



NESHASTEH KHOUSHEH ZARRIN

Gluten :

One of the products of **NESHASTEH KHOUSHEH ZARRIN**, is active Gluten:

Definition: the gluten, is a combination of protein, carbohydrate and fat and when, the dough is washed and the starch and the soluble materials in water, are separated, it remains like an elastic mass and also, this changes to the bright-brown powder, due to drying and milling. And the gluten existing in Iranian flour null, is often between 8.5 to 11 percent that this percent, is related to the way of milling and the quality of wheat.

The consumption cases: the wheat gluten, can be used in many industries like producing Macaroni to increase the protein and preventing the Macaroni break because of proper elasticity- in sausage industry, because of high water and protein absorption and proper volume giving- in industrial bread craft to increase the flour power- in animal feed industries to gain proper protein and high viscosity and water absorption feature, because of having the below features:

- High water absorption (it can absorb water between 1.5 to 1.7 fold of its weight)
- High protein: it can have protein, between 70 to 82 percent and high elasticity and viscosity and proper smell

Comparing the gluten of wheat and corn: the gluten of corn , is cheaper and then:

- its protein, is about 55 percent, and so, it should have about 36 percent less protein, thus, it must be used 36 percent more.
- it doesn't have viscosity, so, while being used, some viscosity increaser materials must be added and, we don't have the same casein wheat because of high viscosity.
- the wheat gluten water absorption is more, and as a result, its usage is more frugal.

Production instruction: the wheat flour gluten, is producible by three methods : Martin- Tree phase – Hydrocyclone

Chemical & Microbiologics table :

Property	Company amount	Standard amount	Std no
Wet	8-10%	Max 10%	2705
Total ASH	0.3 – 0.4	Max 2	2706
Protein	80 - 82	Min 80	2863
Residual Sieve 180	7 – 25%	Max 25	4297
PH	6 – 7	5.8 – 6.4	37
Water absorb	1.5 – 1.7	Min 1.3	4297
Enumertion of micro organisms	1000	Max 5*10 ⁴	5272
Escherichia coli	Negative	Negative	2946
Mould	10	100	3851

