Overview

Useful For
Screening for disorders with increased excretion of fructose, glucose, galactose, disaccharides, oligosaccharides, and succinylpurines

This test is not recommended as a follow up test for abnormal newborn screening for galactosemia.

Genetics Test Information
Screening for disorders with increased excretion of fructose, glucose, galactose, disaccharides, oligosaccharides, and succinylpurines. If qualitative result is suggestive of an elevation of galactose or glucose, quantitative testing will be performed at an additional charge.

Reflex Tests

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>GALU</td>
<td>Galactose, QN, U</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>RGLUR</td>
<td>Glucose, Random, U</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Testing Algorithm
Testing begins with carbohydrate analysis. If qualitative results are normal or abnormal but not indicative of galactose or glucose, testing is complete.

If qualitative results indicate the presence of galactose, then quantitative testing for galactose will be performed at an additional charge.

If qualitative results indicate the presence of glucose, then random glucose testing will be performed at an additional charge.

Special Instructions
- Biochemical Genetics Patient Information

Method Name
Thin-Layer Chromatography (TLC), Qualitative

NY State Available
Yes

Specimen

Specimen Type
Urine

Advisory Information
This test is not appropriate for evaluation of an abnormal newborn screen for galactosemia. For those cases, order GATOL / Galactitol, Quantitative, Urine.
Specimen Required

Supplies: Urine Tubes, 10 mL (T068)

Container/Tube: Plastic, 10-mL urine tube

Specimen Volume: 5 mL

Collection Instructions: Collect an early-morning (preferred) random urine specimen.

Forms

1. Biochemical Genetics Patient Information (T602) in Special Instructions.

2. If not ordering electronically, complete, print, and send an Inborn Errors of Metabolism Test Request (T798) with the specimen.

Specimen Minimum Volume

1 mL

Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urine</td>
<td>Frozen (preferred)</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refrigerated</td>
<td>21 days</td>
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Clinical and Interpretive

Clinical Information

Saccharides (also called carbohydrates) are a group of mono-, di-, and oligosaccharides of endogenous and exogenous sources. Their presence frequently reflects dietary consumption but can indicate specific pathology if either a particular saccharide or a particular excretory pattern is present. Most saccharides (except glucose) have low renal thresholds and are readily excreted in the urine.

The presence of saccharides in urine is seen in some inborn errors of metabolism. Urine tests for reducing substances (eg, copper reduction test) are often used to screen for those disorders. However, in addition to sugars, a number of other substances present in biological fluids (eg, salicylates, uric acid, hippuric acid, ascorbic acid) have reducing properties. Conversely, some saccharides such as sucrose and trehalose do not have reducing properties. Other saccharides present at low concentrations may not be identified by reducing tests. Substances in urine may inhibit glucose oxidase-based tests and, also, other saccharides of diagnostic importance may be present along with glucose in urine. Chromatography of urinary saccharides is therefore required in many instances to identify the particular species of saccharide present. Any specimen tested for urinary carbohydrates is concurrently tested for the presence of succinyl nucleosides to screen for inborn errors of purine synthesis.

Reference Values
Test Definition: CHOU
Carbohydrate, U

Negative

If positive, carbohydrate is identified.

Interpretation
An interpretive comment is provided that includes the name of the identified saccharide and the probable source.

Cautions
A number of compounds (identifiable by the technique used) interfere with the assay and microbial contamination can lead to uninterpretable patterns of urinary saccharides. Retesting will be recommended in these cases.

Clinical Reference


Performance

Method Description

PDF Report
No

Day(s) and Time(s) Test Performed
Tuesday; 11 a.m.

Analytic Time
8 days

Maximum Laboratory Time
15 days

Specimen Retention Time
14 days

Performing Laboratory Location
Rochester
## Fees and Codes

### Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

## Test Classification
This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

### CPT Code Information
84377-Carbohydrate

82760-Galactose (if appropriate)

82945-Glucose (if appropriate)

### LOINC® Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
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<tr>
<td>CHOU</td>
<td>Carbohydrate, U</td>
<td>16550-6</td>
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<table>
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<th>Test Order Name</th>
<th>Result LOINC Value</th>
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<tbody>
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<td>9255</td>
<td>Carbohydrate, U</td>
<td>16550-6</td>
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