

CARBOHYDRATES: FOOD INDUSTRY RESEARCH NEEDS AND INTERESTS

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Carbohydrates constitute a major nutrient in our diet and play a key role in human nutrition. They are provided by foods such as starch, cereals, fruits, vegetables, dairy products... Carbohydrates are added in foods to confer texture, viscosity, sweetness, color, flavor, and also for food preservation.

Carbohydrates are also of major importance to deliver nutritionally balanced and enhanced foods. Consumer health consciousness is increasing, as well as awareness of functional foods. As a consequence, the development of food products containing functional carbohydrates is growing and seems very promising. In the near future, functional carbohydrates will certainly play an important role for the improvement of human health and the reduction and prevention of lifestyle diseases.

The aim of this presentation is to show that carbohydrates are of major importance to deliver nutritionally balanced and enhanced foods. In this lecture, the evolution of dietary carbohydrates from nutritive to textural then functional food ingredients will be briefly highlighted. The major interests and needs for the food industry will be discussed and linked to consumer benefits. Finally, the development foreseen in the field of functional carbohydrates will be covered, with special emphasis on diabetes management, prebiotic properties, and immunostimulating activity.