GENERAL COLLECTION AND HANDLING INSTRUCTIONS

PATIENT PREPARATION INSTRUCTIONS

For some procedures, drugs or other compounds have been reported to cause interference with the analyses. Although LifeLabs attempts to employ methods that are relatively free from such interference, it is necessary in some instances to suggest that certain drugs or foods be eliminated prior to and during specimen collection (please refer to individual tests for specific limitations). As it may be inappropriate to alter drug therapies for some patients, we request that the attending clinician be responsible for advising his/her patient of the requirement to discontinue certain drugs.

For certain assays, it is either mandatory or preferred to have the patient fast (no food or drink other than water) for a specific time prior to specimen collection. See lists below:

Mandatory Minimum 4-Hour Fast

- Urea Breath Test

Mandatory Minimum 8-Hour Fast

- Adiponectin
- Fasting Blood Glucose
- Fasting Insulin
- Gestational DM Confirmation
- Glucagon
- Insulin Glucose Challenge
- Lactose Tolerance
- Oral Glucose Tolerance
- Proinsulin

Mandatory Minimum 12-Hour Fast

- Bile Acids
- Free Fatty Acids
- Gastrin
- Growth Hormone
- Lipoprotein (a)

Preferred Minimum 12-Hour Fast

- Apolipoprotein E
- C-1Q Binding Activity
- Calcitonin
- Calcium
- C-Peptide
- Cryofibrinogen
- Cryoglobulin
- Homocysteine
- Phosphate
- Protein electrophoresis

NON-FASTING LIPID ASSESSMENT COLLECTION

In September 2013, LifeLabs introduced the option of using non-fasting samples for the measurement of lipid levels.

The Canadian Cardiovascular Society (CCS) 2012 guidelines endorse non-HDL-C as a new lipid target. It is calculated by subtracting HDL-C from total cholesterol and reflects the total cholesterol concentration transported within atherogenic lipoproteins. Non-HDL-C is unaffected by fasting status, lending support to use non-fasting specimens.

Epidemiological data illustrate that non-fasting data may be more significant predictor of CVD, independent of postprandial time. Since patients spend most of their day in a postprandial state, use of non-fasting lipids has been determined by most to be acceptable for initial assessment.

For detail information on Non-Fasting Lipid Measurements visit our web site www.lifelabs.com Look for Healthcare Clients-Ontario and click Newsletter and thenclick Inside Diagnostics: September, 2013.

GENERAL COLLECTION AND HANDLING INSTRUCTIONS

PHLEBOTOMY AND LABELING INSTRUCTIONS

For Clients that collect specimens from their patients in their facility, proper collection and handling of those specimens is essential to maintain their integrity.

Phlebotomists need to be reminded that:

- Specimens are to be collected and labeled one patient at a time to avoid misidentification.
- Clear identification of specimens using at least 2 unique identifiers will ensure a test result is attributed to the correct person.
- Vacutainers are drawn in the correct order. This will prevent cross-contamination that may lead to inaccurate results or contaminated blood cultures.
- The correct number of tubes and appropriate tube types are collect for the required tests.
- Proper mixing of each tube is essential to prevent delay or incomplete clotting or platelet clumping.
- They need to record on the requisition the time and date of collection.
- They need to record their initials on the requisition in the top left hand corner.

For detailed test handling requirements, visit our web site www.lifelabs.com.
Look for 'Healthcare Clients – Ontario' and click on 'Test Information Directory'

It is important to include **relevant clinical information** on specimen requisition forms, allowing the laboratory to appropriately process and report results on submitted specimens. The table below summarizes essential clinical information related to commonly ordered tests.

Test	Essential Clinical Information
Microbiology	
All specimens	Pregnancy status, immune status, antibiotic allergies, previous failed antibiotic treatments, present antibiotic treatment, if applicable
Wound Swabs/Sterile Sites/Chlamydia	Body site
Parasitology	Travel history, immune status
Blood cultures	Prolonged incubation time required, if applicable (i.e., endocarditis, Brucellosis, fever unknown origin)
Genital	Vaginal, cervical or rectovaginal site
Hematology	
Heparin	Type and name of heparin administered
Lymphocyte markers (Flow Cytometry)	Complete LifeLabs "Request for Lymphocyte Marker Analysis By Flow Cytometry" Form with clinical diagnosis included
Molecular Diagnostics	
Human Papillomavirus (HPV)	PAP smear history of ASCUS
Therapeutic Drug Monitoring	
Aminoglycosides/Vancomycin	Peak/Trough collection, if applicable, time since last dose
Other TDM	Time since last dose

GENERAL COLLECTION AND HANDLING INSTRUCTIONS

STORAGE AND TRANSPORTATION OF SPECIMENS INSTRUCTIONS

Specimens should be collected, handled, stored and transported in accordance with LifeLabs handling instructions. In general, specimens which must be frozen to maintain integrity should be procured in a LifeLabs Patient Service Centre. Most coagulation assays require freezing of the plasma but INR specimens should be stored and transported at room temperature and not frozen.

Specimens collected in Serum Separator Tube (SST – gold top tube) should be allowed to clot while in a vertical position for 30 minutes then centrifuged as soon as possible. Any specimen collected in a plain serum tube (red top tube), e.g., digoxin, should be allowed to clot for 30 minutes, centrifuged and the serum separated into a secondary aliquot tube prior to transportation.

Potassium and glucose are particularly sensitive to delay in separation. Significant increase of potassium will be observed if specimen is not properly centrifuged. To avoid a decrease in glucose due to glycolysis, gray top tube must be used for all glucose requests.

When proper collection, handling and identification protocols have not been adhered to, specimens will be rejected. Proper specimen handling and identification are fundamental to patient safety.