring cutlery, particularly for those who like to be on the move and struggle to stay seated during meal times.



Dementia: how the dining experience can make a difference

4– Make meals look appealing.

All of us enjoy food more when it looks good, and that goes for individuals requiring modified texture foods, such as pureed meals, too. Pureeing foods separately so that they maintain their colour or using moulded modified texture meals can keep foods looking appealing and increase intakes.



5– Fortify foods.

When appetites are reduced and the volumes being eaten are less, it is important to make the most of what is eaten. Fortify foods by adding energy or protein dense ingredients to foods where possible, such as dried skimmed-milk powder to milk, double cream to soups, grated cheese to vegetables and potatoes, roasting vegetables in oil or adding butter after they are cooked.

6– Keep on top of oral hygiene.

Minimising the risk of gum disease, infections, tooth decay and challenges with swallowing can all be achieved by maintaining oral hygiene. Individuals may forget to, or how to, brush their teeth or may not be able to say when they feel pain or discomfort. Encourage and support teeth brushing and keep an eye on any signs of discomfort. Clean dentures daily and regularly check that they are still fitting correctly.



7– Get the timing right.

Some people living with dementia may eat well in the morning but then less so as the day progresses and they get more tired. On the flip, they may not sleep well and be more drowsy in the morning but come the afternoon be more alert and more interested in meals. Make the most of the times when individuals seem to eat best. If breakfast is a good time, why not offer a cooked breakfast as well as cereal or if someone eats well at night, offer a second pudding or a supper later at night.

8– Consider the surroundings.

Many people eat better in social situations and being surrounded by others. Therefore dining with other people, such as in dining rooms, may result in better intakes. However, this isn't the case for everyone. For some, the presence of other people may trigger anxieties or cause distractions and therefore eating alone or with just a 1-2 other people may be more successful. Learn what is best for the person you are caring for.



Remember, no two people are the same. If you are caring for someone with dementia try to learn what works for that individual best to create patient-centred care and maintain their dignity.

What's in Season?

Here is a list of what fruit and veg are in season in June

Fruit	Vegetables
Blackcurrants, Cherries, Gooseberries, Raspberries, Redcurrants, Rhubarb, Strawberries, Tayberries	Asparagus, Aubergine, Beetroot, Broad Beans, Broccoli, Cauliflower, Chillies, Courgettes, Cucumber, Elderflowers, Lettuce, Marrow, New Potatoes, Peas, Peppers, Radishes, Rocket, Runner Beans, Samphire, Sorrel, Spring Greens, Spring Onions, Summer Squash, Swiss Chard, Turnips, Watercress

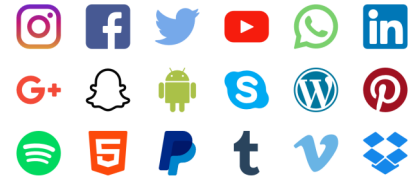
Cooking in season You'll notice these ingredients are more abundant in supermarkets and market stalls this month, so here is a tasty seasonal recipe to try.

Pasta with watercress and radish pesto (serves 4) -

Ingredients:

- Bunch radishes with leaves (about 275g), radishes finely sliced, leaves roughly chopped
 - 80g watercress
 - 70g pumpkin seeds, toasted
 - 70g parmesan or vegetarian alternative, finely grated
 - 2 garlic cloves, crushed
 - Grated zest and juice 1 lemon
 - 100ml olive oil
 - 300g pasta (shape of your choice)
 - 250g frozen peas
1. Put the radish leaves and half the watercress and any thick watercress stalks in a food processor. Add the pumpkin seeds, cheese, garlic, lemon zest and juice. Whizz to a paste, then tip in half the sliced radishes. Pour in the oil, season with salt and pepper, then pulse until the radishes are finely chopped.
 2. Cook the pasta in boiling salted water according to the packet instructions until al dente, adding the peas for the final 1 minute of cooking. Reserve a cupful of cooking water. Drain and return the pasta and peas to the pan, then stir in the pesto, adding enough of the cooking water to loosen so it coats the pasta. Divide among plates and top with the rest of the radish slices and watercress.
 3. Chill the sauce in a tub for up to a week, or freeze for up to a month.





What's in the media?

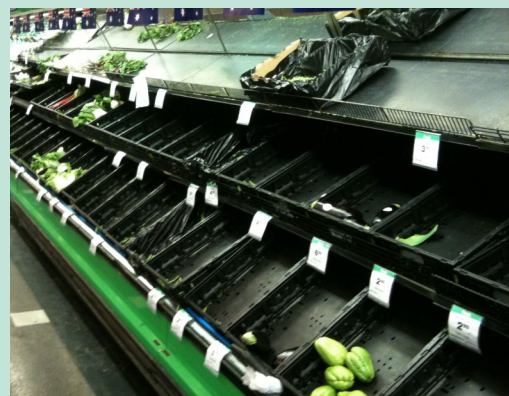
Fruit and vegetable rationing in the UK and the possible effect on blood pressure.

It is well recognised that low fruit and vegetable intake is a risk factor associated with raised blood pressure. As such, a senior lecturer in statistics at the University of Kent, Dr James Bentham and Dr Linda Oude Griep at the University of Cambridge analysed supply trends from 1975-2015 and examined whether they met the World Health Organisation (WHO) recommendations of 400g a day. They examined associations with fruit and vegetable supply and blood pressure across 159 countries and found that where there was increased availability of fruit and vegetables there were lower levels of raised blood pressure.

They highlighted that nearly half of the countries studied do not have access to enough fruit and vegetables and this is particularly a problem in low income countries, putting them at greater risk of raised blood pressure.

In last months issue we covered why food has become more expensive, which has in part been down to reduced availability. In the UK we have been very fortunate that rationing is not something that many of us have had to experience during our life times, therefore it has come as quite a shock to see empty spaces in supermarkets where fresh produce should lie but instead there is only a sign saying “sorry, temporarily out of stock” or else a rationing sign stating “only 2 per customer”.

Part of the supply issue in the UK has been down to available workers, logistics and extreme weather which could be a long term problems for our fruit and vegetable supply. This highlights the urgent need for national and international policies to expand fruit and vegetable productivity with the aim to ensure national food security, support access to healthy diets to optimise consumer health and enhance environmental sustainability.





Warwickshire eating and drinking for health group.

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If you have an interest in food , hydration and health, and would like to join the Warwickshire Food Forum, please contact the editor.

If you would like more information about any of the articles in this newsletter, please contact the editor who will pass this on to the author of the article.

References, further reading and resources

Sustainable Diets

Sustainable food production webinar at www.mynutriweb.com/sustainable-food-production-and-sustainable-land-use-systems-from-a-broad-interdisciplinary-system-perspective/

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Poore J and Nemecek T (2018) The Global impacts of food production. *Science*. 360 (6392): 987-992. Accessed at www.science.org/doi/10.1126/science.aag0216

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Dementia and dining

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Puree foods: www.wiltshirefarmfoods.com/about-our-food/softer-foods

What's in season

BDA Seasonal Fruit and Veg guide: www.bda.uk.com/food-health/your-health/sustainable-diets/seasonal-fruit-and-veg-a-handly-guide.html

Seasonal recipe from www.deliciousmagazine.co.uk/recipes/pasta-with-watercress-and-radish-pesto/

What's in the media

Fruit and Veg supply issues lead to raised blood pressure: www.kent.ac.uk/news/health-social-care-and-wellbeing/33244/fruit-and-veg-supply-issues-lead-to-raised-blood-pressure-study-shows

Oude Griep LM, et al (2023). Worldwide associations of fruit and vegetable supply with blood pressure from 1975 to 2015: an ecological study. *BMJ Nutr Prev Health.*; nutrition.bmj.com/content/early/2023/01/30/bmjnph-2022-000455