## **Gastrointestinal System. 2hrs 5mins**

This seminar provides research-backed-up treatment options for gastrointestinal tract diseases. The main functions of the GI system are digesting food and absorbing macro and micronutrients into the bloodstream or lymph system providing the body with nutrients. It also acts as a defense barrier, because the enterocytes selectively absorb nutrients via specialized and specific molecule designated channels.

inadequate function of the GI system negatively impacts our health.

Digestion and absorption dysfunction cause many health issues. certain foods or nutrients may cause an inflammation of the GI lining which leads to both situations. The body's immune function directly depends on the GI's health state.

Certain common food proteins such as gluten are extremely allergic for certain people. The consumption of gluten-containing food may damage the mucosal lining of the intestines. Intestinal linings are covered with small hair-like projections called villi, that are responsible for increasing absorption footage. Damaged villi will lead to malabsorption of the nutrients, thus causing malnutrition status to one's body.

The treatment option is only to avoid gluten-containing foods. important to point out that many healthy people should not avoid gluten-containing foods.

Additionally, the gut microflora is a key to good health. The lecture provided a good source of probiotics and prebiotics.

Deficiency or decreased amount of gut microflora can cause many problems such as bloating, cramping, passing gas, constipation, diarrhea, and pain. Liver dysfunction also may negatively impact gut health.

Good bacteria stimulate the brush border of the intestines, and it also helps for digesting lactose. They synthesize vitamins and short-chain bacteria.

Dysbiosis is caused by aging, various diseases, poor diet, especially a low-fiber diet, high simple sugar diet, and high stress.

The treatment plan along with physical activity and a good diet containing high fiber and probiotic foods such as kefir and yogurt will provide lactobacillus ( similar to good gut microflora).

Curcumin, turmeric, and ginger may help with gut inflammation.