



# Cancer Markers



Cancer markers are not diagnostic in themselves. A definitive diagnosis of cancer can be made by looking at biopsy specimens (e.g., of tissue) under a microscope or Fine Needle Aspiration Cytology (FNAC) and smear examination of discharge (Pap smear). However, cancer markers provide information that can be used in monitoring treatment, helping in diagnosis, staging & determining prognosis & recurrences.

## Cancer Warning Signals\*

- Change in bowel habits (Colon) or bladder function (Bladder, Prostate)
- Sores that do not heal (Oral Cancer)
- White patches inside the mouth or white spots on the tongue (Precancerous Leukoplakia)
- Unusual bleeding or discharge (Lung, Kidney, Colon, Rectal, Cervical or the endometrial)
- Thickening or lump in the breast or other parts of the body
- Recent change in a wart or mole or any new skin change (Skin-Melanoma)

## Cancer Markers Available

Cancer Markers	Cancers Detected**	Indicated In
AFP	Liver, germ cell cancer of ovaries or testes	Men & Women
CA 19.9	Pancreatic, sometimes bowel and bile duct	Men & Women
hCG	Testicular & trophoblastic	Men & Women
PSA/Free PSA	Prostate	Men
CA 15.3	Breast & others including lung, ovarian	Women
CA 125	Ovarian	Women
CEA	Bowel, lung, breast, thyroid, liver, cervix & bladder etc.	Men & Women

\*\*Cancer Markers may be elevated in a few benign diseases other than cancers also.

# Celiac Disease

## Gluten-sensitive Enteropathy

Celiac disease (gluten-sensitive enteropathy), sometimes called sprue or celiac, is an immune reaction to eating gluten, a protein found in wheat, barley and rye. If you have celiac disease, eating gluten triggers an immune response. Over a period of time, this reaction damages the small intestine's lining and prevents absorption of some nutrients, which in children may affect growth and development. There's no cure for celiac disease — but for most people, following a strict gluten-free diet can help manage symptoms and promote intestinal healing.



### Signs & Symptoms

1. Diarrhea
2. Bloating & Gas
3. Fatigue
4. Weight Loss
5. Constipation
6. Depression
7. Itchy Rash
8. Iron-Def. Anemia

### Laboratory Tests

#### Screening:

1. tTG IgA Abs, Serum
2. IgA, Serum
3. DGP IgG Abs, Serum
4. Endomysial Abs, Serum

#### Further Confirmation:

1. Biopsy
2. Genetic Tests: HLA DQ2 & DQ8



### Tests for General Assessment

1. Complete blood count (CBC) with ESR
2. C-Reactive protein (CRP)
3. Comprehensive metabolic panel (CMP)
4. Vitamin D, Vitamin B12 and Folate
5. Iron, TIBC, Transferrin & Ferritin