

### The Truthfulness of Nutrition Information in YouTube Cooking Channels

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**Objectives:** To evaluate the truthfulness of nutrition, cooking, or food information in videos from Youtube cooking channels' recipes/meal preparation demonstrations. Currently, no studies directly evaluate the truthfulness of nutrition information from cooking channels on YouTube, this research aims to fill this gap in knowledge.

**Methods:** Keywords (mealprep, healthy cooking, recipe, healthy dishes, meals) were selected; Google Trends was used to determine the use of each term. Each keyword was used to select 16 videos for a total of 80 videos. Each channel was evaluated to ensure it qualified as a cooking channel, then sorted into categories (professional chef, nonprofessional cook, home cook, or food media company; each category was sorted into health focused or nonhealth focused) for analysis. Both researchers abstracted content from all videos. Nutrition claims were scored for accuracy & specificity (how detailed the information was) using a tool modeled after the DISCERN tool. In addition, the following indicators

of video popularity were collected: number of views, likes, dislikes, comments & subscribers. Truthfulness was assessed using the sum of accuracy and specificity scores of the videos' nutrition content; higher scores reflect better accuracy, truthfulness, and specificity.

**Results:** 43 of the videos (53.8%) discussed nutrition information. Mean accuracy, specificity, & truthfulness scores were 4.16 of 5, 2.65 of 5, & 6.18 out of 10, respectively. Both truthfulness and specificity were positively ( $p < 0.05$ ) associated with the number of nutrition concepts noted ( $r = 0.309$ ;  $r = 0.375$ ). No associations were found between truthfulness scores and measures of popularity, except for number of subscribers and specificity ( $r = -0.366$ ;  $p = 0.05$ ). Upload source was significantly associated with accuracy ( $p = 0.009$ ) but not truthfulness or specificity. Nonhealth focused professional chefs had a significantly higher mean accuracy than nonhealth focused non-professional cooks ( $p = 0.036$ ). Nonhealth focused food media companies had a significantly higher mean accuracy score than nonhealth focused non-professional cooks ( $p = 0.014$ ).

**Conclusions:** YouTube cooking channels could be reasonable sources for factual nutrition information, but truthfulness can vary based on certain factors.

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