

# Blenderized Tube Feeding in Metabolic Patients: Survey Results from Metabolic Dietitians in the U.S.

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## BACKGROUND:

Blenderized tube feeding (BTF) is an option for tube-fed individuals that is growing in popularity. To date, there has been no published clinical research on the use of blenderized tube feeding in patients with inborn errors of metabolism (IEM).

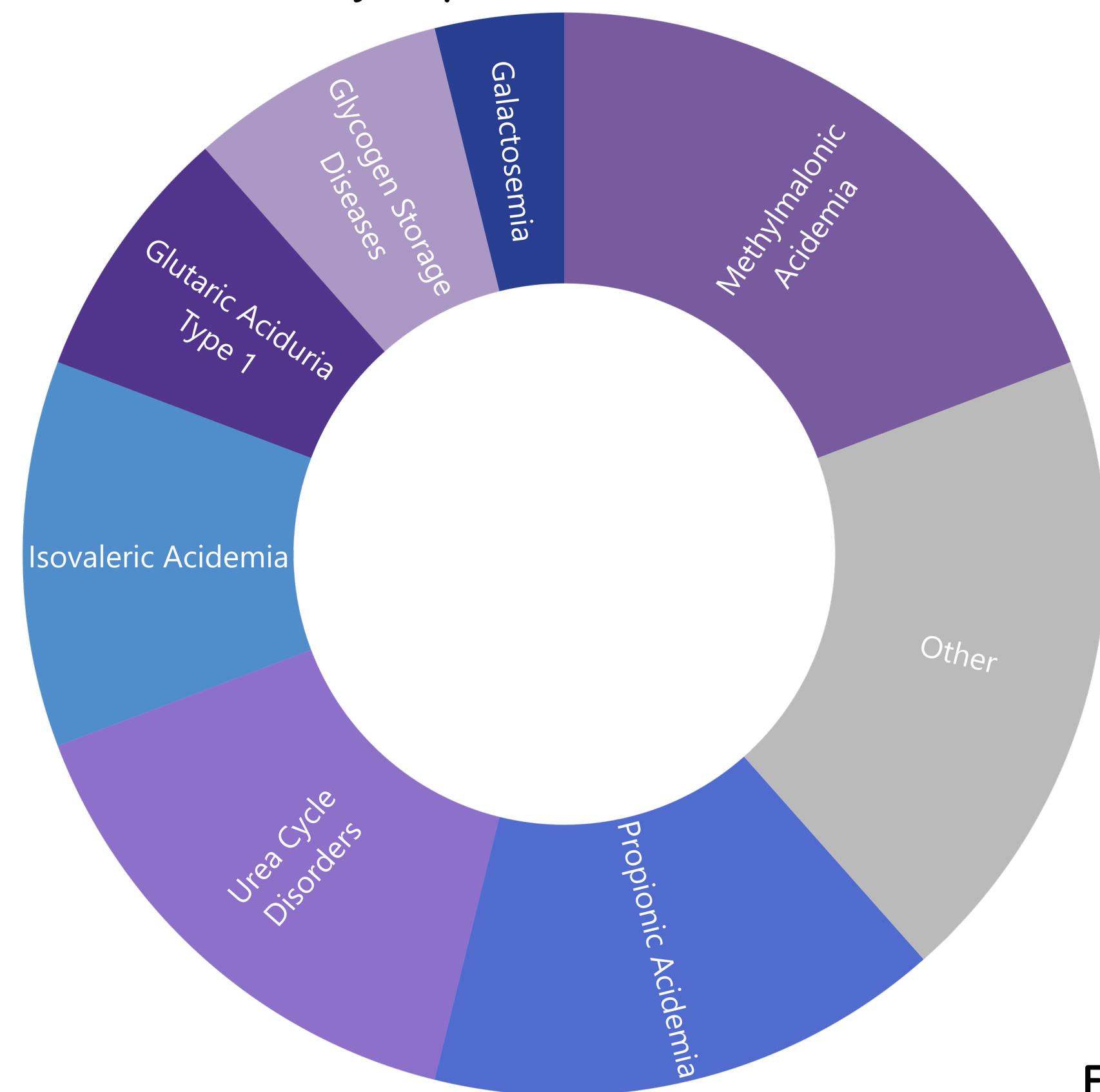
## METHODS:

An 18-question survey was developed to better understand the usage of BTF in patients with IEM. The survey was posted to the metabolic dietitian listserv and metabolic dietitians based in the U.S. were asked to participate anonymously.

## RESULTS:

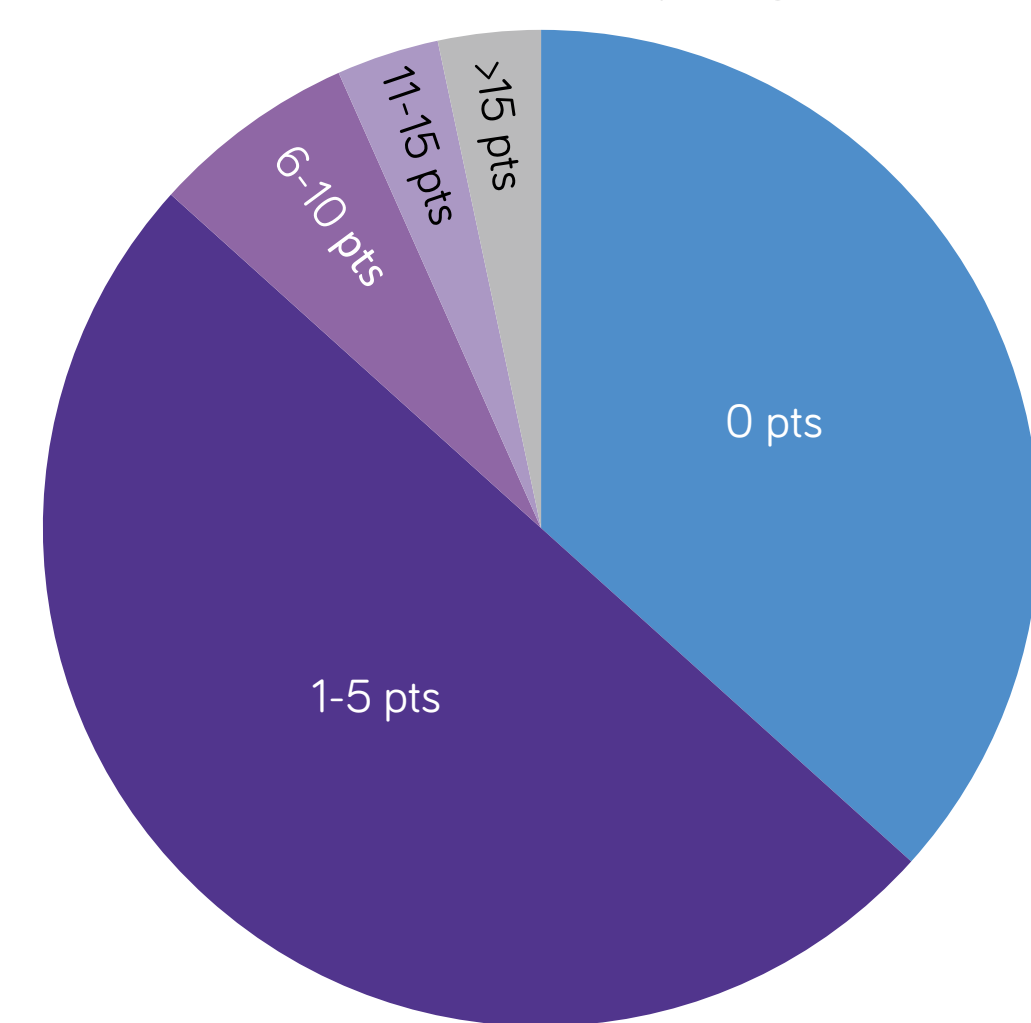
30 metabolic dietitians from 19 states participated in the survey. Dietitians from California and Pennsylvania made up 47% of responders. 63% of the total respondents (n = 19) manage patients with IEM who are fed BTF. Of these 19 survey takers, 12 completed the full survey. The majority (79%) of respondents had only 1-5 patients using BTF.

Which of your patients with IEMs use BTF?



Over half the respondents who completed the full survey (n=7) stated they would first consider using BTF in patients ages 1-3 years old, while 33% (n=4) would consider BTF in infancy (6 months+).

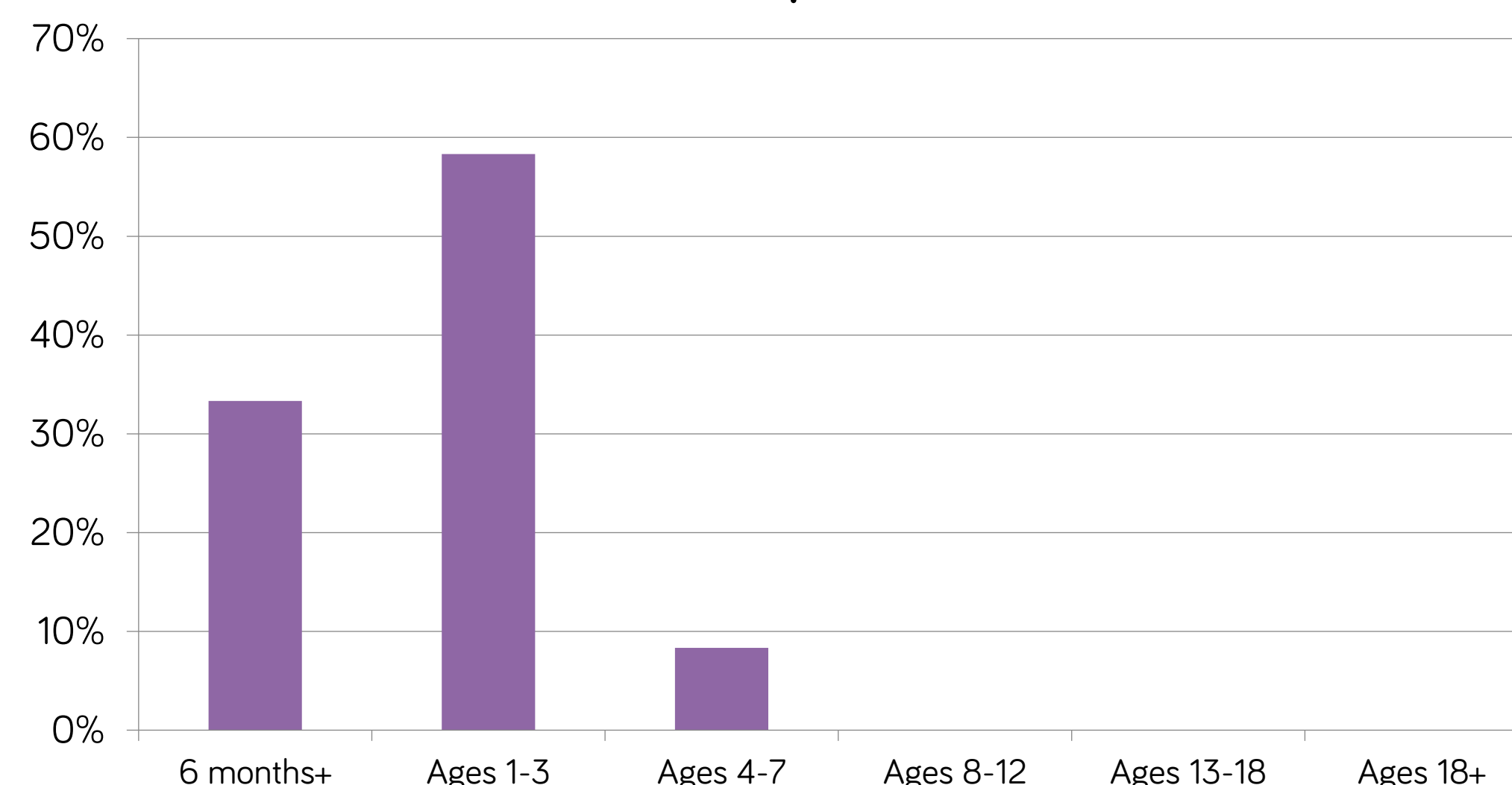
How many of your tube-fed patients incorporate blenderized tube feeding (either commercial or homemade) into their dietary regimen?



The most reported disorders for which BTF is used are organic acidemias and urea cycle disorders. When asked if there were any IEM for which they would not consider using BTF, all responded no.

Other conditions for which RDs have used BTF include VLCADD, 3MCC, NKH, Hunter's, CDG, SLOS, hyperketotic hypoglycemia, and ECHS1.

For what age would you first consider using BTF in your tube-fed patients?



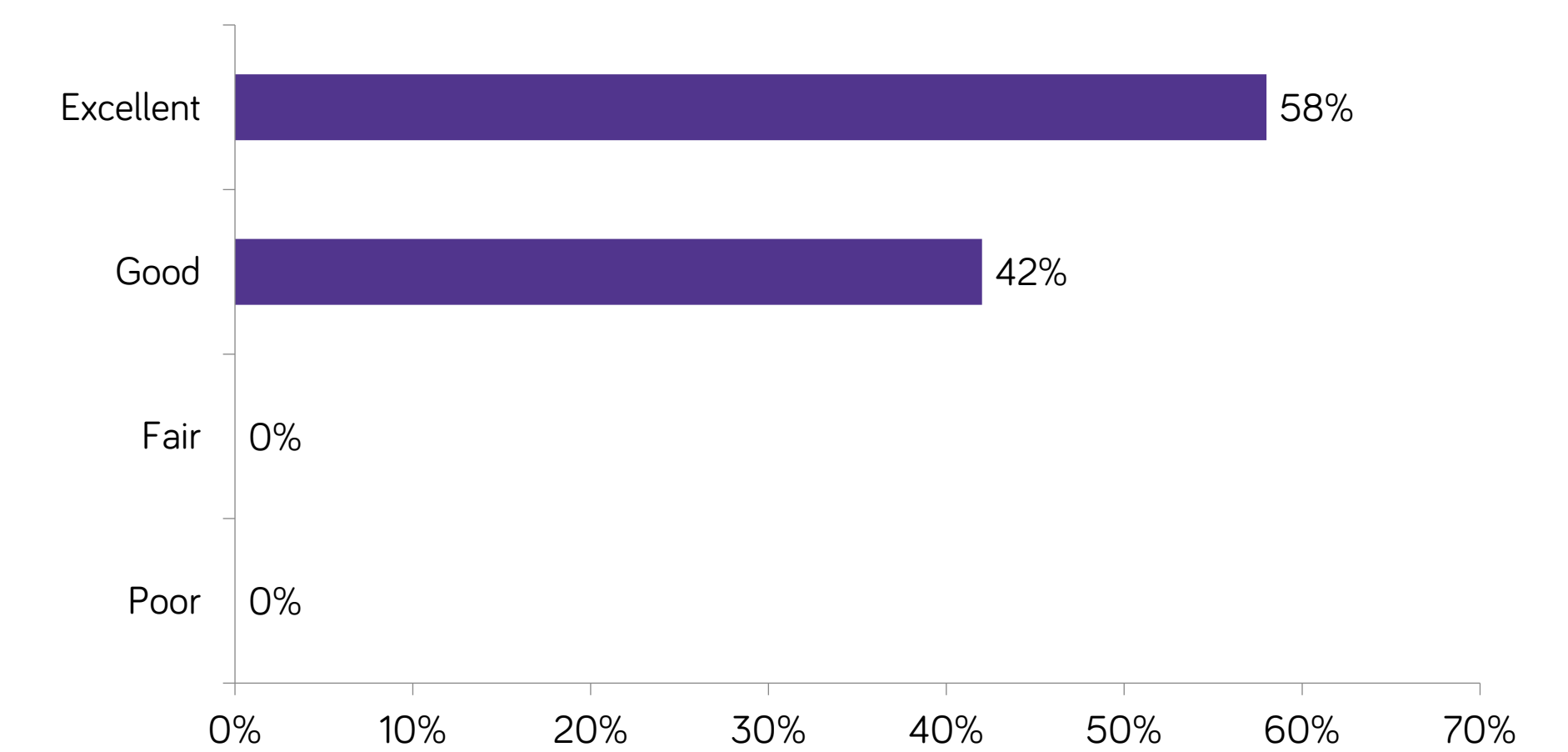
## RESULTS (CONTINUED):

Of the 12 respondents with patients on BTF, 8 reported that 60-100% of their patients also use metabolic formula(s). If a metabolic formula is indicated in the recommendations of a disease state, the majority of respondents indicated they successfully combine BTF with metabolic formula as needed.

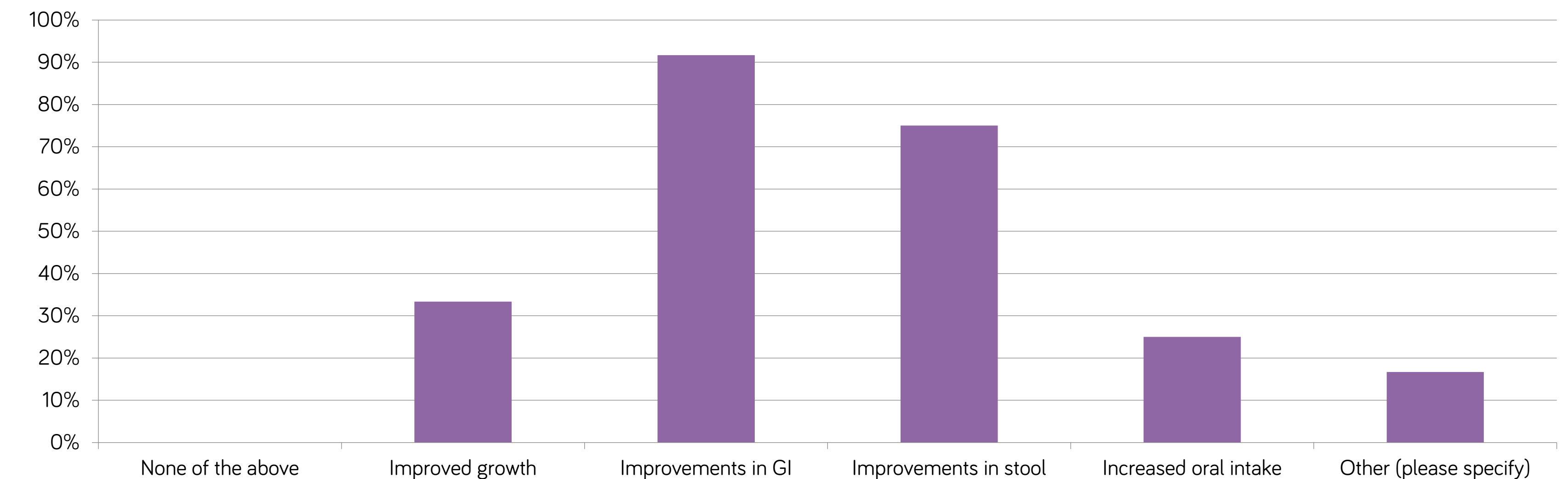
All respondents rate overall tolerability of BTF in their IEM as good or excellent.

The most common benefits seen with using BTF were improvements in GI tolerance and stool consistency. The most common challenges with BTF were identified as labor intensity and time commitment.

How would you rate overall tolerability of BTF in your IEM patients?

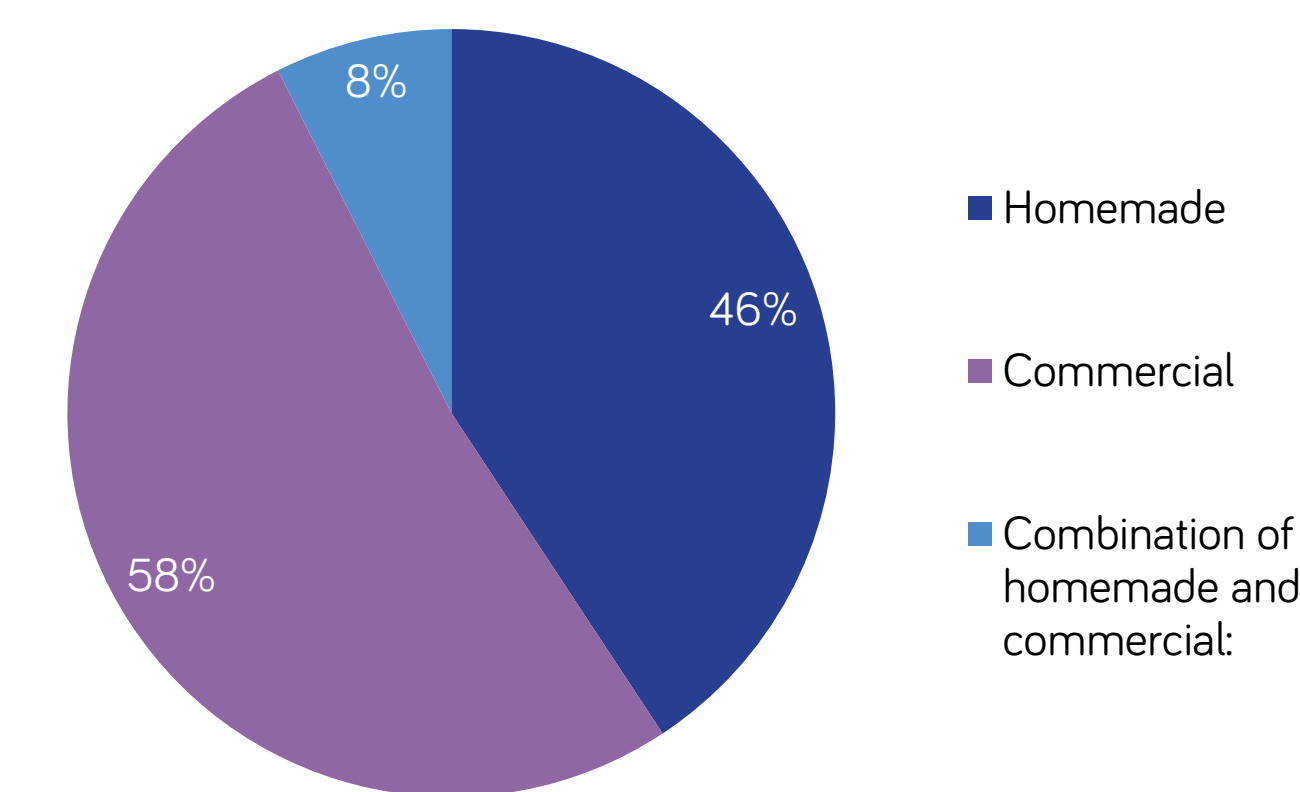


What benefits (if any) have you/your patients seen with using BTF?



Responses for "Other" included parental satisfaction and "parents described the child as having more color and more energy in addition to the above."

What percent of your patients using BTF use a homemade blended diet versus a commercially available blenderized product?



On average, 58% of BTF patients use a commercially-available blenderized product and of those, an average of 29% use a 100% real food product with no synthetic ingredients (e.g. Real Food Blends®).

## CONCLUSION:

Within the sample of respondents, over half use BTF in their patients with IEM and are open to using it in the future for patients with a variety of IEM starting at a young age. All respondents had positive reports for tolerability with BTF. A limitation of this survey was the sample size of respondents. Further research is needed to assess BTF usage patterns on a larger scale within the metabolic community. Additionally, there is a need to assess benefits/metabolic stability/outcomes data of a 100% real food product or homemade diet versus a commercially available blenderized product with synthetic vitamins and minerals added versus a standard enteral formula.