



Emily Caroline Nutrition
Registered Nutritionist



ULTRA PROCESSED FOODS



What are they and what do
we need to do about them?

@feeding.future.foodies

U L T R A
P R O C E S S E D

Emily Caroline
Nutrition

NEW YEAR NEW YOU?

The January new year resolutions combined with the current focus in the media of Ultra Processed Foods have combined to create an avalanche of food dos and don'ts. Influencers give us lists of ingredients which "must" be avoided at all costs; anxiety and concern about what we feed our children has never been higher.

Let's go back a few steps and look at exactly what ultra processed foods (UPF) are.

First up, it's important to know that processing food is essential. It combines ingredients into something safe to eat and it means we can safely store our food for another day. We can preserve the nutrients which would otherwise be unavailable due to food spoilage and in some cases can even enhance the nutrient value of a food (example: a phytochemical called lycopene in tomatoes becomes



easier for the body to use when tomatoes are cooked rather than raw).

In the recent past, researchers have sought to classify the level of processing that a food has undergone. There are several different scales but it is the [NOVA food classification system](#) which has been brought to the attention of the media.

There are four categories which are dependent on the level of processing a food has undergone.

Emily Caroline Nutrition
Registered Nutritionist



NOVA Food classification system

Group 1 Unprocessed or minimally processed foods

The first NOVA group is of unprocessed or minimally processed foods. Unprocessed (or natural) foods are edible parts of plants (seeds, fruits, leaves, stems, roots) or of animals (muscle, offal, eggs, milk). Minimally processed foods are natural foods altered by processes such as removal of inedible parts or to extend the life of unprocessed foods, allowing their storage for longer use, such as chilling, freezing, drying, and pasteurising. None of these processes adds substances such as salt, sugar, oils or fats to the original food.

Examples: Fruit, rice, lentils, meat, poultry, eggs, milk, fish, nuts, 100% nut butter, plain yoghurt, spices, herbs, tea, coffee, flour. All of these do not have added salt, sugar, oils.

Group 2 Processed culinary ingredients

The second NOVA group is of processed culinary ingredients. These are substances obtained directly from group 1 foods or from nature by processes such as pressing, refining, grinding, milling, and spray drying. Group 2 items may contain additives used to preserve the product's original properties.

Examples: salt (with or without added humectants), sugar, molasses, honey, vegetable oils (with or without added antioxidants), salted butter, corn starch

Group 3 Processed foods

The third NOVA group is of processed foods. These are relatively simple products made by adding sugar, oil, salt or other group 2 substances to group 1 foods. Most processed foods have two or three ingredients.

Examples: Canned vegetables, fruits and pulses with added salt/sugar; salted or sugared nuts and seeds; salted, cured, or smoked meat; canned fish; fruits in syrup; cheeses and unpackaged freshly made breads

NOVA Food classification system

Group 4 Ultra-processed food and drink products

The fourth NOVA group is of ultra-processed food and drink products. These are industrial formulations typically with five or more and usually many ingredients.

Include ingredients that you wouldn't find in your kitchen. The main purpose of industrial ultra-processing is to create products that are ready to eat, to drink or to heat, liable to replace both unprocessed or minimally processed foods that are naturally ready to consume.

Common attributes of ultra-processed products are hyper-palatability, sophisticated and attractive packaging, multi-media and other aggressive marketing to children and adolescents, health claims, high profitability, and branding and ownership by transnational corporations.

Examples: fizzy drinks, sweet and savoury packaged snacks, ice cream, chocolate, sweets, mass produced bread, margarine, biscuits, pastries, cakes, cake mix, breakfast cereal, energy bars, milk drinks, flavoured yoghurt, instant sauces, ready-to-heat products of all types eg pies, pizza, meals, fish fingers, instant noodles, sausages

Abridged from: <https://archive.wphna.org/wp-content/uploads/2016/01/WN-2016-7-1-3-28-38-Monteiro-Cannon-Levy-et-al-NOVA.pdf>

Fresh sweetcorn (Group 1) being sorted in a factory



Examples of processing

Group 2 are processed culinary ingredients eg sugar (not shown)

Group 1



Fresh strawberries

Group 3



Tinned strawberries in syrup

Group 4



Strawberry flavoured yoghurt



Milk



Cheese



Powdered cheese flavour sauce



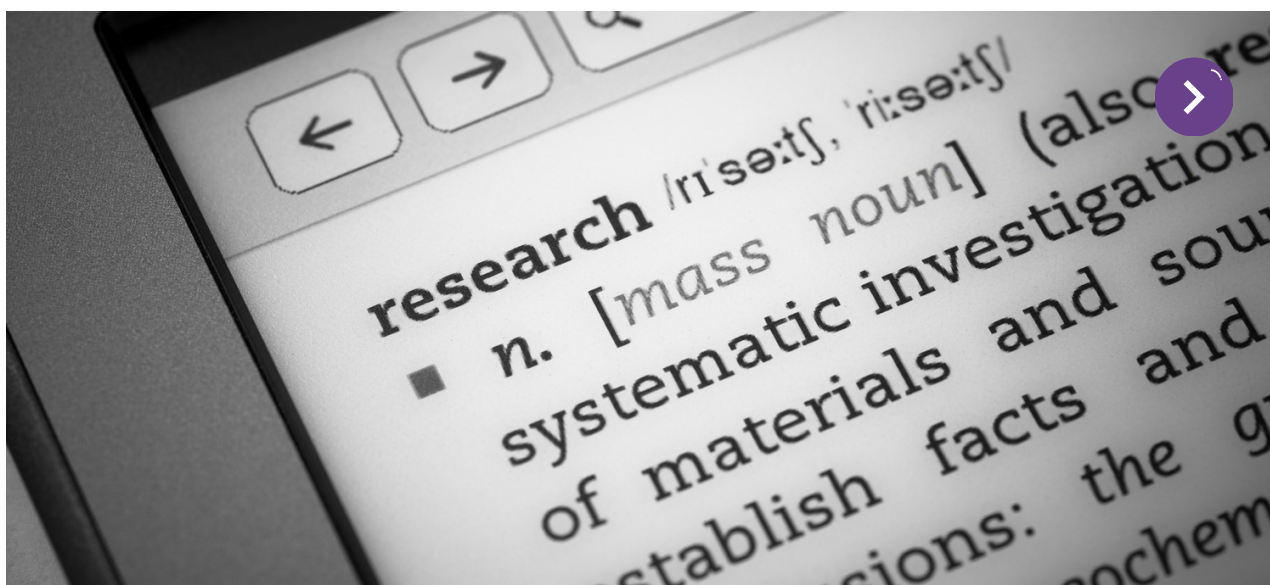
Flour



Using flour to make biscuits at home



Longlife cake



WHAT DOES THE RESEARCH SAY?

Recent studies in adults have found an association between eating higher amounts of ultra processed foods and increased risk of high blood pressure, cardiovascular disease, heart attacks, stroke and early death. So, it is clearly vital we take what we eat seriously. But do we know exactly why and how they affect us?

THEORIES

- We need more research to work out what aspects of the ultra processed foods may be having an adverse effect.
- There are several theories which include the fact that UPF are often 'hyperpalatable' (very easy to eat lots of), they often take less 'work' to chew than whole foods, they may have unbalanced nutrients when compared to whole foods, certain additives may affect gut health, the more processing a food undergoes may make the energy of the food more available to us, amongst other theories.

It is important to note that the studies are observational; this means the researchers look at what people ate over time and the levels of things like cardiovascular disease. This is different from the 'gold standard' in research which is a randomised controlled trial (RCT). A RCT means putting a large number of people into two groups, doing an intervention but neither the person or the researcher knows who is in which group (i.e., the group with an intervention or the placebo group) and then measuring the results. The recent UPF studies are not RCT so they can only show us an association, not cause and effect.

Are all ultra processed foods the “same”?



Back to the NOVA classification for a moment. At first glance, to me there are no particular surprises there. We ‘should’ all be cooking more from scratch when we can (but we live in the world we do and hardly anyone has the time or inclination to cook from scratch all day every day!). The current healthy eating guidelines say we should be eating nutritious, whole foods.

A lot of the examples listed in Group 4 UPF are what would be classified as HFSS foods anyway – High Fat, Sugar or Salt foods (think crisps, chocolate bars, biscuits, fizzy drinks) which we know are linked to less desirable health outcomes.

THE ISSUE COMES WHEN YOU TAKE A DEEP DIVE AND LOOK AT INDIVIDUAL FOODS TO WORK OUT WHERE THEY COME ON THE NOVA SCALE

Mass produced bread comes out as Group 4 UPF but there is an incredibly vast array of breads available on the supermarket shelves, from high fibre with added healthful nuts and seeds to a lower fibre, less nutritious loaf. Are they really all the ‘same’ according to this classification if they are very different nutritionally?

It may be ‘better’ to always make your own bread but that involves time, planning, the cost of a bread maker, storing a bread maker and so on. It is perhaps not realistic for many of us to make our own bread 100% of the time.

Baked beans and houmous come out as Group 4 UPF but you could argue that they are both incredibly nutritious foods as a source of fibre, plant based protein and plant based iron too.

White flour is Group 1 Unprocessed or minimally processed foods – but we know that wholemeal flour has more fibre and eating plenty of fibre is associated with a lower risk of heart disease, stroke, type 2 diabetes and bowel cancer. Is making your own bread with white flour really ‘better’ than a wholemeal prepacked loaf?

Breakfast cereals are Group 4 UPF but may provide children with a good amount of fibre, vitamins and minerals (depending on which one is chosen).

SO WHAT SHOULD WE DO?



I don't have all the answers and I know that issues in nutrition are rarely clear-cut. Sometimes I wonder if in fact there are two categories within Group 4 – products that are UPFs but that are nutrient rich and then UPFs which are HFSS products? Could it be that we just need to think more about the food we buy and intentionally choose foods that serve us? What about if when we have time to cook from scratch we try to do that more often and when we are overwhelmed and have less capacity, we buy more processed items to help us get the family fed?

- In the world we live in, it's often not realistic that every meal is cooked from scratch. We are busy and we need dinner on the table quickly.
- If we start tracking food labels and switching one product for another we run the risk of becoming stressed, anxious and obsessive about food.
- We definitely need to avoid discussing this in front of children – they don't need to take on our anxieties about UPFs. Children learn best by what they see/ what we feed them every day rather than us lecturing them.
- Although the NOVA system isn't 'perfect', it's the best we have at the moment.

FOOD FOR THOUGHT

If we swap one brand of supermarket biscuits for another brand that has fewer ingredients but is similar saturated fat and added sugars, are we really offering a 'healthier' biscuit? Or should we be thinking about how many times a week we should be serving biscuits anyway, plus what we can add alongside a biscuit to add nutrients eg plain yoghurt and fruit?

Does a ready-to-heat 'Salmon en croute' from the supermarket really mean that we are less 'healthy' for using an ultra processed food? Or are we healthier for eating our recommended weekly portion of oily fish which we know has fatty acids that are known to be beneficial for heart health?

TOP TIPS

Taking everything that I've said so far into account,
here are my top tips

Focus on food groups and making sure that you are serving them in the right proportions each day. For example, young children (1-4) need veg/fruit five times a day, a range of carbs five times a day, protein foods twice a day, dairy foods three times a day. When you look at their food like that, there tends to naturally be fewer HFSS foods served as you're busy focusing on meeting their nutrient targets.

Find ways of learning to enjoy more vegetables, more often. Think about cooking them in different ways and adding a little oil/fat plus herbs and spices. Learning to enjoy eating lots of a wide range of veggies (and fruit) has been proven time and time again to be good for long term health.

Gradually increase the number of times you serve pulses/lentils/beans per week. Add them into dishes, blend them up into dips and sauces. Choose tinned in water and get creative.

Look at how frequently you are buying foods which are both HFSS and Group 4 eg shop bought pies, sausages, crisps, biscuits. Buy them every other time you go shopping instead of every time. Then reassess in a month or so. There is no need to deny yourself foods which you enjoy/the family loves, but just have them a little less often.

Variety is key at breakfast. Breakfast cereals which are high in fibre and lower in sugars can be a useful part of a child's diet. Mix in some of the lower sugar ones if the children are keen on a particular higher sugar one. Aim to vary breakfast across the week eg cereal on a couple of days, homemade nutrient rich pancakes or muffins, overnight oats, eggs – plenty of variety stops us relying too hard on any one thing.

Spend some time learning how to read nutrition labels rather than becoming too focused on ingredient lists.

Food list ideas

Less often: More often

LESS OFTEN		MORE OFTEN
Sugary cereals	←→	Lower sugar cereal
Processed meat	←→	Fresh meat cooked from raw
Flavoured yoghurt	←→	Greek yogurt
Instant noodles	←→	Plain pasta
Prepacked bread	←→	Fresh bakery bread
Processed veggie proteins	←→	Tinned pulses in water
Ultra processed meal	←→	One element of meal ultra processed
Processed snacks	←→	Fruit + plain yoghurt
Cereal every day	←→	Variety of breakfasts
Squash/ fizzy drinks	←→	Water
Processed fruit snacks	←→	Fresh fruit

More often and less often can be a great way to think about food choices because nothing is banned.

TOP TIPS

Be kind to yourself; if you're in survival mode for whatever reason, if your child is extremely restricted in what they will eat or they have allergies you choose what nutrition noise you want to listen to. I have been there; I get it. In these circumstances, the amount of foods that are available/accessible to you is going to be reduced and the most important thing is that everyone is fed and happy. Seek support where you can.

Batch cook homemade fruit based snacks, muffins, pancakes etc to save money and add nutrients. Cooking sweeter foods at home helps to cut down on the amount of ultra processed biscuits, cakes and snacks that you buy.

Use your freezer and store cupboards to your advantage. Cook more than you need when you are cooking and freeze extra portions. Frozen veg and fruit are cheaper than fresh and add colour, variety and nutrients. Tinned pulses in water, chopped tomatoes, pasta, tinned fish - all minimally processed yet inexpensive and can be combined to make nutritious meals at the drop of a hat.

Investigate a range of breads. I've always said it's good to serve a wide range of different breads, including as many wholegrains as possible. One change I have made is to sometimes buy fresh bread with fewer additives/preservatives whereas I mostly bought pre-packed bread previously. I cut the fresh loaf into slices and pop in the freezer so we have bread to hand when we need it.

A range of carbohydrates is better than relying on the same ones at each meal. Investigate buckwheat, quinoa, spelt, pearl barley to add interest.

Remember that although it seems what we 'should' eat changes- the fact is that it hasn't really changed all that much since I did my nutrition degree in the early 2000s. Eat more vegetables, more often, oily fish once a week, fish once a week, a range of plant based proteins. Cook at home when you can, don't stress when you can't. Eat whole grains, small amounts of meat if you like, some dairy and just a little of what you fancy. The more good quality knowledge we gain, the less we stress about eating well.

THERE IS NO ONE PERFECT WAY TO FEED YOUR FAMILY

We all have difference preferences, experiences and stuff going on in our lives. One size does not fit all when it comes to food. If you're looking for more personalised info, do get in touch.



MY 1:1 PROGRAMME

I am currently loving working with families running my new programme. Feeding Future Foodies is a 16 week programme designed to help families to reduce stress at mealtimes, understand the foundations of raising confident foodies & uncover the roadmap for long term strategies. If this sounds interesting, book a free call:

<https://p.btrr.to/36dCOtW>

REACH OUT IF YOU'RE STUCK

I'm always happy to chat about what's going on with your child's eating. I also have a wonderful bank of other health professionals if I cannot help you myself. Send me a message on Instagram.





Emily Caroline Nutrition
Registered Nutritionist



ULTRA PROCESSED FOODS

@feeding.future.foodies

U L T R A
P R O C E S S E D

Emily Caroline
Nutrition