ALBERTA PRECISION LABORATORIES
Leaders in Laboratory Medicine

Celiac Disease Diagnostic Algorithm - Calgary

Indications for Testing

Symptomatic individuals
- Nonspecific symptoms (anemia, diarrhea, failure to thrive, fever, skin rash, weight loss)

Asymptomatic individuals
- Celiac disease in first degree relatives
- Autoimmune disease associated with celiac disease (e.g. type I diabetes, autoimmune thyroiditis)
- Non-autoimmune disease associated with celiac disease (e.g. Down syndrome, Turner syndrome)
- Early onset osteoporosis

Patient should not be on a gluten-free diet for at least:
- 2 weeks to see histological changes
- 4-6 weeks to see serological changes

Anti-tissue transglutaminase (tTG) – IgA
(Method has the ability to determine whether the sample has sufficient iGA levels)

IgA sufficient patients

IgA insufficient patients

tTG-IgA Negative
<15 kIU/L

tTG-IgA Positive
≥ 15 kIU/L

tTG-IgG Positive
≥ 15 kIU/L

tTG-IgG Negative
<15 kIU/L

Anti-endomysial antibody confirmation IgA

Negative
Celiac disease unlikely.
Re-evaluate clinical picture

Negative
This does not rule out celiac disease.
Further evaluation by a gastroenterologist may be required

Positive
Consistent with celiac disease.
Referral to a gastroenterologist is recommended.

Negative
Celiac disease unlikely.
Re-evaluate clinical picture