

# PerfectAmino Uptake and Bioavailability, Plasma Test and Lab Results

### Abstract

This study examines the effect of PerfectAmino on the plasma amino acid levels in 5 patients at an Integrative Medical Clinic in Clearwater, FL. Fasting levels of essential serum amino acids and glucose were taken, and then 10 grams of PerfectAmino were fed with repeat serum levels of amino acids and glucose taken at an average of 41 minutes and 103 minutes afterward. The data showed that in every case blood levels of essential amino acids increased significantly from fasting levels with no increase in glucose levels. Additionally, levels of conditionally essential amino acids, (Arginine and Histidine), had increases as well, demonstrating that with PerfectAmino both conditionally essential amino acids can be produced by the body when PerfectAmino is fed. We conclude that PerfectAmino in both tablet and powder from are well absorbed after oral feeding and have no significant effect on blood glucose levels.

### Introduction

The goal was to determine A) whether or not the amino acids in the PerfectAmino were absorbable into the bloodstream within the purported short time period with both the tablet and powdered form, B) if the patient's glucose levels were impacted, which would thereby adversely affect those with diabetes or on ketogenic diets and C) does this blend of essential amino acids give the body what it needs to produce the other two so called "conditionally essential" amino acids Arginine and Histidine.



## **Case Presentation**

The question of the utilization and assimilation of PerfectAmino was taken up with this study. Do the

tablets break down in the stomach and upper GI tract and assimilate into the bloodstream quickly? Or do they stay solid and pass through into the lower intestinal tract? Does the powdered form assimilate faster? Can these amino acid blood levels be sustained allowing for the amino acids to be utilized for protein synthesis? Additionally, is the body able to produce the other two essential amino acids, without consuming them directly? And lastly, is there any impact on glucose levels.

Starting on January 9, 2019, 5 patients (3 female and 2 male) arrived for the study in a fasting state and their blood was drawn for baseline levels of serum amino acids and blood glucose. They then consumed 10 tablets of PerfectAmino with a glass of water.

# Key Stats

#### Average increases:

- 41 minute essential amino acid increase 114%
- 103 minute essential amino acid increase 71%

#### **Glucose levels:**

- 41 minute glucose increase 1.5%
- 103 minute glucose increase -1%

Average age of participants: 33 years old Over base figures

After an average of 38 minutes and then 96 minutes, blood was drawn again, to determine serum levels of amino acids and glucose.

Then on January 10th, the same 5 patients had the same fasting blood draw, after which they consumed 2 scoops of PerfectAminoXP powder (equivalent to 10 tablets). Then after averages of 41 and 103 minutes, their blood was drawn again.

The results in both cases showed that the blood levels of essential amino acids increased within the first 41 minutes and were sustained through and beyond the second test, up to 110 minutes later.

In the case of PerfectAminoXP powder, the 41-minute increase of amino acid levels was at an average of 159%. PerfectAmino tablets showed an increase of 69%, showing faster assimilation into the bloodstream of the powder. In the case of the tablets, the sustained increases after 103 minutes were 77%. The powder had a 66% increase in amino acids in the bloodstream after 103 minutes. Both had similar long term effect on the amino levels, with the main difference being that the tablets had slightly more of a time-release effect.

ACC						
ANALSI	ACC					
TURNER STREET	- MEDIC	ACC				
BOUFF, DANID	NO TURNOR ATHERT	U More	ACC			
54754 Gal. E	Pigs. MINKOFF, DAVID	AN TORNER STREET	C MICE	Acce	CC'	a so
nd co: 05380 Teat Name	Aud MIS8735 Coll. Date Chard Coll. The	Phys. KIM.8URE	NITURNER STREET	O MEDICAL LA	APRIL IL SAN	M. X. Pro
UTY TESTS (Continu	First reported any 06/10/19 Test Name	Aud MISHEN Cell Dat Chard Coll Ta	Pos. MINOUT, DAVID	Clear LIFE WORKS WILLARSA CATER 301 TURNER STREET	710 Print ONE-LEAN	DOD/051151002 Apr.24 Sec.F
na-Aminobatyrie Acid Byllatidioe	Report States: FTX4L	Tind speciel or: 613379 Test Name	Act animits Coll Du Cout? Coll To	Phys. MINKOFF, DAVID 022	Den Alsonities	Tasking: Y
Annoeotatys: Aod H clanine	GENERAL CHEMISTRY	Report Status: FTVAL	First sported or: 053873 Test Name	And MIS6526 Coll Date 0009 Chard Coll Time 0009	19 Roce Date #17919	Print Date: 65/23/19
Aminobatyrie Arid 10	DIARFTER FYM HATION	GENERAL CHEMISTRY	SPECIALTY TESTS (Continue	First aported on: 04.56.19 Test Name	End sport dat:	Plan Tame: 1112 00/08/19
reins Nonite	DSULD, Fasting	DIABETES EVALUATION	Lanara-Alexedepriz Add 3-Made/Dirtidite Base lanaration for Artic	Report States: FTCAL		
eine N	SPECIALTY TESTS	1951LIN, Farling	Proline Ethanolamine	GENERAL CHEMISTRY		
conce Islanice of an	AMINO ACID ANALYSIS, PLASMA Internation	SPELIAL IT TESTS	Aptu-Anisolutyrie Acid Tyronini Thana	DARFTER FYRUMATION	54	45 = 100 mg/d
ine .		ANINO ACID ANALYSIS, PLASMI Interpatition	Mohimine Cystationine	EXSULDS, Footing	6.3	3.1 = 25.0 sk0ad
			- polenine - Lastine Basecontre	WENNELTY TESTS		
			- Paryldanine Trypophan	AMINO ACID ANALYSIS, PLASMA Internation		reported: 01/17/10 10:00
			- Lose	THS AV	THEN OF ARENO ACTOR DOES NOT SEE LAC DEFECT.	GAN A MUCPIC PARAMETER
	Date of Birth Aspartic Acid			INCREAS	ID ORVERSING AND DECREASED AND USS BY DRYTHROCYTIC MICHAEL INTERNATION OF THE ADDRESS OF THE OWNER OWNER OF THE OWNER	NINE MAY BE DOI: TO ARGENIN
	Obtamic Acid Ephrappedice Series	Date of Birth Aspartic Acid		IF NOU IS THE QUE	IT DAGNOTTICS RECARDING THE	NERVICE TV, PLEASE CONTACT VISILABURADORY AT
LARMANNEE CLEVEN C	Asparagine Nipho-Anniovadipie Acud	Verdative Acid Hydroxyprolas Janine		LABORAT	VET DEPCTOR ON CALL. FOR GENER TAX GENETIC TISTING, PLEASE	NL QUESTIONS ABOUT QUEST
	Ghatamine Savanine	Aspangies Alpha-knineadipic Acid		Date of Birls Asperie Acid	05/15/1992 6 #	1.1 math 2
	Dene-Manine Taurine	Outanine Saconiae	In this shows and fair below ( a	Chitamie Acid Epilosoppolica Seriae	83 11	10 = 97 mmill, N 4 = 27 mmill, N
	Citrafina Atgenine	Ihita-Ahorine Taorine	PROATTLANDANNEE DEEXCH OF	Asparagine Nijhin-Aminoadipie Aead	52 (]	00 - 120 smoth Py 31 - 64 smoth Py 10 2 smath Py
	thronise of	Circline Activity		Chycine Chalamine Naturnine	291	132 + 332 undf, 49 439 - 347 undf, 49
		Thronine		Errer Alamine		(-1 mod), -1
				Tauring	-	21 - 102 modil. 49
				Tawing Hinddog Chrolling Arguniae	68 90 43 26 b	0-1         modil,         1           21 - 102         modil,         4           10 - 100         modil,         4           11 - 101         modil,         4           11 - 101         modil,         4           11 - 101         modil,         4
				Tarrise Histolog Citrollog Asystem Threemon Contempo	00 00 01 02 03 04 04 04 04 04 04	0 - 5         mmit, -9           21 - 112         mmit, -9           31 - 111         mmit, -9
				Tarrise Histolog Condise Aquine Brownine Kontmark	60 95 43 28 5 164 m.New Page	0 − 2         mult, %           21 − 112         mult, %           91 − 129         mult, %           91 − 129         mult, %           91 − 129         mult, %           91 − 139         mult, %           91 − 149         mult, %           91 − 109         mult, %           91 − 109         mult, %
				Tarin Hinddo Cardhar Agnine Threatar Threatar Connact	48 10 10 138 L 168 169	4-3 1-10 and 9 0-11 and 9 0
				Tarife Hindu Kapina Aquina Browner Connect	41 15 19 18 16 16 16	4 − 3 11 − 112 model, 9 41 − 112 model, 9 41 − 102 model, 9 41 − 103 model, 9 41 −
				Terini Hindou Kapano Dronou Contract	0 6 15 17 18 18 18 18	1         3         3         3         4         5         7 <th7< th=""> <th7< th=""> <th7< th=""> <th7< th=""></th7<></th7<></th7<></th7<>
				Terte in Centur Aginor Dromor Bronne d'amoni	41 43 43 44 44 44 44 44 44 44 44 44 44 44	1 → 3         and ξ         9           2 → 10         and ξ         9           2 → 10         and ξ         9           3 → 10         and ξ         9           4 → 10         and ξ         9           6 → 10         and ξ         9           7         10         and ξ
Ac				Tertine Control Control Neuronn Kontrol Kontrol	19 19 19 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 mod. 0 γ 1 2 1 2 mod. 0 γ 2 2 1 2 mod. 1 γ 2 4 1 2 mod. 1 γ 2 4 1 2 mod. 1 γ 2 4 1 2 mod. 1 γ 0 - 1 1 mod. 1 γ 0 - 1 1 mod. 1 γ
		AACC		Tang and Tang and Creates Parame Parame Connel	01 01 03 04 04 04 04 04 04 04 04 04 04 04 04 04	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
		Acc		Torder Control Parameter Control Contr	40 10 10 10 10 10 10 10 10 10 1	
					10 10 10 10 10 10 10 10 10 10 10 10 10 1	
0 0 0 0 0 0 0 0 0 0 0 0 0 0						11 million (1997) (1997) (1997) (1997) 11 million (1997)
To there TRUE					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1         1
	Control 1000 (Control 1000) Control 1000 (Co				анан на	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Control (1997)     Control					1 с 1 с 1 с 1 с 1 с 1 с 1 с 1 с	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Comparison of the second		Control Contro			анно тран 1 стан 1	1         1
THE STATE AND A ST					анан на	1         1         1         1         1           1         1         1         1         1         1           1         1         1         1         1         1         1           1
Comparison of the second		The second secon			анно нара (1) (1) (1) (1) (1) (1) (1) (1)	
Comparison of the second		Control of the second s	The second secon		1 di	1         1
THE STATE OF THE S	The second secon					
The Network State			The Annual State S			Anno         Image: Section of the
The second secon	The second secon		The second secon			
Comparison of the second	The second secon					
The second secon	The second secon					
Compared and a second and	The second secon		The second secon			
			Control of the second s			

# Histidine and Arginine

Both of these are considered conditionally essential amino acids for young children and the elderly and may not naturally be produced by the body. In this study, there were increases of up to 15% in Histidine and 111% in Arginine, despite the fact that the blood draws were in a fasting state and that neither of these amino acids are present in the PerfectAmino tablets or PerfectAminoXP powder.

### Glucose

When a protein or amino acids follow the catabolic pathway in the body, they turn in to carbohydrates and sugars and can increase glucose levels, which can have a negative effect on diabetes or those trying to achieve nutritional ketosis. In this case study, there was actually a decrease in the glucose levels, showing definitively that neither PerfectAmino tablets nor PerfectAminoXP powder cause an increase in blood sugar, and thereby can be considered an effective protein source without blood sugar increases or breaking of ketosis, making it "keto friendly."



## Conclusion

In each of these cases, it was evident that the levels of essential amino acids in their blood (including the two that were not present in PerfectAmino) increased significantly and were sustained for the bodies use in protein synthesis. There was evidence that PerfectAmino is as claimed, 99% anabolic and acted as precursors for protein synthesis, and less than 1% of the amino acids were catabolized to produce glucose. While the powder form assimilated more rapidly both it and the tablet form had similar levels of bioavailability. We conclude that PerfectAmino in either powder form or tablet form is the most utilizable amino acid source for protein synthesis and should be a daily supplement for any person wanting optimal body function and health regardless of body age, sex, or activity level.