THE FOOD MATTERS TOTAL WELLNESS SUMMIT

## 5 FOODS TO EAT & FOODS TO EAT & To Fight Inflammation



# THE FOOD MATTERS

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Your total mind-body guide to healing, happiness, and living pain free!



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When it comes to nourishing your body with the healthiest foods, it can be difficult to make sense of the advice. The internet is filled with conflicting evidence and articles about different food trends that claim to make us live longer, our skin brighter, our minds clearer, and fit nearly every health claim under the sun... But each piece of expert advice differs from the next. It's confusing, overwhelming, and exhausting.

At Food Matters, we know that our health will thrive when we eat a diet rich in fruits, vegetables, and healthy wholefoods, with minimal chemical additives or genetic modification. Yet when you arrive at the supermarket, it's difficult to determine what you should and shouldn't be eating.

Use this eBook as your guide to health and vitality. Discover some of the best foods to fight inflammation and disease, while avoiding the foods that can perpetuate these issues.

As always, eat as close to nature with as many organic foods as possible, and remember not to stress too much about your food. At the end of the day, it's meant to nourish and be enjoyed.



In good health,

James Colgutour Lawrentine ten Bosch

James Colguhoun & Laurentine ten Bosch Founders of Food Matters and Filmmakers - Transcendence 1 & 2, Food Matters, and Hungry for Change.

### What Is Inflammation & Why Should We Fight It?

Inflammation is a naturally occurring process within the body, designed to help the body heal from injury or disease. The immune system triggers it in response to a perceived threat, such as a cut or an illness. Acute inflammation, which occurs over a usually short period, is a beneficial tool that helps return your body to its healthiest state. However, chronic inflammation, which occurs over an extended period (and is often less intense), is the kind that is linked to autoimmune conditions, prolonged stress, and debilitating disease.

After all, it is understood that chronic disease stems from chronic inflammation within the body. There is sufficient evidence to show that this prolonged immune response can influence heart disease, cancer, type 2 diabetes, Alzheimer's disease, and even obesity. So by addressing the root cause, we begin to adopt a holistic, preventative approach to healing. And one of the best ways we know how to remedy and reduce inflammation in the body is with proper nutrition.

To better understand how chronic inflammation leads to disease, let's take a closer look at these common conditions.

**GUT ISSUES:** Your gut bacteria and the integrity of your gut lining strongly influence your health (1). According to numerous studies, undesirable bacterial products called endotoxins can sometimes leak through your gut lining and enter your bloodstream (2). Your immune system then recognizes these foreign molecules and attacks them — resulting in chronic inflammation (3). This can work in reverse too, where the gut plays host to inflammatory diseases such as irritable bowel syndrome or gluten intolerances.

**CANCER:** In as early as 1863, observations were made that cancer often developed at sites of chronic inflammation, yet it's only been recently that this has been pinpointed as a primary risk factor. It is now estimated that as many as one in five cancers are caused by chronic inflammation, partly because this may cause damage to the DNA, and partly because it produces cytokines. These tiny molecules stimulate the growth of blood vessels which bring oxygen and nutrients to the tumor (4).

**HEART DISEASE:** According to the American Heart Association, although it is not proven that inflammation causes cardiovascular disease, inflammation is common for heart disease and stroke patients and is thought to be a sign of atherogenic response (a tissue response to injury that involves chronic inflammation) (5).

### **5 of the Best Foods To Eat to Reduce Inflammation**

#I CACAO

Who thought nature's own chocolate would be one of the best foods to fight inflammation? The Aztecs named it 'the food of the gods' for good reason.

The plant contains over 300 beneficial compounds, many of which are strong anti-inflammatories, and a single-serve is thought to contain 20 times the antioxidant power of blueberries. This is largely due to the presence of powerful and potent polyphenols, the naturally occurring antioxidants that are found in a wide range of foods (including wine)! In particular, cacao is abundant in flavanols, which have been sought out for centuries due to their antioxidant and anti-inflammatory effects (6).

Reducing inflammation within the body, particularly at this level of potency, has been shown to lessen the risk of cancers, diabetes, arthritis, depression, and even Alzheimer's disease. There have also been studies to show that increased consumption of cacao properties can protect against cardiovascular disease, reduce the risk of stroke, and help improve blood circulation (7). However, it's most important to ensure that your cacao is raw, as over-processing and heating the plant can cause it to lose the beneficial properties.

Not only is it an incredible food for fighting inflammation, but it's rich in vitamins and minerals, especially iron, magnesium, and potassium, as well as being a good plant-based source of protein and essential dietary fiber.



### CACAO VS. COCOA: WHAT'S THE DIFFERENCE

Raw cacao is made by cold-pressing un-roasted cacao beans. The process keeps the living enzymes in the cacao and removes the fat (cacao butter). Cocoa looks the same but it's not. Cocoa powder is raw cacao that's been roasted at high temperatures. Sadly, roasting changes the molecular structure of the cacao bean, reducing the enzyme content, and lowering the overall nutritional value.

To further that, cocoa is also often treated with alkaline to reduce the wonderful, natural bitter taste present in the plant. The bitterness can take some getting used to, but is hugely beneficial, as this treatment typically results in a 60% decrease in the anti-inflammatory flavanol content (8).



There's nothing more beautiful than a freshly picked berry. It's nature's most incredible sweet treat and brings a spread of health benefits to the table. But what makes this rich berry a powerful antioxidant? The answer lies in the essential monomers when broken down in the body.

Take the acai berry, for example. You've likely seen the beautiful acai breakfast bowls all over the internet but the best part is they're packed with an incredibly powerful antioxidant. Research into the acai compounds and efficacy in the body has shown that this is likely due to the compound velutin, which is believed to have higher anti-inflammatory capabilities than luteolin and apigenin - some of the most sought-after compounds (9).

The major antioxidant found in blueberries, anthocyanin (10), is what gives this berry its gorgeous deep blue color and is largely thought to be responsible for the antiinflammatory capabilities, along with the high fiber and vitamins A, C, and E content (11).



Studies show that blueberries protect the brain, prevent damage to our DNA, and inhibit cancer cell development (12). Basically, you can imagine that the blueberries you eat cause a good reaction in your body and increase the pace of naturally programmed apoptosis (cancer cell death). Emerging research has even shown that they have been proven to kill cancer cells and reduce tumor size, so make sure to grab a fresh punnet next time you're at the markets!

#### WHAT ARE MONOMERS?

These are the building blocks of the basic macromolecules that make up the human body. So when digesting food and obtaining nutrients, the body breaks proteins, carbohydrates, and fats/lipids down into their monomers. From here, the body can use these to rebuild different structures it may need for survival.

### #3 FLAXSEEDS

These aren't the kind of seed you would typically snack on a handful of, but maybe we should find a way to add more into the standard diet. Flaxseeds are a powerhouse seed rich in vital nutrients for health and wellbeing, including anti-inflammatory properties and a healthy dose of fatty acids.

These seeds have been used in the human diet for over 5000 years. They are a fantastic source of dietary fiber, magnesium, potassium, and manganese, but they're most famous for their high levels of plant-based omega-3 essential fatty acid. Flaxseeds contain almost twice the level of omega-3 as fish oil, which research has shown can optimise brain function and reduce the risk of heart disease, and cancer.

Omega-3s are a type of polyunsaturated fatty acid, structurally signified by their double bonds between carbon atoms. These fats can reduce the production of molecules and substances linked to inflammation, such as inflammatory eicosanoids and cytokines. There is even consistent peer-reviewed evidence that highlights the relationship between high intakes of fatty acids and reduced inflammation throughout the body (13).

While flaxseeds have a nice crunch in granola or tossed through a salad, they are best eaten ground for ultimate nutrient absorption or in a quality cold-pressed oil.



### FLAXSEEDS

Flaxseeds are often used interchangeably with linseeds, and many people believe that they are the same seed. However, the two are botanically unrelated and are derived from different plants, despite offering the same nutrients. Linseed is a shorter plant, with lots of branches and lots of seeds. Flaxseed is taller (3 feet) with fewer branches. Therefore, linseed is good for creating oil and flax has long been used to make linen, rope, and nets. Typically, the term flaxseed is more commonly used in the US, whereas linseed is used in most other countries.

### #4 LEAFY GREENS

We've all heard the saying 'eat your greens!' and as it turns out, when it comes to feeling good, there is nothing better. Dark green veggies, such as collard greens and spinach, are a rich source of vitamin C and magnesium. These are both important in converting tryptophan and tyrosine amino acids to serotonin and dopamine – the neurotransmitters responsible for making us feel joyful (14). A good dose of greens every day is, therefore, a must!

And while we know that leafy greens are ideal for alkalizing and detoxifying the body, they also offer anti-inflammatory benefits. Greens like kale, arugula, silverbeet, spinach, chard, and collard greens, offer a rich nutritional profile with high concentrations of micronutrients that reduce chronic inflammation in the body. Vitamins A, D, E, and K, which are the four fat-soluble vitamins, have shown across multiple studies that they can fight inflammation. A lot of leafy greens also partially break down to contain alpha-linolenic acid, which is one type of omega-3 fat that our bodies constantly crave.

Aside from salads and steamed veggies, another great way to up your daily green intake is with the addition of superfood greens. Many supplements, a combination of different nutrient-dense greens, can be mixed into water or daily smoothies for the ultimate daily detox.



### **FAT-SOLUBLE VITAMINS**

The human body requires two different kinds of vitamins for survival. Water-soluble vitamins (C & B-group), dissolve in water - which makes up between 60-80% of the body. Contrastingly, fat-soluble vitamins (A, D, E, K) are abundantly found in high-fat foods, and need fats to be transported through the body. They are much better absorbed into your bloodstream when you eat them with fat, but because fat takes longer to burn, they are stored in the human body longer than their water-soluble counterparts.

### WHAT'S A NEUROTRANSMITTER?

Neurotransmitters are chemical messengers that transmit a signal from a neuron to the next target cell, which can be a different neuron, myocyte, or gland cell. They are chemical substances made by the neuron specifically to transmit a message and are largely responsible for the body's unconscious communication processes.

### #5 TURMERIC

We love this root for its vibrant color and fragrant flavor. The way it adds a punch to curries, makes a beautifully creamy superfoods latte, or dyes our white clothes bright colors - even if we don't mean it to... But you've probably heard that turmeric punches well above its weight in health benefits too...

Curcumin is the compound found in turmeric that helps the spice work its magic. It's long been used in Ayurvedic practice for the healing properties, but out here in the Western world, we're just coming to terms with the powers (15). Curcumin, in its whole form, has been praised in studies for its anti-inflammatory, anti-tumor, and antioxidant properties. It's also what gives turmeric its gorgeous, burnt orange color.

If it seems like turmeric is the answer to all of your health worries, that's probably because it is. This humble root has been proven to reduce inflammation, support cognitive function and prevent Alzheimer's disease, improve skin health and conditions, and may even aid in fighting cancer. The exact mechanisms that determine how curcumin works in the body, and what contributes to this anti-inflammatory effect are still yet to be understood, but there are countless studies across different chronic health conditions that re-instate this belief. So as far as nutrition trends come and go, we'll continue sipping on our turmeric drinks for a long time!



### **TURMERIC & BLACK PEPPER**

Adding black pepper may help the body absorb curcumin more effectively, as it contains the compound piperine, which is involved in the metabolic breakdown of turmeric in the gut and liver. This means by adding a pinch of freshly cracked pepper with your turmeric, you're maximizing the incredible health benefits!

### **5** Foods to Avoid for Inflammation



As many of us shied away from animal products in favor of a plant-based diet, soy products quickly became a rising staple in the Western diet. Think tofu, tempeh, soy sauce, soy milk, edamame, and miso, alongside soy lecithin and emulsifiers used to thicken and preserve food or soybean oil for cooking. These products aren't necessarily bad by nature, it's often what goes on behind the scenes that make them so harmful to our health.

Soy is one of the most common genetically modified (GMO) foods on our shelves. This quite literally means that there is a team of scientists in lab coats working to alter the structure and makeup of this naturally occurring food and as you can imagine, it's having a negative impact on our health. The most significant concerns are derived from the beliefs that high levels of phytoestrogens cause hormonal and reproductive problems, alongside increased allergies - and there are scientific studies to confirm this.

One 2013 study was conducted on pigs, chosen for their similar digestive system to humans. Half of the pigs were fed genetically engineered soy and corn (we will revisit the latter soon), and the other half were fed natural variants. It was noted that those fed the modified crops



had higher levels of inflammatory markers, including inflammation of the stomach and small intestines, stomach ulcers, a thinning of intestinal walls, and an increase in hemorrhagic bowel disease (16).

As of 2007, 91% of the soy planted in the United States is genetically modified, making soy the largest genetically modified food source in the US. The US is also one of the largest exporters of soy.

The health benefits of soy continue to be debated, but the best soy is again labeled clearly that it is organic and is fermented. Choose soy foods like tempeh or tofu and read your edamame labels carefully.

### **SOY & FERMENTATION**

Everywhere we look there is conflicting information on whether or not soy is good for our health. A lot of this debate lies in the topic of soy fermentation, which impacts the body's ability to digest soy products and destroys the lectins and phytic acid present, however, it does produce histamines which some people find difficult to digest.

#### Fermented:

#### Unfermented Products:

- Tempeh
- Miso
  - Tamari
- Tofu
- Edamame beans
- Soy-based imitation meats

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### #2 CANOLA OIL

A balanced diet should always be inclusive of a healthy helping of good-quality fats - but that doesn't necessarily mean all fats. Canola oil is one of the most commonly used vegetable oils for both cooking and as an ingredient, quite simply because it's cheap. But affordability doesn't mean it's the best option for our health and longevity.

Almost 93% of canola oil from canola seeds is genetically modified. Canola oil is derived from the rapeseed plant, a plant whose health benefits are contested. This oil is a processed oil, which goes through multiple steps to remain shelf-stable. In fact, these production processes are tied to health concerns such as heart disease, inflammation, cellulite, stroke, Alzheimer's disease, and asthma.

Canola oil is an oil that can easily become rancid, attracting mold when in baked and processed goods. Because it is partially hydrogenated, it is also capable of promoting high levels of inflammation in the body, as well as arterial calcification, which are major risk factors for coronary heart disease (17).

To add to this dangerous cocktail, some studies suggest that the oil's high omega-6 fatty acid content may promote inflammation when consumed in high amounts.



The body requires a delicate balance of omega-6 and omega-3 fatty acids, but many foods commonly found in a standard diet are rich in these inflammatory omega-6s, leading to a drastic imbalance. Where possible, it's best to switch to an omega-3-promoting oil.

#### **HEALTHY OILS TO USE**

Now that canola is no longer a go-to, what should you use for cooking? These are our favorite alternatives!

- Grass-fed butter or ghee
- Extra virgin cold-pressed olive oil
- Coconut oil



Corn is debatably one of the sweetest, tastiest, and most versatile vegetables, but it's because of this high demand that we are seeing an increase in (or monopolization of the food itself for) genetic engineering. Companies like Monsanto have staked their claim on this staple food, making it increasingly difficult to find versions as close to nature as possible.

Although the long-term impacts on human health are still being observed, there are many studies that indicate just how harmful this is to our bodies (18). In one 2012 animal study, rats fed genetically engineered corn had an increased risk of developing tumors, suffering organ damage, and dying prematurely. Alongside this scientific evidence, there are thousands of stories to be shared about individuals whose health concerns cleared up when removing GMO products from their diet. Furthermore, GMO corn is thought to be one of the leading inflammatory foods, like the 2013 study mentioned with regard to soy confirmed (16).

Currently, corn is one of the larger genetically modified food sources, with the majority of field corn in the US



growing from genetically modified seeds. The two most common varieties of sweet corn that are genetically modified include Syngenta's Attribute sweet corn and Monsanto's Performance series. If you want non-GMO corn, look for the label, USDA certified organic, as the only guarantee that your corn is not genetically modified.

#### WHY FOOD MONOPOLIZATION IS DANGEROUS

Fair, equal, and affordable access to good-quality foods is seen as a basic human right, but due to privatization and corporate greed, the monopolization of foods, crops, and even seeds is well and truly alive in the Western world. This is dangerous as we, the consumers, no longer have control over the foods we eat - and we're subject to whatever the big corporations deem fit to do to our food - such as GMO crops. It's a slippery slope, and we need to take back our food sovereignty for ultimate health and wellbeing.

### CONVENTIONAL #4 FACTORY-FARMED ANIMAL PRODUCTS

Factory-farmed animal products are often obtained through cruel and inhumane methods, which are contributing to rising health concerns in their consumers. It's a general rule of thumb for a broad category of food, but if you're someone who eats animal products, make sure they're from free-range, ethical sources that adhere to health-promoting practices - because the health of the animal ultimately impacts the nutrient value of the food.

Take conventional, mass-produced milk. Dairy cows today are fed growth hormones to maximize milk production. Not only does this make for a potentially breast/prostate/colon cancer milkshake, but it also leads to an increased incidence of udder infection for the animal, leading to pus in the milk. With regard to inflammation, there is conflicting evidence on dairy's role, and it is often thought that lactose intolerance (oftentimes undiagnosed) is responsible for increased inflammation within the body (19), alongside various lipids (20). The part that then needs to be considered is how the human body develops a lactose intolerance as it ages, due to exhausting its supplies of lactase - which is used to break it down.

It's complex, nuanced, and the approach may differ between individuals, but here's my advice: if you do drink cows' milk, make sure it states clearly on the label that it is produced without artificial hormones, and ideally choose organic whole milk from pasture-fed cows. If you



notice that your body has difficulty processing lactose (digestive issues, acne, etc.), it's best to avoid it altogether.

If you're opting for commercial beef, here's what you need to know. For fat cows, farmers feed them grain, corn, and soy to increase profits. The end product is meat that is nutritionally inferior because cows were meant to eat grass. Their state of health is comparable to someone like you or me who just eats processed wheat, without any fresh vegetables. Studies show that grass-fed beef (compared to corn-fed) is higher in important vitamins, minerals, and heart-healthy, anti-inflammatory fats (21). Then there's also the issue of all the antibiotics used on those inappropriately-fed, sick cows and the damaging flow-on effects... My advice? Look for "grass-fed" or "pasture-fed" organic beef from strong healthy animals, that have been treated with kindness - and they'll treat your body with kindness in return.

#### PLANT-BASED PROTEIN SWAPS

Unsure how to keep up the healthy protein intake without the animal product? Try these easy alternatives:

- Chia or flaxseed eggs
- Organic, non-gmo tempeh
- Cashews, almonds, and other nuts
  - Pepitas and sesame seeds
- Almond, coconut, or oat milk
  Quinoa, lentils, or buckwheat

### #5 MONOSODIUM GLUTAMATE (MSG OR E621)

It might be a bit of a stretch calling this dangerous chemical a food, but it's found in so many supermarketbought products and takeaway foods that it's deserving of a mention (because our health is worth it). MSG is a commonly used flavor enhancer. It's what keeps you coming back for a second helping of takeout meals; it's addictive, and it's having dangerous impacts on our health.

MSG is actually an amino acid that is used as a flavor enhancer in soups, salad dressings, chips, frozen entrees, and many restaurant foods. MSG is known as an excitotoxin, a substance that overexcites cells to the point of damage or death. Studies show that regular consumption of MSG may result in adverse side effects which include depression, disorientation, eye damage, fatigue, headaches, and obesity. MSG affects the neurological pathways of the brain and disengages the functions that recognize fullness and satiety, which explains the added effects of weight gain.

MSG is also a culprit of chronic inflammation and enhances joint pain caused by injury and age. In a 2008 article published in the Journal of Autoimmunity, it was found that long-term use of MSG contributed to longterm inflammation, however, the exact mechanisms within the body are still unidentified (22). However, despite it being more than a decade since these findings were first published, little has been done to address dietary consumption and the regulations around it.



#### **READING THE LABELS**

It's often difficult to discern what foods do and don't have MSG in them, especially when takeout meals don't come with a complete list of ingredients. When shopping, be sure to look out for E621 on the label, and don't live in fear of it but try to avoid this harmful, unnecessary addition where you can.

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