



Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE



New Breakfast Cereal Made With ARS Wheat

A new breakfast cereal is on the market, and one of its main ingredients is a type of wheat developed by **Agricultural Research Service (ARS)** scientists at the Wheat Health, Genetics, and Quality Research Unit in Pullman, WA, and their collaborators. The wheat cultivar, named **“Waxy-Pen,”** is what’s known as a waxy wheat, and it has a unique starch composition that can improve the texture, shelf life, and other qualities of foods made with it. Waxy starch has dramatically different processing properties, such as lower gelatinization temperature and higher water swelling. It puffs well, with large expansion and crispy texture.

ARS released the cultivar in 2006 after more than a decade of conventional breeding to alter the wheat kernel’s starch composition. The scientists sent dozens of samples to bakers, millers, food companies, and others. Ultimately, **Kellogg’s collaborated with ARS** to explore the wheat’s potential, and now, whole-grain Waxy-Pen is a major ingredient in **HI! Happy Inside** cereal, which the company markets as promoting intestinal health.

