



Benefits of Barley Intake for Glucose Tolerance and Health

Lorenzo Maria*

Department of Epidemiology, Sapienza University, Rome, Italy

DESCRIPTION

Glucose intolerance describes the metabolic conditions that increase blood sugar levels, such as impaired fasting glucose, impaired glucose tolerance, prediabetes, and type 2 diabetes. Frequent urination, thirst, dry mouth, fatigue, blurred vision, drowsiness, and loss of muscle mass are all indications of glucose intolerance. It can be detected *via* a fasting plasma glucose test or an oral glucose tolerance test. It can be prevented or reversed by altering one's lifestyle, such as increasing exercise, staying away from processed foods and sugar, quitting smoking, and drinking no alcohol. It can also be treated with metformin and other anti-diabetic drugs. With the help of a Continuous Glucose Monitor (CGM), blood sugar levels can be understood and naturally reduced. The exact cause of glucose intolerance is unclear, but there are some risk factors that can increase your likelihood of developing it. Some of these risk factors are:

- Lack of regular exercise
- Obesity
- Excess fat around the abdomen
- High blood pressure
- High cholesterol levels
- Dietary choices
- Age (risk increases over the age of 45)
- Other pre-existing conditions such as obstructive sleep apnea, gestational diabetes mellitus, and polycystic ovary syndrome
- Family history of diabetes and genetics

Some of these risk factors can be modified by making lifestyle changes, such as eating a well-balanced diet, getting regular exercise, and managing your weight. Others are non-modifiable and may require medication or other interventions. The causes of glucose intolerance are not fully understood, but there may be an interaction between genetic and epigenetic factors with a sedentary lifestyle and poor dietary habits. Some diseases of the gastrointestinal tract, such as Inflammatory Bowel Diseases (IBDs), can also impair the production of lactase, the enzyme that breaks down lactose. Lactose is a type of sugar found in milk and dairy products. When lactose is not digested properly, it can

cause symptoms similar to glucose intolerance, such as diarrhea, bloating, and gas. This condition is called Lactose Intolerance (LI). LI can affect about 70% of patients with IBDs. LI can also increase the risk of osteoporosis, a condition that weakens the bones, because it may lead to calcium and vitamin deficiency. Therefore, patients with IBDs and LI should consume dairy products with low lactose content or supplement their diet with calcium and vitamin D.

Some non-dairy alternatives, such as soy milk, almond milk, rice milk, or oat milk. However, these products may not have the same nutrient content as dairy milk, so you may need to supplement your diet with calcium and vitamin D. Barley is a cereal grain that contains a type of soluble fiber called β -glucan, which can have beneficial effects on glucose tolerance. Barley is a whole grain that contains a type of soluble fiber called β -glucan, which can have beneficial effects on glucose tolerance and lipid metabolism. Barley intake can reduce postprandial glucose rise and the second meal effect, which is the phenomenon of lower blood glucose response after a second meal compared to the first meal. It can increase the production of Short-Chain Fatty Acids (SCFAs) in the colon, which can stimulate the secretion of Glucagon-Like Peptide-1 (GLP-1), a hormone that enhances insulin secretion and lowers blood glucose levels.

CONCLUSION

It can improve lipid metabolism by lowering plasma total and low-density lipoprotein cholesterol concentrations and reducing plasma triacylglycerol concentration, which can reduce the risk of cardiovascular complications associated with impaired glucose tolerance. It can increase stool volume and bowel function, which can prevent constipation and promote gut health. These effects may vary depending on the amount, type, and processing of barley consumed, as well as individual factors such as genetic background, microbiota composition, and dietary habits. Lactose intolerance is different from a milk allergy, which is an immune reaction to milk proteins and common in many populations around the world and often runs in families.

Correspondence to: Lorenzo Maria, Department of Epidemiology, Sapienza University, Rome, Italy, Email: ria@penza.com

Received: 19-Jan-2023, Manuscript No. JNDT-23-20841; **Editor assigned:** 23-Jan-2023, PreQC No. JNDT-23-20841 (PQ); **Reviewed:** 13-Feb-2023, QC No. JNDT-23-20841; **Revised:** 20-Feb-2023, Manuscript No. JNDT-23-20841 (R); **Published:** 27-Feb-2023, DOI: 10.35248/2161-0509.23.13.227.

Citation: Maria L (2023) Benefits of Barley Intake for Glucose Tolerance and Health. J Nutr Disord Ther. 13:227.

Copyright: © 2023 Maria L. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.