



LAB#: F060713-0158-1
PATIENT: Ruben Park-Alvarez
ID: PARK-ALVAREZ-R-00002
SEX: Male
AGE: 3

CLIENT#: 24796
DOCTOR: Jaquelyn Mc Candless, MD

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CAMPYLOBACTER CULTURE

	Within	Outside	Ref. Range
Campylobacter	Neg		Neg

Campylobacter is a bacteria and a common cause of diarrheal disease, often accompanied by abdominal cramping, fever, and vomiting. Campylobacter infection is often associated with raw or undercooked poultry, unpasteurized milk, or contaminated water.

SHORT CHAIN FATTY ACIDS

	Within	Outside	Ref. Range
Acetate	61		36 - 74 %
Propionate	19		9 - 32 %
Butyrate	17		9 - 39 %
Valerate	2		1 - 8 %
Butyrate	2.3		0.8 - 3.8 mg/mL
Total SCFA's	13.6		4 - 14 mg/mL

Short chain fatty acids (SCFAs): SCFAs are the end product of the bacterial fermentation process of dietary fiber by beneficial flora in the gut and play an important role in the health of the GI as well as protecting against intestinal dysbiosis. Lactobacillus and Bifidus produce large amounts of short chain fatty acids, which decrease the pH of the intestines and therefore make the environment unsuitable for pathogens, including bacteria and yeast. Studies have shown that SCFAs have numerous implications in maintaining gut physiology. SCFAs decrease inflammation, stimulate healing, and contribute to normal cell metabolism and differentiation. Levels of **Butyrate** and **Total SCFA** in mg/g are important for assessing overall SCFA production, and are reflective of beneficial flora levels and/or adequate fiber intake.

INTESTINAL HEALTH MARKERS

	Within	Outside	Ref. Range
RBC	None		None - Rare
pH		7.9	6 - 7.2
Occult Blood	Neg		Neg
Yeast	None		None - Rare

RBC: Red blood cells in the stool may be associated with a parasitic or bacterial infection, or an inflammatory bowel condition such as Ulcerative Colitis. Colorectal cancer, anal fistulas, and hemorrhoids should also be ruled out. **Occult blood:** A positive occult blood indicates the presence of free hemoglobin found in the stool, which is released when red blood cells are lysed. **pH:** Fecal pH is largely dependent on the fermentation of fiber by the beneficial flora of the gut. **Yeast:** A positive microscopic yeast level indicates the presence of fungi such as Candida albicans in the stool.