

Modern miracle, ancient medicine

Swedish company Nutritech International has announced its intentions to develop a range of innovative health products to showcase its new organic activated barley, which has been called one of the most important nutritional developments of our time.

"Activated" Barley was launched in 2003 and is manufactured through a patented process that increases the Beta-Glucan content by 94%, according to research done at AnalyCen, a well respected and accredited Laboratory in Europe.

David Sandoval, President /CEO of Organic By Nature, Inc. who works with Activated Barley in North America says, "This is the ultimate slow burning carbohydrate! It is great for weight loss, energy, endurance and diabetics, plus it boosts your immune system and normalizes cholesterol. I believe it will help millions of people worldwide dramatically improve their health." While this may sound like a modern miracle, Activated Barley actually has its roots in ancient times, when food was the only medicine.

Romantic History:

Over 2000 years ago, the fathers of medicine discovered that barley grain had many uses. Among the most amazing was a special "barley milk" that was created using an exacting process that unlocked its nutritional treasures. This process was called activation. Once "activated" by the special method, this barley milk would be fed to newborn babies whose mothers were unable to breast feed them. In this way numerous deaths were averted. As the Romans conquered, they took great pride in the fact that they also brought progress in the form of civilization. Running water, education and medicine were some of the benefits of citizenship. The Romans shared the recipe for activating barley grain so effectively that the United Nations adopted the method hundreds of years later as a powerful tool to battle hunger, disease and death in areas ravaged by famine and drought. This is due to the activated barley's ability to provide steady energy even to full grown men for several hours, on as little as 10-20 grams.

Two other examples of historical note are the use of barley meal by both Roman armies and Gladiators. The armies of Rome conquered all of Europe as they marched at speeds that averaged up to 5 miles per hour and often moved entire armies 40 miles per

day (a speed that has earned them the respect of every army since). Their staple food was barley meal. Historians always noted that this was due to barley meal's ability to provide energy and endurance for extended periods of time. However, modern science shows that they also benefited from the immune boosting qualities which enabled

interesting to note that Galen, the most famous of Roman doctors and personal physicians to Emperor Marcus Aurelius himself, got his start as a doctor at a gladiator school in Asia Minor.

As so often happens, the Greeks lay claim as the first to use barley for increasing endurance. History reveals that the original Olympians consumed barley porridge to gain a nutritional advantage over their competitors long before Roman armies or Gladiators adopted the practice. Now a modern Gladiator, US Olympic Wrestling Team Captain Eric Guerrero believes it has given him an edge as he heads to Athens, the original home of Olympic barley eaters. Eric reports that he has more energy, better digestion and an overall feeling of strength since he has added the ultimate body fuel, Activated Barley to his regimen as he trains for Athens! "I had a terrible diet and never realized how it might affect my performance. I now know the importance of balancing my energy levels and fueling my body with Activated Barley®. I believe I can compete at the highest level for years to come and hope that I can bring home medals from Athens as proof."

A distinguished wrestler, Guerrero posted an amazing 126-4 (97%) record and has been a member of the USA's wrestling team four times and brought home four US Open Championships. In 2003 he was voted the Most Distinguished Wrestler in the USA and earned a spot on the 2004 Olympic Wrestling Team.

But before you dismiss Activated Barley as just another athletic / endurance product, you should consider the amazing potential benefits of its most active ingredient

Beta-Glucan because the activation process that makes Activated Barley increases the Beta-Glucan by 77%-94% according to recent tests, performed in July 2003 by AnalyCen in Sweden

What are Beta-Glucans, why are they so important?

Beta-Glucan is the name given to a class of polysaccharides that appear as soluble fiber in certain foods like Activated Barley. Beta-Glucans are now being recognized as the most important of all soluble fibers and Beta-Glucan 1-3 is the superstar of all Beta-



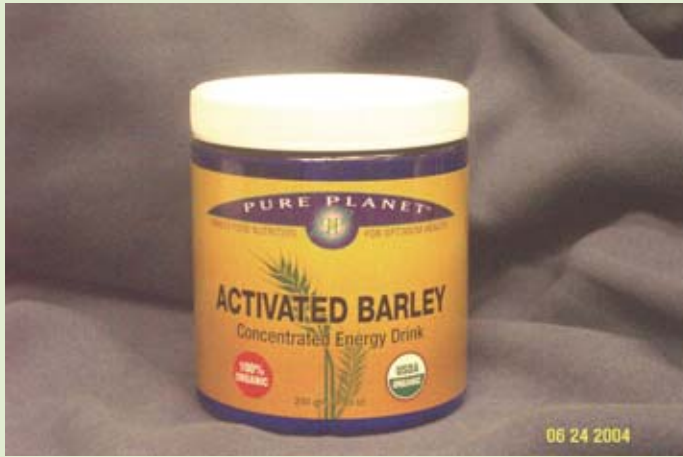
Glucans. Hundreds of scientific studies over the last few decades prove that this uniquely structured polysaccharide provides major benefits to the body particularly in modern times when diabetes, overweight and low energy pervade society. Now with the US FDA's new guidelines, much lower levels of cholesterol are being identified with heart disease and over 63 million Americans have been classified as needing cholesterol-lowering medications, the incredible cholesterol control provided by Activated Barley Beta-Glucans is more important than ever.

Immune Boosting

According to scientists Beta-Glucan 1-3 D activates the white blood cells, the defender cells. This increased macrophage (scavenging) activity of neutrophils assists the body as it defends itself from viruses, bacteria, germs and pathogens. Research shows that Activated Barley also contains active SOD enzyme markers, the free radical scavenging enzyme that is known as the master enzyme.

Cholesterol Control

In the 1999 issue of Critical Reviews in Food Science and Nutrition it stated several reasons why Beta-Glucan (like that found in Activated Barley) might be an effective tool in cholesterol control. Scientists suspect that Beta-Glucans binds to bile acids (the result of old oxidizing cholesterol molecules), which are then expelled from the body through the bowel. This is the safest possible manner to reduce cholesterol because cholesterol is produced by the body to protect cells during replication. Once it has been used it becomes sticky and it collects in our arteries. Statin Drugs like Lipitor and others reduce all cholesterol new and old and may in fact contribute to premature aging and disease. Beta-Glucans by contrast will help maintain healthy cholesterol levels and it works fast. In one study conducted by Chicago Center for Clinical Research after only six weeks, Beta-Glucan fed groups showed significant reductions in cholesterol while the control group showed none.



Energy/ Glucose Control

Insulin controls the amount of glucose brought into the tissue for energy. Insulin resistance results in the body rejecting this glucose. Scientists at the Diet and Human Performance Labs believe foods like barley Beta-Glucans can help since Beta-Glucans are a highly purified polysaccharide molecule completely made with glucose. This glucose is easily transformed by the body into adenosine triphosphate (ATP); which is an energy source that can be stored by muscles, the liver, and other tissues. This is vitally important to diabetics since insulin resistance results in the pancreas excreting too much insulin (thus exhausting insulin reserves). In addition to stabilizing blood and tissue glucose levels, Beta-Glucans like those found in Activated Barley may also trigger hormonal changes that result in reduced insulin resistance.

Ulcerative Colitis

Recent studies indicate that oral administration of germinated barley provide major relief for persons with mild to moderately active Ulcerative Colitis conditions and that the action was noted to take effect in a relatively short time. It was shown in subsequent studies that germinated barley prolonged remission in ulcerative colitis patients. The study conducted at the Hamamatsu University and School of Medicine also noted that barley contained a prebiotic, which increases luminal butyrate production by controlling microfloral distribution, which reduces mucosal damage typically

of this condition.

In the first study Twenty-one patients with mildly to moderately active Ulcerative Colitis (UC) received 20-30 g of Germinated barley foodstuff (GBF) for 24 weeks in an open-label protocol while baseline treatments (5-amino-salicyrate compounds and/or steroids) were continued. The response to the GBF treatment was evaluated using a clinical scoring and after 24 weeks of observation, the GBF group showed a significant decrease in clinical activity index (especially, the degree of visible blood in stools and the presence of nocturnal diarrhea) compared with the control group ($p < 0.05$). No side effects related to GBF were observed. They concluded "nutraceutical germinated barley foodstuff therapy may have a place in long-term management of Ulcerative Colitis, but controlled studies are needed to demonstrate its efficacy in the treatment of this disorder."

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