The pros and cons of weak gluten (Oriana Porfini)

The pros and cons of weak gluten

The "alternative" wheat suitable for pasting are the spelt dicocco, khorasan or triticum turanicum wheat and local populations of durum wheat such as buckwheat, ancient Sicilian grains and old varieties such as Senator Cappelli. **These wheat have been "chosen" by farmers** over the centuries for their environmental adaptability and production yield. The selection according to the processing quality (technological quality) is recent history, of the last 40-50 years, in which the selection made by plant breeders went in the direction of increasing the protein content and the amount of gluten, increase the toughness of gluten, reduce the starch content, increase the milling yield. Therefore, in the field of "alternative" wheat it is frequent to detect varieties with a lower quantity of gluten extracted than modern ones and, above all, of low tenacity (weaker gluten structure), easy to break down, therefore more digestible.

Pasta made with these varieties of wheat

Pasta made with these varieties of wheat have the advantage of being suitable for those who suffer from gluten sensitivity (sensitivity to non-celiac gluten) or want to eat "light"but in order to be quality and to be able to cook, it needs a particular pasting process. Everything must be slower: dough, extrusion and drying. Moreover, it is impossible to establish a recipe for standardizable processing that is good for everyone: every product, every harvest, every place of origin of the raw material requires an adjustment of the parameters. These wheat have a lot of variability and the pasta factory must constantly correct the shooting to measure the qualitative/technological characteristics, the amount of protein and gluten of the grains of that yearThe quality of the paste is also affected by a third parameter, the amount of starch present, in particular the "resistant" fraction, which is the undigested fraction and which has a similar behaviour to the fibres, thus helping to lower the glycemic index of the paste.

Edited by Oriana Porfiri

agronomist and cereal expert

Fonte: Notizie Pasta. Grani siciliani, pasta integrale, glutine debole e micotossine: 4 dilemmi affrontati con gli esperti 23 Ago. 2019, 01:00 | a cura di <u>Gambero Rosso</u>

News – News