

Novel almond and buckwheat plant-based pediatric nutrition drinks support weight gain and improve gastrointestinal symptoms: retrospective analysis of a parent survey.

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Background and Aims

The purpose of this study was to assess weight gain, child's acceptance, and parent perception of nutrition-related symptoms before and after consuming a novel plant-based toddler and/or kids drink [Else Nutrition].

Methods

Data collected from two waves of a cross sectional consumer survey, administered by a 3rd party vendor, were analyzed retrospectively. Repeat consumers who ordered product via company's website received an invitation to participate in an online survey. Questions were adapted from a validated pediatric questionnaire (ROME IV) and modified to also address usage, intake volume, demographics, and anthropometrics. Results are presented as relative frequencies and percentages.

Results

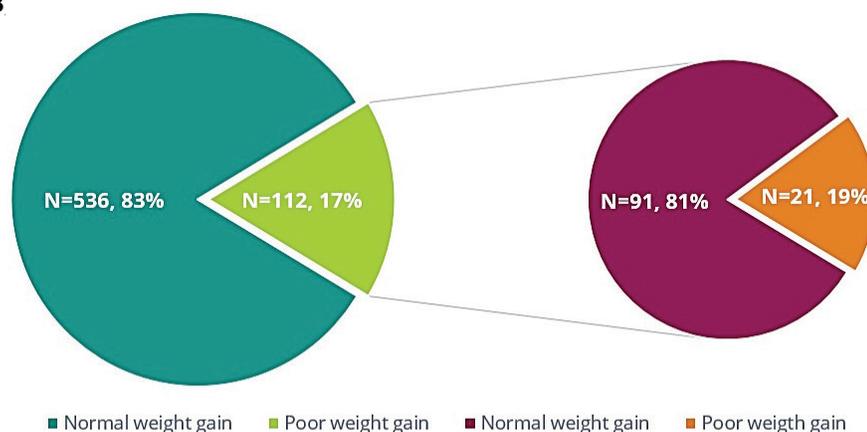
Most subjects (n=648, mean age 2.1±1.3 years) consumed between 1-3 servings per day (mean intake 2.9±3.5 servings per day) for an average of 5.3±3.2 months. The most common reasons for choosing the products were a plant-based lifestyle or preferred ingredients (~70%) and clinical reasons

(~30%) (table 1). Poor weight gain was reported by 17% of respondents, with 81% reporting resolution of issue and normal weight gain following use (figure 1, p<0.001). Stool consistency was evaluated using Bristol Stool Form Scale with trend toward more normal shape stools following use. Over 90% were satisfied with their child's acceptance of the product and intended to continue use.

Table 1: Demographic data of consumers

| | | |
|---------------------------|------------------------|--------------------------|
| | Gender (M/F) | 361/287 (55.7%/44.3%) |
| Age groups | <1 year | 42 (6.5%) |
| | 1-2 years | 337 (52%) |
| | 2-3 years | 166 (25.6%) |
| | 3 years and up | 103 (15.9%) |
| Reasons for choosing Else | Lifestyle | 71% |
| | Medical condition | 29% |
| Former product use | Dairy based formula | 42% |
| | Plant based formula | 29% |
| | Plant based drink | 57% |
| | Hypoallergenic formula | 17% |

Figure 1: Poor weight gain rates on previous formula were reduced following use of Else nutritional drink (n=648)



■ Normal weight gain ■ Poor weight gain ■ Normal weight gain ■ Poor weight gain

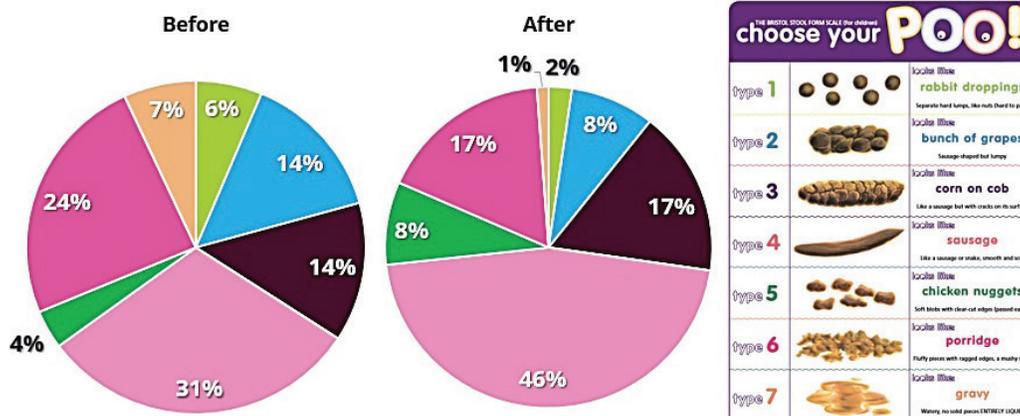
p value was calculated using *Chi-square*

Table 2: Z-scores and percentile calculated using PediTools* for all participants with available data before and since using Else products

| | Before using Else formula | Since using Else formula | |
|------------|---------------------------|--------------------------|----------|
| Z-score | -0.19 | 0.15 | P=0.01 |
| Percentile | 49% | 54% | P=0.0003 |

*Chou JH et al., J Med Internet Res 2020;22(1):e16204

Figure 2: Stool consistency reported by parents from the second wave survey (n=348)



Conclusion

This novel nutritional drink is well accepted and fulfills an important gap for parents desiring plant-based nutrition for their children. It appears to support normal growth in children and toddlers; however, prospective clinical trials are needed.

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