Gluten 2007). some foods such as wheat, barley,

Nutrition



Gluten is a protein which has a central role to determine the unique baking quality of wheat by conferring water absorption capacity, cohesivity, viscosity and elasticity. Gluten is a complex protein but two main fractions are important. There are two major fractions about solubility of gluten in aqeous alcohols which are soluble gliadins and insoluble glutenins (Wieser, 2007). Some foods such as wheat, barley, rye, oat contains gluten which is a natural protein. Although gluten is an inartificial protein, there are some modifications in genetic of wheat. Nowadays, because of these changes, human body can make some difficulties in digestion of gluten.

So there is a disease because of these reasons which is called "celiac disease". Celiac disease is gluten sensitive enteropathy which means intolerance to gluten. This disease is an allergic disease which continues for a life time.

It affects the immune system in a bad way and human body is face with diseases resistlessly. Celiac disease has some factors which are genetic and environmental factors. Environmental one is gluten.

There is a genetic predisposition which is on chromosome 6p21 with over 90% of celiac people expressing HLA DQ2 (DQA1*05/DQB1*2) or in the trans position in HLA-DR5/DR-7 heteroxygous patients and remaining celiac people Express DQ8 (DQA1*0301/DQB1*0302) (Silano, 2010). There are some diseases caused by gluten (figure 1). Some symptoms are similar but the most important one is celiac disease.

There is no definite treatment for celiac disease but gluten free-diet is recommended for celiac people. Some studies show that gluten-free diet is https://assignbuster.com/gluten-2007-some-foods-such-as-wheat-barley/

crucial for celiac people. Many symptoms can be seen on celiac people when they consume food which contains gluten. To prevent this, they should pay attention about their nutrition.

Nowadays, gluten-free diet is popular for everyone. There are many gluten-free foods on every market. Although gluten-free diet is known as a nourishment method which is healthy and helpful for weight loss, it is not proven. Absolutely, if a person consumes more bread, pasta and bakery products and he or she decides to start gluten-free diet which means less baked goods and more fruits and vegetables; she or he start to reduce weight and she or he feels more healthy.

However, gluten is a protein which strengthens the immune system and unnecessary diets may cause some problems. If people do this diet when they no need to do it, human body cannot take some important components such as fiber, some vitamins(B1, B9, A), magnesium, iron, calcium (Thompson, 1999). So there will be some nutrition problems. Briefly, gluten is a natural and complex protein which build-up immune system. Some people have an intolerance to gluten and celiac disease is a life long allergic disease which is also known as gluten enteropathy.

To reduce symtoms caused by consuming foods which includes gluten, gluten-free diet is recommend for celiac people. Number of people who do gluten-free diet but not celiac people is increasing day by day. They think that it helps to reduce weight and healthy, there is no scientific proofs yet. Appendix: Figure 1: Gluten -or wheat- related disorders(Retrieved from: http://onlinelibrary. wiley.

com/doi/10. 1111/jgh. 13703/full) References: Biersiekierski, J. R. (2017). What is gluten? Journal of Gastroenterology and Hepatology. (32), 81.

Silano M., Agostoni C., Guandalini S.

(2010). Effect of the timing of gluten introduction on the development of celiac disease. World Journal of Gastroenterology. (16)12, 1939-1942. Thompson, T. (1999).

Thiamine, riboflavin and niacin contents of the gluten-free diet: is there cause for concern? J. Am. Diet.

Assoc. (99), 858-862. Wieser H. (2007). Chemistry of gluten proteins.

Food Microbiology. (24)2, 115-119.