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Adding Citrus to Meatballs Improves Nutritional Quality

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Researchers from the University of Minnesota have completed the first test on a citrus meatball recipe. The test consisted of three batches of meatballs, with varying percentages of the meat substituted with citrus powder, to see how much of the sweet and tangy powder could be added without adversely affecting the meatballs' texture and cooking characteristics. The test used 1%, 5%, and 10% increments.

The researchers discovered that the citrus fiber increased the cooking yield of the meatball recipe, and that the texture and colour of the meatballs remained acceptable when keeping fiber at the 1% or 5% levels. A restaurant-sized serving of the citrus meatballs, containing 2% citrus powder, contains approximately 5g of fiber. Traditionally, meatballs contain no fiber.

The health benefits of dietary fiber, mainly found in fruits, vegetables, and whole grains, include maintaining a healthy weight, preventing or relieving constipation and reducing risk of diabetes and heart disease. Soluble fiber, found mainly in whole grains and some fruits, is particularly beneficial for diabetics, because fiber slows sugar absorption and improves blood sugar levels.

The researchers suggest using citrus powder as a replacement for bread crumbs in meatball recipes. Based on the initial test, they also think that adding citrus powder to some hamburger recipes would capitalise on the tangy citrus flavour.
Next, the researchers will conduct taste tests and study the potential antioxidant benefits of citrus powder.

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