## Test Definition: FER

### Overview

**Useful For**
Determining male fertility status

**Method Name**
Manual

**NY State Available**
No

## Specimen

**Specimen Type**
Semen

**Advisory Information**

Semen analysis specimens submitted to Mayo Clinic Laboratories are not acceptable for fructose testing due to the use of dilution media. See FROS / Fructose, Semen or Seminal Plasma for specimen requirements for fructose testing in azoospermia patients.

Submit separate specimen to rule-out ejaculatory duct blockage. Positive result indicates no blockage.

**Shipping Instructions**

*Specimen must arrive within 24 hours of collection. Send specimen Monday through Thursday only and not the day before a holiday.* If holiday falls on a Saturday, holiday will be observed on the preceding Friday. Sunday holidays are observed on the following Monday. Specimen should be collected and packaged as close to shipping time as possible. Laboratory does not perform testing on weekends.

**Necessary Information**

Include the following information:

- **Semen volume** (required)
- Viscosity
- pH
- Appearance (color)
- Number of days of sexual abstinence

## Specimen Required

**Patient Preparation:** Patient should have 2 to 7 days of sexual abstinence at the time of semen collection for accurate results.

**Supplies:** Semen Analysis Kit - Dilution Media (T178)

**Specimen Volume:** Total ejaculate
Collection Instructions:

1. After collection, allow the specimen to liquefy for 1 hour.
2. Measure the volume.
3. Place the specimen into media within 1 hour.

**Specimen Minimum Volume**

Total ejaculate

**Reject Due To**

All specimens will be evaluated by 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>Semen</td>
<td>Ambient</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clinical and Interpretive**

**Clinical Information**

Semen is composed of spermatozoa suspended in seminal fluid (plasma). The function of the seminal fluid is to provide nutrition and volume for conveying the spermatozoa to the endocervical mucus.

Male infertility can be affected by a number of causes. Chief among these is a decrease in the number of viable sperm. Other causes include sperm with abnormal morphology and abnormalities of the seminal fluid.

**Reference Values**

**Appearance:** normal

**Volume:** $> \text{ or } =1.5 \text{ mL}$

**pH:** $> \text{ or } =7.2$

**Motile/mL:** $> \text{ or } =6.0 \times 10^{6}$

**Sperm/mL:** $> \text{ or } =15.0 \times 10^{6}$

**Motility:** $> \text{ or } =40\%$

**Grade:** $> \text{ or } =2.5$

**Note:** Multiple laboratory studies have indicated that semen parameters for motility and grade on average retain 80% of original parameters when our shipping method is used for transport. Using these averages, samples with 32% to 39% motility and grade of 2 may be in the normal range if testing was performed shortly after collection. Therefore, these borderline patients may need to collect another sample at a local fertility center to verify fertility status. Motile/ejaculate: $> \text{ or } =9.0 \times 10^{6}$
Viscosity: > or = 3.0
Agglutination: > or = 3.0
Supravital: > or = 58% live
Fructose: positive

**Note:** Fructose testing cannot be performed on semen analysis specimens shipped through Mayo Clinic Laboratories. If patient is azoospermic, refer to FROS / Fructose, Semen or Seminal Plasma. Submit separate specimen to rule out ejaculatory duct blockage. Positive result indicates no blockage.

**Interpretation**
Semen specimens can vary widely in the same man from specimen to specimen. Semen parameters falling outside of the normal ranges do not preclude fertility for that individual. Multiple samples may need to be analyzed prior to establishing patient's fertility status.

**Cautions**
No significant cautionary statements

**Clinical Reference**

**Performance**

**Method Description**

**PDF Report**
No

**Day(s) and Time(s) Test Performed**
Monday through Friday; 6:30 a.m. to 3:30 p.m.

Send specimen Monday through Thursday only and not the day before a holiday

**Analytic Time**
1 day

**Maximum Laboratory Time**
4 days

**Specimen Retention Time**
Specimens are discarded after testing.
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
89310

LOINC® Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FER</td>
<td>Semen Analysis</td>
<td>54231-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result ID</th>
<th>Test Result Name</th>
<th>Result LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTN</td>
<td>Abstinence</td>
<td>10587-4</td>
</tr>
<tr>
<td>CLST1</td>
<td>Collection Site</td>
<td>56816-2</td>
</tr>
<tr>
<td>TY</td>
<td>Study Type</td>
<td>54453-6</td>
</tr>
<tr>
<td>CNTN</td>
<td>Container Type</td>
<td>74384-9</td>
</tr>
<tr>
<td>APP3</td>
<td>Appearance</td>
<td>13359-5</td>
</tr>
<tr>
<td>VL53</td>
<td>Semen Volume</td>
<td>3160-9</td>
</tr>
<tr>
<td>PH1</td>
<td>pH</td>
<td>2752-4</td>
</tr>
<tr>
<td>MOTML</td>
<td>Motile/mL</td>
<td>42531-4</td>
</tr>
<tr>
<td>SPML</td>
<td>Sperm/mL</td>
<td>9780-8</td>
</tr>
<tr>
<td>MOTY</td>
<td>Motility</td>
<td>6800-7</td>
</tr>
<tr>
<td>GR2</td>
<td>Grade</td>
<td>13942-8</td>
</tr>
<tr>
<td>MOTEJ</td>
<td>Motile/Ejaculate</td>
<td>6800-7</td>
</tr>
<tr>
<td>VISC</td>
<td>Viscosity</td>
<td>32789-0</td>
</tr>
<tr>
<td>AGGLU</td>
<td>Agglutination</td>
<td>33217-1</td>
</tr>
<tr>
<td>STAIN</td>
<td>Supravital Stain</td>
<td>4466-9</td>
</tr>
<tr>
<td>FRCT</td>
<td>Fructose</td>
<td>13943-6</td>
</tr>
<tr>
<td>CMT45</td>
<td>Comment</td>
<td>48767-8</td>
</tr>
</tbody>
</table>