

Glycemic Index and Glycemic Load of FiberPasta



Glycemic index evaluation

The glycemic index of pasta Fiberpasta (spaghetti) has been studied in healthy volunteers (n =20), using 50g anhydrous glucose as reference food. The increase of glycemic levels has been evaluated for different times (0-120min). As shown in **Figure 1**, an increase in postprandial glycemia has been observed after intake of reference food and pasta. The incremental area under the glucose response curve (AUC) has been calculated by using the trapezoid rule. The Glycemic Index of pasta has been expressed as the ratio between AUC of pasta and AUC of the reference food (glucose).

$$\text{Glycemic Index (GI)} = (\text{AUC pasta} / \text{AUC glucose}) * 100$$

Results of the study

In **Figure 1**, the mean plasma glucose values obtained after intake of pasta-Fiberpasta compared with the reference (glucose), have been shown. The mean AUC value obtained after intake of pasta (43.7 ± 17.1 mmol*min/L) is significantly lower than that obtained with reference food (185.4 ± 67.7 mmol*min/L). The Glycemic Index values of FiberPasta range between 11% and 37% and the mean value is $23.5 \pm 9.1\%$. The glycemic load of a FiberPasta portion (80g) is 10.8 ± 4.3

Figure 2: Food Glycemic Index

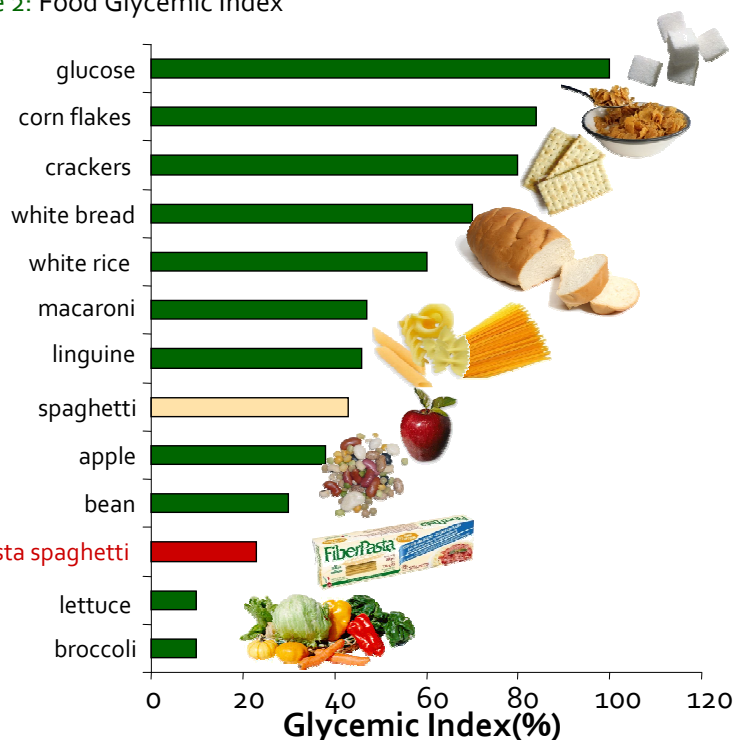
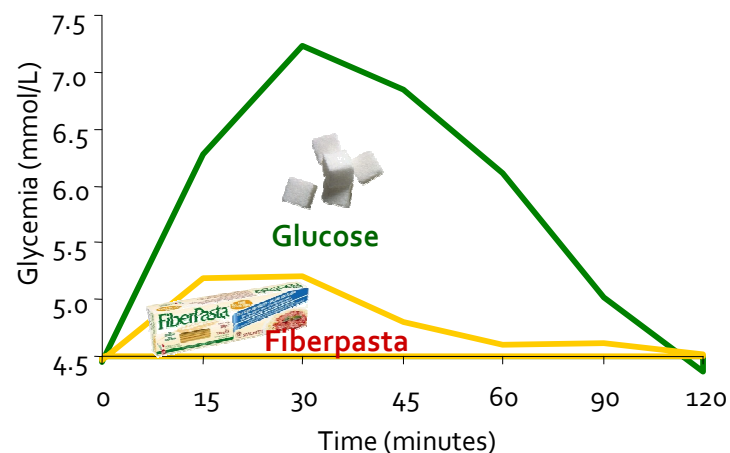


Figure 1: Variation of blood glucose levels after 50g glucose intake and after the consumption of 50g FiberPasta



Conclusions:

- **FiberPasta (spaghetti) has a glycemic index of 23.5% and a glycemic load of 10.8; therefore it can be considered a low glycemic food (Figure 2).**
- The low glycemic index of FiberPasta is due to its composition rich in dietary fibre and proteins (15% fibre, 15% protein)