

## Have Your Patients Truly Fasted for Their Early Morning Blood Work? Free Fatty Acids May Tell All

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Ever order fasting morning blood work only to wonder when the results come back if the patient had actually fasted? Concerned about this problem, Collins et al. ([10.1542/peds.2018-3896](#)) decided to see if the concentration of serum free fatty acid (FFA) might be a marker to indicate a fasting or nonfasting state. The authors compared FFA levels in 442 fasting inpatient children and 323 outpatient children who were to have fasted and then receive a glucose load as part of an oral glucose tolerance test and found that FFA levels performed better than glucose or insulin for identifying non-fasting state. In fact the authors determine that a level of FFA < 287 mEq/ml had 99% sensitivity and 98.0% specificity for non-fasting. When children were tested for FFA levels in the inpatient and outpatient setting, the authors found that 9.7% of those in the outpatient setting compared to 1.6% in the inpatient setting had FFA values suggestive of non-fasting. What does this mean? It suggests that if in doubt about a patient fasting, you won't have to chew the fat with parents figuring out if the patient did or did not fast, but simply draw a FFA level and if it is less than 287 mEq/ml, you may want to repeat those tests on another day when your patient actually did fast. Read this study and decide if you want to use FFA as the serologic polygraph test for true fasting.

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