**Urine Fluoride; 24-hour collection**

<table>
<thead>
<tr>
<th>Fluoride</th>
<th>µg/mL</th>
<th>mg/24 hr</th>
<th>Reference Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride</td>
<td>1.5</td>
<td>1.6</td>
<td>2.3 - 4.2 mg/24 hr</td>
</tr>
</tbody>
</table>

Fluoride in urine is measured using an ion specific electrode. Fluoride is neurotoxic, compromises integrity of bone, and interferes with iodide metabolism. Primary sources of fluoride include fluoridated water, beverages, toothpaste/mouth washes, dental treatments and some medications.

Urinary excretion is the main route of elimination for fluoride. Fluoride is found in drinking water, tea and other beverages, toothpaste, refrigerants and non-stick coatings, as well as many prescription drugs including some anesthetics, antibiotics, antidepressants, chemotherapeutics, corticosteroids, asthma and allergy medications, and antifungals.

Fluoride is potentially toxic at high doses or with prolonged lower-level exposure. It may cause dental fluorosis, osteomalacia, ligament calcification, hypocalcemia, arrhythmias, neurotoxicity, headaches, vertigo, thyroid dysfunction and anemia. Recent studies indicate that fluoride exposure from fluoridated water correlates with increased risk of bone cancer in young boys, and hip fracture in the elderly. Fluoride was measured using an ion specific electrode.

Comments:
- **Date Collected:** 6/24/2007
- **Collection Period:** 24 hr coll
- **<dl:** less than detection limit
- **Date Received:** 6/26/2007
- **Volume:** 1600 ml
- **Method:** ISE
- **Date Completed:** 6/28/2007

Reference ranges are representative of a healthy population under non-challenge or non-loading conditions.

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