Staying hydrated is essential to keeping kids at peak health so they can train and perform at their best.

Dehydration symptoms

- Dark yellow urine (urine should be the color of light lemonade; see #3 in the table to the right)
- Feeling thirsty
- Body weight change of more than 1% during exercise
- Lack of concentration
- Early fatigue
- High perceived exertion in training
- Trouble tolerating heat
- Delayed recovery from exercise
- Muscle cramps

<table>
<thead>
<tr>
<th>Urine Color</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Daily hydration plan

**Before training or competition sessions**
- Drink 1–2 cups of water with meals.
- Keep a water bottle with you to stay hydrated throughout the day.

**During training or competition**
- Stick to plain water for physical activity lasting 60 minutes or less.
- Drink cool (~59°F) fluids in hot weather and warm fluids in cold weather. Fluid temperature can affect your body’s ability to regulate heat and cold.
- Use body weight change during training to calculate how much you need to drink. One pound of weight loss equals 16 oz. (2 cups) of sweat loss. Aim to replace 80–100% of sweat lost during activity. As a general rule, drink 1 cup of water every 15–20 minutes during training or competition.
- For long sessions (over 60 minutes), consume sports drinks (which contain carbohydrates and electrolytes) or water with gels or chews (note that these typically do not contain much sodium).

**Recovery**
- Consume fluid to replace 150% of sweat lost in training. Drink 24 oz. (3 cups) of fluid per pound of sweat lost during the session. As a general rule, drink 2–3 cups of fluid within 1 hour after the session.
- Drink some low-fat milk or flavored milk, which has a combination of carbohydrates and protein, to help replenish energy and repair muscle.

---

**Locations**

- **Emeryville**
  - 6121 Hollis St, Ste 2
  - Emeryville, CA 94608

- **Los Gatos**
  - 555 Knowles Dr
  - Los Gatos, CA 95032

- **Lucile Packard Children’s Hospital Stanford**
  - 725 Welch Rd
  - Palo Alto, CA 94304

- **Palo Alto**
  - 730 Welch Rd
  - Palo Alto, CA 94304

- **Pleasanton**
  - 5000 Pleasanton Ave, Ste 200
  - Pleasanton, CA 94566

- **San Francisco – California Pacific Medical Center**
  - 3801 Sacramento St
  - 2nd Floor, Ste 216
  - San Francisco, CA 94118

- **Sunnyvale – Motion & Sports Performance Lab**
  - 1195 West Fremont Ave
  - 2nd Floor
  - Sunnyvale, CA 94087

- **Walnut Creek – John Muir Medical Center**
  - 106 La Casa Via, Ste 240
  - Walnut Creek, CA 94598

We help young athletes perform their best, on and off the field. Call us at **(844) 41-ORTHO** or visit [ortho.stanfordchildrens.org](http://ortho.stanfordchildrens.org) to learn more about our Orthopedic and Sports Medicine Center.