

## CHICKEN NUGGETS





# INTRODUCTION

The Chicken Nugget was invented in the 1950's and made its debut on the McDonald's menu board in the early 80's. Fast-forward to 2014 and the Chicken Nugget is one of the most popular items in the freezers of the on-the-go family. And nowadays, there is a wide variety of brand choice — some differentiated on nutritional elements, others on kid-friendliness, and some on price point.

This research aims to explore differences in the flavour and textural profiles of various brands of frozen chicken nuggets and to determine which aspects of the chicken nugget are key drivers of liking.

### MATERIALS AND METHODS

The research recruited 50 women to our central location facility in the Greater Toronto Area between the ages of 25 and 54, all of whom did the majority of grocery shopping for their household and had children younger than 18 living at home. All had purchased and consumed chicken nuggets at least once in the past month.

The test included 12 samples of frozen chicken nuggets ranging in price from \$4.99/900g to \$11.99/700g, including both National brands and Private Label brands. Three of the twelve samples were marketed as 'healthier' options. The products were served blind, two pieces per sample, and were cooked according to package directions. The order of the samples was fully rotated over two days.

Respondents answered a series of questions relating to the aroma, appearance, flavour, and texture. The questions were a combination of 9-point hedonic scales and 9-point intensity scales.

Following the product evaluation, respondents were shown the ingredient and nutritional panels of the 12 products and were asked about the impact on their purchase decision.

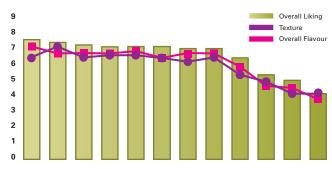
### **RESULTS**

### Product trial

In blind tasting, there was significant variation in the appeal and sensory profiles of the 12 samples.

Two products stood apart from the rest with top scores on Overall Liking and Purchase Intent. A few interesting observations about this unlikely duo: one ranked 1st on flavour and 7th on texture, while the other ranked 1st on texture and 7th on flavour (see Graph 1); one was a private label, the other a national brand; neither was the most expensive (or cheapest) of the samples, and neither had the most (or least) fat or sodium levels.

Graph 1 – Drivers of Overall Liking



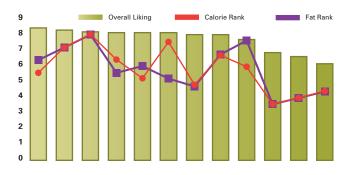
On the other end of the spectrum, three nuggets had very low overall appeal – posting the lowest scores for overall liking, flavour and texture. Incidentally, these were also the "healthiest" nuggets – with the lowest declared amounts of fat and calories. (See Graph 2)

And as for the seven brands in the middle of the pack, one was much too greasy, another did not have enough breading, and some had an unpleasant aftertaste. The bottom line: there was not one single attribute driving dislike.

## Factors influencing purchase decision

Following the product evaluation, respondents were shown the ingredient lists and nutritional panels for the samples they tried and asked how this information might impact their purchase decision.

Graph 2 - Fat and Calories vs. Overall Liking

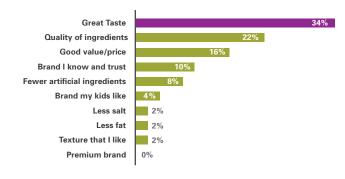


While the healthiest nuggets did not score well in blind trial, their nutritional values were a hit. The product with the lowest declared fat and sodium saw a 48% net increase in claimed purchase interest once the nutritional panel was shown. One with among the highest fat and sodium levels saw a net decrease of 32%.

And as for the ingredient lists, shorter is better. Products with the shortest ingredient lists saw the biggest net increases in claimed purchase intent, 42% - 46%. While some of these were the "healthy" products, one was a mainstream brand and was one of the top performers overall.

Although the research suggests that health and nutrition can have a big impact on purchase intent of chicken nuggets, taste is still of primary importance. The women in our research claim that "great taste" is the most important factor in their purchase decision. They also place little importance on fat and sodium levels. (see Graph 3)

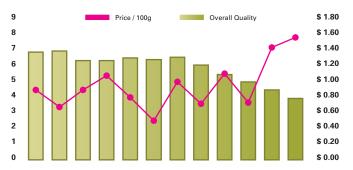
Graph 3- Most Important Factors Driving Purchase Decision (claimed)



This is consistent with the results of the sensory evaluation where we saw the low fat and low sodium products perform poorly.

Respondents also indicated that they are loyal to 2 or 3 brands of chicken nuggets and tend to purchase those regardless of price. In order to explore the relationship between price and performance, the retail package price was

Graph 4 - Price vs. Quality



converted to price/100g. In fact, price had little correlation with perceived quality. And the highest priced nuggets (which were the "healthy" products) were seen as the lowest quality. (see Graph 4)

### **CONCLUSIONS AND IMPLICATIONS**

The objective of this research was to investigate the sensory performance of frozen chicken nuggets. We included both national and private label brands and recruited female consumers residing in one geographical area — the Greater Toronto area.

Within this framework it was revealed that there are differences in the sensory profiles and likeability of the different products, driven mainly by flavour and texture. Healthier products, that is, those with lower fat, sodium, and calorie levels, do not perform well. Although respondents claim to be more interested in those products once they read the nutritional labels, great taste remains the most important claimed driver of purchase interest.





Perhaps the true Golden Nugget is one that has all the positive taste and textural properties, but with the benefits of low fat and sodium; if achievable, it will be worth a pot of gold...gold nuggets that is.

For questions about this research, or how you can leverage consumer taste buds in your business, contact Andrew Scholes at andrew.scholes@contracttesting.com.

Contract Testing Inc. is an industry leader in sensory evaluation and consumer product testing. We are the only sensory evaluation and consumer product research company with corporately managed test sites in both Canada and the United States. With over 25 years of experience, we are innovators in testing with consumers across all major food, beverage and household and personal care categories.



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