

Pediatric Nephrology
University Hospital Bonn
Normal values



- **Plasma:**

Oxalate	all age groups:	$< 6.3 \pm 1.1 \mu\text{mol/l}$ (free oxalate)
Glycolate	all age groups:	$< 7.9 \pm 2.4 \mu\text{mol/l}$

- **Urinary excretion of soluble in 24-hour urine samples:**

Oxalate	all age groups:	$< 0.50 \text{ mmol}/1.73 \text{ m}^2 \text{ BSA}/24\text{h}$ $< 45 \text{ mg}/1.73 \text{ m}^2 \text{ BSA}/24\text{h}$
Glycolate	all age groups:	$< 0.50 \text{ mmol}/1.73 \text{ m}^2 \text{ BSA}/24\text{h}$ $< 45 \text{ mg}/1.73 \text{ m}^2/24\text{h}$
L-glycerate	all age groups:	$< 5 \mu\text{mol/l}$
Calcium	all age groups:	$< 0.1 \text{ mmol}/\text{kg BW}^*/24\text{h}$ $< 4 \text{ mg}/\text{kg BW}^*/24\text{h}$
Citrate	all age groups: <u>boys/men:</u>	$> 1.9 \text{ mmol}/1.73 \text{ m}^2 \text{ BSA}/24\text{h}$ $> 365 \text{ mg}/1.73\text{m}^2 \text{ BSA}/24\text{h}$ $> 0.61 \text{ mg}/\text{kg BW}^*/24\text{h}$
	<u>girls/women:</u>	$> 1.6 \text{ mmol}/1.73 \text{ m}^2 \text{ BSA}/24\text{h}$ $> 310 \text{ mg}/1.73\text{m}^2 \text{ BSA}/24\text{h}$ $> 0.47 \text{ mg}/\text{kg BW}^*/24\text{h}$

Cystine	< 10 years:	< 55 µmol/1.73m ² BSA/24h < 13 mg/1.73m ² BSA/24h
	> 10 years:	< 200 µmol/1.73m ² BSA/24h < 48 mg/1.73m ² BSA/24h
Uric acid	< 1 years:	< 70 µmol/kg BW*/24h < 13 mg/kg BW*/24h
	1-5 years:	< 65 µmol/kg BW*/24h < 11 mg/kg BW*/24h
	> 5 years:	< 55 µmol/kg BW*/24h < 9 mg/kg BW*/24h

- **Soluble/creatinine ratio (spot urine samples)**

Calcium/creatinine	< 12 months:	< 2.2 mol/mol, < 0.8 g/g
	1-3 years:	< 1.5 mol/mol, < 0.53 g/g
	3-5 years:	< 1.1 mol/mol, < 0.4 g/g
	5-7 years:	< 0.8 mol/mol, < 0.3 g/g
	> 7 years:	< 0.6 mol/mol, < 0.21 g/g
Citrate/creatinine	0-5 years:	> 0.12 – 0.25 mol/mol, > 0.2 – 0.42 g/g
	> 5 years:	> 0.08 – 0.15 mol/mol, > 0.14 – 0.25 g/g
Oxalate/creatinine	0-6 months:	< 325-360 mmol/mol, < 260-288 mg/g
	7-24 months:	< 132-174 mmol/mol, < 110-139 mg/g
	2-5 years:	< 98-101 mmol/mol, < 80-81 mg/g
	5-14 years:	< 70-82 mmol/mol, < 60-65 mg/g
	> 14 years:	< 40 mmol/mol, < 32 mg/g
Glycolate/creatinine	0-6 months:	< 363-425 mmol/mol
	7-24 months:	< 245-293 mmol/mol
	2-5 years:	< 191-229 mmol/mol
	5-14 years:	< 166-186 mmol/mol
	> 14 years:	< 99-125 mmol/mol

L-glycerate/creatinine	0-6 months: 7-24 months: 2-5 years: 5-14 years: > 14 years:	< 14-205 mmol/mol < 14-205 mmol/mol < 14-205 mmol/mol < 23-138 mmol/mol < 138 mmol/mol
Cystine/creatinine	< 1 months: 1-6 months: > 6 months:	< 85 mmol/mol, < 180 mg/g < 53 mmol/mol, < 112 mg/g < 18 mmol/mol, < 38 mg/g
Urate/creatinine	< 12 months: 1-3 years: 3-5 years: 5-10 years: > 10 years:	< 1.5 mol/mol, < 2.2 g/g < 1.3 mol/mol, < 1.9 g/g < 1.0 mol/mol, < 1.5 g/g < 0.6 mol/mol, < 0.9 g/g < 0.4 mol/mol, < 0.6 g/g