

MEDIFIT EDUCATION'S

ALIVE & DEAD

FOODS

DEAD FOODS

| ALIVE AND DEAD FOODS | NUTRIENT DENSITY AND BIOAVAILABILITY | FRESH FRUITS AND VEGETABLES | SPROUTS AND MICROGREENS | FERMENTED FOODS | PROCESSED AND REFINED FOODS | CANNED AND PRESERVED FOODS | LONG-SHELF-LIFE FOODS | HOLISTIC APPROACH TO EATING | MINDFUL EATING |
| FOOD ENERGETICS |

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ALIVE FOODS

*Understanding Science behind
living and Dead foods*

DR MAHESH KUMAR

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Dr Mahesh Kumar



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DEFINING ALIVE AND DEAD FOODS

Living foods were created for our consumption

They exist in a raw or close-to-raw state. Living foods include fruits, vegetables, grains, seeds, and nuts. They are beautifully packaged in divinely created wrappers called skins and peels.

Living food looks robust, healthy, and alive. No chemicals have been added. It has not been bleached or chemically altered. Living foods are plucked, harvested, and squeezed, not processed, packaged, and put on a shelf. Living foods are recognizable as food.

Dead foods are the opposite

They are living foods that have fallen into human hands and have been altered in every imaginable way, making them last as long as possible at room temperature and to be as addictive as possible to the consumer. That usually means the manufacturer adds considerable amounts of sugar, which is called "dextrose," "corn syrup" , "fructose," "glucose," and generally any other food ending in "ose." It also means they add man-made fats that involve taking various oils and heating them to dangerously High temperatures so that the nutrients die and become reborn as some-thing completely different - a deadly, sludgy substance that is toxic to our bodies. That sludgy substance - which is called "hydrogenated" or "partially hydrogenated" oil - is a common ingredient in the American diet and is present in most processed foods from crackers and pastries to hamburger buns.

Life breeds life - Death breeds death

When you eat living foods, the enzymes in their pristine state interact with your digestive enzymes. The other natural ingredients God put in them - vitamins, minerals, phytonutrients, antioxidants, fiber, and more - flow into your system in their natural state. These living foods were created for our digestive systems, bloodstream, and organs.

Dead foods hit our bodies like a foreign intruder. Chemicals, including preservatives, food additives, bleaching agents, and so on, place a strain on the liver. Toxic man-made fats begin to form in our cell membranes and become incorporated in our bodies or stored as fats. They begin to form plaque in our arteries. Fat also contains compounds called leptins. When the small intestine detects leptins, it sends a message to the brain saying, "I'm satisfied, I'm full, stop eating." However, it takes about twenty minutes from the time we start eating for the food to reach our small intestine and leptin is able to signal the brain to stop eating, and most Americans can eat a tremendous amount of food in twenty minutes.

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Your brain, sensing that it still doesn't have the nutrition it needs, sends out hunger signals. You eat again - more of the same dead food.

Your body does its best to harvest the tiny traces of good from the food, but in the end you are undernourished, overfed the wrong foods, and overweight. You are, in other words, caught in the trap of the standard American diet, which is a SAD and toxic situation.

If you say, 'Everyone around me eats bad food, and they all look fine', consider that maybe everyone around you is unhealthy, in the process of becoming overweight, and disease-prone. If you want to be a healthy, vibrant, energetic person rather than someone bouncing between all-you-can-eat buffets and fast-food restaurants, take your diet seriously.

Ditch the Dead Food

So, what exactly is a “dead” food?

If it can sit on your counter for days or weeks and not go bad, then it's a dead food. These foods are refined, highly processed, often synthetic and have little-to-no nutritional value. Think about foods like cheese-flavored crackers, meal replacement bars, fruit snacks and flavored beverages.

Unfortunately, these processed, chemical-rich foods are pervasive in the American diet. We want fast, convenient and tasty food and there's plenty on the supermarket shelves that fit the bill. And what has been the result of a diet full of dead foods? Rising rates of obesity, heart disease, diabetes and cancer, among other things.

Mainstream medicine is finally recognizing that processed and refined foods are linked to increased inflammation in the body. A steady diet of dead foods leads to chronic inflammation, which can result in increased blood pressure, weight gain, elevated blood sugar levels and arthritis, to name a few. The human body is not designed to function properly under stressful conditions (poor nutrition) and will react and respond to these inflammatory foods, which manifest itself in aches, pains, brain fog, poor sleep and hormonal imbalance, in addition to the aforementioned diseases.

But it doesn't have to be this way. Ditching the dead food for a diet rich in “alive” foods will put you on the path to better health.

Live Better With Alive Food

Let's get back to the basics to discover what “alive” foods are and how they help the body. A food that is “alive” is one that is as close to its original, natural form—plants (fruits and vegetables), nuts and seeds, fish, poultry and whole grains. These foods are rich in inflammation-fighting antioxidants and

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phytochemicals. They help the body produce and activate enzymes, which are necessary for hormone production and chemical reactions in the body. In addition to these foods, foods rich in probiotics and prebiotics are also considered “alive” as they help promote the healthy bacteria in your body that are the first line of your immune system. These foods include kefir, miso, bananas, asparagus and Jerusalem artichokes.

Choosing alive foods begins in the supermarket or at your local farmers market. First, head over to the produce section and fill your basket with a rainbow of organic fruits and vegetables. Try to choose what’s local and in season. Next, add protein sources, such as eggs, organic poultry and wild-caught, omega-3-rich fish, such as Alaskan salmon or Pacific halibut. The dairy section must be navigated carefully, as there are many foods with artificial colors, flavors and sweeteners lurking around. Choose kefir and organic plain yogurt that has live and active cultures. Finally, head to the middle of the store to pick up your whole grains, such as quinoa (it’s really a seed but classified as a grain), brown rice, oats, nuts, nut butters, seeds and beans.

Another important tip for successfully choosing alive foods is to read labels. The ingredient list will tell you whether or not the item contains chemicals, preservatives or anything artificial. Generally, a product that comes in a box, bag, can or package will have some kind of preservatives to increase shelf life. If you can’t pronounce an ingredient or have no idea what it is, you should probably put it back on the shelf. An item with a quick expiration date is more often “alive” because of the lack of additives. And most of the previously mentioned alive foods do not come in a package (fruits, veggies, poultry, fish). Beans (dry or canned), nuts (preferably raw), nut butters (again, raw is best), whole grains, and sprouted grain bread are some of the packaged “alive” foods that we recommend.

The Problems with Cooking Food

While it is true that cooking certain vegetables such as onions or garlic can enhance particular vitamins, the heat breaks down the inherent nutrients. By cooking food, you essentially inhibit yourself from getting the antioxidants, vitamins, minerals, probiotics, and enzymes (all of which provide a healthy foundation) that are present in the food’s raw form. Why is this? Well, life-giving chemical reactions occur when energy runs between atoms. The cooking process interrupts those chemical reactions and depletes or can totally erase the energy flow. Think of your body as an alkaline battery. Just like a battery, your body needs energy to function. To keep your body charged you need to eat the foods that are not acid-forming. If too much acid corrodes a battery, what do you think it does to your body? Too much acid (alcohol, starchy foods, cooked food, salt, sugar, or meat) can decay your body, which is why you need the nutrients of raw foods to keep a neutral pH balance.

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"I already buy lots of organic produce," you may be thinking. Well, this means nothing if you cook your food to a dead state, or if you're adding salt, sugar, or any other acidic components to your meals. It is true that organic food is 80%-300% more nutritionally dense than inorganic food. That's even more of a reason not to cook the food! We want you to get the right nutrients you are supposed to be getting. Because switching to a completely raw foods diet can be challenging in the initial stages, we suggest flash-frying your food. This technique—cooking your food at a high temperature for a minimal amount of time in a pan filled with oil—allows you to keep some heat from the kitchen in your meals. If you want to warm soups or stews, heat them at 120 degrees or lower because the lower heat helps food retain nutrients.

Myths About a Raw Foods Diet

First off, let's make one thing very clear: it's false to believe that a raw foods diet doesn't give you enough protein. Protein does not solely come from meat. In fact, there are many vegetables and plant-based substances such as Spirulina, which directly deliver amino acids to you. Your body actually has to work harder to get those amino acids when digesting meat or eggs.

It's also false to believe that a raw foods diet is too expensive. There are so many local farmers markets, co-ops, and grocery stores that have great prices on seasonal organic produce. Resist the urge to eat at the fast food restaurant down the street and buy some healthy veggies from a local grocer instead.

Raw foods do not take long to prepare! Making raw food meals is easy, especially since there are so many recipes (now more than ever) solely focused on using fresh, raw foods.

It's time to take charge of your health and treat your body like you want it to last. That means saying goodbye to dead food and preservatives. You don't have to be an extremist to eat raw food; you just have to want to improve your health. Alkalizing foods such as green leafy veggies, fresh herbs, sprouts, or wild dandelions are readily available at grocery stores or local farmers markets. Commit to a raw foods diet and you'll be on the track towards a better, livelier, more raw way of life.

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UNDERSTANDING THE LIFE FORCE (PRANA) IN FOOD

The concept of pranic foods is likely based on the ancient Indian yogic diet culture of consuming foods to nurture your mind, body, and soul.

Pranic foods comprise the pranic diet, an eating pattern that categorizes foods based on how they supposedly affect your vital energy, or prana.

To understand how these foods purportedly function, you must first know what prana is.

This article explains what prana is, examines various types of pranic foods, and reviews the scientific evidence behind these concepts.

What is prana?

Prana is a Sanskrit word for life or breath. According to the Hindu belief system, prana is your life force or vital energy — similar to “qi” (or “chi”) in traditional Chinese medicine (TCM).

In the Hindu practice of yoga, prana is considered a cosmic form of energy that exists everywhere. When present within you, prana becomes life — and when it leaves the body, that marks death.

The energy of a particular food and how it affects your life force is the basic principle behind pranic foods.

What is pranic food?

Pranic food shouldn't be confused with pranic healing, which is an entirely different concept. Pranic healing is a type of energy healing based on the belief that the body has self-healing powers and that energy can be used to speed this healing process.

Rather, the concept of pranic foods bears many similarities with yogic diets described in Ayurvedic texts. Ayurveda is a traditional Indian healing practice that takes a holistic approach to health, including diet.

Types of pranic foods

Pranic foods are classified into three categories based on how they affect your prana, or energy.

Positive pranic foods

Positive pranic foods are thought to kindle one's life forces. This category includes fresh, whole, minimally processed, locally grown, and organic foods.

Positive pranic foods are mild in taste. They're not supposed to be eaten in excess.

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These foods include:

- ash gourd
- honey
- coconut
- whole grains
- millet
- nuts and seeds
- fruits (fresh and dried)
- fresh vegetables
- sprouted mung beans
- beans and lentils

Negative pranic foods

Negative pranic foods are believed to deprive you of vital energy. These include stimulants that give you instant energy but may lead to a subsequent crash.

Foods that are too salty, spicy, sour, or pungent — essentially anything that is over-flavored — are said to harm your prana.

Here's a list of foods that many pranic food practitioners say negatively affect your prana:

- onion
- garlic
- asafoetida
- coffee
- tea
- chili
- eggplant (brinjal)
- stimulants, such as caffeine
- intoxicating substances, such as alcohol

Some sources also include meats, eggs, fish, and poultry on the negative pranic food list, while others claim that these foods are fine as long as they're cooked well and consumed in moderation.

Neutral pranic foods

Neutral pranic foods neither increase nor decrease your prana. Still, they may make you somewhat sluggish.

Neutral pranic foods include:

- tomatoes
- potatoes

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Comparing pranic foods to yogic diet principles

It's unknown who coined the term "pranic foods," and no documented history of the concept or the diet exists.

Yet, while there's no mention of pranic foods in Ayurveda, yoga, or any ancient Indian scriptures, the concept bears similarities to principles espoused by Ayurvedic and yogic dietary traditions.

Ayurveda is a robust medicinal system that instructs you to eat according to your constitution, lifestyle, and medical needs. It doesn't discourage onion or garlic consumption, nor does it prohibit meats.

Ascetic monks and practitioners of yoga — or yogis — of the Indian subcontinent follow certain dietary precepts called the yogic diet principles.

The yogic diet is documented in scriptures that date back around 5,000 years. There are three types of yogic diets — Sattvic, Rajasic, and Tamasic.

Sattvic diet. Foods are closest to their natural form, lightly cooked and mildly seasoned. This diet is believed to increase calmness and focus. It's most suitable for anyone seeking a quiet and peaceful existence.

Rajasic diet. Sour, bitter, salty, spicy, hot, and pungent foods are common in this diet, which allows onion, garlic, asafoetida, and other strongly flavored foods. This diet, which is best suited for fighters, leaders, artists, etc., is stimulating and incites various emotions.

Tamasic diet. This diet includes meat, stimulants, and alcohol, as well as stale, contaminated, fermented, fried, highly processed, and over- or undercooked foods. This eating pattern causes tiredness and weakness and is said to be bad for health.

There are many similarities between positive pranic foods and the Sattvic diet, as well as negative pranic foods and the Rajasic and Tamasic diets.

While there's no documentation of or historical references about pranic foods, its basic concepts may be ancient in origin.

Prana can also be enhanced through our thoughts, words, and actions.

The reason why a simple home cooked meal tastes delicious and satisfying is because of the way it is cooked with love and care. Mass-cooked meals don't have that inherent taste, which leads to the addition of artificial flavors and taste enhancers.

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These factors impact the quality of Prana in food:

- The mindset in which the food is prepared
- Hygiene during food preparation
- Time difference between when food was prepared and when it is eaten
- Mindset while eating
- The group with whom you are eating and the conversations before or during eating
- Whether food was offered to the Divine before eating

There is a marked difference in taste and flavor

- between home-cooked food vs food mass-produced in a restaurant/cloud kitchen
- between freshly cooked food vs stale food
- between food that is cooked with love and care vs food made with a lot of resentment and anger

Prana may not be seen or measured through the limited capability of our 5 senses. But it can be experienced through abilities beyond sensory perception. As Wayne Dyer beautifully put it, Please note, Ayurveda doesn't classify food based on Prana. Foods are recommended solely based on the individual constitution type and the season.

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HOW NUTRIENT DENSITY AFFECTS VITALITY

What is nutrient-dense food?

A nutrient-dense food or beverage is one that is rich in vitamins, minerals, and other beneficial components which provide positive health effects with relatively low calories. These foods tend to be natural instead of processed, meaning they have minimal to no addition of extra fats, sugars, or other artificial ingredients.

Eating more nutrient-dense foods has major perks for health such as reducing your risk of chronic diseases and fending off viruses or colds. These foods can boost your vitality and increase energy levels so you can do more of the things you love. Some nutrient-dense foods are also high in calories such as avocado, nuts and seeds. These are perfect for gaining weight the healthy way such as if you're looking to pack on muscle.

Energy-dense and nutrient-poor foods are the ones that are calorie-dense, meaning higher in calories, yet low in nutrients. These are best to limit since they have been linked to disease and can lead to unhealthy weight gain. These include processed foods such as soda, candy, cakes, pastries, chips, sugar-sweetened beverages, and sausage or bacon.

What makes a food nutrient-dense

These are the all-stars you want to make an appearance in all or most of your meals! Examples of nutrient-dense, yet lower-calorie foods include fruits and vegetables, whole grains, low-fat dairy, seafood, fish, fresh lean meats, eggs, lentils and beans. Here are some key things to look for when choosing more nutrient-dense foods:

Whole versus processed

Whole foods by nature are considered to be nutrient-dense because they contain a wide variety of nutrients. Processed foods typically have some or most of the healthy nutrients removed, in order to extend the shelf life or make the product cheaper. Food manufacturers also add in unhealthy fats, sugar and salt in order to make them taste better. So as a rule of thumb, choose your foods closer to how they are found in nature, such as an apple versus apple juice.

Colorful

Eating a colorful diet increases the number of nutrients you're getting. Colorful fruits and vegetables contain many vitamins, minerals, and antioxidants with few calories. Each color offers different nutrients so fill your plate with the colors of the rainbow. Plus it will make your meals more visually appetizing!

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Peak season

Seasonal eating focuses on foods that are naturally grown during different times of the year. This maximizes health benefits while minimizing environmental impact. For instance, a Climatarian diet, which focuses on reducing the carbon footprint, has been shown to decrease our risk of diabetes, high blood pressure, and obesity while increasing vitality, mental health and longevity!

Complete proteins

A complete protein contains all essential amino acids, or protein building blocks. Animal-based proteins, such as lean meat or eggs are considered to be complete. It's also possible to get enough protein on a daily basis without eating animal foods. The key is to focus on a variety of wholesome plant-based protein sources such as tofu, beans, lentils and whole grains and include them with most or all of your meals.

Nutrient-Dense Foods for Enhanced Vitality

The pursuit of optimal health and vitality is a common goal, and the foods we choose to nourish our bodies play a crucial role in achieving this. In a world of processed options and nutritional misinformation, focusing on nutrient-dense foods is essential for promoting energy, well-being, and longevity. This blog post will explore the concept of nutrient density, discuss why it's important, and highlight some of the most nutrient-packed foods available. We will also cover some practical ways to incorporate these foods into your diet for enhanced vitality.

Understanding Nutrient Density

Nutrient density refers to the concentration of essential nutrients (vitamins, minerals, antioxidants, and phytonutrients) in a food relative to its calorie content. Foods that are high in nutrients and low in calories are considered nutrient-dense, while those that are high in calories but low in nutrients are considered "empty calories." Choosing nutrient-dense foods is critical because they provide the building blocks our bodies need to function optimally, without excess calories that can lead to weight gain and other health issues.

The Importance of Nutrient-Dense Foods

Prioritizing nutrient-dense foods is vital for several reasons:

Optimal Cellular Function: Nutrients are essential for every cellular process in the body, from energy production to DNA repair. Consuming a diet rich in nutrients ensures that your cells have the resources they need to function efficiently, which translates to enhanced vitality and overall health.

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Disease Prevention: Many chronic diseases, such as heart disease, type 2 diabetes, and cancer, are linked to nutrient deficiencies and poor dietary habits. Nutrient-dense foods contain compounds that can protect against cellular damage and inflammation, thus reducing the risk of chronic disease.

Satiety and Weight Management: Nutrient-dense foods, rich in fiber and other compounds, promote satiety, helping to keep you feeling full and satisfied. This can prevent overeating and support healthy weight management.

Improved Cognitive Function: The brain relies on a steady supply of nutrients to function properly. Nutrients such as antioxidants can protect the brain from "rusting," and may provide neuroprotective effects by defending against free radicals.

Enhanced Energy Levels: Adequate nutrients are essential for energy production. When the body gets the nutrients it needs, energy levels tend to increase naturally.

Top Nutrient-Dense Foods

While many foods offer valuable nutrients, some stand out for their exceptional nutrient density. Here are some of the top choices to incorporate into your diet:

Beans: Legumes, including beans, lentils, and chickpeas, are nutritional powerhouses, packed with fiber, protein, and a variety of vitamins and minerals. Beans are also an excellent source of antioxidants. The most comprehensive analysis of diet and cancer ever performed recommends eating whole grains and/or legumes with every meal.

Berries: Berries, such as blueberries, strawberries, and raspberries, are bursting with antioxidants and phytonutrients. They can potentially lower LDL cholesterol by an astounding thirty-eight points.

Cruciferous Vegetables: Vegetables like broccoli, kale, and Brussels sprouts are rich in sulforaphane and other compounds that support liver detoxification and have been shown to boost the body's defenses against cancer. Broccoli has been mentioned more than any other food in the sources, for good reason, as it can prevent DNA damage and metastatic cancer spread, among other benefits.

Greens: Dark leafy greens, like spinach and collard greens, offer an abundance of nutrients, including vitamins A, C, and K, as well as minerals like iron and calcium. They are among the healthiest foods on the planet, offering the most nutrition per calorie.

Other Vegetables: Eating a variety of other vegetables, such as sweet potatoes, carrots, and bell peppers, ensures a broad spectrum of nutrients and bioactive compounds.

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Fruits: Fruits, such as apples, pears, and oranges, provide essential vitamins, minerals, and antioxidants. A fruit-, vegetable-, and nut-based diet that included about twenty servings of fruit per day for a couple of weeks had no adverse effects on weight, blood pressure, or triglycerides, all while lowering LDL ("bad") cholesterol.

Whole Grains: Whole grains like oats, quinoa, and brown rice are excellent sources of fiber, B vitamins, and other essential nutrients. The most comprehensive analysis of diet and cancer ever performed recommends eating whole grains with every meal.

Nuts and Seeds: Nuts and seeds are great sources of healthy fats, protein, fiber, and various vitamins and minerals. They are also very tasty and make for an easy daily checkmark to tick off.

Practical Tips for Incorporating Nutrient-Dense Foods

Here are some practical strategies to help you increase the amount of nutrient-dense foods in your diet:

- **Embrace the "Daily Dozen":** "Daily Dozen" checklist as a guide for incorporating a variety of nutrient-rich foods into your daily routine.
- **Plan Your Meals:** Planning your meals in advance can help ensure that you include a variety of nutrient-dense foods in your diet throughout the week.
- **Prioritize Whole Foods:** Focus on eating whole, unrefined foods in their natural state. This minimizes processing and helps to maximize nutrient content.
- **Eat a Rainbow of Colors:** Different colors in fruits and vegetables represent different phytonutrients. Eating a variety of colors can help to ensure a broad spectrum of nutrients.
- **Snack Smart:** Instead of reaching for processed snacks, opt for nutrient-dense alternatives such as fruits, vegetables, nuts, or seeds.
- **Experiment with Recipes:** Get creative in the kitchen and try new recipes that incorporate nutrient-dense foods. This keeps your meals interesting and allows you to experience new flavors and textures.
- **Read Labels Carefully:** Pay attention to nutrition labels and choose foods with higher nutrient content. Be aware that processed foods may hide added salt, sugars and fats.
- **Don't Be Afraid of Frozen or Canned:** Frozen or canned produce can be just as nutritious as fresh, and are more affordable.
- **Choose Whole Grains:** When choosing grains, look for "whole grain" on the label, rather than refined grains.

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Conclusion

Nutrient-dense foods are the foundation of a healthy and vibrant life. By focusing on consuming a wide variety of fruits, vegetables, legumes, whole grains, nuts, and seeds, you can provide your body with the essential nutrients it needs to thrive. Remember that small, consistent changes can make a big difference in your health over time. By incorporating more nutrient-dense foods into your diet, you can take an active step towards achieving enhanced vitality and well-being.

By being mindful of what we eat and choosing wisely, we can unlock the incredible power of nutrient-dense foods and experience the benefits of optimal health.

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BIOAVAILABILITY OF NUTRIENTS IN DIFFERENT FOOD TYPES

Bioavailability refers to the proportion of a drug or nutrient that enters the bloodstream and is available for action. It is typically expressed as a percentage, with values ranging from 0% to 100%. Bioavailability plays a crucial role in pharmacokinetics and nutrition, as it determines the effectiveness and dosage of medications and nutrients.

The main function of bioavailability is to assess the extent and rate of absorption of drugs or nutrients into the bloodstream. By understanding bioavailability, healthcare professionals can optimize drug formulations to ensure optimal therapeutic effects. In terms of nutrition, bioavailability helps determine the efficiency of nutrient absorption, which is important for maintaining overall health and preventing nutrient deficiencies.

The main benefit of understanding bioavailability is the ability to tailor nutrient intake to achieve desired therapeutic outcomes. In nutrition, knowing the bioavailability of different nutrients can guide dietary choices to optimize nutrient absorption.

What is the definition of nutrient bioavailability?

Nutrient bioavailability, also known as nutrient absorption, is the proportion of a nutrient that can be absorbed and utilized by the body for its intended functions. It is a measure of how efficiently the body can absorb and use nutrients from the food consumed.

Factors such as the form of the nutrient, the food matrix, processing methods, and interactions with other dietary components can influence bioavailability. For example, the bioavailability of protein can range from 70-90%, meaning that the body can absorb and utilize 70-90% of the protein consumed.

The bioavailability of iron from plant-based sources is lower compared to iron from animal-based sources. This is because plant-based iron is in the non-heme form, which is not as easily absorbed by the body. However, consuming vitamin C-rich foods alongside plant-based iron can enhance its bioavailability.

Similarly, the bioavailability of calcium from dairy products is higher compared to calcium from plant-based sources. This is because dairy calcium is more easily absorbed by the body due to its specific form and other factors present in dairy products that enhance absorption.

Furthermore, the bioavailability of certain micronutrients, such as vitamin D, can be influenced by individual factors like age and genetics. Older adults and individuals with certain genetic variations may have lower bioavailability of vitamin D, which highlights the importance of personalized nutrition recommendations.

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How is bioavailability calculated for nutrients in food?

The bioavailability of nutrients in food is calculated by determining the fraction of nutrients that can be absorbed and used by the body.

Researchers conduct studies to measure the absorption of nutrients into the bloodstream, typically by analyzing blood or urine samples.

By comparing the amount of a nutrient consumed to the amount absorbed, the bioavailability can be calculated. For example, if a participant consumes 100 milligrams of a nutrient and only 50 milligrams are absorbed, the bioavailability would be 50%.

How is bioavailability measured for different substances?

Bioavailability for different substances is typically measured through pharmacokinetic studies and bioequivalence comparisons. Pharmacokinetic studies involve administering the substance and monitoring its concentration in the bloodstream over time to determine its bioavailability. For example, if a drug has a bioavailability of 80%, it means that 80% of the administered dose reaches the systemic circulation.

What factors affect the nutrient bioavailability?

Nutrient bioavailability is influenced by various factors.

- **Physiological factors:** Individual physiological factors, such as metabolism, intestinal motility, and disease states, can influence bioavailability. These factors can affect the absorption, distribution, metabolism, and excretion of nutrients, ultimately impacting their bioavailability.
- **Gastric pH:** The acidity of the stomach can influence the absorption of certain drugs, as some may be sensitive to changes in pH.
- **Food and beverage interactions:** Certain foods and beverages can affect the bioavailability of nutrients.

How do cooking methods affect the bioavailability of nutrients in food?

Different cooking methods can have a significant impact on the bioavailability of nutrients in food. Heat exposure during cooking can cause structural and compositional changes in nutrients. While some nutrients may become more bioavailable through cooking, others may be reduced.

For instance, boiling and steaming can increase the bioavailability of certain nutrients by breaking down cell walls, but prolonged cooking or high temperatures can lead to nutrient loss, particularly for heat-sensitive vitamins like vitamins C and B vitamins.

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On the other hand, grilling or roasting can create compounds with potential anti-nutritional effects, reducing the bioavailability of certain nutrients.

How to increase the bioavailability of nutrients?

Here are the 9 steps to enhance the bioavailability of nutrients.

1. Consume nutrients alongside certain foods or supplements that enhance absorption, such as pairing iron-rich foods with vitamin C sources to boost iron bioavailability.
2. Optimize gut health through the consumption of probiotics and fiber-rich foods, which can improve nutrient absorption.
3. Choose cooking methods that preserve nutrient content, such as steaming or microwaving for better preservation of nutrients.
4. Avoid cooking methods like boiling or frying which can lead to nutrient loss.
5. Be mindful of any interactions between medications and nutrients, as they may interfere with absorption.
6. Practice proper food storage and handling to maintain nutrient integrity.
7. Consider individual variations in nutrient absorption, as factors like age, genetics, and health conditions can influence bioavailability.
8. Incorporate regular physical activity into your routine, as exercise has been shown to enhance nutrient absorption.
9. Consult with a healthcare professional or registered dietitian for personalized guidance on enhancing nutrient bioavailability.

How does nutrient bioavailability impact diet efficacy?

Nutrient bioavailability is a critical factor in determining the effectiveness of a diet plan, as it determines the amount of nutrients that can be absorbed and utilized by the body. When nutrients are not bioavailable, the body is unable to effectively utilize them, which can lead to nutrient deficiencies and hinder the efficacy of the diet plan.

How does the bioavailability of nutrients differ in vegetarian diets compared to omnivorous diets?

The bioavailability of nutrients differs in vegetarian diets compared to omnivorous diets. Plant-based sources of nutrients may have lower bioavailability than animal-based sources. For example, non-heme iron from plant foods is not as readily absorbed by the body as heme iron from animal sources.

Some nutrients may be more easily absorbed when cooked or processed, while others may be lost during cooking. For example, cooking tomatoes increases the bioavailability of the antioxidant lycopene, while cooking broccoli can reduce the

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bioavailability of vitamin C. Understanding these differences is important for individuals following vegetarian diets to ensure they are meeting their nutrient needs and maintaining optimal health.

What is the bioavailability of protein in a vegan diet?

The bioavailability of protein in a vegan diet can vary, but plant-based protein sources generally have good bioavailability. Factors such as amino acid composition, presence of anti-nutrients, and processing methods can influence protein bioavailability.

Plant-based protein sources like legumes, tofu, tempeh, and quinoa are considered to have good bioavailability due to their balanced amino acid profiles and minimal presence of anti-nutrients. Consuming a variety of protein sources and properly preparing them can enhance overall protein bioavailability in a vegan diet. For example, combining beans and rice or adding vitamin C-rich foods to a meal can improve the absorption of plant-based proteins.

Which proteins have the highest bioavailability?

Animal-based proteins such as eggs, milk, and meat have the highest bioavailability. Animal-based proteins have a bioavailability ranging from 90% to 100%, meaning that almost all of the protein is effectively utilized by the body.

This is due to their complete amino acid profile, which provides all essential amino acids necessary for various metabolic processes, including muscle growth and repair.

What is the bioavailability of plant-based proteins?

The bioavailability of plant-based proteins is generally lower compared to animal-based proteins. Studies have shown that the average bioavailability of plant proteins ranges from 70% to 90%, while animal proteins have a bioavailability of around 90% to 100%. This means that the body can absorb and utilize a greater percentage of animal proteins than plant proteins.

The lower bioavailability of plant proteins is mainly due to factors such as the presence of anti-nutritional factors, lower digestibility, and incomplete amino acid profiles. For example, plant proteins like those found in legumes contain compounds like phytates and tannins, which can reduce the absorption of certain minerals and proteins. Additionally, plant proteins often lack one or more essential amino acids, making it important to consume a variety of plant-based protein sources to obtain all the necessary amino acids.

PRACTICAL TIPS FOR MAXIMIZING NUTRIENT ABSORPTION

As the founder of K3 Nutriments, my journey into optimizing health has led me to understand the importance of not just what we eat, but how our bodies absorb these nutrients.

Ensuring effective nutrient absorption is crucial for maintaining overall health and wellness. Here are some practical tips and strategies to maximize your nutrient absorption, whether through food, supplements, IVs, or injections.

How to Boost Your Nutrient Absorption

Eating a nutritious diet is essential to improve your gut health. But it's not just what you eat that matters. To reap the benefits of a healthy diet, your body must be able to absorb nutrients from the foods you eat.

Nutrient absorption is an essential part of digestion. The nutrients from your diet supply your cells with the energy they need to complete your daily bodily functions.

This article will take a closer look at digestion and the absorption of nutrients. We'll outline some tips that you can follow to maximize nutrient absorption and get the most out of your diet. We'll also highlight what can happen when your body struggles to absorb nutrients. Keep reading to learn how to boost your nutrient absorption.

Digestion and Absorption of Nutrients

Your digestive system prepares the food you eat for nutrient absorption before it reaches your intestines. Chewing breaks food down into small pieces that make it easier to digest. When food enters your stomach, it mixes with stomach acid and digestive juices to form a partly digested fluid known as chyme.

Your small intestine absorbs nutrients from the chyme after it leaves your stomach. The small intestine is 6 meters long and up to 3 cm in diameter. It provides the largest surface area for intestinal absorption.

Tiny, hair-like projections called villi line the inside of your small intestine. Villi are covered with special cells that absorb nutrients such as carbohydrates, proteins, and fats. Blood vessels inside the villi transport digested nutrients to various parts of your body for storage or use.

Your large intestine also absorbs some nutrients. It's 1.5 meters long and up to 7.5 cm in diameter. This is where electrolyte and water transport occur. The large intestine contains leftover digestive products such as undigested food, dead cells, and fluid. Fluid in the large intestine gets absorbed into the bloodstream, which turns liquid waste into solid stool.

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Tips to Maximize Nutrient Absorption

Boosting nutrient absorption can improve your health. Digested nutrients provide energy for cellular repair and growth. This keeps your intestinal cells healthy and prevents inflammation, which can reduce your risk of digestive conditions. Optimal digestion and nutrient absorption support your immune function and overall health.

You can enhance the absorption of nutrients from the foods you eat by making mindful dietary choices.

Wrapping Up Nutrient Absorption

Nutrient absorption is integral to digestion and a requirement for overall health and wellness. Your intestines must be able to absorb nutrients from the foods you eat to obtain benefits from a balanced, plant-based diet.

There are many ways to maximize nutrient absorption. Try eating healthy fats with vegetables, pairing prebiotics with probiotics, and opting for unpeeled foods. Chewing your food thoroughly and drinking plenty of water also improves digestion and nutrient absorption.

Your digestive system must complete several physiological mechanisms to successfully uptake nutrients. A healthy digestive system absorbs nutrients, supplies your cells with energy, and releases waste. Many medical conditions can disrupt digestion and cause malabsorption. This can lead to a variety of gastrointestinal symptoms.

Eat a Variety of Foods

Eating a diverse range of foods is like painting with a full palette of colors. Each hue adds to the richness and vibrancy of the masterpiece that is your health.

Benefits of a Diverse Diet

Eating a wide range of foods ensures you get a spectrum of vitamins and minerals. Different foods provide different nutrients, so incorporating a variety of fruits, vegetables, grains, and proteins helps cover all nutritional bases. Keep in mind, most of us will need to supplement to acquire the needed nutrients.

Tips for Diversifying Your Diet

To achieve this colorful, nutrient-rich diet, consider these strategies:

- **Incorporate Color:** Eat a rainbow of fruits and vegetables.
- **Rotate Proteins:** Include different sources such as meat, fish, beans, and legumes.
- **Try New Recipes:** Experiment with international cuisines to discover new ingredients.

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By embracing these tips, you can ensure a more balanced intake of essential nutrients, setting the stage for optimal absorption.

Optimize Your Gut Health

A healthy gut is the cornerstone of effective nutrient absorption. Think of your gut as the fertile soil that nurtures and grows the food you consume into the energy and nutrients your body needs.

Importance of a Healthy Gut

A healthy gut is critical for nutrient absorption. The gut microbiota plays a significant role in breaking down food and aiding in the absorption of nutrients.

Ways to Improve Gut Health

To cultivate this fertile soil, here are some ways to boost your gut health:

- **Probiotics:** Consume yogurt, kefir, sauerkraut, or take a probiotic supplement.
- **Prebiotics:** Eat foods rich in prebiotics, like garlic, onions, and bananas.
- **Fiber:** Increase your intake of fiber from fruits, vegetables, and whole grains.
- **Black Pepper:** Add table pepper to as many of your foods as possible.
- **Mineral Salts:** Add salt with minerals such as Volcanic Pink Salt to your foods.
- **Cinnamon:** Cinnamon aids in the production of digestive enzymes.

By nurturing your gut, you create an environment where nutrients can be absorbed more efficiently, boosting your overall health.

Stay Hydrated

Hydration is the unsung hero of nutrient absorption. Without sufficient water, your body can't properly digest food or transport nutrients.

Role of Water in Digestion

Adequate hydration is essential for digestion and nutrient absorption. Water helps break down food so that your body can absorb the nutrients.

Hydration Tips

Here are some tips to keep you well-hydrated:

- **Drink Water Regularly:** Aim for at least 8 cups of water a day. Hydrogen water is the best for this purpose.
- **Monitor Urine Color:** Light yellow urine typically indicates proper hydration.

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- **Hydrate Before Meals:** Drinking a glass of water 30 minutes before meals can aid digestion. If possible, drink little to no liquids during the meal.

Staying hydrated is a simple yet powerful way to enhance nutrient absorption and overall health.

Manage Stress

Stress is a silent saboteur of nutrient absorption. Chronic stress can disrupt digestion and impair your body's ability to absorb nutrients.

Connection Between Stress and Digestion

Chronic stress can negatively impact your digestive system, leading to poor nutrient absorption.

Stress Management Techniques

To keep stress in check, try these strategies:

- **Practice Mindfulness:** Engage in meditation or deep-breathing exercises.
- **Exercise Regularly:** Physical activity helps reduce stress and promotes healthy digestion.
- **Sleep Well:** Ensure you get 7-9 hours of sleep per night.

Managing stress is key to maintaining a healthy digestive system and maximizing nutrient absorption.

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THE VIBRANCY OF RAW FRUITS AND VEGGIES

Fruits and vegetables contain important vitamins, minerals and plant chemicals. They also contain fibre.

There are many varieties of fruit and vegetables available and many ways to prepare, cook and serve them.

A diet high in fruit and vegetables can help protect you against cancer, diabetes and heart disease.

Eat 5 kinds of vegetables and 2 kinds of fruit every day for good health.

Most Australians do not eat enough fruit and vegetables.

When buying and serving fruit and vegetables, aim for variety to get the most nutrients and appeal.

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BENEFITS OF ENZYMES, VITAMINS, AND ANTIOXIDANTS

Consuming some foods raw, like fruits and vegetables, may offer more nutrients than cooked food. But this isn't true for all foods. Some raw foods may increase your risk for food-borne illness compared to cooked food.

Cooking food can improve its taste, but it also changes the nutritional content.

Interestingly, some vitamins are lost when food is cooked, while others become more available for your body to use.

Some claim that eating primarily raw foods is the path to better health. However, certain cooked foods have clear nutritional benefits.

What Is a Raw-Food Diet?

Raw foods are foods that have not been cooked or processed.

While there are varying levels of raw-food diets, all of them involve eating mostly unheated, uncooked and unprocessed foods. In general, a raw-food diet is made up of at least 70% raw foods.

The diet often includes fermented foods, sprouted grains, nuts and seeds, in addition to raw fruits and vegetables.

Many raw foodists consume a vegetarian or vegan diet, eliminating animal products and eating mostly raw plant foods. However, a small number also consume raw dairy products, fish and even raw meat.

Advocates claim that raw foods are more nutritious than cooked foods because enzymes, along with some nutrients, are destroyed in the cooking process. Some believe that cooked food is actually toxic.

While there are some clear benefits to eating raw fruits and vegetables, there are also some potential problems with a raw-food diet.

A strict raw-food diet is very difficult to follow, and the number of people that stick to a completely raw diet in the long term is very small.

Furthermore, some foods contain dangerous bacteria and microorganisms that are only eliminated by cooking. Eating a completely raw diet that includes fish and meat comes with a risk of developing a food-borne illness.

Nutrition

Is Raw Food Healthier Than Cooked Food?

Consuming some foods raw, like fruits and vegetables, may offer more nutrients than cooked food. But this isn't true for all foods. Some raw foods may increase

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Cooking food can improve its taste, but it also changes the nutritional content.

Interestingly, some vitamins are lost when food is cooked, while others become more available for your body to use.

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Cooked Food May Be Easier to Chew and Digest

- Chewing is an important first step in the digestive process. The act of chewing breaks down large pieces of food into small particles that can be digested.
- Improperly chewed food is much more difficult for the body to digest and can lead to gas and bloating. Additionally, it requires significantly more energy and effort to properly chew raw foods than cooked ones.
- The process of cooking food breaks down some of its fibers and plant cell walls, making it easier for the body to digest and absorb the nutrients.
- Cooking also generally improves the taste and aroma of food, which makes it much more enjoyable to eat.
- Although the number of raw foodists who consume raw meat is small, meat is easier to chew and digest when it's cooked.
- Properly cooking grains and legumes not only improves their digestibility, but it also reduces the number of anti-nutrients they contain. Anti-nutrients are compounds that inhibit the body's ability to absorb nutrients in plant foods.
- The digestibility of a food is important because your body can only receive a food's health benefits if it's able to absorb the nutrients.

Some cooked foods may provide the body with more nutrients than their raw counterparts because they are easier to chew and digest.

Summary:

- Cooked foods are easier to chew and digest than raw foods. Proper digestion is necessary to absorb a food's nutrients.
- Cooking Increases the Antioxidant Capacity of Some Vegetables
- Studies have shown that cooking vegetables increases the availability of antioxidants like beta-carotene and lutein.
- Beta-carotene is a powerful antioxidant that the body converts into vitamin A.
- A diet rich in beta-carotene has been associated with a reduced risk of heart disease .
- The antioxidant lycopene is also more easily absorbed by your body when you get it from cooked foods instead of raw foods .
- Lycopene has been associated with a decreased risk of prostate cancer in

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men and lower risk of heart disease.

- One study found that cooking tomatoes reduced their vitamin C content by 29%, while their lycopene content more than doubled within 30 minutes of cooking. Also, the total antioxidant capacity of the tomatoes increased by over 60% .
- Another study found that cooking increases the antioxidant capacity and content of plant compounds found in carrots, broccoli and zucchini.
- Antioxidants are important because they protect the body from harmful molecules called free radicals. A diet rich in antioxidants is associated with a lower risk of chronic disease .
- Cooking your vegetables may make certain antioxidants more available to your body than they are in raw foods.

Cooking Kills off Harmful Bacteria and Microorganisms

It's better to eat certain foods cooked, as raw versions may contain harmful bacteria. Cooking food effectively kills bacteria that may cause food-borne illness.

However, fruits and vegetables are generally safe to consume raw, as long as they have not been contaminated.

- Spinach, lettuce, tomatoes and raw sprouts are some of the fruits and vegetables most frequently contaminated by bacteria.
- Raw meat, fish, eggs and dairy often contain bacteria that can make you sick.
- E. coli, Salmonella, Listeria and Campylobacter are some of the most common bacteria that may be found in raw foods .

Most bacteria cannot survive at temperatures over 140°F (60°C). This means that cooking effectively kills bacteria and reduces the risk of food-borne illness .

Commercially produced milk is pasteurized, which means it has been exposed to heat to kill any harmful bacteria it may contain.

It is not recommended to consume raw or undercooked meat, eggs or dairy. If you do choose to eat these foods raw, make sure your food is fresh and purchase it from a trusted source.

Broccoli: Raw broccoli contains three times the amount of sulforaphane, a cancer-fighting plant compound, than cooked broccoli does.

Cabbage: Cooking cabbage destroys the enzyme myrosinase, which plays a role in cancer prevention. If you choose to cook cabbage, do so for short periods.

Onions: Raw onion is an anti-platelet agent, which contributes to heart disease prevention. Cooking onions reduces this beneficial effect.

Garlic: Sulfur compounds found in raw garlic have anti-cancer properties.

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Foods That Are Healthier Cooked

Asparagus: Cooking asparagus breaks down its fibrous cell walls, making folate and vitamins A, C and E more available to be absorbed.

Mushrooms: Cooking mushrooms helps degrade agaritine, a potential carcinogen found in mushrooms. Cooking also helps release ergothioneine, a powerful mushroom antioxidant.

Spinach: Nutrients like iron, magnesium, calcium and zinc are more available for absorption when spinach is cooked.

Tomatoes: Cooking greatly increases the antioxidant lycopene in tomatoes .

Carrots: Cooked carrots contain more beta-carotene than raw carrots .

Potatoes: The starch in potatoes is nearly indigestible until a potato is cooked.

Legumes: Raw or undercooked legumes contain dangerous toxins called lectins. Lectins are eliminated with proper soaking and cooking.

Meat, fish and poultry: Raw meat, fish and poultry may contain bacteria that can cause food-borne illnesses. Cooking these foods kills harmful bacteria

Some foods, including certain fruits like pineapple and fermented foods like kimchi, contain digestive enzymes that may benefit digestion.

Many organs work together to make up your digestive system .

These organs take the food and liquids you eat and break them down into simpler forms, such as proteins, carbs, fats and vitamins. The nutrients are then transported across the small intestine and into the bloodstream, where they provide energy for growth and repair.

Digestive enzymes are necessary for this process, as they break down molecules like fats, proteins and carbs into even smaller molecules that can be easily absorbed.

There are three main types of digestive enzymes:

- **Proteases:** Break down protein into small peptides and amino acids
- **Lipases:** Break down fat into three fatty acids plus a glycerol molecule
- **Amylases:** Break down carbs like starch into simple sugars

Enzymes are also made in the small intestine, including lactase, maltase and sucrase.

If the body is unable to make enough digestive enzymes, food molecules cannot be digested properly. This can lead to digestive disorders like lactose intolerance.

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Thus, eating foods that are high in natural digestive enzymes can help improve digestion.

Here are 12 foods that contain natural digestive enzymes.

- Pineapple
- Papaya
- Mango
- Honey
- Bananas

Bananas are another fruit that contains natural digestive enzymes.

- Avocados

Unlike other fruits, avocados are unique in that they are high in healthy fats and low in sugar.

- Kefir

Kefir is a fermented milk beverage that is popular in the natural health community.

- Sauerkraut

Sauerkraut is a type of fermented cabbage that has a distinct sour taste.

- Kimchi

Kimchi is a spicy Korean side dish made from fermented vegetables.

- Miso

Miso is a popular seasoning in Japanese cuisine. It's made by fermenting soybeans with salt and koji, a type of fungus.

- Kiwifruit

The kiwifruit is an edible berry that is often recommended to ease digestion

- Ginger

Ginger has been a part of cooking and traditional medicine for thousands of years.

Some of ginger's impressive health benefits may be attributed to its digestive enzymes.

Antioxidants are compounds that inhibit the oxidation of other molecules and protect the body from the effects of free radicals, produced either by normal cell

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metabolism or as an effect of pollution and exposure to other external factors and are responsible for premature aging and play a role in cardiovascular disease. degenerative diseases such as cataracts, Alzheimer's disease, and cancer. While many antioxidants are found in nature, others are obtained in synthetic form and reduce oxidative stress in organisms. This review highlights the pharmacological relevance of antioxidants in fruits, plants, and other natural sources and their beneficial effect on human health through the analysis and in-depth discussion of studies that included phytochemistry and their pharmacological effects. The information obtained for this review was collected from several scientific databases (ScienceDirect, TRIP database, PubMed/Medline, Scopus, Web of Science), professional websites, and traditional medicine books. Current pharmacological studies and evidence have shown that the various natural antioxidants present in some fruits, seeds, foods, and natural products have different health-promoting effects. Adopting functional foods with high antioxidant potential will improve the effective and affordable management of free radical diseases while avoiding the toxicities and unwanted side effects caused by conventional medication.

Benefits

Many people on a raw food diet believe that it makes the body better able to prevent and fight diseases, especially chronic conditions.

Following a raw food diet can have a range of benefits, including improved health and weight loss. The next sections discuss some possible benefits.

A raw food diet tends to be high in fruits, vegetables, nuts, and legumes, all of which are staples of a healthful diet. Eating a range of these foods will provide plenty of vitamins, minerals, and healthful fats, and protein.

Cooking destroys some nutrients, such as water-soluble vitamin B and vitamin C, so eating food raw ensures a better supply of these.

Fewer processed foods

Processed foods tend to be higher in salt, added sugars, and unhealthy saturated fats. They can lead to inflammation of blood vessels and cardiovascular disease. Reducing or eliminating processed foods can, therefore, have significant health benefits.

Weight loss

If a person wishes to lose weight, eating mainly uncooked foods can help. This is because raw foods are usually low in calories, and plant-based foods are high in fiber, making a person feel full for longer.

Retaining enzymes in food

According to some sources, the cooking process may destroy or alter the natural

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enzymes in foods, as well as some essential vitamins.

The idea is that nature has given each food its unique perfect mix, and these vital enzymes allow a person to digest their foods fully. Proponents claim that only raw food, therefore, is "live" food.

However, these enzymes present in food are mostly denatured by the acid in the stomach. Our bodies contain the enzymes needed to digest foods.

Other benefits

Some people believe that the raw food diet will lead to the following benefits, though these are not scientifically proven:

- more energy
- clearer skin
- better digestion

Eating raw food has an array of benefits backed by scientific studies and the advantages range from sustained weight loss, increase in energy levels and lowering of cholesterol levels. Studies show that raw food diet has higher levels of antioxidants and basically reduce your risk of chronic ailments. However, cooked food has better digestibility and also takes care of the anti-nutrients that are found in raw food thus making nutrient absorption better. In our daily life, we tend to eat a mix of cooked and uncooked food. While veggies are cooked, salads like onion, cucumber and even green chilly are eaten raw. Many of us eat sprouted grains, broccoli, bell peppers raw while others steam or cook them before eating. So, which one is actually better for your health - raw food or cooked food?

Raw food has more water-soluble vitamins

"Cooking leads to loss of water, reducing the amount of water-soluble vitamins. Fruits high in Vitamin C should be consumed raw for this reason. Even green chillies, when eaten raw, have more Vitamin C than lemons by weight".

But why do we prefer cooking over consuming raw food?

Cooking destroys enzymes in food

"And some believe that cooking leads to more need for enzymes from us to digest food. The other side claims that enzymes in food are for their growth, and humans make enough enzymes to digest food cooked or uncooked.

Cooked food has more mineral and micronutrient density

"As we make saag out of leafy vegetables like palak, the minerals, fat-soluble vitamins, and antioxidants are concentrated as water content goes down. For example, Vitamin K, an antioxidant and oil-soluble vitamin, gets concentrated when cooked" .

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Cooking kills bacteria and microorganisms

cooking reduces the chances of food-borne illnesses, especially in animal-based food sources. "For germinated foods, it depends on the type of microorganisms/preparation environment".

Cooking makes food easier to digest

Cooking breaks down some plant cells to make them easier to digest and absorb. That's why meat is easier to digest when cooked and cooking grains and legumes improve digestibility.

Cooking reduces antinutrients

"Antinutrients have been shown to hinder the absorption of certain micronutrients. Cooking reduces known anti-nutrients like oxalates and phytates. But anti-nutrients are demonised because of their names actually they have a lot of beneficial functions".

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SEASONAL EATING AND LOCAL PRODUCE

What is seasonal food?

Seasonal food is produce that is purchased and consumed around the time that it is harvested. For example, purchasing fresh fiddlehead ferns in season in New York means buying them in the spring shortly after farmers have harvested them.

Why is it important to eat food that's in season?

Seasonal food is fresher, tastier and more nutritious than food consumed out of season. Even though we all like to eat strawberries year round, the best time to eat them is when they can be purchased directly from a local grower shortly after harvest. Seasonal fruits and vegetables produced on local farms are often fresher, as they do not require long distances for transport. Also, unlike out of season produce which is harvested early in order to be shipped and distributed to your local retail store, crops picked at their peak of ripeness are also better tasting and full of flavor.

Why is eating local food important?

Purchasing locally grown foods helps support local farms and maintains farmland and open space in your community.

Local food supports the local economy. The money you spend on products from local farmers and growers stays in the community and is reinvested with other local businesses. In addition, food grown locally, processed locally and distributed locally generates jobs and subsequently helps stimulate local economies.

Local growers can tell you how the food was grown. When you buy directly from farmers, you have the opportunity to ask what practices they use to raise and harvest the crops. When you know where your food comes from and who grew it, you know a lot more about your food.

Where can I find recipes for the local, seasonal produce on this site?

You can find lots of wonderful recipes for even the most obscure local and seasonal produce in our Real Food Encyclopedia.

Where can I buy local, seasonal produce in my state?

Most of the produce included in the Seasonal Food Guide can be found at your local farmers' market, through local Community Supported Agriculture programs operating in your area and at restaurants and businesses committed to seasonal, local food.

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How do you know when food is in-season?

Because climates and soils vary throughout the United States, the plants that grow here vary, too. There are many handy resources that can help you find what's in-season in your area.

Another option is to find what grows best in your area by referencing the Farmers Almanac. You can even grow your own food.

Understanding natural growing cycles

Each food has a specific time that it's best grown and harvested. Knowing foods' growing cycles provides insight into best practices for eating seasonally.

Harvest times for these foods will depend on the type of plants, their germination cycles, and how long it takes for the plants to mature in Spring.

These are "cool-season" crops that begin to germinate in colder soil and can tolerate cold temperatures.

Examples include:

- asparagus
- spinach
- radishes
- rhubarb
- scallions
- chives
- fiddlehead ferns
- ramps (sometimes called wild leeks or spring onions)
- garlic scapes
- Summer

These are "warm-season" crops that thrive in hot conditions and are sensitive to frost.

Examples include:

- melons
- cucumber
- tomatoes
- eggplants
- peppers
- stone fruits
- summer squash
- herbs
- End of summer or fall

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These are the plants that are harvested for storage.

Examples include:

- hard-skinned winter squashes
- root vegetables
- onions
- potatoes

Seasonal eating may also benefit the planet — and your wallet

Webster and Chan agree that eating seasonally can lower your carbon footprint. Sourcing food seasonally means you're potentially lowering greenhouse gas emissions associated with trucking and holding the produce in cold storage.

Because your food spends less time traveling, it'll be fresher—and perhaps less expensive—since there will be fewer costs associated with shipping and storage.

You'll also be supporting your local farmers and economy, according to Lorencz.

Farms provide employment and are integral parts of our food system. Buying local keeps small farms in business and promotes food diversification.

Buying local keeps small farms in business and promotes food diversification.

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SPROUTING TECHNIQUES

It's easy to Sprout!

All you need is an old jam-jar and some seeds (like lentil, pea or chickpea) that you can buy from any supermarket. It's super easy. Sprouts grow well all year round - and are the perfect thing for midwinter when few other things can be sown. They also make a great first growing project. A mix of rose radish, chickpea, pea, mung bean and lentil sprouts.

Why sprout?

Sprouts can be grown at any time of year in even the smallest home, and on the smallest budget. What's more they're packed with vitamins and nutrients, good for your health and fighting off those pesky winter colds. A huge variety of seeds can easily be grown to eat as sprouts including radish, pea, chick pea, mung beans, alfalfa, fenugreek, sunflower, lentil, and broccoli. Each has its own unique flavour. Add them to sandwiches, salads, soups and stir fries or eat them on their own.

Fantastic value

You don't need to buy the small, pricey packets of sprouting seeds either. Many dried pulses like mung beans, lentils or chick peas from the supermarket or health food shop will sprout just as well at a fraction of the cost. If buying sprouting seeds online, look out for the larger (500g) packs as they are often much better value. I get most of my seeds to sprout from SkySprouts whose seeds I've always found excellent quality - they are offering 10% off your first order to Vertical Veg readers - use the code: verticalveg at checkout.

How to make your own sprouter

Sprouters are readily available to buy or it's super easy to make your own. A DIY jam-jar sprouter is actually easier to use and gives better results than many commercial sprouters. Make your own sprouter in two simple steps: Find a decent sized glass jar, preferably with a lid. Drill small holes in the lid - 3mm is fine or punch them with a hammer and nail. If you prefer, you can dispense with the lid altogether and simply drain the water off through your fingers.

How to grow sprouts, step by step

Put some seeds in the bottom of the jar and cover with water to soak for twelve hours. You can add just one type of seed or a mix of varieties, it's fun to experiment. The seeds will expand a lot as they grow. Half to one inch (1cm - 2cm) of dried seeds will usually fill a jar. It varies between seeds - radish expand more than sunflowers, for example - you'll quickly learn.

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Soaking the seeds for twelve hours helps speed the germination process. The seeds will swell to double their size, too.

After twelve hours, rinse the seeds in water. Ideally the water should be at room temperature - not too cold and not too hot. Then drain the water out of the holes in the lid, leaving the seeds damp but not swimming in water. Rinse the sprouts in water and drain. Try to avoid rinsing them in very cold water as this can slow the sprouting process.

Repeat the rinsing process at least once every 12 hours until the sprouts are ready - usually about 2 to 4 days. After three days, these sprouts are nearly ready to eat. As you can see they're already trying to escape from the jar - so I probably put a few too many seeds in this jar in the first place.

Eat the sprouts straight away. Or transfer them to a plastic bag in the fridge where they keep well for several days.

How do you like 'em?

If you grow or buy sprouts, I'll be fascinated to hear how you like to eat 'em in the comments below - which varieties do you like best and what's the tastiest ways to eat them?

Microgreens

If you enjoy sprouting, why not try growing peashoots and other microgreens? They are easy to grow, delicious and nutritious. Here's how to grow peashoots.

Types of sprouts

1. ALFALFA SPROUTS

Alfalfa sprouts are a very common and popular sprouting variety as they have a mild taste making them great to add to any dish for extra crunch and nutrients.

They are an excellent source of minerals, calcium, magnesium, and potassium -all crucial for muscle and bone health.

Alfalfa seeds will take three to seven days to sprout and should preferably be eaten raw as the nutrients in the sprouts are unstable and will go lost when cooked.

2. BROCCOLI SPROUTS

Broccoli sprouts don't taste like broccoli but add a mildly spicy, nutty flavor to any dish that needs a spicy flavor boost. They also add a beautiful pop of striking green color to your dishes.

Broccoli sprouts are sure to increase the nutritional intake of any dish and boost

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your overall health. They are high in antioxidants and a good source of fiber, folic acid, and vitamins A, C, and K.

You can expect edible-sized sprouts from seed after five days. Like alfalfa and other thin sprouts, you should eat them raw to maintain their nutritional structure and value.

"The nutrition and flavor of fresh broccoli sprouts are definitely a 5 star. Economical salad!".

3. BEET SPROUTS

Beet sprouts are more challenging to grow and take longer to sprout to edible form, between eleven to twenty-one days from seeds. But they are worth the wait!

They taste slightly earthy and sweet, very much like full-sized beets. Their striking hot pink stems and bright green leaves make any dish eye-catching.

Not only do they look gorgeous, but like all sprouts, they add nutrients such as Vit A, B, C, E, and K, and also iron, calcium, and protein.

4. CHICKPEA SPROUTS

Beans such as chickpeas are sometimes difficult to digest, and sprouting helps to improve digestion.

They are also more protein-rich than other sprouts and are packed with many nutrients such as Vitamin C and iron.

Since chickpeas are larger, they need to be soaked for longer and require more frequent rinsing and draining.

Chickpeas are one of the quickest beans to sprout; they will sprout in two days. Enjoy them raw in salads or cooked in soups and veggie burgers, or make delicious raw hummus.

5. MUSTARD SPROUTS

Mustard sprouts look very similar to alfalfa sprouts and have a spicy, earthy flavor. Some compare them to the taste of horseradish. They work great to add a bit of spiciness to sprout blends or eat on their own if you choose.

Expect a nutritional boost of vitamins and minerals, including calcium, iron, zinc, magnesium, and selenium, when you add them to salads and sandwiches.

Mustard sprouts are ready to harvest in three to six days, and the longer the sprouts mature, the more intense the flavor will become.

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6. GREEN PEA SPROUTS

Green peas grow tasty, refreshing sprouts and have a sweet, mild flavor that adds crunch to salads or sandwiches.

They are packed with Vitamin A, B, and C and minerals such as calcium, iron, and phosphorus.

Green pea sprouts are larger than broccoli and alfalfa sprouts and take about the same time as mung bean sprouts to grow. You can harvest sprouted green peas within two to three days.

Due to their size, green peas need to soak longer and require more frequent rinsing and draining.

"These cook up delicious and tender, and they can be sprouted too! Did a test batch - germination was fast and very high & the sprouts tasted great. Quite pleased I bought these peas!".

7. KALE SPROUTS

Kale sprouts have a unique shape with grey-green and violet purple-toned veins. They provide a crisp texture with a sweet flavor and undertones of nuts, pepper, and classic brassica bite.

Kale sprouts are a good source of vitamin C, folic acid, calcium, and potassium and can be enjoyed both raw or cooked by lightly sauteeing them.

You can harvest kale sprouts from day three to six, depending on how long you want them to grow.

8. LENTIL SPROUTS

Of all the sprouts, lentils contain the most protein, and they are very low in calories, making them fantastic for any diet or weight loss program.

Lentils will add great crunch and a rich, nutty flavor to any dish. Remember that split lentils won't sprout; you must purchase whole lentils.

Not only are they rich in nutrients such as thiamine, copper, manganese, iron, and vitamin C, but they also look pretty with their various colors.

Lentil sprouts can be enjoyed two to four days after sprouting, depending on how you like them. They can be eaten raw or lightly cooked to soften them a bit.

9. MUNG BEAN SPROUTS

Another popular sprout is Mung bean sprouts. They originated in Asia and have become widely used in Asian and Western diets.

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Mung beans are high in protein and fiber, low in calories, and rich in vitamin C, calcium, and iron. With their mildly nutty flavor and bigger size, they go well in cooked dishes such as stir-fry or eaten raw in salads.

Mung bean sprouts take three to four days to grow to an edible size and typically have two to four-inch long white stalks.

"These are so wonderful for sprouting! They make incredible, cheap, highly nutritious raw veggies! They are so easy to sprout. I have had mung beans from China and the quality wasn't as good. I don't know why."

10. RADISH SPROUTS

Radish sprouts come in just as many diverse varieties and taste similar to mature radishes but are less spicy.

Their slender white and red stems look stunning as a garnish on salads, sandwiches, sushi, or tofu scramble.

Radish sprouts are rich in vitamin B and C, folate, and manganese and will sprout within three to six days from seeds.

11. RED CLOVER SPROUTS

Red clover sprouts come from the legume *Trifolium* seeds, which look and taste very similar to alfalfa sprouts. Red clover sprouts have a long white, thin stalk with a light green top, providing a mild flavor and crunch.

You can harvest red clover sprouts within five to six days from seeds. Due to their fragility, they should instead be eaten raw than cooked to maintain the nutrient content.

Like many other sprouts, Red clover sprouts are rich in protein, vitamins, iron, and calcium.

12. SUNFLOWER SPROUTS

Sunflower sprouts are another interesting sprout to add to dishes with their nutty flavor, more prominent size, and crunchier and crispier texture.

They are loaded with vitamin D, calcium, and iron. Just be cautious, as sunflower sprouts are more calorie-dense and high in fat (although mostly healthy unsaturated fat.)

Sunflower sprouts will take longer to grow due to their size, and you will be able to harvest them within twelve to fourteen days.

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NUTRITIONAL POWERHOUSE OF SPROUTS

Health Benefits & Nutrition Value of Sprouts

Sprouts are tiny but mighty when it comes to nutrition! They're packed with good stuff like vitamins, minerals, and antioxidants that help keep our bodies healthy. When seeds, grains, or beans sprout, they become easier to digest, and our bodies can soak up more of the good stuff inside them. Sprouts have lots of enzymes that help break down food and get most out of what we eat. Eating sprouts helps with digestion and metabolism. They're also low in calories, high in fiber, making us feel full and helps with losing weight.

Sprouts are like little soldiers fighting for our health! They have antioxidants that fight off bad stuff in our bodies called free radicals, which can make us sick. Some studies even say that certain nutrients in sprouts might help stop cancer cells from growing. Sprouts are good for our hearts too. They have fiber and potassium that keep our hearts strong and our blood pressure in check. Plus, sprouts have lots of vitamin C, which helps our immune system stay strong.

So, eating sprouts is like giving your body a big boost of goodness! They're tasty, easy to add to meals, and super good for you. Just make sure to handle them safely so they stay fresh and free from germs.

Calories in Sprouts

The calorie content of sprouts can vary depending on the type of sprouts and how they're prepared. Generally, sprouts are low in calories because they are mostly water and fiber. On average, a cup (approximately 100 grams) of raw sprouts contains around 30-50 calories. However, this can vary slightly based on factors such as the type of seed or bean sprouted.

It's important to note that while sprouts are low in calories, they are rich in nutrients, making them a great addition to a healthy diet. They provide essential vitamins, minerals, and antioxidants without adding a significant number of calories, making them a nutritious and satisfying choice for meals and snacks.

How Many Calories Do Sprouts Have?

Here are the approximate calorie counts for popular varieties of sprouts per 100 grams:

Type of Sprout- Calories (per 100g)

- Moong (Mung) Sprouts- 30 calories
- Matki (Moth) Sprouts- 36 calories
- Chana (Chickpea) Sprouts- 42 calories
- Methi (Fenugreek) Sprouts- 49 calories

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- Masoor (Red Lentil) Sprouts- 45 calories
- Kabuli Chana (Chickpea) Sprouts- 46 calories
- Alfalfa Sprouts- 23 calories
- Bean Sprouts- 30 calories
- Broccoli Sprouts- 35 calories
- Lentil Sprouts- 40 calories
- Mung Bean Sprouts- 30 calories
- Soybean Sprouts- 40 calories

These values are approximate and can vary based on factors such as the specific variety of sprouts and how they are prepared. Sprouts are generally low in calories and high in nutrients, making them a healthy addition to Indian cuisine.

Calories in Common Food Items with Sprouts

When you enjoy foods with sprouts, you're not just getting a tasty meal; you're also getting a nutritious boost! A traditional Indian sprout salad, commonly known as "moong dal chaat," typically includes sprouted mung beans mixed with chopped onions, tomatoes, green chilies, spices and a squeeze of lemon juice. This delicious dish is not only light and refreshing but also low in calories, usually clocking in at around 100-150 calories for a cup serving.

If you opt for a sprout wrap, a popular choice might be a "sprouts and veggie wrap" made with whole grain roti, filled with crunchy sprouts, cucumbers, tomatoes, and a spread of mint chutney or tangy tamarind sauce. This wholesome wrap could range from 200 to 300 calories, depending on the specific ingredients and portion size.

This is commonly known as "sprout rolls" or "frankie," can be a filling and nutritious option. In Indian cuisine, sprouts are also frequently used sabzis, where they're cooked with spices, vegetables, and sometimes protein sources like paneer or fish as accompaniments. These flavorful dishes, such as "sprouted moong curry" or "ussals, kadalas,lobias" are not only rich in flavor but also provide essential nutrients. A serving of this might typically contain around 200 to 300 calories.

Lastly, soups featuring sprouts are a comforting and nourishing option. A bowl of "sprout soup," made with sprouts, vegetables, and fragrant Indian spices, could be around 100-200 calories, depending on the ingredients and portion size.

It's important to remember that these calorie counts are approximate and can vary based on factors such as ingredients, cooking methods, and portion sizes. As always, if you're keeping track of your calories or following a specific dietary plan, it's a good idea to check labels or use a nutritional calculator for more precise information.

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Sprouts are like little powerhouses of goodness! Here's why they're so great for you:

- Sprouts are bursting with essential vitamins, minerals, and antioxidants that help keep your body strong and healthy.
- Sprouting makes seeds, grains, and beans easier to digest.
- Sprouts are low in calories but high in fiber, which helps you feel full and satisfied, helping you to lose weight.
- Sprouts are loaded with vitamin C and other nutrients that help strengthen your immune system. Eating them regularly can help keep you from getting sick.

The fiber, potassium and antioxidants in sprouts are great for your heart health. They can help lower cholesterol levels and keep your heart strong.

Some studies suggest that certain compounds in sprouts may help prevent cancer by fighting off harmful cells in your body.

The enzymes in sprouts aid digestion, making it easier for your body to break down and absorb nutrients from other foods you eat.

So, whether you sprinkle them on salads, add them to rice, or toss them in stir-fries, including sprouts in your diet is an easy way to boost your health and feel great!

Health Benefits & Nutrition Value of Sprouts

Sprouts are tiny but mighty when it comes to nutrition! They're packed with good stuff like vitamins, minerals, and antioxidants that help keep our bodies healthy. When seeds, grains, or beans sprout, they become easier to digest, and our bodies can soak up more of the good stuff inside them. Sprouts have lots of enzymes that help break down food and get most out of what we eat. Eating sprouts helps with digestion and metabolism. They're also low in calories, high in fiber, making us feel full and helps with losing weight.

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- Sprouts are low in calories but high in fiber, which helps you feel full and satisfied, helping you to lose weight.
- Sprouts are loaded with vitamin C and other nutrients that help strengthen your immune system. Eating them regularly can help keep you from getting sick.
- The fiber, potassium and antioxidants in sprouts are great for your heart health. They can help lower cholesterol levels and keep your heart strong.

Some studies suggest that certain compounds in sprouts may help prevent cancer by fighting off harmful cells in your body.

The enzymes in sprouts aid digestion, making it easier for your body to break down and absorb nutrients from other foods you eat.

So, whether you sprinkle them on salads, add them to rice, or toss them in stir-fries, including sprouts in your diet is an easy way to boost your health and feel great!

Potential Risk of Consuming Sprouts

Sprouts can sometimes carry harmful bacteria that cause foodborne illnesses like nausea, vomiting, and diarrhea. This is because they're grown in warm, moist conditions where bacteria thrive. Cleaning sprouts thoroughly can be tricky, and harmful bacteria may remain even after rinsing. Certain groups, like pregnant women and those with weakened immune systems, are at higher risk. To stay safe, wash them well, cook them well, and store them in the fridge. Also, be careful to avoid cross-contamination by keeping sprouts away from raw meat and washing hands and surfaces after handling them. These steps can help you enjoy sprouts without worrying about getting sick.

Nutritional Value of Sprouts

Before delving into sprouts' incredible benefits, it is crucial to understand their exceptional nutritional value. Sprouts are germinated seeds that have just started to grow. They contain abundant essential nutrients during this early stage, making them a true superfood. Nutritional value can vary and depend on the different types of sprouts, such as mung bean sprouts, wheat sprouts, black gram sprouts, lentil sprouts, kidney bean sprouts, or fenugreek sprouts.

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Sprouts are rich in vitamins A, C, E, and K and minerals like iron, potassium, and magnesium. They also provide good dietary fiber, protein, and antioxidants. This impressive nutritional profile makes sprouts a valuable addition to any diet.

On average, one cup of green sprouts contains:

- Calories: 257
- Protein: 7.7 gm
- Carbohydrate: 6.2 gm
- Fibers: 2 gm
- Vitamin C: 13.7 mg
- Vitamin K: 34.3 mcg

12 Health Benefits of Eating Sprouts Daily

Boosted Immune System: Sprouts enhance the immune system due to their high vitamin C content. This vitamin stimulates white blood cell production, which plays a crucial role in improving the body's defence against infections and diseases.

Improved Digestion: The fiber content of sprouts promotes digestion by adding bulk to stool and preventing constipation. Sprouts contain enzymes that aid in breaking down complex carbohydrates and proteins, ensuring efficient nutrient absorption.

Enhanced Heart Health: Sprouts are heart-friendly due to their low cholesterol and sodium content. They are also rich in potassium, which helps maintain healthy blood pressure levels. Furthermore, the antioxidants in sprouts protect the heart and vascular system from oxidative stress and reduce the risk of cardiovascular diseases.

Cancer Prevention: Sprouts are a natural phytochemical source that prevents cancer development. These plant-based bioactive compounds inhibit the growth of cancer cells and neutralize harmful free radicals in the body, reducing the risk of various types of cancer.

Weight Management: Including sprouts in your diet can support weight management efforts. They are low in calories and high in fiber, keeping you full for longer periods and curbing unnecessary cravings. Moreover, sprouts contain enzymes that promote fat metabolism, aiding in weight loss.

Improved Skin Health: Sprouts are rich in vitamins and antioxidants, contributing to healthy skin. Vitamin C helps in collagen production, promoting skin elasticity, while antioxidants protect against free radicals, preventing premature aging and maintaining a youthful glow.

Detoxification: Sprouts have excellent detoxifying properties due to their high fiber content. They facilitate regular bowel movements and help eliminate toxins from the body. Additionally, sprouts contain sulfur compounds that support liver

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detoxification processes.

Bone Health: Sprouts are a good source of vitamin K, which plays a crucial role in your bone health and density. Regularly consuming sprouts can help prevent osteoporosis and promote strong, healthy bones.

Improved Vision: Vitamin A present in sprouts makes them beneficial for maintaining good vision and can protect from age-related macular degeneration and cataracts.

Regulated Blood Sugar Levels: Sprouts have a low glycemic index, making them a preferable option for individuals with diabetes or those aiming to control their blood sugar levels. The fiber and protein in sprouts help slow down glucose absorption, preventing blood sugar spikes.

Reduced Inflammation: Sprouts possess anti-inflammatory properties due to their high antioxidant content. These antioxidants help diminish inflammation in the body, decreasing symptoms of conditions such as arthritis and promoting overall well-being.

Improved Cognitive Function: Sprouts contain nutrients such as vitamin E and folate that support brain health and improve cognitive function. Regular consumption of sprouts may help enhance memory, focus, and concentration.

Conclusion

Sprouts have many health benefits, including boosting the immune system and promoting weight loss. Their impressive nutritional profile and ability to support various bodily functions make them an invaluable addition to any diet. So, whether you sprinkle them on a salad, toss them in a stir-fry, or blend them into a smoothie, incorporate sprouts into your meals regularly and reap the life-changing benefits of eating sprouts daily.

Health Benefits of Sprouts

18 Amazing Health Benefits of Eating Sprouts Daily

1. Enhanced Nutrient Absorption

Sprouts are a nutritional goldmine, with their nutrient content skyrocketing during the germination process. As seeds sprout, they become more bioavailable. This means your body can absorb and utilize the vitamins, minerals, and other beneficial compounds more efficiently.

For example, the vitamin C content in sprouts can increase significantly, making them a fantastic addition to your meals. This enhanced nutrient absorption can lead to better overall health and vitality.

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2. Improved Digestion

One of the most notable benefits of sprouts is their positive impact on digestion. The enzymes activated during sprouting help break down complex carbohydrates, proteins, and fats. This makes them easier for your body to digest and absorb.

Additionally, sprouts are rich in fiber, which supports regular bowel movements and promotes a healthy gut microbiome. A study found that sprouting can increase the fiber content of grains by up to 133%, making them more beneficial for digestion.

3. Antioxidant Power

Sprouts are brimming with antioxidants like vitamins C and E, as well as beta-carotene. These powerful compounds neutralize harmful free radicals, reducing oxidative stress and inflammation in the body.

Science indicates that consuming just over 100 grams of sprouts daily can have protective effects against DNA damage, which is associated with cancer risk. Regular consumption of sprouts can contribute to a stronger immune system. This can also lower the risk of chronic diseases such as heart disease and certain cancers.

4. Immune System Support

Speaking of the immune system, sprouts are a fantastic ally in keeping it strong and resilient. They possess natural antimicrobial properties that can help fight off harmful microorganisms. Their nutrient-dense profile supports the production of white blood cells and enhances the body's overall defense against pathogens.

Plus, the vitamin A found in many sprouts is crucial for maintaining healthy mucous membranes. This can act as a barrier against infections.

5. Cardiovascular Health

Certain sprouts, such as lentils and mung bean sprouts, are particularly beneficial for heart health. They are low in cholesterol and high in dietary fiber, which can help lower cholesterol levels and maintain healthy blood pressure.

A study published in Food Chemistry demonstrated that sprouts can increase "good" HDL cholesterol while reducing total and "bad" LDL cholesterol levels. This indicates their potential for improving cardiovascular health. Sprouts can help reduce the risk of heart disease, making them a heart-healthy choice.

6. Weight Management

If you're looking to maintain a healthy weight or shed a few pounds, sprouts can be a valuable ally. They are low in calories and high in fiber. This can help you feel full and satisfied for longer, reducing the likelihood of overeating. Incorporating sprouts into your meals can provide a nutritious boost while supporting your weight management goals. For example, you can add a handful of alfalfa sprouts to your salad to enhance its volume without adding many calories.

7. Bone Health

Sprouts are an excellent source of calcium, a mineral crucial for maintaining strong, healthy bones. They also contain other bone-supporting nutrients like vitamin K and magnesium. Regular consumption of sprouts can help prevent osteoporosis and reduce the risk of fractures, especially as we age. A study from the Journal of Nutrition found that sprouts rich in vitamin K can improve bone mineral density.

8. Skin Health

The vitamins, minerals, and antioxidants found in sprouts can also work wonders for your skin. Vitamin C, for example, is essential for collagen production, which keeps your skin firm and youthful. Sprouts also contain zinc, which helps regulate oil production and reduce inflammation, making them a great ally in fighting acne. Incorporating sprouts into your diet can lead to a clearer complexion and healthier skin overall.

9. Brain Health

Sprouts are rich in folate, a B vitamin that plays a crucial role in brain development and function. Studies have shown that folate deficiency can lead to cognitive impairment and an increased risk of dementia.

By adding sprouts to your diet, you can help keep your brain sharp and healthy. This makes them a smart choice for maintaining cognitive function.

10. Diabetes Management

For those living with diabetes, sprouts can be a valuable addition to their diet. Studies have shown that consuming sprouts can help lower blood sugar levels and improve insulin sensitivity.

A study found that participants who consumed broccoli sprout supplements experienced lower blood insulin levels and improved insulin resistance. The high fiber content of sprouts also helps regulate blood sugar spikes. So it is a good diabetes-friendly food choice.

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11. Cancer Prevention

The antioxidants and phytochemicals found in sprouts may also help prevent the development of certain types of cancer. Sulforaphane, a compound found in broccoli sprouts, has potent anti-cancer properties.

This can inhibit the growth of cancer cells and promote their death. Research indicates that regular consumption of sprouts can be a proactive step in reducing cancer risk and supporting overall health.

12. Anti-Aging Benefits

Sprouts are rich in antioxidants that can help protect your cells from damage caused by free radicals. This is a major contributor to the aging process. By incorporating sprouts into your diet, you can help slow down the signs of aging and maintain a youthful appearance and vitality. Plus, The vitamin E found in many sprouts can help keep your skin hydrated and reduce the appearance of fine lines and wrinkles.

13. Detoxification

The chlorophyll in sprouts acts as a natural detoxifier, helping to remove toxins and heavy metals from the body. This can help support the liver, kidneys, and other organs responsible for eliminating waste.

Plus, It can also help maintain a healthy internal environment. Consuming sprouts regularly can aid in the body's natural detoxification processes, promoting overall health and well-being.

14. Improved Fertility

For those looking to conceive, sprouts can be a valuable addition to their diet. They are rich in folate, which is essential for fetal development and reducing the risk of neural tube defects. Additionally, sprouts contain zinc, which is crucial for male fertility and sperm health. Including sprouts in your diet can support reproductive health and enhance fertility for both men and women.

15. Reduced Inflammation

Chronic inflammation is at the root of many health problems, from joint pain to heart disease. The antioxidants and anti-inflammatory compounds found in sprouts can help reduce inflammation throughout the body. This can provide relief for those suffering from conditions like arthritis, asthma, or autoimmune disorders. For instance, sprouted beans are known for their anti-inflammatory properties, making them a great addition to an anti-inflammatory diet.

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16. Hormonal Balance

Sprouts can also play a role in maintaining hormonal balance in the body. Many sprouts, particularly those from cruciferous vegetables like broccoli, contain compounds called indoles. It can help regulate estrogen levels.

A study found that consuming cruciferous vegetables can lead to a decrease in estrogen levels. This may help reduce the risk of hormone-related cancers.

17. Enhanced Athletic Performance

For those who lead an active lifestyle, sprouts can be a fantastic addition to your diet for enhancing athletic performance. Rich in protein, vitamins, and minerals, sprouts provide the essential nutrients needed for muscle recovery and energy production.

A study published in the Journal of the International Society of Sports Nutrition highlighted that incorporating nutrient-dense foods like sprouts can improve exercise performance and recovery. The high levels of antioxidants in sprouts also help reduce exercise-induced oxidative stress, allowing for better recovery times.

18. Versatility and Convenience

Last but not least, sprouts are incredibly versatile and convenient. They can be easily incorporated into a wide variety of dishes, from salads and sandwiches to stir-fries and smoothies.

Sprouts are also easy to grow at home, making them an accessible and cost-effective way to boost your health. You can sprout your seeds using a simple jar and water. This can ensure you have fresh, nutrient-rich sprouts on hand whenever you need them.

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PROBIOTICS AND GUT HEALTH

Probiotics are live microorganisms (microbes) that can have beneficial effects on or inside your body. Every human body is home to trillions of microorganisms that live with us and help support our bodily functions and health. Not all of the microbes we may carry are helpful to us — some types (germs) can be harmful. But beneficial microbes, like probiotics, help to control the potentially harmful types.

Probiotic products contain select, beneficial types of microbes to add to the populations already living in your body. Many probiotics are oral supplements designed to be ingested into your gastrointestinal tract. Others are topical products that you can apply to your skin or to the mucous membranes inside your body cavities, like your nose or genitals. These are all places where beneficial microbes commonly live.

What do probiotics do?

Probiotics are food and health products that contribute live, beneficial microbes to the populations within your gut and elsewhere, in order to strengthen those communities. They're meant to prevent and treat dysbiosis — an imbalance or a deficit of beneficial microbes in your microbiome. When they work, the microbes take up residence on or in your body, adding to the populations already living there.

Not all probiotics are alike, though. Different types of microbes function differently within your body, so different types might be better or worse for your condition. Probiotics also aren't regulated by the FDA, so manufacturers don't have to prove the quality or even the contents of their products. It's a good idea to consult a knowledgeable healthcare provider about which probiotics might work best for your needs.

Different types

You can take probiotics in various forms, including capsules, lozenges, beads, powders, and drops. You can also find probiotics in several foods and drinks, including some yogurts, fermented milks, chocolates, and flavored beverages.

Most probiotic microbes must endure digestive acids and enzymes before colonizing your large intestine.

Probiotics in capsules, tablets, beads, and yogurt tend to survive your stomach acids better than powders, liquids, or other foods or beverages, regardless of when they're taken.

Furthermore, *Lactobacillus*, *Bifidobacterium*, and *Enterococci* are more resistant to stomach acid than other types of bacteria.

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In fact, most strains of Lactobacillus come from the human intestinal tract, so they're inherently resistant to stomach acid.

Health benefits of bifidus probiotics

If you're thinking about adding bifidus to your daily diet, here are 10 good reasons to get started:

1. Boost your immune system

Research suggests that bifidus and other probiotics can enhance immune function. This means fewer colds and other infections.

2. Keep you regular

Have constipation? Probiotics are known to help. One study from 2007 found that bifidus improved bowel regularity in nursing home residents, who often experience constipation.

3. Combat IBS

One theory suggests that IBS is a result of disruption in healthy intestinal bacteria. Clinical studies show that bifidus can help improve stool frequency and reduce discomfort overall in people with IBS who experience symptoms like constipation.

4. Lower your cholesterol and blood pressure

Some evidence suggests that probiotics might improve cholesterol levels and even lower your blood pressure [Trusted Source](#). Like most foods, the effects aren't immediate. Participants in the cardiovascular study took probiotics for eight weeks before there was significant changes in blood pressure.

5. Help you lose weight

Not only does gut microbiota play a role in metabolism and fat storage, it also influences satiety, the feeling fullness after a meal. Preliminary evidence also showed that probiotics may help with reducing the risk of obesity.

6. Prevent diarrhea

When you take antibiotics, you may experience diarrhea. Antibiotics don't discriminate between good bacteria and bad bacteria. Bifidus has been shown to prevent diarrhea caused by antibiotics. Make sure to take bifidus at least two hours before or after taking antibiotics.

7. Prevent eczema

Bifidus has shown some promise for preventing eczema in high-risk children, but more research is still needed to confirm these effects.

8. Reduce risk of yeast infections or UTIs

Urinary tract infections (UTIs) and yeast infections are a result of having an overgrowth of yeast or bad bacteria. Taking bifidus can help rebalance your system and prevent these types of infections.

9. Treat traveler's diarrhea

Traveling to another country? Bifidus and other probiotics can help prevent that's usually the result of eating contaminated food or being exposed to foreign bacteria, typically in developing countries.

10. Treat a stomach ulcer

Research suggests that bifidus and other probiotics can inhibit the growth of the bacterium. This bacterium can live in your stomach and is the main cause of stomach ulcers.

Fermentation enhances food preservation, and eating fermented foods can also boost the number of beneficial bacteria, or probiotics, in your gut.

Fermentation is a process in which bacteria and yeast break down sugars.

Probiotics may have several health benefits, including better digestion, improved immunity, and weight loss.

Alive & Dead Foods

YOGURT, KEFIR, KIMCHI, AND KOMBUCHA

1. Kefir

Kefir is a type of cultured dairy product. It's nutritious, high in probiotics, and easy to digest.

It's made by adding kefir grains—a combination of yeast and bacteria—to milk. This results in a thick, tangy beverage that tastes similar to yogurt.

Studies suggest that kefir offers numerous health benefits. It's believed to aid digestive health and reduce inflammation.

Some research suggests kefir improves immune function by stimulating the body to produce anti-inflammatory substances. Animals fed kefir were also more successful at fending off intestinal infections.

More research is needed to understand the effects of kefir and whether certain amounts may help decrease inflammation and help reduce the risk of heart disease and cancer.

Kefir contains less lactose than milk. When kefir grains and milk are combined, the bacteria in the grains help ferment and break down the lactose in the milk.

But kefir does contain some lactose, so it may not be appropriate for everyone with lactose intolerance.

2. Kombucha

Kombucha is a fermented tea that's fizzy, tart, and flavorful. It's made from either green or black tea and offers these drinks' health-promoting properties.

Some research suggests that drinking kombucha may help protect the liver from damage caused by exposure to harmful chemicals.

Other research indicates kombucha may help induce cancer cell death and prevent the spread of cancer cells.

More human research is needed to confirm the health benefits.

Many kombucha drinks are high in added sugar, and others may contain sugar substitutes such as sugar alcohols, which some people may prefer to avoid.

3. Kimchi

Kimchi is a popular Korean side dish that's usually made from fermented cabbage or other fermented veggies, such as radishes.

Research shows that kimchi has many health benefits, including lowering

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cholesterol, reducing insulin resistance, and help with gut health and irritable bowel syndrome (IBS) symptoms.

Kimchi is easy to make and can be added to everything from noodle bowls to sandwiches.

4. Probiotic yogurt

Yogurt is made from milk that has been fermented, most commonly with lactic acid bacteria.

It contains many important nutrients, including calcium, potassium, phosphorus, riboflavin, and vitamin B12.

Yogurt has also been associated with a wide variety of health benefits, including:

- improved digestive health and relief from gastrointestinal (GI) symptoms
- helping to reduce blood pressure, especially in those with high blood pressure
- improved bone density physical function in older adults
- lower body weight

pregnancy outcomes and maternal health

Not all yogurts contain probiotics, since these beneficial bacteria are often killed during processing. You can look for yogurts that contain live cultures to ensure you get your probiotic dose.

Incorporating fermented foods into your diet.

How Often To Eat Fermented Foods for Gut Health

There are no official recommendations for how often to eat fermented foods. Regularly including them may improve gut health and reduce inflammation. One study found that eating six servings of fermented foods daily for 10 weeks reduced inflammation and increased gut microbiome diversity compared to those who only increased fiber intake. Try adding one fermented food daily, like kefir at breakfast, kombucha with lunch, or sauerkraut in a grain bowl at dinner.

How To Make Them at Home

You will need sterilized glass jars, salt, a cloth napkin or cheesecloth, and whatever ingredients you intend to ferment. Here are general steps for making fermented vegetables at home.

Combine prepared vegetables with salt. Squeeze and mix thoroughly to allow the vegetables' natural liquids to release. You may have to repeat this step multiple times to get enough brine.

Mix in your desired herbs and spices.

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Add the vegetables and brine to a sterilized glass jar. The vegetables should be completely submerged in liquid. Close the jar tightly, then set it aside to be stored at room temperature.

You may see bubbles start to form in the jar. You can gently release the lid to let the gases out once a day.

How long you allow your vegetables to ferment will depend on the temperature at which they are kept and your preferred flavor profile. This could be anywhere from three days to one month. The longer they ferment, the more tangy they will taste.

Store the vegetables in the refrigerator once they ferment, where they can stay good in the fridge for months.

Risks and Side Effects

Common side effects of eating fermented foods can include digestive symptoms like bloating and gas in people who are sensitive. Not washing hands or vegetables or not using sterilized jars can increase the risk of harmful microbes. Incorrect storage can also heighten the risk of foodborne illness.

Fermented foods may pose risks for those with histamine intolerance, migraines, or those taking MAOI medications. Consult a healthcare provider to confirm whether fermented foods are safe for you.

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INCORPORATING FERMENTED FOODS INTO YOUR DIET

Fermented vs. Probiotic Foods

People often use the terms "fermented" and "probiotic" interchangeably, but they are not synonyms. Fermented ingredients are produced with bacteria or yeast and undergo chemical changes. Probiotics are live bacteria or yeast that may offer benefits when you consume them as a supplement or in food.

Some fermented foods contain active bacteria but have not been confirmed to act as probiotics. For a fermented food to be accurately labeled as a probiotic, it must be proven safe, have strain-specific benefits, and contain enough microbes to deliver these benefits. Based on these guidelines, all the foods listed above are fermented, but not all are probiotics

THE IMPACT OF PROCESSING ON NUTRIENTS

Summary

- The nutrient value of food is almost always altered by the kind of processing it undergoes.
- The water-soluble vitamins are the most vulnerable to processing and cooking.
- Careful cooking and storage will help retain the nutrients in your food.
- Excessive consumption of ultra-processed foods can result in weight gain in the short term and diet-related disease in the long term.

About food processing

Almost all food is processed in some way before it is eaten. Commercially, the main reasons to process food are to eliminate micro-organisms (which may cause disease) and to extend shelf life.

Simply cooking or combining a food with other foodstuffs to create a recipe is also considered a form of food processing. Whatever the case, the nutrient value of any food is often altered by the processing.

Effects of processing and storage of food

Some vitamins are more stable (less affected by processing) than others. Water-soluble vitamins (B-group and C) are more unstable than fat-soluble vitamins (K, A, D and E) during food processing and storage.

The most unstable vitamins include:

- folate
- thiamine
- vitamin C.

More stable vitamins include:

- niacin (vitamin B3)
- vitamin K
- vitamin D
- biotin (vitamin B7)
- pantothenic acid (vitamin B5).

Processes affecting food nutrient content

A variety of things can happen during the growing, harvesting, storage and preparing of food that can affect its nutritional content. Processes that expose foods to high levels of heat, light or oxygen cause the greatest nutrient loss.

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Fertilisers

Most plant crops are produced with the aid of fertilised soils. High use of nitrogen fertilisers tends to reduce the vitamin C content in many fruit and vegetable crops. It does not seem to make any difference to the plant's nutrient value whether the fertiliser is organic or not.

Milling

Cereals such as wheat can be ground to remove the fibrous husks. The husks contain most of the plant's dietary fibre, B-group vitamins, phytochemicals and some minerals.

That is why products such as white bread are less nutritious than wholemeal varieties, even if they have been artificially fortified with some of the nutrients that were lost after milling.

It is impossible to add back everything that is taken out, especially the phytochemicals. The 'fibre' that is added back to some products is often in the form of resistant starch, which may not be as beneficial as the fibre removed.

Blanching

Before a food is canned or frozen, it is usually heated very quickly with steam or water. The water-soluble vitamins, including vitamin C and B-complex, are sensitive and easily destroyed by blanching.

Canning

Food is heated inside the can to kill any dangerous micro-organisms and extend the food's shelf life. Some types of micro-organisms require severe heat treatment and this may affect the taste and texture of the food, making it less appealing. Preservatives are generally not needed or used in canned foods.

Water-soluble vitamins are particularly sensitive to high temperatures. Many people believe that canned foods are not as nutritious as their fresh counterparts, but this is not always the case, as fresh food often deteriorates more rapidly than canned foods.

Freezing

The nutrient value of a food is retained when it is frozen. Any nutrient losses are due to the processing prior to freezing and the cooking once the frozen food is thawed.

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Pasteurisation

Pasteurisation involves heating liquid foods such as milk and fruit juices to specific temperatures to destroy micro-organisms. The nutrient value of milk is generally unaffected. In the case of pasteurised fruit juices, some losses of vitamin C can occur.

High pressure processing

This alternative preservation method subjects a food to elevated pressures, with or without the use of heat to kill micro-organisms. This method has been used in foods such as fruit juices. As heat is not required, this process impacts less on the vitamin content, flavour and colour of foods.

Dehydrating

Drying out foods such as fruits can reduce the amount of vitamin C they retain, but it can also concentrate other nutrients, particularly fibre in plant foods. Dehydrating food also makes food products more energy dense, which may contribute to weight gain.

If a dehydrated food is reconstituted and cooked with water, further nutrients are leached out of the food and lost in the cooking water.

Preparation of vegetables

Most vegetables are peeled or trimmed before cooking to remove the tough skin or outer leaves. But most nutrients, such as vitamins, tend to lie close to the skin surface, so excessive trimming can mean a huge reduction in a vegetable's nutrient value.

Losing nutrients through cooking

Some vitamins dissolve in water, so you lose your vitamins to the cooking water if you prefer to boil your vegetables. For example, boiling a potato can cause much of the potato's B and C vitamins to migrate into the boiling water.

It is still possible to benefit from these nutrients if you consume the liquid, for example, by turning the potato and the liquid into a soup. Alternative cooking methods such as grilling, roasting, steaming, stir-frying or microwaving generally preserve a greater amount of vitamins and other nutrients.

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Benefits of cooking food

Cooking can be advantageous in many ways, including:

- making the food tastier
- breaking down parts of vegetables that would otherwise be indigestible
- destroying bacteria or other harmful micro-organisms
- making phytochemicals more available, for instance, phytochemicals are more available in cooked tomatoes than in raw tomatoes. (Phytochemicals are chemicals produced by plants.)

Preserving the nutrient value of vegetables

Some suggestions to retain the maximum nutrition in the foods you cook include:

- Store foods properly, such as keeping cold foods cold and sealing some foods in airtight containers.
- Keep vegetables in the crisper section of the refrigerator.
- Try washing or scrubbing vegetables rather than peeling them.
- Use the outer leaves of vegetables like cabbage or lettuce unless they are wilted or unpalatable.
- Microwave, steam, roast or grill vegetables rather than boiling them.
- If you boil your vegetables, save the nutrient-laden water for soup stock.
- Use fresh ingredients whenever possible.
- Cook foods quickly.

Ultra-processed foods

Ultra-processed foods and beverages are products formulated from industrial processes and/or contain industrially derived ingredients.

The processing techniques used in ultra-processed foods differ from the more basic and traditional methods described above. Industrial techniques include fractionation, hydrogenation, hydrolysis, extrusion, moulding and pre-frying.

Ultra-processed foods are typically highly convenient and palatable, and tend to be high in added sugars, salt, oils and fats. They also contain ingredients and additives that can't usually be found in a home pantry, such as artificial colours and flavours, emulsifiers, and inverted sugars.

Some common examples of ultra-processed foods include:

- carbonated soft drinks and energy drinks
- confectionary, biscuits, pastries
- sweetened breakfast cereals
- pre-prepared meat, cheese, pasta and pizza dishes
- sausages, burgers, hot dogs and other reconstituted meat products
- powdered and packaged 'instant' soups, noodles and desserts.

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Ultra-processed food and health

Consumption of ultra-processed foods can lead to increased energy intake, resulting in weight gain.

A high proportion of ultra-processed foods in the diet is also linked to:

- obesity
- cardiovascular and metabolic diseases
- cancer
- gastrointestinal disorders
- depression.

The mechanisms explaining the association between consumption of ultra-processed foods and chronic disease are still unclear. However it is likely explained in part by increased intake of sugar, salt, fats and oils, increased energy intake due to their hyperpalatable nature, and the displacement of meals prepared from nutritious unprocessed and minimally processed foods.

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SUGAR, WHITE FLOUR, AND REFINED OILS

White Flour: A Refined Grain

White flour is a refined grain product made from wheat that has been stripped of its bran and germ, the most nutritious parts of the grain. This refining process removes fiber, vitamins, and minerals, leaving behind a product that is primarily composed of starch.

White Sugar: A Sweet Addition

White sugar, also known as sucrose, is a simple carbohydrate derived from sugarcane or sugar beets. It provides a quick burst of energy but offers little nutritional value.

Health Implications

Blood Sugar Levels

White sugar has a high glycemic index (GI), meaning it can cause a rapid spike in blood sugar levels. This can lead to insulin resistance, a condition that can increase the risk of type 2 diabetes. On the other hand, white flour has a lower GI and can help stabilize blood sugar levels.

Weight Gain

Both white flour and white sugar are high in calories and can contribute to weight gain if consumed in excess. However, white flour is more filling due to its fiber content, which can help curb hunger and prevent overeating.

Heart Health

White flour has been linked to an increased risk of heart disease due to its low fiber content. Fiber helps lower cholesterol levels and improve blood flow. White sugar, on the other hand, does not have a direct impact on heart health.

Digestive Health

White flour lacks fiber, which is essential for maintaining a healthy digestive system. Fiber promotes regularity and reduces the risk of constipation. White sugar has no effect on digestive health.

Nutritional Value

White flour is a poor source of vitamins and minerals, as it has been stripped of its nutrient-rich bran and germ. White sugar provides no nutritional value whatsoever.

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Choosing the Lesser Evil

Based on the nutritional evidence, white flour appears to be the lesser evil compared to white sugar. While it is not a health food, its lower GI and higher fiber content make it a slightly healthier option.

Practical Tips

Limit Consumption

Both white flour and white sugar should be consumed in moderation. Opt for whole-wheat flour over white flour and use natural sweeteners like honey or maple syrup instead of white sugar.

Read Food Labels

Pay attention to food labels to identify hidden sources of white flour and white sugar. Avoid processed foods that contain these ingredients in large quantities.

Make Gradual Changes

Don't try to eliminate white flour and white sugar from your diet overnight. Make gradual changes by reducing their intake and replacing them with healthier alternatives.

Wrapping Up: The True Winner

In the battle of white flour vs white sugar, there is no clear winner. Both ingredients have their drawbacks, but white flour emerges as the slightly healthier choice due to its lower GI and higher fiber content. However, the best approach is to limit the consumption of both and opt for more nutritious options instead.

Refined Oils and Why You Should Avoid Them

There is ample evidence suggesting that animal fats aren't the primary cause for our epidemic levels of heart disease, but vegetable oils. Research is showing that butter consumption at the turn of the century was about 18 lbs. per person per year and the use of vegetable oils was non-existent. Cancer and heart disease were rare.

Today butter consumption is just above 4 lbs. per person per year while the use of vegetable oils and refined oils has SOARED.

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What are refined oils and which ones should you avoid?

Let's begin by clarifying that healthy fats are an essential part of healthy living. But not all fats are created equal.

Olive oil, for example, that is UNrefined, uses olives that have been pressed to extract the oil. There ARE health benefits to using pure, unrefined olive oil.

With that being said, let's dive a little deeper in the refining process.

Definition: Oil that has been refined has been altered by using chemicals that are harmful to us. In short it means to 'purify'.

But the meaning of purify has many definitions. It may mean the oil was treated with acid, or purified with an alkali, or bleached. It can also be neutralized, filtered or deodorized. All of which require chemicals like Hexane.

In the process of making and refining these types of oils, it leads to PUFas (rancid polyunsaturated fatty acids) which DO NOT hold up well to high heats. In the process of being extracted from the seed these oils oxidize and turn into trans fats. The smell is so rancid that a cleaning process has to take place using bleach to deodorize it.

Refined Oils You Should Avoid:

- Canola oil
- Vegetable oil
- Soybean
- Safflower
- Corn oils
- Margarine (or any other 'buttery' spread)

As dangerous as refined oils can be to our health, even more dangerous is the repeated use of Hydrogenated oils (Crisco and margarine). These are some of the most dangerous products on the market today! They have been BANNED in 2 European countries, but are still deemed safe in the United States.

Hydrogenated oil is made by forcing hydrogen gas into oil at high pressure. The more solid the oil is the more hydrogenated the end product, such as margarine and Crisco or lard.

When hydrogenated oils are made the healthy fats are converted into a new type of fat, known as trans fat. This is one subject that has overwhelming support from Doctors, scholars, and scientists alike.

Trans fats should be avoided while healthy fats (found in olive oil, nuts and avocados) should be eaten.

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Trans fats are so bad for you, the FDA estimated approximately 95% of prepared cookies, 100% of crackers and 80% of frozen breakfast products contained trans fats.

So which oils are safe then?

Extra Virgin Olive Oil

Although Extra virgin olive oil contains a high amount of saturated fat (about 12%) it is one of the few unrefined oils. This means the antioxidants in the original fruit are retained because the oil is extracted by machine only.

Olive oil is usually good 3-12 months after it has been bottled. After 2 years you can expect the fruity flavors to begin disappearing. It is best to buy your oil from a local store that specializes in oils. Purchase them in smaller quantities so they are not sitting in your pantry for months. And NEVER store them over the stove. Keep the bottle sealed and avoid light if possible.

Olive oil

This can be tricky because plain olive oil is usually a blend of refined, virgin and extra virgin olive oils. Read the label to know what you are getting.

Organic Butter

Butter, like eggs and coconut oil, have been given a bad rap. These are the same marketers who said aspartame and margarine were healthy choices! Butter is a good, safe, WHOLE FOOD choice.

The best choice would be butter from raw milk grass fed cows and the second choice, which is more accessible to most of us, is organic, which is from milk of grass fed cows with NO rBGH injected into them.

Coconut oil

Coconut oil is the least fattening of all oils. It got a bad rap back in the 1970s, but the misinformation out there is outdated and coconut oil is one of the better oils for you.

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READING FOOD LABELS CRITICALLY

Why Is It So Critical To Read A Food Label?

Reading food labels is complex, and it is hard for consumers to understand the stated details. Here is a step-by-step guide on how to read it.

Shutdowns are prevailing, families are staying home longer, consumers are being frugal with their spending to cope with constrained incomes, and habits are changing permanently as we cope up with the anxieties of health and hygiene brought upon us by the pandemic.

Businesses have undergone a transformation at the same time with e-commerce services meeting consumer needs at their homes, consumption of packaged food rising through the period of the pandemic, and, at the same time, consumers choosing to eat healthy, fresh meals at home. The focus on immunity and good health, especially coming from food and good nutrition is a priority for consumers. This makes it imperative for consumers to read labels, compare similar products and choose the ones that are best suited for our health.

Food labels are key to the understanding of the constituents of food, its nutritional value, and its correlation to our health and well-being. Food ingested works in our body in many ways; some to its benefit and some that must be checked. While a small part of the food label is fairly simple and straightforward, certain parts require a contextual understanding of the values and their actual meaning.

Turn the pack – the most vital information is at the back!

The front of the pack health claims is often just the half truth about any product. They are often written in an attractive manner, to influence consumer purchase. Often products mention claims like low fat, and high fibre in the front – only for us to realize that the product is high in sugar and sodium.

The nutritional information table at the back, is where the story lies. Unfortunately, the section is usually overlooked or misunderstood. A detailed nutrient-wise information panel dissects the products and tells you exactly what you are eating.

Read the Ingredient List

The ingredient list is one of the most critical parts of a food label. It gives you a list of items that constitute the product. Whilst reading the ingredient list, take care of the following points –

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- The ingredient list is written in descending order of quantities. The first 3-4 ingredients on the list pretty much sum up what the product is made up of. Make note of the first 3 ingredients on the list – if the names include refined grains/flour, hydrogenated fat, or a type of sugar, then the product must be skipped. Select products that are made up of whole grains, pulses, nuts & seeds or fruit and vegetables largely.
- Shorter the ingredient list, healthier the product. Go for products that are made in less than 10 ingredients.
- Look for ingredients on the label that you recognize and are familiar with.
- Look out for masquerading ingredients – especially sugar and salt. Sugar is present in 70 different forms in packaged food products and one must be wary before you select any product blindly.

Sodium is not only present in salt, but also in food additives like baking powder, baking soda, preservatives, flavour enhancers, sequestrants and more.

Check the food additives below the ingredient list

Food Additives are substances that are added to food to maintain or improve the safety, freshness, taste, texture, or appearance of food. Additives are needed to ensure processed food remains safe and in good condition throughout its journey from factories or industrial kitchens, during transportation to warehouses and shops, and finally to consumers.

The use of food additives is only justified when their use has a technological need, does not mislead consumers, and serves a well-defined technological function, such as to preserve the nutritional quality of the food or enhance the stability of the food. Food additives can be derived from plants, animals, or minerals, or they can be synthetic.

Food additive classes are often declared together with their specific names or the INS (International Numbering System) codes. While most food additives are listed under the ingredient list, special rules apply to flavourings, colourings and preservatives.

Please note, that FSSAI mandates the use of approved flavouring agents (and other additives) only. So even if the label mentions 'artificial flavouring substances', they are safe to consume and possess no toxicity threat.

Consumer choice is now beginning to tip in the favour of natural substances – be it flavour, colour, or any other additive. Clean label products, created without the use of artificial substances are manifesting an increase in consumer adoption. We are seeing an increasing number of consumers consciously choose products that are natural and sans any artificial additives.

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Nutrition Information Panel / Nutrition Label

The nutrition information on the food label is a mandatory description intended to inform the consumer of the nutritional properties of the food product.

Nutrition Information is often written per 100gm/100ml or per serve on the label.

The nutrition information on the food label holds the most critical information about the product and can help you make healthier choices. 3 things that you **MUST** check on the nutrition information panel before you pick any product –

- **Serving Size**

One serve is the amount of food customarily consumed per eating occasion, which is expressed in metric units or given in common household measures like a teaspoon, tablespoon, or cup that is appropriate to the food. This will tell you how many servings are there in the pack. Serving sizes are standardised to enable us to compare similar food products.

- **Beneficial vs Harmful Nutrients**

All nutrients declared on the nutrition label can be divided into 2 sections – beneficial nutrients and harmful nutrients.

Beneficial nutrients are the nutrients that you must get more of – protein, dietary fiber, calcium, iron, vitamin D, vitamin C, vitamin A, and potassium. These nutrients are beneficial to the body and our health.

On the other hand, harmful nutrients are the nutrients that you must limit or get less of – saturated fat, trans fat, total sugar, added sugar, and sodium. Saturated fat, sodium, and added sugars are nutrients listed on the label that are directly associated with adverse health effects and non-communicable diseases. Follow one rule for these nutrients – the lower the better!

- **% Daily Value - Per serve percentage (%) contribution to RDA**

While the nutrition information panel on Indian food labels are mostly written per 100gm/ml, FSSAI does suggest that brands must mention the nutrition information per serve and the per serve percentage (%) contribution of nutrients to their respective RDAs. Per serve percentage (%) is also known as Daily Value (%) and is calculated for a standard 2000-kcal diet.

Allergens

Allergens are substances that cause an immune response (allergic response) in certain people, which could even be life-threatening in extreme cases. Foods containing one or more of the eight common allergens must be listed

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prominently on the label. Allergens are usually found below the list of ingredients. The common 8 allergens mandated for declaration by FSSAI are,

- Cereals containing gluten; i.e., wheat, rye, barley, oats, spelt or their hybridized strains and their products
- Crustaceans
- Milk & Milk products;
- Eggs and egg products;
- Fish and fish products;
- Peanuts, Tree nuts and their products;
- Soybeans and their products;
- Sulphite in concentrations of 10mg/kg or more.

Date Marking

You may see 3 types of date marking on your food product – 'date of manufacture or packaging', 'Expiry/Use by' or 'Best before'.

- The date of manufacture is the date on which the food product was manufactured and packaged.
- Expiry/Use by date tells you how long the food will remain at its best quality and will not be fit for consumption post the date. This is often used in perishable products like milk, bread, etc.
- Best Before date guarantees the quality of certain properties of the product to be effective up to this date. Once the date has passed, it may just lose its freshness, taste, aroma or nutrients, but it does not necessarily mean that the food is no longer safe to eat. The 'best before' date is often mistaken by consumers to be the same as the 'expiry date'. Often foods that may have passed its 'best before' date go straight in the trash, though they would still be completely edible.

The best way to not get tricked by food labels is to attempt to read and comprehend them. Understanding the food label is the key to making healthy food choices and stocking up your kitchen with food that positively impacts your health. The secret here is to look for a few data points that are most critical.

If you find reading and comprehending food labels complex, you are not alone. 6 out of 10 consumers find food labels complex and 9.5 out of 10 consumers seek a simplified version of the food label.

NUTRIENT LOSS DURING PRESERVATION

Why Nutrient Loss Happens During Cooking

When you cook food, certain nutrients, especially vitamins, are affected by heat, water, and air. For example, water-soluble vitamins like Vitamin C and B-complex vitamins dissolve in cooking water, while fat-soluble vitamins like Vitamins A, D, E, and K can degrade at high temperatures. Factors like cooking time, temperature, and method all have a major impact on nutrient retention.

How to Cook Your Food While Preserving Nutrients

Different cooking methods have different effects on food quality and nutrient retention. Below, we'll explore common examples and how they affect food preparation.

1. Air Fryer

Air frying uses hot air to cook food with little to no added fats. It's a quick cooking method that helps retain nutrients better than deep frying. Cooking vegetables like carrots and zucchini in an air fryer can preserve antioxidants like beta-carotene while maintaining a low-fat content.

2. Deep Frying

Deep frying involves submerging food in oil at very high temperatures. While it enhances flavor, it often reduces nutrient value due to the extreme heat. Vitamins and minerals in vegetables and meat can degrade, and the fat content increases. For nutrient retention, opt for air frying or steaming instead.

3. Stir-Frying

Stir-frying is a popular cooking process that uses high heat for a short time. This method is ideal for preserving water-soluble vitamins in selected vegetables. Using less oil and stirring constantly prevents nutrient loss while maintaining the quality of food.

4. Baking

Baking uses dry heat, making it a good choice for retaining vitamins and minerals in food. Roasted vegetables like sweet potatoes or broccoli retain more nutrients compared to boiling. Baking also enhances resistant starch in certain vegetables, benefiting digestive health.

5. Gentle Steaming

Steaming is one of the best methods for preserving nutrients. Since food doesn't come in contact with water, water-soluble vitamins remain intact. Steaming is

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especially effective for cooking vegetables common in a balanced diet, such as spinach and cauliflower, while preserving their vitamin C content.

6. Grilling

Grilling meats and vegetables can enhance flavor, but grilling at high heat can reduce nutritional quality. To avoid losing nutrients, use moderate heat and cook food for shorter durations. Grilled meats can retain protein while vegetables maintain their beta-carotene content.

7. Water Poaching

Poaching involves cooking food in simmering water at low temperatures. It's a gentle method that prevents nutrient loss, especially for heat-sensitive vitamins. Poaching eggs and fish helps retain their nutritional components while reducing fat content.

8. Cooking en Papillote

Cooking en papillote, or cooking in parchment paper, locks in moisture and nutrients by steaming food in its own juices. It's a great way to cook food like fish and vegetables while keeping their nutritional value intact.

9. Microwaving

Microwave cooking is a quick and efficient method to retain more nutrients in food compared to boiling or frying. Microwaving uses low temperatures for short cooking times, making it ideal for preserving water-soluble vitamins. Studies in food science and Biotechnol show that microwave ovens are better for cooking vegetables like broccoli and carrots to retain their antioxidant activity.

10. Pan Frying

Pan frying uses less oil than deep frying but can still lead to loss of nutrients at high temperatures. To minimize this, cook at medium heat and use oils like olive oil that are stable at moderate temperatures. Cooking veggies like bell peppers in a pan helps preserve their nutritional content when done correctly.

Tips to Prevent Nutrient Loss

Use Airtight Containers

Store raw vegetables properly to retain freshness and prevent loss of vitamins.

When vegetables are exposed to air, they tend to lose their moisture and nutrients due to oxidation. Using airtight containers prevents this by creating a sealed environment that slows down the degradation process. It also keeps out contaminants and bacteria, ensuring the vegetables remain fresh for longer periods.

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Additionally, these containers help maintain the natural color, texture, and taste of the produce. By reducing exposure to light and air, they effectively preserve sensitive vitamins like Vitamin C and certain B vitamins that degrade quickly when exposed.

Minimize Cooking Time

Overcooking food destroys vitamins and reduces nutritional components.

Short cooking times preserve the natural structure of vitamins, which can be destroyed by prolonged exposure to heat. Nutrients like Vitamin C and folate are especially sensitive to extended cooking periods. Preparing meals quickly, such as through stir-frying or blanching, ensures that these vitamins are retained.

Moreover, reducing cooking time also enhances the texture and flavor of vegetables, making them more appealing and healthier to consume. Quick cooking methods are not only convenient but also a practical way to maximize the nutrient density of your meals.

Choose Steaming Over Boiling

Steaming prevents the leaching of water-soluble vitamins into cooking water.

Boiling causes water-soluble vitamins like Vitamin C and B-complex vitamins to leach into the cooking water, which is often discarded. Steaming, on the other hand, allows vegetables to cook through indirect heat without being submerged in water, thus retaining their nutrients.

In addition to nutrient preservation, steaming helps maintain the vibrant color and natural taste of the vegetables. It is also a versatile cooking method suitable for various types of produce, ensuring that you get the maximum health benefits from your meals.

Avoid Very High Temperatures

High heat can degrade nutrients, so opt for low-temperature methods like poaching or steaming.

Cooking methods that use very high temperatures, such as deep frying or grilling, can cause significant nutrient loss. Vitamins like Vitamin C and thiamine are highly sensitive to heat and can degrade rapidly. By choosing gentler methods like poaching or steaming, you can minimize this loss and ensure a nutrient-rich meal.

Using lower temperatures also prevents the formation of harmful compounds that can occur with high-heat cooking. This approach not only preserves nutritional content but also promotes overall health by maintaining the integrity of the food.

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Use Cooking Water

When boiling vegetables, use the leftover water for soups or stews to recover lost nutrients.

The water used to boil vegetables often contains a significant amount of leached nutrients, especially water-soluble vitamins and minerals. Instead of discarding this nutrient-rich liquid, repurpose it in soups, stews, or sauces to make your meals more wholesome and flavorful.

This practice not only reduces waste but also ensures that the vitamins and minerals lost during cooking are reintroduced into your diet. It's a simple yet effective way to make the most of your ingredients and boost the nutritional value of your dishes.

Conclusion

Cooking methods have a significant impact on the nutrient value of food. By choosing techniques like steaming, grilling, or microwaving, you can preserve more nutrients and maintain the nutritional quality of your meals. Understanding how cooking time, temperature, and method affect nutrient retention empowers you to make healthier food choices. Small changes in the preparation of food can help you prevent loss of nutrients and enjoy a nutritious, balanced diet.

Cooking doesn't have to mean losing nutrients; with the right methods, you can prepare food that's both delicious and nutritious.

SODIUM CONTENT IN CANNED FOODS

A Deep Dive into Canned Foods: Are They High in Sodium?

Canned foods have long been a convenient option for busy households and an essential component of food pantries worldwide. However, a recurring concern that often arises is the sodium content in these foods. With health warnings about high sodium consumption echoing throughout nutrition discussions, many people are left wondering: are canned foods high in sodium? In this article, we'll explore sodium levels in canned foods, the implications of high sodium intake, how to make informed choices, and the healthier alternatives available.

Understanding Sodium: The Basics

Sodium is an essential mineral required by the body primarily for maintaining fluid balance, transmitting nerve impulses, and muscle contraction. However, while sodium fulfills these critical roles, excessive intake can lead to various health issues, especially hypertension or high blood pressure, which significantly increases the risk of heart disease and stroke.

Sodium Content Guidelines

The American Heart Association recommends an upper limit of 2,300 milligrams of sodium per day for the average adult, ideally aiming for less than 1,500 milligrams for those with high blood pressure or other risk factors. However, many Americans consume more than 3,400 milligrams of sodium daily, largely from processed and canned foods.

Introduction

You walk down the canned food aisle and immediately think about all that hidden sodium lurking in those convenient metal containers.

This concern makes perfect sense if you are managing high blood pressure or trying to reduce your sodium intake for better heart health.

Hi, I am Abdur, your nutrition coach and today I am going to explain the real truth about sodium in canned foods and show you how to make smart choices.

Why Do Some Canned Foods Contain High Sodium?

Food manufacturers add sodium to canned foods for three main reasons that go beyond simple taste enhancement.

The primary reason is preservation – sodium acts as a natural preservative that prevents harmful bacteria from growing inside the sealed container.

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Sodium also helps maintain the texture and color of vegetables and fruits during the canning process by strengthening cell walls.

At the cellular level, sodium creates an environment where water moves out of bacterial cells through osmosis, effectively dehydrating and killing these microorganisms.

The third reason involves flavor enhancement – sodium amplifies natural tastes and makes foods more appealing to consumers.

However, modern canning technology has advanced significantly, allowing manufacturers to reduce sodium content while maintaining food safety and quality.

Which Canned Foods Are Actually Low in Sodium?

Many canned foods naturally contain minimal sodium or come in specially formulated low-sodium versions.

Canned fruits packed in water or natural juice typically contain less than 10 milligrams of sodium per serving, making them excellent choices for blood pressure management.

No-salt-added canned vegetables like green beans, corn, and carrots contain only the naturally occurring sodium from the vegetables themselves.

Canned beans labeled as “no salt added” provide protein and fiber with sodium levels around 15-30 milligrams per half-cup serving.

Low-sodium canned soups and broths are specifically formulated to contain 140 milligrams or less of sodium per serving, compared to regular versions that may contain 800-1200 milligrams.

Canned fish like salmon and tuna in water without added salt provide heart-healthy omega-3 fatty acids with reasonable sodium levels.

These options prove that you can enjoy the convenience of canned foods while maintaining a low-sodium diet for better blood pressure control.

Why is Sodium Added to Canned Foods?

Sodium serves various purposes in canned foods, including:

- **Preservation:** It acts as a preservative, extending the shelf life of the products.
- **Flavor Enhancement:** Sodium enhances taste, making canned products more palatable.

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Understanding these functions can help consumers make educated choices when selecting canned foods.

Analyzing Sodium in Different Canned Food Categories

While it's essential to recognize the sodium content in canned foods, it also varies widely across different categories. Let's break down some common types of canned foods and their sodium levels.

Canned Vegetables

Canned vegetables can be a healthy choice, but their sodium content can differ significantly based on the brand and type. Typically, regular canned vegetables contain 350 to 500 mg of sodium per serving. However, many manufacturers offer low-sodium or no-sodium-added varieties that can contain as little as 5 to 20 mg per serving.

Nutritional Tip: Always check the label for "no added salt" or "low sodium" options, which significantly reduce sodium intake.

Canned Soups and Broths

Canned soups and broths often contain the highest sodium levels. A standard serving can contain anywhere from 700 mg to over 1,000 mg of sodium. Due to the concentrated flavors that come from added seasonings, these products can quickly exceed daily recommended limits.

Canned Meats

Canned meats, such as tuna or chicken, also have varying sodium content. A typical can of tuna packed in water might have around 300 to 400 mg of sodium per serving, while processed meats can be significantly higher.

Canned Legumes

Canned beans and legumes, a great source of protein and fiber, can still contribute a fair amount of sodium, ranging from 200 to 400 mg per serving for regular varieties. Consumers should similarly look for low-sodium options or rinse the beans thoroughly before consumption to help reduce sodium levels.

Canned Fruits

While not as sodium-heavy, canned fruits often come in syrups or juices containing added sugars and preservatives. They typically have low sodium, ranging from 10 to 20 mg per serving, depending on preparation.

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The Health Implications of High Sodium Consumption

Excessive sodium consumption is a significant public health concern. High sodium intake has been correlated with various health issues, including:

Hypertension

Elevated sodium levels can lead to hypertension, a condition frequently contributing to heart disease and stroke. Limiting sodium intake can significantly lower blood pressure and decrease the risk of heart-related illnesses.

Kidney Issues

High sodium levels can inhibit kidney functions and lead to kidney disease over time. The kidneys, responsible for filtering excess sodium, can become overburdened, resulting in impaired filtration and leading to additional health complications.

Osteoporosis

Excess sodium intake may also impact bone health. High sodium levels can lead to calcium loss through urine, potentially increasing the risk for osteoporosis, particularly in older adults.

How Can You Reduce Sodium from Regular Canned Foods?

Simple preparation techniques can significantly reduce sodium content in regular canned foods by 30-40 percent.

Draining and rinsing canned vegetables, beans, and legumes under cold running water for 30 seconds removes much of the added sodium from the liquid.

Research shows that this rinsing process can eliminate up to 40 percent of the sodium while retaining most of the nutritional value.

The sodium reduction occurs because most added salt dissolves in the canning liquid rather than penetrating deep into the food itself.

For canned fish, draining the liquid and choosing water-packed varieties over oil-packed ones naturally reduces sodium intake.

When using canned tomatoes or tomato sauce, diluting them with fresh water or low-sodium broth helps decrease concentration while maintaining flavor.

These simple steps allow you to enjoy convenient canned foods while protecting your cardiovascular health through reduced sodium consumption.

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BALANCING CONVENIENCE WITH HEALTH

Today, people are eating more processed food compared to the past few decades—and it's easy to see why. It's conveniently available, making it an absolute time-saver in the kitchen. It's also usually cheaper and tastier than whole, natural foods while offering a longer shelf life.

With food prices rising, you might think that you have no choice but to join the bandwagon of processed food consumption.

But it's a compromise you don't have to make—not with the right processed products.

Some processed foods can be fortified to provide the nutrients we need to thrive and reduce the risk of deficiencies. As such, they can be a healthier option for certain populations while providing key nutrients inexpensively.

Read on to discover what processed foods are, which food groups to consume, and the health risks to watch out for to make more informed decisions about your diet.

The Convenience of Frozen Foods

Research conducted by the American Frozen Food Institute (AFFI), in conjunction with Circa and FMI – The Food Industry Association, tracked the perceptions, attitudes, and behaviors of more than 1,700 consumers. The study found that 38% of those who consume frozen food eat it every few days or daily and that the majority of core consumers turn to the frozen food aisle looking for better-for-you product attributes.

Research found that shoppers view frozen food as a total meal solution that saves them time, is easy to prepare, and meets their taste expectations. Frozen foods offer a range of time-saving benefits that make them an attractive option for many households.

Here are some key aspects:

Time-Saving Aspects

Quick Preparation and Cooking Times: One of the most significant advantages of frozen food products is their convenience in preparation and cooking. Frozen meals are designed to be microwaved or oven-baked directly from the freezer, saving time you would otherwise spend on meal prep — a benefit for busy individuals or families who may not have the time to prepare meals from scratch.

Total Meal Solutions: Many shoppers turn to the frozen food aisle to find total meal solutions that balance protein, vegetables, and carbohydrates while

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eliminating the need to prepare multiple meal components separately, which can be time-consuming. Frozen meals provide a well-rounded dish with minimal effort.

Long Shelf-Life: Frozen food has a much longer shelf-life than fresh produce or refrigerated items. The extended shelf-life means you can store them for longer periods without worrying about spoilage.

Availability and Variety

Year-Round Availability of Seasonal Products: The use of frozen food has significantly transformed the year-round availability of seasonal products. Historically, consumers were limited to enjoying fruits, vegetables, and certain seafood only when they were in season locally, or shoppers would have to pay a much higher price. However, advancements in freezing technology have revolutionized the food marketplace.

Now, seasonal products can be harvested at their peak of freshness and immediately frozen, preserving their nutritional value, taste and texture. This innovation extends the shelf life of these products and makes them accessible throughout the year, irrespective of their natural growing seasons. As a result, consumers enjoy a diverse and nutritious diet year-round, benefitting from the convenience and consistent quality of frozen foods.

Diverse and Nutritious Options: Modern frozen food comes in multiple nutritious options, catering to various dietary needs and preferences. The diverse range means having different cuisines and meal types readily available and saving time sourcing specific ingredients or preparing complex recipes.

Ease of Portion Control: Frozen foods often come in pre-portioned sizes, making it easier to control portions without measuring or guesswork. As a result, you can save time in planning and preparing meals, particularly if you're monitoring your food intake for health or dietary reasons.

Health Benefits of Frozen Foods

Frozen foods provide multiple health benefits, including:

Nutritional Integrity: Frozen produce maintain their nutritional value better than their fresh counterparts because freezing preserves essential vitamins and minerals. The freezing process usually occurs shortly after harvest, locking nutrients at their peak. In contrast, fresh produce can lose nutrients during transportation and storage. Studies have found that frozen fruits and vegetables are equally nutritious, and sometimes superior, to fresh ones in terms of vitamin and mineral content.

Portion Control: Many frozen meals come pre-portioned, allowing for consumers to easily eat a single measured portion rather than estimate their serving size. Portion balance is an important part of healthy eating habits.

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Taste and Quality of Frozen Foods

Maintaining Flavor with the Freezing Process: Freezing is a widely used method for preserving the taste and texture of food. When food is frozen, the water inside it forms ice crystals, which slows down the degradation process and preserves its quality.

The key is to freeze the food quickly so that small ice crystals form, which are less damaging to the cellular structure of the food, a process known as Individual Quick Freezing (IQF). IQF is a flash-freezing method that rapidly freezes individual pieces of food at extremely low temperatures. This rapid freezing creates tiny ice crystals, preserving the food's cell structure and maintaining its taste, texture, and nutritional value.

Environmental and Economic Benefits of Frozen Foods

Reduced Food Waste: Some of the top reasons consumers report throwing out are spoilage and excess leftovers – both of which frozen food can help address. Freezing is pivotal in reducing spoilage and food waste. Slowing down the decomposition process preserves food quality and nutritional value. When foods are frozen, the growth of bacteria, yeasts and molds that cause food spoilage and deterioration is significantly inhibited. As a result, food can be stored for extended periods without losing its edibility or nutritional benefits.

Cost-Savings: Research shows that freezing helps consumers not only reduce their food waste, but save money as well. In fact, a survey of 1,500 respondents found that the vast majority (84%) believe that buying frozen food helps them save money specifically because of the reduced food waste that occurs thanks to the ability to eat pre-portioned meals, prepare only what is needed, or save leftovers.

What Are Processed Foods?

Processed foods refer to any food that has been altered from its natural state. When we say alteration, we're referring to a broad spectrum of activities that can be as basic as cutting, canning, dehydrating, pasteurizing, drying, freezing, and cooking. Or, it can involve multi-step manufacturing, where many ingredients are combined to create the final product.

Food is processed for a variety of reasons like:

- To reduce waste
- To extend its shelf life
- To make food more digestible
- To make food available year-round
- To preserve or enhance its nutritional content
- To kill harmful microbes and make food safer to consume
- To increase its palatability

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What we eat is—more often than not—governed by our taste buds which is one of the most common reasons for processing food. Tastier fare activates our endogenous reward systems which promote motivated behavior, making us eat more than we planned.

Are Processed Foods Bad for You?

Not all processed foods are inherently “bad” or unhealthy.

Most foods in their natural form are processed before they reach our plates. Ground beef, and pasteurized foods like milk are some examples. They retain a lot of good-for-you nutrients and freshness—even after processing.

The trouble starts when chemicals enter the picture.

If artificial substances and refined ingredients are mixed in, they can lower the nutritional value of food. It can also cause people to eat more than their recommended amount of calories. Despite this, approximately 60% of the American diet comes from processed foods which can have serious health implications.

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SHELF-STABLE PRODUCTS AND THEIR DRAWBACKS

Shelf-stable food is food of a type that can be safely stored at room temperature in a sealed container. This includes foods that would normally be stored refrigerated, but which have been processed so that they can be safely stored at room or ambient temperature for a usefully long shelf life.

Various food preservation and packaging techniques are used to extend a food's shelf life. Decreasing the amount of available water in a product, increasing its acidity, or irradiating or otherwise sterilizing the food and then sealing it in an air-tight container are all ways of depriving bacteria of suitable conditions in which to thrive. All of these approaches can extend a food's shelf life, often without unacceptably changing its taste or texture.

For some foods, alternative ingredients can be used. Common oils and fats become rancid relatively quickly if not refrigerated; replacing them with hydrogenated oils delays the onset of rancidity, increasing shelf life. This is a common approach in industrial food production, but concerns about health hazards associated with trans fats have led to their strict control in several jurisdictions. Even where trans fats are not prohibited, in many places there are new labeling laws (or rules), which require information to be printed on packages, or to be published elsewhere, about the amount of trans fat contained in certain products.

Introduction

The growing need for increased food sustainability should boost the need for more accurate shelf-life predictions. In addition, the rapidly changing food product portfolio, results in a daily need for new/updated shelf-life dates. Shelf-life is generally known as the period of time during which a food product maintains its acceptable characteristics under specified storage conditions. On a food label, shelf-life can be indicated by either a 'best before' date which refers to the quality of the food or a 'use by' date which is linked to the food safety. In case of a shelf-stable product, shelf-life is determined by a decrease in quality rather than safety. Having an accurate shelf-life prediction is important not only for food industries but also for consumers.

From a food manufacturer's point of view, defining an exact shelf-life of a food product can be a real challenge as there are many variables to be considered. Factors determining shelf-life range from intrinsic factors inherent to the food (e.g. product composition) to extrinsic factors. New shelf-life estimations will be needed at every stage of new product development as well as when changes in formulation, processing technology, packaging and/or storage are applied. When the determination of the best before date is done inappropriately, several drawbacks could arise, such as brand damage or food waste.

Background

Defining the exact shelf-life of a shelf-stable food product is still a real challenge for food manufacturers as there are many variables to be considered. Currently, many shelf-life determinations of commercial shelf-stable products are based on trial-and-error methods which could pose risks resulting in brand damage (overestimation) or food waste (underestimation). Because degradation reactions determining shelf-life are really complex, predicting quality changes remains a challenge; consequently, a scientific approach which considers multiple variables is greatly needed. Recent advances in analytical methods (e.g. GC-MS fingerprinting) and data analysis techniques (e.g. multivariate data analysis and kinetic modelling) can play a key role in this context if they are used in (accelerated) shelf-life studies. Moreover, the role of sensory evaluations should not be forgotten as changes in sensorial properties or decreases in consumer acceptance levels as a function of storage time are in most cases the primary reasons for defining the end of shelf-life.

Scope and approach

This review paper focuses on research progresses in this field and addresses future challenges for quality investigation during storage and prediction of shelf-life dates. As proof of concept, the paper focuses on investigating quality changes of pasteurised shelf-stable orange and mango juices during storage.

Key findings and conclusions

In the study of shelf-stable orange and mango juices, the (combined) analytical targeted and untargeted fingerprinting approach proved to be a useful approach for identifying major-quality related chemical changes and was able to select shelf-life markers (i.e. quality parameters with a clearly observable time- (and temperature-) dependent change). In studying the kinetics of change of the monitored quality attributes, it is tempting to think that the fastest reactions will determine the shelf-life of a shelf-stable product. However, consumer acceptance through sensory evaluation also plays an important role in determining the acceptability limit and therefore the best before date. The integrated science-based approach put forward can be used to investigate quality changes of a wide range of shelf-stable products during storage.

Conclusion

Predicting shelf-life quality changes for food industries remains a challenge due to the complexity of degradation reactions and their interactions. The current practice of many shelf-life determinations are largely based on trial-and-error methods or experience-based guesses which could potentially lead to overestimation (risk for brand damage) or underestimation (risk for food waste). To have a better prediction of shelf-life of shelf-stable food products, a science-based approach should be.

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ARTIFICIAL ADDITIVES AND PRESERVATIVES

Food additives are chemicals added to foods to keep them fresh or to enhance their colour, flavour or texture. They may include food colourings (such as tartrazine or cochineal), flavour enhancers (such as MSG) or a range of preservatives.

Most food additives are listed on the product label, along with other ingredients, in a descending order by weight (flavours are an exception and do not need to be identified). Sometimes, the additive is spelt out in full. At other times, it is represented by a code number: for example, cochineal may be listed as Colouring; sodium sulphite may be shown as Preservative.

Overview

Many different food additives have been developed over time to meet the needs of large-scale food processing. Additives are added to ensure processed food remains safe and in good condition throughout its journey from factories or industrial kitchens, to warehouses and shops, and finally to consumers. Additives are also used to modify the sensory properties of foods including taste, smell, texture and appearance.

Food additives can be derived from plants, animals or minerals, or they can be chemically synthesized. There are several thousand food additives used, all of which are designed to do a specific job. Food additives can be grouped into 3 broad categories based on their function.

Safety tests for food additive

Toxicological tests on animals are used to determine the amount of the additive that is expected to be safe when consumed by humans. This is usually an amount 100 times less than the maximum daily dose at which 'no observable effects' are produced by an additive consumed over the test animal's lifetime.

If there is any doubt over the safety of an additive, approval is not given. If new scientific information becomes available suggesting that a food additive is no longer safe, the approval to use the food additive would be withdrawn.

Most food additives are tested in isolation, rather than in combination with other additives. The long-term effects of consuming a combination of different additives are currently unknown.

Effects of food additives

Some people are sensitive to particular food additives and may have reactions like hives or diarrhoea. This doesn't mean that all foods containing additives need to be automatically treated with suspicion. All foods are made up of

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chemicals and food additives are not always 'less safe' than naturally occurring chemicals.

Many of the food additives used by the food industry also occur naturally within foods that people eat every day. For example, MSG is found naturally in parmesan cheese, sardines and tomato in significantly greater quantities than the MSG present as a food additive. People with food allergies and intolerances are also often sensitive to chemicals found naturally in certain foods, such as nuts or shellfish.

Many people view food additives as a major food threat. However, in terms of health risk, food additives would come in at the end of the line, after food-borne microorganisms (like salmonella), inappropriate hygiene and eating habits, environmental contaminants and naturally occurring toxins.

Types of food additives

The different types of food additive and their uses include:

- **Anti-caking agents** – stop ingredients from becoming lumpy.
- **Antioxidants** – prevent foods from oxidising, or going rancid.
- **Artificial sweeteners** – increase the sweetness.
- **Emulsifiers** – stop fats from clotting together.
- **Food acids** – maintain the right acid level.
- **Colours** – enhance or add colour.
- **Humectants** – keep foods moist.
- **Flavours** – add flavour.
- **Flavour enhancers** – increase the power of a flavour.
- **Foaming agents** – maintain uniform aeration of gases in foods.
- **Mineral salts** – enhance texture and flavour.
- **Preservatives** – stop microbes from multiplying and spoiling the food.
- **Thickeners and vegetable gums** – enhance texture and consistency.
- **Stabilisers and firming agents** – maintain even food dispersion.
- **Flour treatment** – improves baking quality.
- **Glazing agent** – improves appearance and can protect food.
- **Gelling agents** – alter the texture of foods through gel formation.
- **Propellants** – help propel food from a container.
- **Raising agents** – increase the volume of food through the use of gases.
- **Bulking agents** – increase the volume of food without major changes to its available energy.

Some food additives can cause reactions

For most people, additives are not a problem in the short term. However, 50 of the 400 currently approved additives in Australia have been associated with adverse reactions in some people. Some food additives are more likely than others to cause reactions in sensitive people.

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It is often the additives that are used to give a food a marketable quality, such as colour, that most commonly cause allergic reactions. Some of these hypersensitive reactions include:

- **Digestive disorders** – diarrhoea and colicky pains
- **Nervous disorders** – hyperactivity, insomnia and irritability
- **Respiratory problems** – asthma, rhinitis and sinusitis
- **Skin problems** – hives, itching, rashes and swelling.

It is important to realise that many of the symptoms experienced as a result of food sensitivities can be caused by other disorders. Medical diagnosis is important. If you try to diagnose yourself, you may restrict your diet unnecessarily and neglect an illness.

Other additives

Other food additives are used for a variety of reasons, such as preservation, colouring and sweetening. They are added when food is prepared, packaged, transported, or stored, and they eventually become a component of the food.

Preservatives can slow decomposition caused by mould, air, bacteria or yeast. In addition to maintaining the quality of the food, preservatives help control contamination that can cause foodborne illness, including life-threatening botulism.

Colouring is added to food to replace colours lost during processing or other production, or to make food appear more attractive.

Non-sugar sweeteners are often used as an alternative to sugar because they contribute fewer or no calories when added to food. WHO has issued a recommendation against the use of non-sugar sweeteners in general, based on evidence that they don't seem to benefit long term weight loss or maintenance and may increase risk of noncommunicable diseases.

WHO response

Evaluating the health risk of food additives

WHO, in cooperation with the Food and Agriculture Organization of the United Nations (FAO), is responsible for assessing the risks to human health from food additives. Risk assessments of food additives are conducted by an independent, international expert scientific group – the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

Only food additives that have undergone a JECFA safety assessment and are found not to present an appreciable health risk to consumers can be used internationally. This applies whether food additives come from natural sources or

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they are synthetic. National authorities, either based on the JECFA assessment or a national assessment, can then authorize the use of food additives at specified levels for specific foods.

JECFA evaluations are based on scientific reviews of all available biochemical, toxicological, and other relevant data on a given additive – mandatory tests in animals, research studies and observations in humans are considered. The toxicological tests required by JECFA include acute, short-term and long-term studies that determine how the food additive is absorbed, distributed and excreted, and possible harmful effects of the additive or its by-products at certain exposure levels.

The starting point for determining whether a food additive can be used without having harmful effects is to establish the acceptable daily intake (ADI). The ADI is an estimate of the amount of an additive in food or drinking water that can be safely consumed daily over a lifetime without adverse health effects.

International standards for the safe use of food additives

The safety assessments completed by JECFA are used by the joint intergovernmental food standard-setting body of FAO and WHO, the Codex Alimentarius Commission, to establish levels for maximum use of additives in food and drinks. Codex standards are the reference for national standards for consumer protection, and for the international trade in food, so that consumers everywhere can be confident that the food they eat meets the agreed standards for safety and quality, no matter where it was produced.

Once a food additive has been found to be safe for use by JECFA and maximum use levels have been established in the Codex General Standard for Food Additives, national food regulations need to be implemented permitting the actual use of a food additive.

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MINIMIZING RELIANCE ON PACKAGED FOODS

Processed and packaged foods have become a staple in most people's diets due to their convenience and availability. However, these foods are often loaded with preservatives, artificial flavors, and other additives that can negatively impact our health in the long run. Additionally, relying heavily on these foods can contribute to unnecessary waste and harm the environment.

Energy-conscious cooking offers a great way to reduce reliance on processed and packaged foods. By adopting some simple tips, one can improve the quality of their meals and reduce their carbon footprint.

Plan Your Meals

Planning meals ahead is an essential step in energy-conscious cooking. Make a list of the ingredients you need for each meal before going to the store. Shopping with a list will help reduce impulse buying and reduce food waste.

Buy Fresh and Local Produce

Buying fresh, seasonal produce from local farmers' markets can significantly reduce your reliance on processed and packaged foods. Not only is the produce fresh and packed with nutrients, but it is also more sustainable as it did not travel long distances to reach the market.

Cook From Scratch

Cooking from scratch is the ultimate way to reduce the intake of processed and packaged foods. When you cook from scratch, you have total control over the ingredients you use, ensuring that they are fresh and healthy. Simple recipes like soups, stews, and salads require minimal prep time, making them perfect for busy individuals. Building a repertoire of easy recipes can help you embrace energy-conscious cooking.

Preserve Food At Home

Preserving food at home is essential in energy-conscious cooking. Techniques such as canning, drying, and fermenting are simple ways to preserve food and reduce waste. For instance, rather than purchase packaged tomato sauce, one can make and preserve their own sauce for future use.

Reduce Meat Consumption

Meat production has a significant environmental impact, with livestock consuming vast amounts of resources like water. Reducing meat consumption is one way to reduce reliance on processed and packaged foods and promote energy-conscious cooking. Consider incorporating plant-based proteins like lentils, chickpeas, and beans into your meals.

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Use Energy-Efficient Appliances

Using energy-efficient appliances is one of the most critical steps in energy-conscious cooking. Appliances like ovens, refrigerators, and dishwashers consume significant amounts of energy. Choose appliances with energy star ratings as they are more energy-efficient and environmentally friendly.

Conclusion

Reducing reliance on processed and packaged foods is essential for a healthy lifestyle and a healthier planet. Energy-conscious cooking is a simple but effective way to make this change. By planning meals, purchasing fresh produce, cooking from scratch, preserving food at home, reducing meat consumption, and using energy-efficient appliances, we can create delicious meals while reducing our carbon footprint. Embrace energy-conscious cooking today and make a positive impact on your health and the environment.

Change your shopping routine

It's much easier to limit your intake of processed foods when you don't have any on hand.

Next time you go to the grocery store, fill your cart up with healthy, minimally processed ingredients like fruits, vegetables, whole grains, and legumes.

You can also try changing which aisles you shop in most, staying in the store's perimeter, or focusing on the middle aisles where you may find beans, vegetables, canned fruit, brown rice, and whole wheat pasta.

Be sure to read labels on your favorite food products when you're shopping. Whenever possible, avoid foods with lots of sodium, trans fat, or added sugar.

The takeaway

Processed foods are any food that has been cooked, canned, frozen, or packaged.

Although you can eat numerous processed foods as part of a healthy diet, you should limit those that are high in sodium, sugar, additives, and preservatives.

Try a few of the tips outlined in this article to find what works for you. Remember to make changes slowly for the best results.

CONNECTING WITH YOUR FOOD

Mindful Eating: Cultivating a Conscious Relationship with Food

Mindful eating, a practice emphasizing present moment awareness during meals, fosters a deeper connection with food and its nutritional value. This approach counters the prevalent fast-paced lifestyles that often lead to rushed and inattentive eating habits. By incorporating principles of sensory awareness and mindful engagement, individuals can transform their eating experiences and cultivate healthier relationships with food.

Defining Mindful Eating and its Importance

Mindful eating, as defined by the concept of present moment awareness, involves engaging all five senses to fully experience the taste, texture, aroma, and visual appeal of food. This contrasts sharply with the habitual, often mindless consumption that characterizes many modern eating patterns. The importance of mindful eating stems from its ability to address the disconnect between eating and nourishment. In today's fast-food environment, characterized by readily available hyper-palatable, energy-dense foods, the absence of mindful eating often leads to overconsumption and unhealthy dietary habits. By consciously engaging with the process of eating, individuals can better regulate their intake, addressing issues of overeating and developing a healthier relationship with food. The application of this concept can be observed in the increased awareness of satiety cues, leading to improved portion control and a reduction in feelings of guilt or shame associated with food consumption. This approach resonates with the principles of intuitive eating, emphasizing trust in internal body signals of hunger and fullness.

Practical Application of Mindful Eating Principles

Implementing mindful eating involves creating a conducive environment. This includes eliminating distractions (e.g., electronic devices) and establishing a calm, peaceful setting. Before commencing a meal, engaging in deep breathing exercises can promote relaxation and mental clarity. The act of eating should be unhurried, with careful attention paid to each bite. The process involves thoroughly chewing food, allowing for the full appreciation of its taste and texture. This technique aligns with the concept of interoceptive awareness, the ability to perceive internal bodily sensations, improving one's understanding of hunger and satiety cues. Furthermore, acknowledging the journey of food from its origin to the plate promotes gratitude for the resources involved in its production and distribution. Mindful eating requires a holistic approach, considering not only the physical act of consumption but also its psychological and emotional dimensions. The application of this holistic principle is evident in the reduced stress and anxiety associated with mealtimes observed in

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practitioners of mindful eating. The process of mindful eating can be enhanced through the application of self-compassion, which supports individuals in acknowledging imperfections and avoiding self-criticism related to eating habits.

Cultivating Gratitude and Addressing Distractions

Gratitude plays a vital role in mindful eating. Expressing appreciation for the food and the individuals involved in its preparation fosters a positive and respectful approach to consumption. This practice aligns with the broader concept of positive psychology, highlighting the importance of cultivating positive emotions to improve overall well-being . Conversely, eliminating distractions—such as phones or television—is crucial for promoting focused attention on the sensory experience of eating. This aligns with the principles of attentional control which are fundamental in achieving mindful states and managing impulsive behaviors. This can significantly impact an individual's dietary habits. By reducing distraction, individuals can be more attuned to their internal sensations and make healthier choices.

Understanding and Honoring Body Signals, Portion Control, and Learning from Children

Mindful eating promotes attentiveness to internal signals of hunger and satiety. This involves differentiating between true hunger and emotional or environmental triggers for eating. This ability is facilitated by the cultivation of interoceptive awareness . Through mindful awareness, individuals learn to recognize their body's cues for appropriate portion sizes, preventing overeating and promoting a healthier weight. Observing the eating habits of children, who often display natural mindful eating patterns, can provide valuable insights into unhurried and fully engaged consumption. Children generally display a higher level of interoceptive sensitivity and consume food more slowly than adults. This method aligns with Bandura's social learning theory, which emphasizes the role of observational learning in shaping behaviors .

Curiosity, Acceptance of Imperfections, and the Importance of Slowing Down

Approaching meals with curiosity encourages exploration of the sensory qualities of food. This involves observing the varied textures, aromas, and tastes of each bite, enhancing the pleasure derived from eating. This aligns with the principles of sensory-specific satiety, wherein the repeated consumption of a specific food leads to a decreased enjoyment of that food and enhances the appeal of diverse foods. Embracing imperfections in food appearance reduces the pressure of adhering to unrealistic beauty standards and promotes appreciation for food's nutritional value over aesthetics. Prioritizing slow, deliberate eating is crucial for mindful eating, allowing for full digestion and the experience of sensory richness.

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Slow eating supports the body's natural regulatory mechanisms for hunger and satiety, which are frequently overridden in the rush of modern life.

Mindful Eating and its Broader Impact

Mindful eating transcends the immediate act of consumption. It involves cultivating a broader awareness of the relationship between food, emotions, and overall well-being. By practicing mindful eating, individuals develop a healthier relationship with food, reducing feelings of guilt or shame and cultivating a more positive approach toward nutrition. The benefits extend beyond weight management, encompassing improved digestion, stress reduction, and heightened awareness of one's physical and emotional state. This holistic approach aligns with the biopsychosocial model of health, which recognizes the interplay of biological, psychological, and social factors in shaping an individual's well-being .

Conclusions and Recommendations

Mindful eating offers a powerful strategy for improving dietary habits and cultivating a healthier relationship with food. By applying principles of present moment awareness, sensory engagement, and gratitude, individuals can transform their eating experiences. Further research is needed to explore the long-term effects of mindful eating on various health outcomes and to investigate the most effective strategies for promoting its adoption across diverse populations. Recommendations include incorporating mindful eating practices into nutrition education programs, developing targeted interventions for individuals with disordered eating patterns, and conducting longitudinal studies to assess its impact on overall well-being. The widespread adoption of mindful eating has the potential to significantly contribute to improved public health, promoting healthier dietary habits and reducing the prevalence of diet-related illnesses.

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EATING WITH AWARENESS

Being aware of what you're eating is important to stay healthy. Being aware of your body's natural signals and hunger/satiety cues is just as important. Essentially being in tune with your body takes some practice but is possible for everyone.

What is intuitive eating?

Almost everyone can describe what it feels like to be hungry. Take a second to think how this may feel to you. This type of intuition is one of the strongest and easiest to understand what it means. Everyone gets hungry otherwise we would starve.

Now think about what it feels like when you are satisfied but not full. This type of feeling is more subtle and more difficult to pick up on. Not being as important as the drive to eat, being satisfied during eating often gets ignored. Being satisfied means that we still have physical space for a little more food but don't feel like eating anymore. Being full means that we are physically unable to fit any more food in our stomach without pain. Most of us tend to eat until the whole meal is gone or we are so full that we can not eat anymore.

Intuitive eating allows you to be more aware of when you are satisfied during a meal and stop eating at that point. This may mean eating less of a meal than you had portioned out. It may also vary from day to day based on your activities and other factors.

Intuitive eating also allows you to choose the foods that will satisfy you the most in a given day. Everyone has had a craving for a specific food and knows what it's like if it's ignored. By not ignoring your cravings you won't have to fight your body, which can be exhausting in addition to our daily stressors. You may crave more rice or pasta one day and more meat on another day. Although this is not a reason to eat ice cream or chips all day.

How to start eating intuitively

Eating intuitively is not hard but takes some practice and key steps. One of our greatest hurdles is the speed at which we eat. Most of us tend to eat too quickly and unless we portioned everything perfectly, we are now full. It takes about 20 minutes for the brain to get all the messages from the stomach that we are satisfied from a meal. Setting a timer for 20 minutes and pacing yourself is a great place to start. You can also try setting your fork or spoon down every bite and taking time to chew your food, making sure to really enjoy each bite.

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Think of a time you ate something so fast you didn't remember even eating it and now it's gone. You may even feel like you didn't even eat it. By slowing down and enjoying each bite, a little can go a long way. Try not to eat on the go or if you're in a hurry. If you are short on time, take a 5 min break to enjoy a quick snack. This quick 5 min break will leave you feeling fuller than eating while distracted and on the go.

Follow these key steps to start practicing eating intuitively

- Set a timer for 20 min for each main meal and then put the phone down (don't check your social media pages)
- Sit at a table and avoid distractions like TV, magazines, etc.
- Set your fork/spoon down between bites
- Chew well and enjoy each bit to increase the satisfaction of every bite
- Focus more on what you may be craving at a given meal
- Use a smaller plate/bowl and take 5 min before you go back for seconds. If you still feel you need another serving after 5 min, allow yourself the extra food your body may need.
- Allow yourself to not finish your plate (it's better to throw the food out then store it in your body)

We're all born with it

Intuitive eating is an innate sense that we all had as babies and slowly lost as we grew older. My 9 month old baby will eat with no problem and all of a sudden will start to smack the spoon away with her hands. No matter how many times you try to give her another bite she'll refuse each one. I've had many spoons go flying from well-placed smacks. Talk about great hand eye coordination at 9 months, ha-ha.

What is important to notice is that she knows when she is hungry and when she's satisfied she knows it. As we grow up we tend to change our eating habits based on our culture at home, work, community, and society norms. Eating everything on the plate was a common family standard in past years that led to many people over eating later in life.

THE ROLE OF GRATITUDE

In our fast-paced lives, meals can often become just another task on our to-do lists. We eat quickly, distracted by screens or our busy thoughts, losing the connection to the nourishment our food provides. However, integrating gratitude into our eating practices can transform our relationship with food, turning meals into moments of mindfulness and appreciation. This blog explores the role of gratitude in mindful eating and offers practical ways to cultivate a deeper appreciation for the food on our plates.

Before delving into the role of gratitude, it's essential to understand what mindful eating entails. Mindful eating is the practice of paying full attention to the experience of eating. It involves being aware of the food's flavors, textures, and aromas while recognizing the physical sensations of hunger and fullness. This practice encourages a holistic approach to eating, promoting not just physical nourishment but also emotional and mental well-being.

Enhanced Awareness: Mindful eating encourages us to slow down and savor each bite. This awareness can lead to a more profound appreciation of the food we consume.

Improved Digestion: Eating mindfully allows the body to better digest food, as we take the time to chew and enjoy, promoting healthier eating habits.

Reduced Overeating: By tuning into our hunger cues, we're less likely to overeat, fostering a healthier relationship with food.

The Power of Gratitude

Gratitude is more than just a fleeting feeling; it is a powerful practice that can profoundly impact our mental and emotional health. In the context of eating, gratitude allows us to recognize and appreciate the journey of our food—from the earth to our plates.

- **Shift in Perspective:** Practicing gratitude can shift our focus from what we lack to what we have. This positive perspective can improve our overall mood and relationship with food.
- **Emotional Well-Being:** Gratitude has been linked to increased feelings of happiness and reduced stress. By expressing appreciation for our food, we can cultivate a more positive emotional state during meals.
- **Connection to Community and Nature:** Gratitude fosters a sense of connection—not just to the food itself but also to the people who grow, prepare, and serve it. This awareness creates a deeper bond with our community and the natural world.

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Integrating Gratitude into Mindful Eating

Now that we understand the significance of gratitude in the context of mindful eating, let's explore practical ways to incorporate this practice into our daily meals.

1. Start with a Moment of Reflection

Before you begin your meal, take a moment to pause and reflect. This could involve:

- **Silent Appreciation:** Close your eyes and take a few deep breaths, focusing on the food in front of you. Consider the journey it took to arrive at your table.
- **Verbal Thanks:** If you're dining with others, express gratitude aloud. Sharing your appreciation can enhance the communal experience of eating.

Acknowledge the Ingredients

As you prepare and eat your food, take the time to acknowledge each ingredient:

- **Local Sourcing:** If possible, choose ingredients that are locally sourced. Think about the farmers and producers who worked hard to bring fresh food to your table.
- **Cultural Significance:** Consider the cultural background of the foods you are consuming. Acknowledge the traditions and history behind the dishes.

Engage Your Senses

Gratitude can be deepened by fully engaging your senses during the eating experience:

- **Visual Appreciation:** Take a moment to appreciate the colors and presentation of your meal. A beautiful plate can enhance the overall experience.
- **Taste Exploration:** Savor each bite, paying attention to the flavors and textures. Recognizing the complexities of taste can heighten your appreciation.

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Keep a Gratitude Journal

A gratitude journal can be a powerful tool to cultivate appreciation for your food:

- **Daily Entries:** At the end of each day, write down a few things you appreciated about your meals. This practice encourages reflection on the diversity and nourishment that food provides.
- **Highlight Connections:** Note the people you shared meals with or the local ingredients you used. This practice can deepen your sense of community and connection to your food.

The Benefits of Gratitude in Mindful Eating

Integrating gratitude into your eating practice has numerous benefits that extend beyond the dining table:

1. **Increased Satisfaction:** Research shows that expressing gratitude can enhance overall satisfaction in various aspects of life, including food. Acknowledging the positive aspects of your meals can make you feel more fulfilled.
2. **Healthier Choices:** When we cultivate a sense of appreciation for food, we may be more inclined to choose nourishing, wholesome options. Gratitude encourages us to see food as a source of sustenance rather than merely a means to satisfy hunger.
3. **Enhanced Mindfulness:** Practicing gratitude inherently encourages mindfulness. By focusing on what you appreciate about your food, you become more present and engaged in the eating process.

Overcoming Challenges

While incorporating gratitude into your eating habits can be rewarding, there may be challenges:

1. **Busy Lifestyles:** In our hectic lives, it can be easy to overlook the gratitude aspect. Start small by setting aside just one meal each week to practice mindfulness and gratitude.
2. **Negative Associations:** Some may struggle with negative feelings surrounding food, whether from past experiences or societal pressures. Acknowledge these feelings and allow yourself to express gratitude for the positive aspects of your meals, no matter how small.
3. **Cultivating Consistency:** Like any practice, integrating gratitude into your meals takes time. Be patient with yourself and focus on small, consistent efforts.

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Conclusion

Gratitude plays a vital role in mindful eating, allowing us to cultivate a deeper appreciation for the food we consume. By incorporating practices that enhance awareness, connection, and appreciation, we can transform our meals into nourishing experiences that support our well-being. As you embrace the power of gratitude, you'll likely find that meals become not just a necessity but a joyful celebration of nourishment and connection. So, the next time you sit down to eat, take a moment to reflect, appreciate, and savor the abundance before you. Your body and spirit will thank you.

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AYURVEDIC AND TRADITIONAL CHINESE MEDICINE PERSPECTIVES

The Gunas (energies) of Food

In Sanskrit, the word "Guna" means thread, virtue, quality or attribute, and is generally defined as "that which binds". In Yoga and Ayurveda, the Gunas relate to all matter and energy describing the qualities of nature, and states of consciousness.

They are generally defined as:

- **Sattva:** lightness, balance, harmony, purity, wellbeing, goodness and harmony.
- **Rajas:** heat, activity, passion, restlessness, turbulence, stress and anger or confusion.
- **Tamas:** heaviness, lethargy, dullness, ignorance, delusion, darkness or destructiveness.

Our individual natures have a proportion of each Guna for instance without Tamas we would not sleep, without Rajas we would lack dynamism and without Sattva life would be uninspiring, without the higher consciousness.

When relating these attributes to food and health Ayurveda utilizes the Gunas to understand the individual energetics of foods, spices, herbs, and beverages and how they affect individual constitution and imbalances, and overall health and well-being.

In addition to looking at the Gunas of food, Ayurveda also looks to eating proper quantities, following an organic seasonal diet, having regularity of meals so the body has effective digestion, assimilation and elimination processes, our state of minds while preparation of foods instilling consciousness, and following proper food combining making sure that what we eat are compatible to not create Ama or disease.

According to Ayurveda these gunas have the following effects on our health:

Sattvic food are those that purify the body and calm the mind, bring presence and raise our consciousness. These foods include fresh fruits, level vegetables, nuts, grains, fresh milk and dairy products and spices like fresh ginger, fresh or dried turmeric, coriander, cardamom, and fennel. A sattvic diet includes preparing foods with love and full awareness and eating food within 6 hours of preparation before they lose their energy. Pungent and Astringent foods and spices can be non-sattvic and include onion, garlic, red chilis, black pepper.

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Rajasic food stimulates the body and mind into action but in excess can cause hyperactivity, restlessness, anger, irritability, and sleeplessness. These foods included overly spiced foods, onions, garlic, tea, coffee, fried foods, excessively sugary foods, chocolate, and soft drinks.

A rajasic person might eat on the run and experience poor digestion and health and is usually aggressive and overflowing with energy. According to Ayurveda, this can be beneficial if used wisely, and it can lead a person towards prosperity, power, and prestige.

Tamasic food is referred to as dead foods, such as meat, fish, poultry, eggs, stale foods including frozen, reheated foods, sugary foods, oily and heavy foods, and foods that are processed or have preservatives.

Alcohol, cigarettes, and drugs also fall into this category. All of these substances do nothing to lift our energy and consciousness, and in fact they pull us down into a state of laziness, dullness, careless and unaware ourselves and others. Living tamasically can lead to obesity, diabetes, heart, and liver disease. We will feel unmotivated, careless, and oblivious of ourselves and others.

Ayurveda

Traditional Chinese Medicine (TCM) emphasizes the importance of food energetics in maintaining health and preventing disease. This article explores the principles of TCM food energetics and provides practical tips for choosing foods according to their properties. From understanding the warming and cooling effects of different foods to balancing yin and yang energies, you'll gain insights into how TCM views nutrition. Whether you're looking to support specific organs, balance your energy, or address common ailments, incorporating TCM food energetics into your diet can have a positive impact on your overall health and well-being.

Introduction to TCM Food Energetics

Traditional Chinese Medicine (TCM) recognizes the importance of food in maintaining health and preventing disease. TCM food energetics is a branch of TCM that focuses on the energetic properties of different foods and how they can affect the body's energy balance.

In TCM, food is classified according to its properties, such as temperature, taste, and action on the body. Each food has a specific energetic nature that can either cool or warm the body, promote or suppress certain bodily functions, and have an overall yin or yang effect.

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The concept of yin and yang, which represents the dualistic nature of the universe, is fundamental in TCM. Yin is associated with qualities such as coldness, darkness, and rest, while yang is associated with qualities such as warmth, light, and activity. In terms of food energetics, yin foods have a cooling effect on the body and tend to nourish and moisten, while yang foods have a warming effect and tend to invigorate and stimulate.

By understanding the energetic properties of foods, individuals can make informed choices about what they consume to maintain or restore balance in their bodies. Incorporating TCM food energetics into one's diet can help promote optimal health and well-being by supporting the body's natural energy flow and addressing imbalances that may lead to various health issues.

Understanding Food Properties

In Traditional Chinese Medicine (TCM), foods are classified according to their properties, which include warming, cooling, neutral, and hot. These properties are believed to have an impact on the body's energy and balance.

Warming foods are believed to increase the body's internal heat and promote circulation. They are often used to treat conditions associated with coldness, such as poor digestion, cold hands and feet, and fatigue. Examples of warming foods include ginger, cinnamon, garlic, and lamb. These foods can help to warm the body and improve energy levels.

Cooling foods, on the other hand, are believed to reduce internal heat and have a cooling effect on the body. They are often used to treat conditions associated with excess heat, such as inflammation, fever, and skin rashes. Examples of cooling foods include cucumber, watermelon, mint, and tofu. These foods can help to cool the body and promote balance.

Neutral foods are considered to have a balanced effect on the body and do not significantly impact its energy. They are often used as a staple in the diet and can be consumed in moderation by individuals with different constitutions. Examples of neutral foods include rice, sweet potato, chicken, and spinach.

Hot foods are believed to have a strong warming effect on the body and can increase internal heat. They are often used to treat conditions associated with coldness and weakness. Examples of hot foods include chili peppers, alcohol, coffee, and lamb. These foods should be consumed in moderation, especially by individuals with excess heat or inflammation.

It is important to note that the properties of foods in TCM are not solely based on their temperature or spiciness. Instead, they are determined by their overall effect on the body's energy and balance. By understanding the properties of

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different foods, individuals can make informed choices to support their health and well-being.

The Yin and Yang of Food

In Traditional Chinese Medicine (TCM), the concept of yin and yang is fundamental to understanding the balance and harmony within the body. Yin and yang are opposite forces that complement each other and are present in all aspects of life, including food. In TCM, food is classified according to its energetic properties, which can be either yin or yang.

Yin represents the cooling, nourishing, and calming aspects, while yang represents the warming, energizing, and stimulating aspects. The balance between yin and yang energies is crucial for maintaining optimal health.

When it comes to food, the goal is to consume a balanced combination of yin and yang foods to maintain the equilibrium within the body. An imbalance in yin and yang energies can lead to various health issues.

Certain foods have inherently yin or yang properties. For example, yin foods include fruits, vegetables, and herbs that have a cooling effect on the body. These foods are often hydrating, promote relaxation, and help clear heat from the body.

On the other hand, yang foods are typically warming and energizing. They include foods like meat, spices, and nuts, which provide warmth and stimulate the body's functions. Yang foods are often recommended during colder seasons or for individuals who have a deficiency of yang energy.

It's important to note that the classification of foods as yin or yang is not solely based on their taste or temperature. Instead, it considers the overall effect of the food on the body's energy. For example, watermelon, despite being cold in temperature, is considered a yin food because of its hydrating and cooling properties.

By understanding the yin and yang properties of foods, individuals can make informed choices to restore or maintain the balance of energies within their bodies. Incorporating a variety of yin and yang foods in the diet can help support overall well-being and promote harmony in the body's systems.

Applying TCM Food Energetics in Your Diet

Incorporating TCM food energetics into your daily diet can help support specific organs and address common health concerns. Here are some practical tips to help you get started:

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Choose foods according to their properties: TCM categorizes foods as either yin or yang, and each food has specific properties that can affect the body's energy. For example, if you have a weak digestive system, you may choose foods with warming properties to support digestion.

Support specific organs: TCM believes that each organ has its own energy and can be nourished by specific foods. For example, if you want to support your liver, you may choose foods that are sour in taste, such as lemons or vinegar.

Balance yin and yang energies: TCM emphasizes the importance of balancing yin and yang energies in the body. If you have excess yang energy, you may choose cooling foods to balance it out. Similarly, if you have excess yin energy, you may choose warming foods.

Meal planning: Incorporate a variety of foods into your meals to ensure a balance of different energies. Include a mix of yin and yang foods, as well as foods that support different organs.

Recipe ideas: Experiment with TCM-inspired recipes that incorporate foods with specific properties. For example, you could try a stir-fry with cooling vegetables like cucumber and watermelon to balance excess yang energy.

By applying TCM food energetics in your diet, you can promote overall health and well-being by supporting the body's natural energy balance.

Balancing Yin and Yang Energies

In Traditional Chinese Medicine (TCM), the concept of Yin and Yang represents the balance between opposing forces in the body. Yin energy is associated with coolness, darkness, and rest, while Yang energy is associated with warmth, light, and activity. Balancing these energies is crucial for maintaining overall health and well-being.

One way to balance Yin and Yang energies through food choices is by incorporating a variety of foods with different energetic properties. Foods that are considered Yin in nature include fruits, vegetables, and seafood, while Yang foods include meats, spices, and grains. By including a balance of Yin and Yang foods in your diet, you can help maintain the equilibrium of these energies.

Moderation is another key aspect of balancing Yin and Yang energies. Consuming foods in moderation helps prevent an excess of either Yin or Yang energy in the body. For example, excessive consumption of Yang foods like spicy or greasy foods can lead to an imbalance, causing symptoms such as heartburn or inflammation. On the other hand, excessive consumption of Yin foods like raw or cold foods can lead to digestive issues or a feeling of coldness in the body.

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Identifying and addressing imbalances in the body through TCM food energetics involves paying attention to your body's signals and symptoms. If you experience symptoms such as fatigue, insomnia, or digestive disturbances, it may indicate an imbalance in Yin and Yang energies. Consulting with a TCM practitioner can help you identify the specific imbalances and provide guidance on adjusting your diet accordingly.

To address imbalances, TCM recommends using food as medicine. For example, if you have excess Yang energy, incorporating more Yin foods like leafy greens, cucumbers, and melons can help restore balance. Similarly, if you have excess Yin energy, adding more Yang foods like ginger, garlic, and warming spices can help restore equilibrium.

In conclusion, balancing Yin and Yang energies through food choices is an essential aspect of TCM food energetics. By incorporating a variety of Yin and Yang foods in moderation, and addressing imbalances through targeted food choices, you can support the harmonious flow of energy in your body and promote overall health and well-being.

Supporting Specific Organs

In Traditional Chinese Medicine (TCM), the concept of food energetics is closely tied to organ health. According to TCM principles, different foods possess specific properties that can either support or disrupt the function of various organs in the body.

One of the key organs in TCM is the liver, which is responsible for detoxification and maintaining the smooth flow of Qi (energy) in the body. To support liver health, it is recommended to consume foods that have a cooling and detoxifying effect. Some examples of such foods include bitter greens like dandelion greens, artichokes. These foods help to clear heat and toxins from the liver, promoting its optimal function.

The spleen is another important organ in TCM, responsible for digestion and nutrient absorption. Foods that support the spleen tend to have a warming and nourishing effect. Examples of spleen-supportive foods include root vegetables like sweet potatoes, carrots, and parsnips. These foods help to strengthen the spleen and improve digestive function.

The kidneys, which play a vital role in TCM, are responsible for storing the body's essence and regulating water metabolism. Foods that nourish the kidneys are typically warming and tonifying in nature. Some examples of kidney-supportive foods include black beans, walnuts, and goji berries. These foods help to strengthen the kidneys and promote overall vitality.

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By understanding the connection between TCM food energetics and organ health, you can make informed choices about the foods you consume. Incorporating organ-supportive foods into your diet can help maintain the balance and harmony of your body's systems, promoting optimal health and well-being.

Addressing Common Ailments

In Traditional Chinese Medicine (TCM), food is not only seen as a source of nutrition but also as a way to balance the body's energy. By understanding the energetic properties of different foods, you can use TCM food energetics to address common ailments.

Digestive issues can be alleviated by incorporating certain foods into your diet. For example, if you experience bloating or indigestion, you can consume warming foods such as ginger, cinnamon, and garlic. These foods help to improve digestion and promote the movement of energy in the body.

Insomnia can be a result of an imbalance in the body's energy. To address this, you can include calming foods in your diet. Chamomile tea, lavender, and oats are known for their calming properties and can help promote better sleep.

Fatigue is a common ailment that can be addressed through TCM food energetics. If you often feel tired and lack energy, incorporating foods with nourishing properties can be beneficial. Foods such as ginseng, goji berries, and black sesame seeds are known for their ability to boost energy and vitality.

To incorporate these foods into your diet, you can try adding ginger to your stir-fries or drinking chamomile tea before bed. You can also include goji berries in your smoothies or sprinkle black sesame seeds on your salads. Experiment with different recipes and find ways to incorporate these foods into your meals.

Remember, TCM food energetics is not a one-size-fits-all approach. It's important to listen to your body and consult with a qualified TCM practitioner if you have any specific health concerns. By using TCM food energetics to address common ailments, you can support your overall well-being and promote balance in your body.

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BALANCING HOT AND COLD FOODS

Why eating close to nature is the way to go.

In traditional Chinese medicine, food is grouped into three categories: cooling, neutral and warming. unpacks the ways these groups interact with the body, and outlines the holistic benefits of eating closer to nature.

Food can do one of two things: it can benefit the body or it can be a deficit. Ancient civilisations understood these basic principles, but over time, we seem to have hit a grey area. We've disconnected from the fact that food will either take our health where we want it to go, or the contrary.

Along with vitamin D and sleep, food is a primal source of energy. We don't drive our car into the petrol station and fill it up with water, and in the same way, we can't expect our bodies to thrive with minimal or incorrect nourishment. But what's more, depending on your health, the food you eat may be creating a perpetual state of poor health – especially if your gut health is compromised.

In traditional Chinese medicine, we drill down a little further to look at the energetic properties of food, finding that they fall into certain categories: warming, cooling and neutral. How these categories work in the body is pretty straightforward; the use of cooling foods is beneficial when there is excess heat in the body, such as sunstroke. By the same token, we use warming foods when there is internal cold, such as pain. The simplicity of this makes it very beautiful and easy for us all to adopt and drill down on the whole premise that food is indeed medicine. To explain this in more detail, let's look at these categories individually.

COOLING FOODS

Cooling foods aid in clearing heat and toxins from the body, and nourishing the internals. For those of us who are always hot, perspire a lot, suffer from thirst, constipation, red eyes, cold sores, heartburn and thirst – to name the most common symptoms – using cooling foods can be useful in assisting your condition.

What to eat

Apples, pears, citrus fruits including grapefruits, strawberries, watermelon, celery, asparagus, cucumber, green vegies including spinach, lettuce, watercress as well as some unlikely vegies such as mushroom and tomato. Buckwheat and millet are considered cooling in nature also, as are eggs and yoghurt. Cooling teas such as chrysanthemum and peppermint are wonderful in helping to treat niggly ailments.

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WARMING FOODS

Warming foods assist in raising energy of the body and the organs as they improve circulation. Symptoms may include cold extremities, aches and pains including upset digestion, bloating after eating cold foods, fluid retention and overall lack of energy and wellbeing.

What to eat

Red dates, cherries, apricots, mandarin peel, hawthorn fruit, coconut milk and flesh, onions, pumpkins, mustard, rice, certain nuts such as walnuts and chestnuts, as well as most meats and shellfish. Warming herbs such as chilli and cinnamon are beneficial, as are coffee and wine – in moderation, of course.

SUPPORTING BALANCE

In traditional Chinese medicine, we see that the foods we consume on a daily basis support overall balance. It may be easy to see, based on the energetics of food, that this is the backbone of treatment in TCM. For example, if it's hot, cool it down; if it is stuck, use methods to allow energy to flow more freely and if it's deficient, gently support or nourish it.

It's important to look at how your body feels after you've eaten certain foods to know if these ancient and effective ideas around food energetics are applicable. In my experience, the most common thing I see is bloating after the consumption of cold and raw foods. This is often a sign that the digestive system is struggling, so introducing more warming, cooked foods are of great benefit. Warming foods are easy to digest, which means we don't get that bloated feeling.

When it comes to foods that are a deficit to the body, there are no guesses. If it hasn't grown or roamed on the ground, then it's best left on the shelf. Highly processed and refined foods do very little for your body and, in some instances, they can worsen your health as they take a lot of energy to break down with very little, if any, nutritional value. Consuming these foods can leave us further depleted and often unsatisfied, resulting in us eating more.

I encourage you to make good choices when it comes to the food you eat. There's a smorgasbord of wholefoods on offer, all served up beautifully by nature. If we look to the properties of food in the most basic manner, it can indeed support our health on the next level.

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HARMONIZING WITH YOUR BODY'S NEEDS

Nutrition is an integral part of a vibrant and healthy life. Let's recap the complex relationship that exists between health and nutrition. Eating well is crucial to leading a happy and satisfying life. To increase our body's optimism, let's examine the complex relationship between nutrition and well-being in this article and gain some practical advice. So let's go out on this path to balance diet and well-being for a healthy, energetic existence!

In a world filled with dietary choices, understanding the impact of what we eat on our overall health is crucial. The food we consume acts as fuel for our bodies, influencing energy levels, mood, and long-term well-being. This guide aims to demystify the complexities of nutrition, empowering you to make informed choices for a healthier and more vibrant life.

Proteins, Carbohydrates, and Fats: The Building Blocks of Nutrition

Our bodies require a balance of macronutrients for optimal function. Proteins, carbohydrates, and fats play distinct roles in maintaining health. Proteins aid in muscle repair, carbohydrates provide energy, and fats support various bodily functions. Achieving a balance of these macronutrients is like creating a well-rounded recipe for your overall well-being.

Vitamins and Minerals: Small Nutrients, Big Impact

While macronutrients take the spotlight, vitamins and minerals are essential for numerous physiological processes, from immune function to bone health. Ensuring an adequate intake of these unsung heroes is vital for overall vitality.

Water: The Elixir of Life

Staying hydrated is often underestimated, but it plays a pivotal role in maintaining health. Water facilitates digestion, regulates body temperature, and supports nutrient transport. Simple yet profound, maintaining optimal hydration levels is a cornerstone of well-being.

Portion Control and Variety for a Nutrient-Rich Plate

A balanced diet involves more than just choosing healthy foods; it's about portion control and variety. Building your plate with a rainbow of fruits, vegetables, lean proteins, and whole grains ensures a diverse range of nutrients essential for vitality.

Alive & Dead Foods

Unlocking the Potential of Superfoods

Superfoods are rich in nutrients and offer a myriad of health benefits. From antioxidant-packed berries to omega-3-rich fish, incorporating these nutrient powerhouses into your meals can elevate your diet and contribute to overall well-being.

Savouring Every Bite: The Art of Mindful Eating

Mindful eating isn't a complicated concept; it's simply about savouring each bite while developing a more mindful relationship with your food. By paying attention to your hunger cues, eliminating distractions during meals, and appreciating the flavours, you promote better digestion, promote healthy weight management, and optimal nutrient absorption.

Timing Is Everything: Nourishing Your Body Throughout the Day

Meal timing isn't about strict schedules; it's about syncing your meals with your body's energy needs. Discover the importance of meal timing and find the ideal intervals between meals to keep your energy levels sustained throughout the day.

One Size Does Not Fit All: Tailoring Nutrition to Your Lifestyle

Individual needs vary, and a one-size-fits-all approach to nutrition is ineffective. Whether you follow a specific dietary preference or lead a particular lifestyle, customizing your diet to meet your unique requirements is essential for long-term success.

Exercise and Nutrition: A Symbiotic Relationship

Exercise and nutrition are intertwined elements of a healthy lifestyle. Unveiling the dynamic relationship between exercise and nutrition defines how a healthy diet supports various types of physical activity. Understanding your body's nutritional requirements based on your exercise routine is like providing the perfect fuel for your fitness journey.

Navigating Food Challenges

Challenges like travel, social events, or dietary restrictions need not derail your nutrition goals. By making smart choices and planning, you can navigate any situation while maintaining a balanced and healthy diet.

Alive & Dead Foods

A Culinary Celebration of Diverse Culture and Nature

Incorporating cultural and seasonal foods into your diet not only adds variety but also connects you with the rich tapestry of culinary traditions. Embracing local produce supports sustainability and nourishes both the body and the soul.

Separating Fact from Fiction: Evidence-Based Nutrition

The world of nutrition is rife with myths and misconceptions. We'll debunk common nutrition myths, providing evidence-based information to help you make informed choices and avoid pitfalls on your journey to a healthier lifestyle.

Conclusion

Summing up our exploration of nutrition, it's evident that what you eat profoundly impacts your well-being. By making informed dietary choices, you set the stage for a vibrant and fulfilling life. Cheers to nourishing your body, embracing holistic health, and thriving in every aspect of life!

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Discover the essence of nutritional vitality by understanding Alive and Dead Foods.

Explore how alive foods, such as fresh produce, sprouts, and fermented items, overflow with life-enhancing enzymes, vitamins, and probiotics, boosting your overall health.

Contrast this with dead foods like processed, refined, and preserved products, which can deplete your energy and well-being.

This knowledge empowers you to make informed dietary choices, fostering a more vibrant and healthy lifestyle.



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