Keep your postprandial curve flat

Andrea Poli

Correspondence to:
Andrea Poli
poli@nutrition-foundation.it

© Springer Healthcare – CEC Editore 2013

Post-prandial glycaemia and triglyceridemia increase should be kept low. This is one of the sound messages that emerge from the recent research in metabolism and nutrition. In fact, low glycaemia and lipemia post-prandial levels are associated with lower use of glucose and triacylglycerols for the synthesis of storage fat, lower oxidative stress, and lower inflammatory response. These actions play positive roles in the prevention and control of the metabolic and degenerative disorders typical of modern societies.

How can we keep low post-prandial glycaemia and lipemia responses? The most immediate approach is the choice of low-glycemic index foods. An International group of experts met in Stresa (Italy) from June 5th to June 7th and redacted a consensus document (which can be downloaded at <http://www.nutrition-foundation.it/convegni/glycemic-index-summit-2013.php>) in which they underscore how the isocaloric substitution of high-glycemic index foods with low-glycemic index ones is easy and effective. Italian-style pasta, as an example (and specifically *spaghetti*, if not overcooked, i.e. “*al dente*”), induces post-prandial glycemic curves that are flatter, and reach lower peaks, as compared with bread and –

even more so – with standard potatoes. Indeed, the European Food Safety Authority (EFSA) acknowledges that a low glycemic response is advantageous for the consumer and that food items with these features can bear specific health claims.

Another possibility to keep low post-prandial glycaemia and triglyceridemia is the use of food items obtained from plants (popular with some ethnic groups) that can favorably influence the glycemic response to a meal, via multiple mechanisms.

A paper from Indian authors underscores the role of a tropical legume (“horse gram”) in the control of post-prandial glycemia (curiously, the sprouts of this plant, now more and more used in the area, are less effective than unprocessed seeds of the plant); a paper from Mexico, on the other hand, shows the favorable effects of infusions prepared from local herbs (*Hypericum* and *Salvia*) on insulin sensitivity in a rat model, which should translate also into a better handling of food carbohydrates. Keeping the post-prandial curves as flat as possible: this is one of the goals that should be jointly addressed by food technologists, biochemists, and nutritionists. Notably, food companies should also pay more attention to this important issue.