BACKGROUND

Gliadin is a glycoprotein that, along with glutenin, plays a role in the formation of gluten, an ergastic amorphous mixture of proteins found in wheat, rye, and barley. Gluten is responsible for the elasticity of kneaded dough, which allows it to be leavened. Gliadin is approximately 60% soluble in ethanol and contains only intramolecular disulfide links. Gliadin is also found in a variety of foods as well as in beer, along with the glycoprotein Hordein. Induction of zonulin release in intestinal epithelial cells is triggered by Gliadin. This causes an activation of the zonulin pathway by PKC mediated cytoskeleton reorganization and tight junction opening leads to a rapid increase in intestinal permeability to macromolecules. Individuals with disorders such as celiac disease or Crohn’s disease are sensitive to Gliadin since they lack the enzyme necessary for its digestion and can not tolerate it in their diet.

REFERENCES


RESEARCH USE

For research use only, not for use in diagnostic procedures.