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## From Heat Wave to Healthy Days - Simple Nutrition for Hot Weather

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### Nutrition and Heat Safety

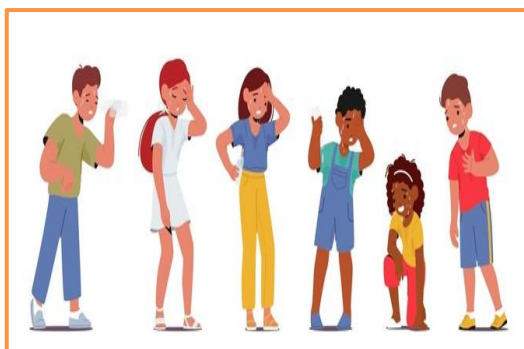
Every year, as temperatures climb and heat waves become more frequent, many people think of summer only as a season of holidays, mangoes and cool drinks. Yet high heat is also a serious health challenge. Heat waves are now recognised as one of the leading causes of weather-related deaths worldwide and they can silently worsen heart disease, kidney problems and diabetes. The good news is that simple changes in what we eat and drink, combined with basic heat-safety habits, can protect our health and keep us comfortable through the hottest months. This article explains, how the body reacts to heat, why dehydration is dangerous and how sensible food and fluid choices can make a big difference. The focus is on practical, everyday steps that families, workers, students and older adults can follow in Indian summer conditions, while respecting medical advice for those with chronic illnesses.



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### How heat affects the body

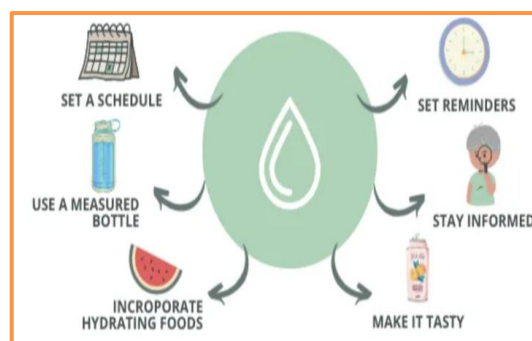
The human body works best within a narrow temperature range. In hot weather, the body cools itself mainly by sweating and by increasing blood flow to the skin. Sweat evaporates from the skin surface and carries heat away, but this process costs the body both water and electrolytes such as sodium and chloride. If the lost fluids are not replaced, the blood becomes more concentrated, the heart has to work harder and the body's temperature starts to rise. Mild dehydration may first show up as thirst, dry mouth, darker urine, headache, irritability or a feeling of unusual tiredness. If heat exposure continues, people can develop heat exhaustion,



with symptoms like heavy sweating, dizziness, nausea, muscle cramps and a rapid pulse. In the most severe form, heat stroke, body temperature rises dangerously high, sweating may stop and the person can become confused, disoriented or unconscious, this is a medical emergency that needs immediate hospital care. Older adults, infants and young children, people with obesity, those with heart, kidney or lung disease and outdoor workers such as farmers, construction workers and street vendors are at greater risk. They may not sense thirst as strongly, or their bodies may struggle to get rid of extra heat. For these groups, attention to nutrition and hydration is not just about comfort, it is literally life-saving.

### Hydration: more than just drinking water

Most people know that drinking water is important in summer, but few realise how much and how often it should be taken. Health agencies generally recommend regular, small amounts of fluid throughout the day, instead of drinking large quantities at once. For people doing physical work in the heat, guidance often suggests roughly one cup of fluid every 15–20 minutes, adjusted based on body size, activity and climate, while avoiding over-drinking. For the average healthy adult in daily life, aiming for around 2–3 litres of fluids per day in hot weather is a reasonable practical target, unless a doctor has advised fluid restriction. Plain, safe drinking water should be the first choice for hydration. However, water alone is not the only source of fluids. Traditional drinks such as lightly salted buttermilk, lemon water, tender coconut water and diluted homemade fruit juices can provide both fluids and electrolytes. These beverages are particularly useful after outdoor work or travel, when there has been heavy sweating. On the other hand, sugary soft drinks, packaged juices and energy drinks add a high calorie load without providing meaningful nutrition, and they can even worsen dehydration if taken in excess. Hydrating foods also play a quiet but powerful role. Many fruits and vegetables have high water content along with vitamins, minerals and fibre. Seasonal fruits such as watermelon, muskmelon, oranges and grapes and vegetables like cucumber, tomato and leafy greens, help maintain body water and protect cells from heat-related damage through their antioxidant content. Including these foods in meals and snacks is an easy way to improve summer hydration without forcing oneself to drink more.



### Eating light, eating right in summer

In hot conditions, the body's metabolism and digestion can be affected by both the heat and the level of physical activity. Heavy, very oily or highly spicy meals increase the digestive workload and may raise body temperature slightly, leaving people feeling heavy and sluggish. Lighter meals, based on whole grains, pulses, vegetables and fermented foods, are usually better tolerated in the summer months and support sustained energy levels.

Complex carbohydrates are an important base. Whole grains such as millets, brown rice, whole wheat, jowar and bajra provide slow-releasing energy and help maintain stable blood sugar. Traditional Indian preparations like idli, dosa, uttapam, dhokla and fermented porridges are gentle on the stomach and are often naturally suited to hot climates. Pulses and dals, sprouts, curd, paneer, eggs and small portions of fish or lean meat supply high-quality proteins that repair body tissues and support immunity, which can be stressed by chronic heat exposure.



Healthy fats, taken in moderation, are also necessary. Using small quantities of plant oils, along with nuts and seeds, provides essential fatty acids without overloading the digestive system. At the same time, it is wise to reduce very oily gravies, repeated deep-fried snacks and street foods that have been kept at room temperature for a long time, because both fat content and possible microbial growth can cause discomfort or illness in the heat. Instead, simple meals like curd rice with vegetables, khichdi with seasonal vegetables, sambar with idli, or millet-based roti with dal and salad can give a satisfying yet light feeling.



### The importance of electrolytes and salts

Sweat does not carry away only water; it also contains salts, mainly sodium and chloride, and smaller amounts of potassium and other minerals. When sweating is profuse and prolonged, as in outdoor labour or sports, these electrolytes can be significantly depleted. Low sodium levels may lead to muscle cramps, headaches, nausea and in severe cases confusion and seizures. To prevent this, it is sometimes necessary to replace not just water but also salts. For most people with moderate daily activity, normal meals with adequate salt and traditional drinks like buttermilk are enough to maintain electrolyte balance. In situations of heavy sweating, oral rehydration solution (ORS) or homemade salt-sugar solutions, prepared with proper proportions, can be used under guidance to rehydrate safely. However, it is also important not to overuse high-salt drinks or tablets, especially in people with hypertension, kidney disease or heart failure, where excess sodium can be harmful. They should follow specific advice from their healthcare provider. Another risk, though less known to the general public, is over-hydration with plain water without electrolytes, particularly during prolonged endurance activities. This can lead to low blood sodium (hyponatraemia), which is dangerous. Thus, balance is the key: not too little and not too much water, with just enough salts through food and, when needed, medically recommended drinks.



### Safe food and lifestyle habits in hot weather

High temperatures do not only affect the body, they also influence food safety. Bacteria grow faster in warm environments and cooked foods left at room temperature for several hours are more likely to spoil. In summer, it is therefore especially important to follow basic hygiene: washing hands before cooking and eating, storing cooked food in the refrigerator if it is not consumed immediately, reheating thoroughly before reuse and being cautious with street foods that may have been exposed to dust, flies and heat. Lifestyle habits can greatly reduce heat stress. Public health guidelines recommend avoiding strenuous outdoor activity during the hottest part of the day, usually late morning to mid-afternoon. Planning outdoor work in the early morning or late evening, taking frequent rest breaks in shade, wearing light-coloured, loose cotton clothing and using hats or umbrellas help the body stay cooler. At home, keeping windows and curtains closed during peak heat and ventilating in the cooler hours, using fans, cool showers or wet cloths and spending time in cooler community spaces if available are all helpful practices. People should watch for early signs of heat strain in themselves and others, unusual fatigue, irritability, reduced concentration, headaches or cramps. Importantly, communities can save lives by regularly checking on older neighbours,

people living alone and children during intense heat spells. A simple phone call to remind someone to drink water or to rest in a cooler place can be a powerful health intervention.

### Special care for vulnerable groups

Some groups need extra attention in summer. Older adults may have a weaker sense of thirst, reduced sweating and chronic diseases that increase their risk of heat-related illness. They benefit from regular, gentle reminders to drink fluids, eat small frequent meals, avoid very hot environments and keep their medications reviewed by their doctor during peak summer. Children and adolescents, on the other hand, may become so engrossed in play or sports that they forget to drink water;



schools and parents can encourage regular water breaks, shaded play areas and lunchboxes rich in fruits, salads and curd-based dishes. Pregnant women, people with obesity and those on certain medications (such as diuretics) also need tailored advice, as their bodies may respond differently to heat and fluid changes. Outdoor workers and farmers face unique challenges; they may not have control over work timings or conditions. For them, community arrangements for safe drinking water at worksites, rotating tasks to allow rest and using protective clothing and head coverings are essential. Simple, portable foods like chapati with vegetable curry, curd, bananas and roasted chana can provide energy and nutrients without heavy digestive load. Even urban office workers are not completely protected. Air-conditioned environments can sometimes lead to low humidity, causing mild dehydration without obvious sweating, while heavy restaurant lunches may worsen afternoon lethargy. For them, carrying a water bottle, choosing lighter lunches with salads and curd, and taking short breaks from screens can support both heat resilience and productivity.

### Small daily changes, long-term benefits

Nutrition and heat safety are not about dramatic measures; they are about thoughtful, consistent habits. Drinking enough safe water, choosing traditional hydrating foods and drinks wisely, eating light yet balanced meals, and respecting the limits of the body in extreme heat can collectively reduce the burden of heat-related illness. These practices not only protect against acute emergencies like heat stroke but also support heart, kidney and metabolic health over the long term. As climate change leads to more frequent and intense heat waves, communities that adapt their food and lifestyle practices will be better prepared. Families can use summer as an opportunity to rediscover simple, seasonal foods; schools can teach children about smart hydration; workplaces can create heat-safety norms; and local health workers can spread these messages in neighbourhoods and villages. When nutrition and heat safety go hand in hand, summer can remain a season of joy, not danger, for all.

