



Preventing Dehydration In Children During Summer: “Essential Strategies For Health And Safety”

Dr.Rohini.T. Phd in nursing

Department oh child health nursing

Karunacollege of nursing

INTRODUCTION

Dehydration is a health problem in which the body becomes deficient in water and necessary salts. It occurs due to summer seasons and excess vomiting, diarrhea, or sweating.

The body organs are not able to perform their functions properly. The most important signs include dryness of skin, dry tongue, rapid breathing, and fainting in extreme cases. If a child suffers from dehydration he/she may not be able to recover the lost body fluids. In severe cases of dehydration, you must take the child to the hospital. Let's see the causes, signs & symptoms, preventions, treatments, and tips to avoid dehydration in children.

IMPORTANT:It should be treated immediately because, in severe cases of dehydration, it can lead to the stage of a coma.

Role of Parents and Guardians

As parents, it's essential to actively monitor your child's hydration. This can mean offering fluids at regular intervals, especially if your child is too young or too distracted to ask for water themselves. Educating your kids about the importance of drinking water and recognizing the signs of dehydration is also crucial.

Understanding Hydration

Water makes up over 60% of our bodies and plays a crucial role in regulating temperature, supporting digestion, transporting nutrients, and maintaining energy. During the summer, we lose more fluids through sweat, making it essential to drink plenty of water and maintain body hydration.

Dehydration isn't just about feeling thirsty – it can affect your mood, focus, skin, and vital organ functions. The key to avoiding it lies in knowing how to hydrate your body consistently, especially when the temperature soars.

Causes of Dehydration in Children

Dehydration may occur due to less drinking of water, especially in the summer. Many children are not in the habit of drinking enough water as they are busy playing. There is more loss of fluids from the body than intake. This is what is one of the main **causes of** dehydration in children. Other causes of dehydration in children include the following

What Causes Dehydration in Summer?

Hot weather accelerates fluid loss through sweating. But temperature isn't the only factor. Some common dehydration in summer triggers include:

- Excessive sun exposure
- Vigorous physical activity without fluid replenishment
- Drinking alcohol or caffeine, which can act as diuretics
- High-protein or low-carb diets, which may require more water for processing
- Underlying health conditions like diabetes, kidney disorders, or vomiting and diarrhea

Vomiting and Diarrhea:

Severe vomiting and diarrhea are the main causes of dehydration in children. This can cause excessive loss of fluids and electrolytes from the body quickly and can lead to severe dehydration in children.

Excessive Sweat:

Some children play in the sun during summer which leads to excessive sweat and children also fail to drink enough water. High humidity and heat can lead to more sweating and this causes more loss of fluids from the body.

Fever:

Your child may suffer from dehydration if he/she is suffering from a high fever. The risk of dehydration increases if fever, vomiting, and diarrhea are also present.

Diabetes in Children:

Some children are at a higher risk of dehydration if they suffer from diabetes. Diabetic children need to drink more water as they pass more urine as compared to the normal children and if they fail to drink enough water they can suffer from dehydration.

Common Symptoms of Dehydration in Summer

- Dry mouth and tongue
- Dizziness or light-headedness
- Headaches
- Fatigue and muscle cramps

- Dark yellow urine or infrequent urination
- Dry or flaky skin
- Confusion or irritability in extreme cases

Children and older adults are particularly vulnerable to dehydration in summer and may show symptoms faster than others.

Signs and Symptoms of Dehydration in Children

The important **dehydration symptoms in children** include the following:

- Dryness of mouth, lips, and tongue. The mouth becomes dry due to a deficiency of fluids in the body.
- The skin becomes dry and hard due to excessive loss of fluids from the body in the form of vomiting or diarrhea.
- Tears do not roll out from the eyes when the child cries
- The child may not pass urine for eight hours or more and only use less than 6 diapers in a day
- The eyes become sunken
- The breathing becomes hard and rapid
- The hands and feet become cold and trembling
- The head also becomes cold

Precautions to Take at Home When a Child Becomes Dehydrated

You can take some precautions at home if your child starts showing the symptoms of dehydration. You can take the following precautions:

How can YOU child be treated for dehydration?

If your child is dehydrated, the best treatment is to give your child fluids to drink. Give your child water or oral rehydration solutions. You can buy these from your local pharmacy or supermarket. You can ask your pharmacist which rehydration solutions are best for your child.

Do not give your child drinks that are high in sugar or caffeine. These can make dehydration worse.

If your child struggles to drink water, you can try:

- diluting or 'watering-down' apple juice with an equal amount of water
- giving them milk if they are over 12 months old

Infants

If you are breastfeeding your baby, offer more feeds than usual.

Infants: They typically get enough fluids from breast milk or formula, but in very hot climates, they might need additional water once they start eating solid foods.

If your baby is older than 6 months and bottle fed, replace formula feeds with oral rehydration solution or water. Do this for 12 hours. Then, give them their normal formula in small amounts, but more often.

If your baby is under 6 months old and dehydrated, take them to a doctor as soon as possible.

Young children:

Make hydration fun using colorful cups or straws, and set a good example by drinking plenty of water yourself.

Older children

If your child weighs more than 10 kilograms, give them one cup of water each hour, for 4 hours. If they are vomiting or have diarrhoea, they may need more than this.

They can choose whether to drink it all at once or take small sips.

Teach them to listen to their bodies, hydrate whenever they feel thirsty, and carry a water bottle to school and sports activities.

- Staying hydrated in summer is essential to prevent fatigue, headaches, heatstroke, and other heat-related illnesses. Learn how to stay hydrated, the symptoms of dehydration, and smart hydration tips to protect your health during the hotter months.
- Avoid giving any medicine for diarrhea if your child is below two years without consulting with a doctor.
- Give more fluids to your child including fruit juices, lemon water, oral rehydration solution, etc. Avoid giving artificial fruit drinks as too much sugar in such drinks can make some symptoms worse.
- If your child is breastfeeding, continue to breastfeed your child as frequently as possible.
- Slowly start giving some liquid food such as rice water or rice pudding to your child that can be digested easily and quickly
- If your child has a fever, you can give medicine for the fever after consulting with a doctor. Avoid giving any medicine without consulting with a doctor.

If the condition of the child does not improve you must take your child to the hospital.

When YOU GO TO THE HOSPITAL

If the condition of your child does not improve at home you must call a doctor immediately. You must call the doctor when

- Your child is not taking anything to drink for a few hours
- If your child is under one year of age and is not taking your breastfeeding for more than a day
- If the child is vomiting many times in 24 hours
- If the vomit of the child looks green, brown, or red
- If your child has not eaten anything for 3-4 days
- If your child is not going for urination for many hours, had a dry mouth, lips, and tongue, and you feel sunken soft spots on the head
- If your child is not responding properly

- If your child shows signs of severe dehydration, such as rapid breathing or pulse, extreme fatigue, or fainting, seek medical help immediately. Dehydration can usually be reversed with increased fluid intake, but severe cases may require medical treatments such as oral rehydration solutions or intravenous fluids.

Treatment in the Hospital

For the **dehydration in child treatment**, the doctor in hospital will check the level of electrolytes and will start giving electrolyte solutions through the intravenous route for a quick recovery.

- The doctor will give medicine if your child will have a fever
- The doctor will give some medicine for vomiting or diarrhoea if needed
- The child will be given complete rest.

Tips to Prevent Dehydration

Dehydration in children can be prevented by drinking enough water and eating foods that have high water content. Many fruits and vegetables are good to compensate for the excess loss of water. You can use the following tips to prevent dehydration in your child:

- If the child suffers from vomiting and diarrhea you should start giving more water or give ORS solution to prevent dehydration. So, when you notice the signs of vomiting and diarrhea start giving more fluids.
- When your child goes out to play in the sun, make sure he/she carries a water bottle. You can add some energy drink or sweetened drink to the bottle to prevent dehydration.
- Encourage your child to drink more water during hot and humid weather so that if your child sweats more the lost fluids can be compensated by drinking more water.
- Give more fruits to your child. Fruits such as watermelon, orange, and raspberries are good sources of water content and such fruits can fulfil the demand for extra water in the body during summers.
- Encourage your child to eat a healthy diet during summer to prevent food poisoning which can lead to excessive vomiting and diarrhea.
- Ensure that your child does not eat anything from outside especially in summer because outside food may be stale which can lead to food poisoning.

Thus, you can prevent dehydration in your child by taking suitable precautions and ensuring that your child drinks enough water.

How much water should my child drink?

Babies under a year old get all the fluid they need through breastmilk or formula. If your baby is aged 6 months or older, you can give them small amounts of boiled, cooled water.

The recommended daily intake of water for children is:

- 1 to 3 years old: 4 cups
- 4 to 8 years old: 5 cups
- 9 to 13 years old: 5 to 6 cups
- 14 to 18 years old: 6 to 8 cups

Your child will need extra water when they are exercising or in hot climates.

Remember that children need to drink whatever the weather, even in the winter.

Even if they aren't thirsty, encourage your child to drink before, during and after physical activity. This can help prevent dehydration.

How to Stay Hydrated in Summer

Here's how you can take simple steps to ensure your body hydration stays on track:

1. Drink Plenty of Water – Even Before You're Thirsty

Thirst is often a late indicator of dehydration. Sip water regularly throughout the day instead of waiting to feel parched. Aiming for 8–10 glasses is a good starting point, but your needs may increase in hot weather or with activity.

2. Eat Water-Rich Foods

Incorporate fruits and vegetables like watermelon, cucumber, oranges, and strawberries, which naturally support the hydration of the body.

3. Carry a Water Bottle Everywhere

Keep a reusable bottle on hand as a visual reminder. Stainless steel bottles can also keep water cooler for longer – great for Indian summers.

4. Avoid Sugary and Carbonated Beverages

While tempting, soft drinks and sweetened juices don't count towards hydration and can even make you lose more fluids.

5. Start and End the Day with Water

A glass of water in the morning kickstarts your metabolism and rehydrates you after sleep. Drinking before bed can also prevent overnight dehydration.

6. Choose Coconut Water or Natural Electrolyte Drinks

Coconut water replenishes lost electrolytes and is a natural alternative to energy drinks, making it one of the top hydration tips for tropical climates.

How to Keep Hydrated in Summer: Extra Lifestyle Tips

If you're wondering how to keep hydrated in summer, here are additional tips to protect your body:

- Wear light, breathable clothing that helps sweat evaporate.
- Limit intense outdoor activity during peak sunlight hours (12 PM–4 PM).
- Use a fan or cooling towel to reduce overheating.
- Take regular shade breaks when spending time outside.

Home Remedies to Boost Hydration

For those looking for simple home-based hydration tips, here's what you can do:

- Add lemon, cucumber, or mint to your water for a flavourful twist.

- Try buttermilk or homemade fruit smoothies to stay cool and hydrated.
- Use ORS (oral rehydration solutions) during bouts of diarrhoea or vomiting.

1. Load up your water intake

Yes! One of the best, most effective, and simple tips to prevent dehydration during summer is to drink a lot of water. The water levels in the body are depleted due to the extremely hot weather outside. This, in turn, causes fluid imbalance in the body and increases your risk of headache, lightheadedness, and fainting. Hence, during summer, ensure you increase your water intake as a part of your daily routine.

Instead of drinking loads of water at once, take small sips regularly throughout the day. This helps you to stay hydrated all day. Also, make sure you drink at least two liters of water every day during summer.

**Don't let the heat drain you – stay refreshed and hydrated with our electrolyte drinks!
Buy now**

2. Eat fruits and vegetables rich in water content

Water alone is not sufficient to beat the summer heat and dehydration. As salt and minerals are also lost from the body along with water, it is best to increase the intake of hydrating fruits and vegetables in a diet without fail. These fruits also help your body to remain cool along with providing various nutrients.

Instead of snacking on chips and burgers, opt for a platter of salad containing fresh fruits and vegetables such as grapes, watermelon, muskmelon, cucumber, papaya, and oranges to beat the summer heat.

3. Drink healthy juices (not carbonated drinks)

When it comes to summer, all of us stack our refrigerators with cold drinks and carbonated beverages. However, it is not a good idea as these drinks not only rob the essential nutrients but also make you feel more thirsty.

Instead, opt for healthy, homemade fruit juices or vegetable juices to quench your thirst. You can drink coconut water, bottle gourd juice, carrot, and beetroot juice, or try detox drinks (fruit slices that are soaked in water overnight). Also, drinks that are steeped with common herbs or spices such as ginger, jeera, or mint act as one of the best home remedies for dehydration. You can even go the traditional way and drink a glass of lemon water which not only helps in detoxification but also to fight dehydration.

4. Stay hydrated during/after exercise

Exercising every day is a good habit but not at the cost of your health. The best way to prevent complications during exercise, especially on a hot summer day, is to stay hydrated. As the body loses fluids and electrolytes after a strenuous workout session, it is important to replenish the lost minerals and water in the body to prevent dehydration. Do not let dehydration stop you from sticking to your fitness routine by staying hydrated. Also, avoid chemical-laden and sugary drink after exercise as it will do more harm than good in the long run.

5. Try homemade popsicles

Who doesn't love to enjoy ice cream on a hot summer day? Isn't the thought enough to make you crave one now? How about trying homemade popsicles this summer? Yes, homemade popsicles are not only a healthy alternative to ice cream but also help you to reap the benefits of fruits. All you need are fresh fruits, herbs, sugar, and water. Add chopped fruits, herbs, sugar, and water in a blender, blend, and pour it in a mold. Refrigerate it for six to eight hours and the popsicles are ready.

You can make a wide range of popsicles at home to quench your thirst and enjoy it on any afternoon. And what's best? Even your kids will love to have chilled popsicles, thus helping to maintain the fluid balance healthily in summer.

6. Make the most of soups and smoothies this season

Soups form an integral part of the daily diet for people planning to keep strict control over their diet to lose weight. However, you can also make the most of these soups during summer to stay hydrated and prevent dehydration. The same rule applies to smoothies. Hence, this summer make it a habit to include soups and smoothies in your meals. This will not only add more fluids to your body but also help you to regulate your hunger and keep a tab on your food intake.

Moreover, for fussy eaters, homemade smoothies with nuts, fresh fruits, and chocolate can make them gulp down the drink without a second thought!

7. Include curd and buttermilk in the diet

Do not think twice before including curd and buttermilk in your diet this summer. It not only works as one of the most simple and effective home remedies for dehydration but also exerts a cooling effect on the stomach and body. Moreover, it is known to help treat mild dehydration by replenishing the body with lost fluids and salts. Also, if you suffer from diarrhea or vomiting, eating curd or drinking buttermilk helps you to deal with it as it acts as a probiotic.

Some More Quick Tips:

- 1. Dress appropriately:** Wear lightweight, breathable clothing in light colors during summer to help regulate your body temperature and reduce sweating. This can help prevent excessive fluid loss.
- 2. Take breaks in the shade:** When spending time outdoors, take frequent breaks in shaded areas to rest and cool down. Avoid prolonged exposure to direct sunlight, especially during the hottest parts of the day.
- 3. Avoid excessive alcohol and caffeine:** Both alcohol and caffeine can contribute to dehydration by increasing urine production. Limit your intake of these beverages, especially when spending time outdoors in the heat.
- 4. Set reminders:** During summer activities, it's easy to forget to drink water. Set reminders on your phone or use apps to prompt you to take regular sips of water.
- 5. Plan outdoor activities wisely:** Schedule outdoor activities during the cooler parts of the day, such as early morning or late afternoon. Avoid strenuous exercise during peak heat hours to reduce the risk of dehydration.
- 6. Cool down with cold showers:** Take refreshing cold showers to lower your body temperature and reduce the risk of overheating.
- 7. Use a portable fan:** Carry a portable misting fan to spray cool water on your face and body for instant relief from the heat.
- 8. Listen to your body:** Pay attention to signs of dehydration, such as thirst, dry mouth, fatigue, dizziness, or dark urine, and respond promptly by hydrating.

This summer, do not let the heat strike you down with heatstroke and dehydration. Follow these simple tricks and remedies to beat the summer heat and prevent dehydration naturally at home.

Conclusion

Maintaining hydration in summer goes beyond just drinking water. It involves being aware of your body's needs, making smart dietary choices, and responding to early warning signs. When in doubt, prioritise fluids, listen to your body, and take proactive steps to prevent dehydration in summer.

Reference :

1. https://www.1mg.com/articles/7-effective-ways-to-prevent-dehydration-this-summer-season/?srsltid=AfmBOooIqISW4YBGsaj0Bjar5RyuOo_T4jhF3DBwA1JNjU9mJDPNrif5
2. <https://kidshealth.org/en/parents/dehydration.html>
3. <https://www.ncbi.nlm.nih.gov/books/NBK436022/>
4. <https://kidshealth.org/en/parents/dehydration-sheet.html>
5. <https://www.sparshhospital.com/blog/stay-hydrated-in-summer-prevent-dehydration/>
6. <https://www.hopkinsmedicine.org/health/wellness-and-prevention/summer-hydration-what-should-kids-be-drinking-in-the-summer>
7. <https://prashanthihospitals.com/blogs/protecting-your-child-from-dehydration-causes-symptoms-and-prevention/>
8. <https://kidshealth.org/en/parents/dehydration.html>
9. <https://www.luriechildrens.org/en/blog/dehydration-in-children/>
10. <https://www.nhs.uk/conditions/dehydration/>
11. <https://www.healthychildren.org/English/health-issues/injuries-emergencies/Pages/dehydration.aspx>

