

Patient: **SAMPLE**  
**PATIENT**

DOB:

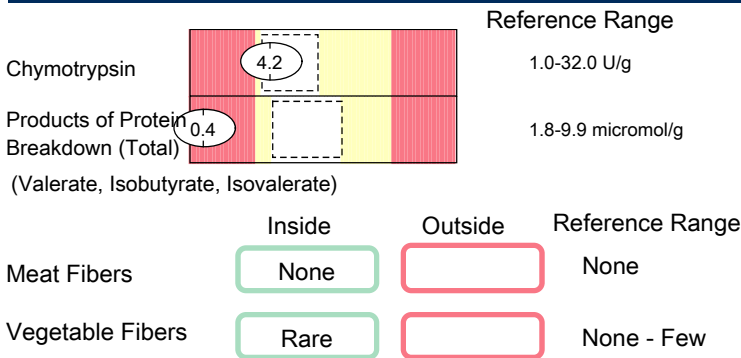
Sex:

MRN:

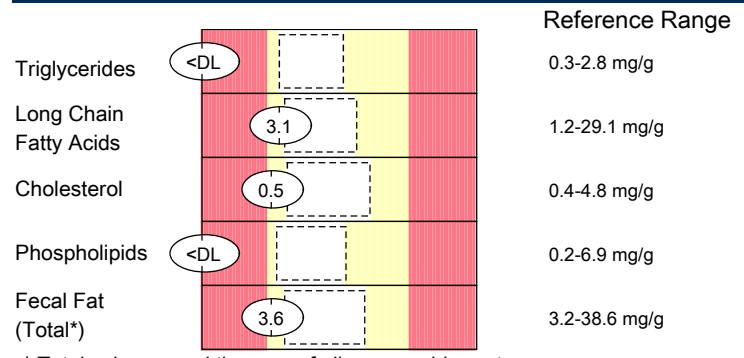
**2001 CDSA/P (Comprehensive Digestive Stool Analysis/Parasitology) - Stool**

Methodology: MALDI-TOF MS, Automated and Manual Biochemical Methods, Vitek 2® System Microbial identification and Antibiotic susceptibility, Automated Chemistry, GC-FID, Microscopic Evaluation, ELISA, Ion Selective Electrode, Immunoassay, GCMS

**Digestion**

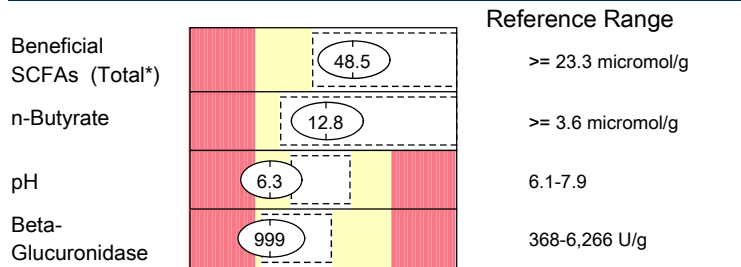


**Absorption**



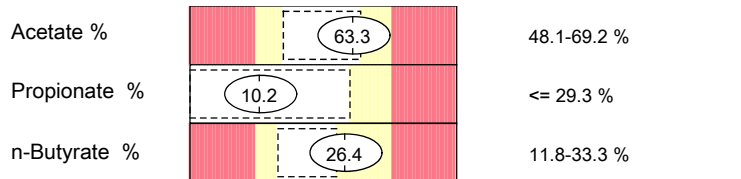
\* Total values equal the sum of all measurable parts.

**Metabolic Markers**



\* Total values equal the sum of all measurable parts.

**SCFA distribution**



**Microbiology**

**Bacteriology**

**Beneficial Bacteria**

Lactobacillus species	*NG
Escherichia coli	*NG
Bifidobacterium	(4+)

**Additional Bacteria**

Klebsiella pneumoniae	PP	(4+)
Enterobacter cloacae	PP	(4+)
Klebsiella oxytoca	PP	(4+)
Enterococcus durans	NP	(4+)

**Mycology**

Candida species	NP	(1+)
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**Immunology**

	Inside	Outside	Reference Range
Fecal Lactoferrin ♦	Negative		Negative

**Macroscopic**

	Inside	Outside	Reference Range
Color	Brown		Brown
Mucus	Negative		Negative
Occult blood ♦	Negative		Negative

*NG	NP	PP	P
*NG			
No Growth	Non-Pathogen	Possible Pathogen	Pathogen



## Parasitology

### Microscopic O&P Results

Microscopic O&P is capable of detecting all described gastrointestinal parasites. The organisms listed in the box represent those commonly found in microscopic stool analysis. Should an organism be detected that is not included in the list below, it will be reported in the Additional Results section. For an extensive reference of all potentially detectable organisms, please visit [www.gdx.net/product/gi-effects-comprehensive-stool-test](http://www.gdx.net/product/gi-effects-comprehensive-stool-test)

Genus/species	Result
<b>Nematodes - roundworms</b>	
<i>Ancylostoma/Necator</i> (Hookworm)	Not Detected
<i>Ascaris lumbricoides</i>	Not Detected
<i>Capillaria philippinensis</i>	Not Detected
<i>Enterobius vermicularis</i>	Not Detected
<i>Strongyloides stercoralis</i>	Not Detected
<i>Trichuris trichiura</i>	Not Detected
<b>Cestodes - tapeworms</b>	
<i>Diphyllobothrium latum</i>	Not Detected
<i>Dipylidium caninum</i>	Not Detected
<i>Hymenolepis diminuta</i>	Not Detected
<i>Hymenolepis nana</i>	Not Detected
<i>Taenia</i> spp.	Not Detected
<b>Trematodes - flukes</b>	
<i>Clonorchis/Opisthorchis</i> spp.	Not Detected
<i>Fasciola</i> spp./ <i>Fasciolopsis buski</i>	Not Detected
<i>Heterophyes/Metagonimus</i>	Not Detected
<i>Paragonimus</i> spp.	Not Detected
<i>Schistosoma</i> spp.	Not Detected
<b>Protozoa</b>	
<i>Balantidium coli</i>	Not Detected
<i>Blastocystis</i> spp.	Not Detected
<i>Chilomastix mesnili</i>	Not Detected
<i>Cryptosporidium</i> spp.	Not Detected
<i>Cyclospora cayetanensis</i>	Not Detected
<i>Dientamoeba fragilis</i>	Not Detected
<i>Entamoeba coli</i>	Not Detected
<i>Entamoeba histolytica/dispar</i>	Not Detected
<i>Entamoeba hartmanii</i>	Not Detected
<i>Entamoeba polecki</i>	Not Detected
<i>Endolimax nana</i>	Not Detected
<i>Giardia</i>	Not Detected
<i>Iodamoeba buetschlii</i>	Not Detected
<i>Cystoisospora</i> spp.	Not Detected
<i>Trichomonads</i> (e.g. <i>Pentatrichomonas</i> )	Not Detected
<b>Additional Findings</b>	
White Blood Cells	Not Detected
Charcot-Leyden Crystals	Not Detected
<b>Other Infectious Findings</b>	

**Additional Tests (if indicated)****Parasitology EIA Tests***Methodology: EIA*

	<b>Result</b>	<b>Expected Result</b>
Cryptosporidium ♦	Negative	Negative
Giardia lamblia ♦	Negative	Negative
Entamoeba histoytica ♦	Negative	Negative

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Prescriptive Agents					
KLEBSIELLA PNEUMONIAE	R	I	S-DD*	S	NI*
Ampicillin	<input type="text" value="R"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Amox./Clavulanic Acid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Cephalothin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Ciprofloxacin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Tetracycline	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Trimethoprim/Sulfa	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>

Natural Agents	
KLEBSIELLA PNEUMONIAE	
	Low Inhibition   High Inhibition
Berberine	
Oregano	
Plant Tannins	
Uva-Ursi	

**Prescriptive Agents:**

The R (Resistant) category implies isolate is not inhibited by obtainable levels of pharmaceutical agent.

The I (Intermediate) category includes isolates for which the minimum inhibition concentration (MIC) values usually approach obtainable pharmaceutical agent levels and for which response rates may be lower than for susceptible isolates.

\* The S-DD (Susceptible-Dose Dependent) category implies clinical efficacy when higher than normal dosage of a drug can be used and maximal concentration achieved.

The S (Susceptible) column implies that isolates are inhibited by the usually achievable concentrations of the pharmaceutical agent.

\* NI (No Interpretive guidelines established) category is used for organisms that currently do not have established guidelines for MIC interpretation.

Refer to published pharmaceutical guidelines for appropriate dosage therapy.

**Natural Agents:**

In this assay, inhibition is defined as the reduction level on organism growth as a direct result of inhibition by a substance. The level of inhibition is an indicator of how effective the substance was at limiting the growth of an organism in an in vitro environment. High inhibition indicates a greater ability by the substance to limit growth, while Low Inhibition a lesser ability to limit growth. The designated natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances.

This test has been developed and its performance characteristics determined by Genova Diagnostics, Inc. It has not been cleared by the U.S. Food and Drug Administration.

Patient: **SAMPLE  
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Prescriptive Agents					
ENTEROBACTER CLOACAE					
	R	I	S-DD*	S	NI*
Ampicillin	<input type="text" value="R"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Amox./Clavulanic Acid	<input type="text" value="R"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Cephalothin	<input type="text" value="R"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ciprofloxacin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Tetracycline	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Trimethoprim/Sulfa	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>

Natural Agents	
ENTEROBACTER CLOACAE	
	Low Inhibition   High Inhibition
Berberine	<input type="text"/>
Oregano	<input type="text"/>
Plant Tannins	<input type="text"/>
Uva-Ursi	<input type="text"/>

**Prescriptive Agents:**

The R (Resistant) category implies isolate is not inhibited by obtainable levels of pharmaceutical agent.

The I (Intermediate) category includes isolates for which the minimum inhibition concentration (MIC) values usually approach obtainable pharmaceutical agent levels and for which response rates may be lower than for susceptible isolates.

\* The S-DD (Susceptible-Dose Dependent) category implies clinical efficacy when higher than normal dosage of a drug can be used and maximal concentration achieved.

The S (Susceptible) column implies that isolates are inhibited by the usually achievable concentrations of the pharmaceutical agent.

\* NI (No Interpretive guidelines established) category is used for organisms that currently do not have established guidelines for MIC interpretation.

Refer to published pharmaceutical guidelines for appropriate dosage therapy.

**Natural Agents:**

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# Bacterial Sensitivity

Patient: **SAMPLE  
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DOB:

Sex:

MRN:



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Prescriptive Agents					
KLEBSIELLA OXYTOCA					
	R	I	S-DD*	S	NI*
Ampicillin	<input type="text" value="R"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Amox./Clavulanic Acid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Cephalothin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Ciprofloxacin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Tetracycline	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>
Trimethoprim/Sulfa	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="S"/>	<input type="text"/>

Natural Agents	
KLEBSIELLA OXYTOCA	
	Low Inhibition   High Inhibition
Berberine	
Oregano	
Plant Tannins	
Uva-Ursi	

**Prescriptive Agents:**

The R (Resistant) category implies isolate is not inhibited by obtainable levels of pharmaceutical agent.

The I (Intermediate) category includes isolates for which the minimum inhibition concentration (MIC) values usually approach obtainable pharmaceutical agent levels and for which response rates may be lower than for susceptible isolates.

\* The S-DD (Susceptible-Dose Dependent) category implies clinical efficacy when higher than normal dosage of a drug can be used and maximal concentration achieved.

The S (Susceptible) column implies that isolates are inhibited by the usually achievable concentrations of the pharmaceutical agent.

\* NI (No Interpretive guidelines established) category is used for organisms that currently do not have established guidelines for MIC interpretation.

Refer to published pharmaceutical guidelines for appropriate dosage therapy.

**Natural Agents:**

In this assay, inhibition is defined as the reduction level on organism growth as a direct result of inhibition by a substance. The level of inhibition is an indicator of how effective the substance was at limiting the growth of an organism in an in vitro environment. High inhibition indicates a greater ability by the substance to limit growth, while Low Inhibition a lesser ability to limit growth. The designated natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances.

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Azole Antifungals					
CANDIDA SPECIES	R	I	S-DD*	S	NI*
Fluconazole	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="NI"/>
Voriconazole	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="NI"/>

Non-absorbed Antifungals	
CANDIDA SPECIES	Low Inhibition   High Inhibition
Nystatin	<input type="text"/>

Natural Antifungals	
CANDIDA SPECIES	Low Inhibition   High Inhibition
Berberine	<input type="text"/>
Caprylic Acid	<input type="text"/>
Garlic	<input type="text"/>
Undecylenic Acid	<input type="text"/>
Plant tannins	<input type="text"/>
Uva-Ursi	<input type="text"/>

**Prescriptive Agents:**

The R (Resistant) category implies isolate is not inhibited by obtainable levels of pharmaceutical agent.

The I (Intermediate) category includes isolates for which the minimum inhibition concentration (MIC) values usually approach obtainable pharmaceutical agent levels and for which response rates may be lower than for susceptible isolates.

\* The S-DD (Susceptible-Dose Dependent) category implies clinical efficacy when higher than normal dosage of a drug can be used and maximal concentration achieved.

The S (Susceptible) column implies that isolates are inhibited by the usually achievable concentrations of the pharmaceutical agent.

\* NI (No Interpretive guidelines established) category is used for organisms that currently do not have established guidelines for MIC interpretation.

Refer to published pharmaceutical guidelines for appropriate dosage therapy.

**Nystatin and Natural Agents:**

Results for Nystatin are being reported with natural antifungals in this category in accordance with laboratory guidelines for reporting sensitivities. In this assay, inhibition is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the substance was at limiting the growth of an organism in an in vitro environment. High inhibition indicates a greater ability by the substance to limit growth, while Low Inhibition a lesser ability to limit growth. The designated natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances.

Sensitivities performed by manual MIC assay.

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## ENSURE THE FOLLOWING:

- Peel and stick labels completed with patient's date of birth are on all tubes as well as the test requisition form

### All tubes:

- Are tightly closed
- Sealed in the biohazard bag with absorbent pad
- Refrigerated until packaged for shipping

### All required information:

- All sections of test requisition form completed either online or on the included paper form. If using the online form, the paper form **must still be returned with the health care provider's signature**
- Health survey completed
- Payment information provided
- All tubes and associated forms placed back in the original Genova sample collection pack box prior to shipping

## SHIP THE SAMPLE(S) TO THE LAB

Ship only Monday through Friday, and within 24 hours after final collection.

Please refer to the shipping instruction insert found in your Genova sample collection pack box.



REGISTER FOR THE PATIENT RESOURCE CENTER AT [WWW.GDX.NET/PRC](http://WWW.GDX.NET/PRC)

- Complete health surveys
- Make payments
- Access test results



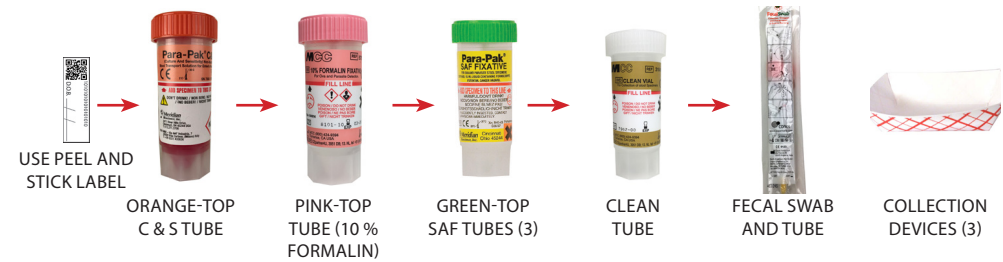
Call 800.522.4762 or visit our website at [www.gdx.net](http://www.gdx.net)

## GASTROINTESTINAL 3 DAY COLLECTION

### PATIENT SAMPLE COLLECTION INSTRUCTIONS FOR THE FOLLOWING PROFILE(S)

GI Effects Comprehensive Profile*	Stool	#2200
GI Effects Microbial Ecology Profile*	Stool	#2205
GI Effects Gut Pathogen Profile*	Stool	#2207
CDSA with Parasitology	Stool	#2001
CDSA 2.0	Stool	#2003

### COLLECTION MATERIALS FOR SAMPLE



- **CAUTION: Tubes contain poisonous liquid. KEEP OUT OF REACH OF CHILDREN.**
- Tubes are under pressure. Cover tube cap with a cloth and remove cap slowly.
- For eye contact, flush with water for 15 mins.
- For skin contact, wash with soap and water.
- For ingestion, contact poison control center immediately.

### REQUIRED MATERIALS

- Disposable gloves (3) (vinyl)
- Peel and stick labels
- Black disposable bags
- Absorbent pads
- Test requisition form
- Biohazard bags
- Genova sample collection pack box
- FedEx® Clinical Lab Pak and Billable Stamp
- Health survey

### IMPORTANT INFORMATION BEFORE YOU BEGIN THE COLLECTION

- Test not recommended for patients under 2 years of age.
- **Wait at least 4 Weeks** from colonoscopy or barium enema before starting the test.
- Please consult with your physician before stopping any medications. Certain medications and/or supplements may impact test results.
- **2 to 4 Weeks Before the Test:**
  - » Discontinue antibiotics, antiparasitics, antifungals, probiotic supplements (acidophilus, etc.).
  - » Discontinue proton pump inhibitors (PPIs), and bismuth **14 Days prior if adding on the H. pylori test.**
- **2 Days Before the Test:**
  - » Discontinue aspirin and other NSAIDs (i.e. ibuprofen), rectal suppositories, enemas, activated charcoal, bismuth, betaine HCL, digestive enzymes, antacids, laxatives, mineral oil, castor oil, and/or bentonite clay.
- **DO NOT collect samples** when there is active bleeding from hemorrhoids or menstruation.
- Before collecting your specimen refer to the shipping instruction to determine what day you can ship. **Ship only Monday through Friday, and within 24 hours after final collection.**

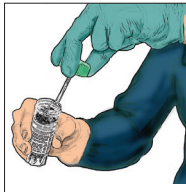


## COLLECTION

- 1 **Completely fill out** front and back of test requisition form using the **included form** or **online at [www.gdx.net/register](http://www.gdx.net/register)**. Failure to provide all information will result in delay of test processing.
- 2 Using the peel and stick labels provided **record the patient's date of birth** and **place** a label on each of the tubes and the test requisition form.

## STOOL COLLECTION DAY ONE

- 3 **Put on** the glove.
- 4 **Collect** your stool sample using the enclosed collection container. **DO NOT contaminate** the sample with either urine or water from the toilet.
- 5 **GREEN-TOP TUBE:** **Remove** the cap. **Transfer** stool sample into the tube using the built-in scoop. **Collect** from different areas of the sample. **Mix** the sample with the liquid in the tube until it is as smooth as possible. **Make** sure that the liquid and sample do not exceed the **FILL LINE**. **DO NOT OVERFILL**. **Screw** the cap on tightly. **Shake** tube for 30 seconds.



**BLENDED SAMPLE & PRESERVATIVE CANNOT EXCEED THE RED FILL LINE**

**NOTE:** If a worm is seen, **DO NOT place** it in tube with stool. Instead **place** it in **GREEN-TOP TUBE WITHOUT** scooping additional stool. Alternatively, a worm can be placed in a clean glass jar with rubbing alcohol, with no additional stool added to jar. Make note on requisition form that a worm was seen and write **WORM** on the tube. **Do not mix and mash** sample if there is a worm inside. **Do not shake tube** if there is a worm inside.

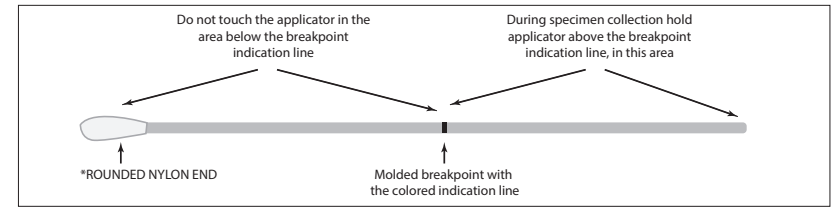
- 6 **Place** in biohazard bag and refrigerate. **Refrigerate** tube until ready to ship. **DO NOT FREEZE**.
- 7 **Dispose of remaining sample** into toilet and put collection container and glove in **black disposable bag**.

## STOOL COLLECTION DAY TWO

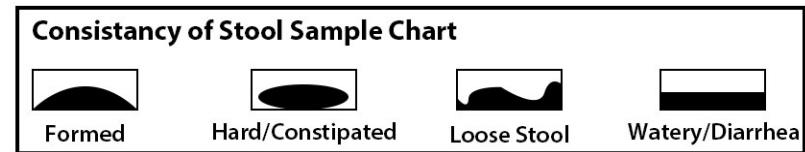
- 8 **Follow Steps 3 through 6** using the contents of the DAY 2 bag including the **GREEN-TOP TUBE**.
- 9 **Dispose of remaining sample** into toilet and put collection container and glove in **black disposable bag**.

## STOOL COLLECTION DAY THREE

- 10 **Repeat STEPS 3 through 6** with **GREEN-TOP TUBE, ORANGE-TOP TUBE, PINK-TOP TUBE, and the WHITE-TOP TUBE**.  
*Note: There is no liquid in the WHITE-TOP TUBE.*
- 11 **Peel** open swab package, **remove** the tube, and place it upright. The swab should remain in the sleeve until you are ready to collect sample.
- 12 **Grasp** swab above the molded breakpoint which is the opposite end from the nylon applicator tip. (see diagram below)



- 13 **Collect** sample by inserting the **ROUNDED NYLON END\*** (see above) of the swab into the stool sample and **rotate** it. **Confirm** that the swab contains fecal material. If not, repeat.
- 14 **Open** the swab collection tube and insert the swab. **Mash** and **mix** the rounded nylon end of the swab with stool on it against the side of the tube.
- 15 **Break** the swab off at the break point. **Place** the screw cap on the tube and **tighten**. **Shake** the tube. Using the peel and stick label, **write** patient's date of birth on the label and apply to the swab tube.
- 16 **Record the date of collection, stool consistency** (refer to chart below), and **stool color** for **Day 3 Collection only**, on the Test Requisition Form in the sample consistency, sample color, and collection date areas.



- 17 **Dispose of remaining sample** into toilet and put collection container and glove in **black disposable bag**.
- 18 **Place** all tubes in the biohazard bag and refrigerate. **Refrigerate** until ready to ship. **DO NOT FREEZE**.

