

Supplementary Materials: Pharmaceutical Oral Formulation of Methionine as a Pediatric Treatment in Inherited Metabolic Disease

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Table S1. Result of the study of aromas on a panel of five adults using a subjective scale from 1 to 5; 5 being the best score.

Test subject	Litchi flavor	Cotton candy flavor	Orange flavor	Strawberry flavor
A	1	2	2	4
B	1	1	3	5
C	1	2	2	5
D	1	3	1	5
E	1	1	2	4
Mean	1	2	2	5

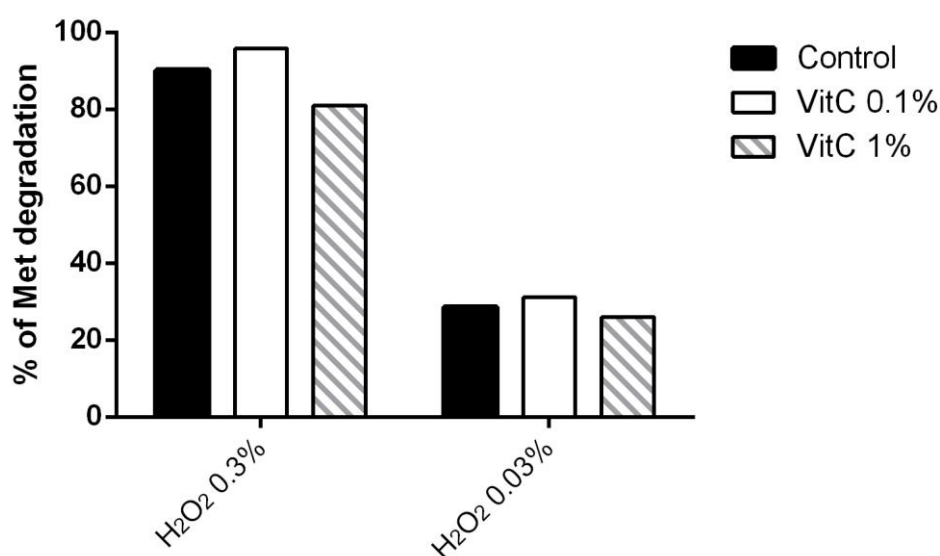


Figure S1. Percentage of Methionine (Met) degradation less than 15 min after reaction with H₂O₂ 0.3% or H₂O₂ 0.03% without (control), and with 0.1% or 1% of vitamin C (Vit C).

Table S2. Result of acceptability parents survey after at least one year of use by their children.

Item	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Survey 6	Survey 7	Results (mean \pm SD)
Age	4 years 4 months		2 years 11 months	2 years 3 months	3 years 9 months	20 months	6 years	
How long has your child been taking the methionine syrup? (month)	12	12	13	17	14	15	12	13.6 \pm 1.9
Was your child taking methionine capsules before using the syrup?	Yes	Yes	Yes	No	Yes	No	Yes	
If so, do you prefer methionine syrup or capsule?	Syrup	Syrup	Syrup	-	Syrup	-	Syrup	
If so, on a scale of 1 to 7 symbolized by the facial expressions below, how would you rate your child's enjoyment of methionine capsules?	-	-	-	-	1	-	5	
Give a score out of 5, where 1 is the worst score								
Are you satisfied with the ease of use of the syrup?	4	4	5	5	5	5	5	4.7 \pm 0.5
Give a score out of 5, where 1 is the worst score								
How would you rate the smell of methionine syrup?	3	3	5	3	2	1	5	3.1 \pm 1.5
Give a score out of 5, where 1 is the worst score								
Is Strawberry Taste acceptable or not for your child?				Yes	Yes	Yes	Yes	
Does your child take a drink or food immediately after taking the methionine syrup to eliminate the taste of the syrup?	Gastrostomy intake	Gastrostomy intake	Gastrostomy intake	No	Yes	Yes	Yes	
If yes, on a scale of 1 to 7 symbolized by the facial expressions below, how would you rate your child's appreciation of methionine syrups?				2	3	6	3	3.5 \pm 1.7

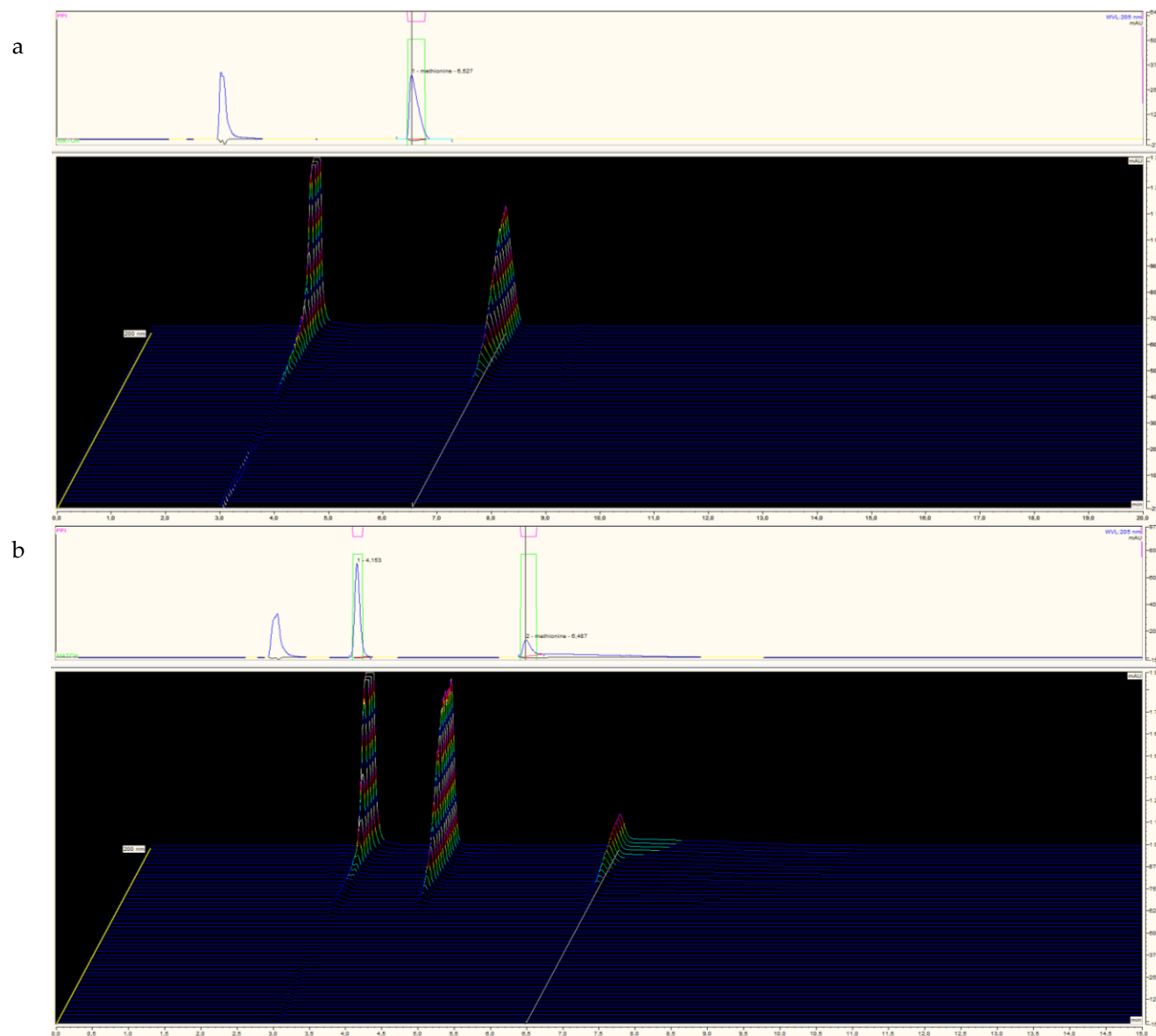


Figure S2. (a) Example of Chromatogram and 3D-plot (200–300 nm) of methionine suspension in 0.1M HCl less than 15 minutes after mixing (Met retention time ~6.5 min). (b) Chromatogram and 3D-plot (200–300 nm) of methionine suspension in 0.1M HCl after 72h at 70°C with a degradation product detected at 4.2 min