## Managing the Implications of a Low-Carbohydrate Diet for the Hospitality Industry

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Patrice Lucas is a patisserie lecturer at Auckland University of Technology, New Zealand. He has completed coursework at the Quimper Trade School in France, obtaining a diploma in professional excellence in Patisserie. Currently, Patrice is focusing his studies on food science integrating food science into his teaching, focusing on biochemistry in food and human metabolism. Combining practical experience with theory, helps students enhance the texture, flavour, and consistency of food preparation while understanding the nutritional impact of food.



The foundation of low-carbohydrate diets can be traced back to historical shifts in human dietary patterns, particularly, the advent of agriculture, which resulted in changes in food consumption and provides insights into the origins of this dietary approach [1]. Research indicates that this dietary intervention positively impacts various health-related outcomes, contributing to weight loss and improving metabolic markers such as BMI, insulin resistance, blood lipid profiles, and systolic blood pressure. The adoption of a low-carbohydrate diet as a management approach for chronic diseases has garnered substantial support.

The fundamental concept revolves around the hypothesis that carbohydrate intake alters metabolic processes, reducing particularly insulin levels, which results in enhanced fat utilisation and potential weight loss. This approach, often called the 'carbohydrate-insulin model' [3] has gained traction due to its possible benefits in weight management and improved metabolic function. Furthermore, the financial considerations associated with adopting a low-carbohydrate diet are noteworthy, as fresh produce and foods rich in protein tend to be more expensive than carbohydrate alternatives. Despite these cost implications, the potential long-term health benefits, including improved cardiovascular health and sustainable weight management, underscore the value of such dietary changes.

However, the low-carbohydrate trend presents challenges and opportunities for the hospitality industry, particularly for hotels and restaurants. In Aotearoa, there has been a growing public demand for healthier policies. In the case of dining options, it is the hospitality industry's role to meet these demands.

This realisation has prompted establishments to reconsider and propose menus that assign healthy fats, proteins, and non-starchy vegetables, thereby playing a crucial part in promoting public health. Hotels and restaurants can produce health-conscious dishes on their menus by minimising refined sugar and starches. Today, as consumers seek healthier options, they are shifting their preferences towards 'better for you' alternatives. In this context, the low carbohydrate option becomes pivotal.

To cater for this demand, establishments can implement various strategies, such as identifying 'Keto' or 'low carb' dishes on their menus; these should include 'net carb' values for transparency. Restaurants could also provide a selective menu featuring low-carb options, such as almond flour bread and vegetable pasta (e.g., shirataki noodles), instead of higher-carb alternatives. Additionally, training employees on low-carb foods and dietary requirements ensures that they can provide informed recommendations, and accommodate customers with specific preferences. By adopting these practices, establishments can more effectively align with consumer preferences and the growing demand for healthier choices.

In summary, this article contributes to existing literature by demonstrating the practical implications of a low-carbohydrate diet for health outcomes. Low-carbohydrate diets, in addition to assisting with weight management, have been linked to improved metabolic markers and a reduced risk of developing chronic diseases (e.g., Type 2 diabetes and various cardiovascular conditions) [4]. As consumers seek healthier options, the hospitality industry is encountering challenges and opportunities in adapting to this trend. Hotels and restaurants can promote healthier eating habits through their menus, by reducing refined sugars and starches, and redesigning them to highlight non-starchy vegetables, healthy fats, and proteins. In this way, hotels and restaurants can meet public health demands and promote healthier eating practices. Despite initial cost considerations, the long-term health benefits tied to low-carbohydrate diets indicate a promising future in addressing modern dietary challenges.

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