

Fulvi-H as Possible Treatment for Viral Diseases

Juan M Navarrete*, Omar Y Morales, María I Gracia and Miguel A Zúñiga

Faculty of Chemistry, Department of Inorganic and Nuclear Chemistry, National University of Mexico

Abstract

Fulvi-H is Fulvic acid produced and sold in Mexico, firstly as soil fertilizer and secondly as animal dietary supplement. Now, after high purification from heavy metals and bacterial organisms, it has been authorized as human dietary supplement, in view of empirical excellent results in all fields, as well as experimental results obtained with mice and rats, which showed much better filtration of electrolytes through liver from digestive pipe to blood serum ($^{32}\text{PO}_4^{3-}$, $^{45}\text{Ca}^{2+}$, $^{59}\text{Fe}^{3+}$, $^{131}\text{I}^-$) followed by promotion of antibodies in their immune system (IgG, IgT). This paper summarizes all these results and proposes Fulvi-H at higher doses as a valuable complement in addition to treatment of human viral diseases, such as Herpes Zoster, Hepatitis C and AIDS. Therefore, next step should be a medical protocol, to test the facts proved in laboratory animals.

Keywords: Fulvic acid; Dietary supplement; Vertebrates; Viral diseases

Introduction

Fulvi H has been authorized to be sold in Mexico as human dietary supplement, in view of proved benefits obtained when it is used as soil fertilizer and consequent production of better crops, as well as promotion of higher filtration of electrolytes through liver from digestive track to blood serum, which seems to stimulate also the production of antibodies (IgG and IgT) in mice and rats [1-3]. This last result is now of great interest, when some extremely grave viral infections such as AIDS and more recently Ebola became an international health problem. However, Fulvi-H as human dietary supplement, presented in one saturated solution (650 g/l) and prescribed one soup spoon per day, seems to be far from being a medical product against viral infections, in spite of its beneficial effects, since the extrapolation from mice and rats to human beings reaches excessive doses. This paper ponders the results obtained at present and proposes one dose to apply in a medical protocol.

Experimental

The Fulvi-H common effect on vegetables and vertebrates seems to be better absorption of electrolytes from soil to vegetables and from water for vertebrates, which has been proved by using radioactive labelled ions such as $^{32}\text{PO}_4^{3-}$, $^{45}\text{Ca}^{2+}$, $^{131}\text{I}^-$ and $^{59}\text{Fe}^{3+}$ [1-5]. In the case of vertebrates, it seems that a second and most important effect is the promotion of antibodies IgG and IgT, which has been proved by using Elisa method for IgG and a light refractometer for IgT in blood samples from mice and rats [6,7]. These results have led to use a purified version of Fulvi-H as human dietary supplement, whose empirical results have been proved as quite satisfactory: fortifying, apparent resistance to colds and definite effect by topical use on dermatological symptoms of herpes Zoster. The prescribed dose till now has been daily 7-10 g since the side effect is slight diarrhoea.

Results

Tables 1 and 2 show results of increasing IgG and IgT in mice and rats, when these animals were fed with average daily doses equal to 67.5 mg of Fulvi-H per mouse, 35 g. average weight, and 675 mg of Fulvi-H per rat, 350 g. average weight, during 2 months. Tables 3 and 4 show results of decreasing weight in these animals during same period, probably due to Fulvi-H slight laxative effect [6,7].

	Without FA	With FA
Mice	IgG (mg/mL)	IgG (mg/mL)
1	8.296	18.280
2	11.215	41.919
3	7.593	30.131
4	15.223	17.419
5	2.528	12.381
6	2.636	15.955
7	4.072	27.439
8	3.457	37.187
9	2.590	39.531
Average (\bar{x})	6.4 ± 3.5	26.6 ± 8.6
Std. Dev. (σ)	4.524	11.158

Increment IgG= $(26.6-6.4) \times 100/6.4=315\%$

Table 1: Variation of IgG+FH in mice.

	Without FA	With FA
Mice	IgT (mg/mL)	IgT (mg/mL)
1	58	66
2	62	68
3	48	66
4	62	76
5	54	65
6	60	76
7	70	72
8	72	70
9	61	68
Average (\bar{x})	60.75 ± 6.56	69.66 ± 3.21
Std. Dev. (σ)	7.851	4.183

Increment IgT= $(69.66-60.75) \times 100/60.75=14\%$

Table 2: Variation of IgT+FH in mice.

*Corresponding author: Juan M Navarrete, Faculty of Chemistry, Department of Inorganic and Nuclear Chemistry, Bldg. D, National University of Mexico, CU, UNAM, Mexico City, Mexico, ZC 04510, Tel: +52 55 5622 5232; E-mail: jmnat33@unam.mx

Received September 25, 2015; Accepted January 18, 2016; Published January 25, 2016

Citation: Navarrete JM, Morales OY, Gracia MI, Zúñiga MA (2016) Fulvi-H as Possible Treatment for Viral Diseases. Drug Des 5: 125. doi: 10.4172/2169-0138.1000125

Copyright: © 2016 Navarrete JM, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Rats	Without FA		Rats	With FA	
	IgT (mg/mL)			IgT (mg/mL)	
	Initial	Final		Initial	Final
1	66	68	11	70	70
2	70	69	12	65	70
3	66	63	13	68	68
4	64	67	14	62	70
5	60	64	15	68	68
6	64	66	16	60	69
7	66	70	17	62	72
8	68	70	18	64	72
9	70	68	19	62	71
10	66	70	20	62	70
Average (\bar{x})	66 ± 2.13	67.5 ± 1.79	Average (\bar{x})	64.3 ± 2.38	70 ± 1.01
Std. Dev. (σ)	2.98	2.50	Std. Dev. (σ)	3.33	1.41

No FH: $(67.5-66) \times 100/66=2.3\%$ +FH: $(70-64.3) \times 100/64.3=8.86\%$

Table 3: Variation of IgT in rats (no FH and +FH).

Rats	Without FA		Rats	With FA	
	Weight (g)			Weight (g)	
	Initial	Final		Initial	Final
1	303	400	11	311	400
2	324	409	12	305	396
3	310	424	13	305	411
4	307	396	14	302	377
5	301	409	15	315	382
6	312	468	16	312	414
7	280	396	17	311	379
8	316	463	18	302	405
9	323	416	19	303	379
10	325	431	20	313	374
Average (\bar{x})	309.9 ± 9.58	421.2 ± 18.6	Average (\bar{x})	307.9 ± 3.56	391.7 ± 10.87
Std. Dev. (σ)	13.39	26	Std. Dev. (σ)	4.97	15.2

No FH: $(421.2-309.9) \times 100/309.9=35.91\%$ +FH: $(391.7-307.9) \times 100/307.9=27.21\%$

Weight decreasing= $35.91-27.21=8.7\%$

Table 4: Variation of weight in rats (no FH and +FH).

Conclusion

These results allow to think that much higher doses to man might be an adequate treatment for epidemic viral infections as fearful as AIDS, hepatitis C and recent Ebola. By considering a simple weight proportion between mice and rats to man, an established medical protocol might start with 20 ml saturated solution of Fulvi H daily ingestion as a minimal dose (13.5 g/day), which might be increased according clinical analysis results till 200 ml of saturated solution as a maximal dose (135 g/day).

References

1. Navarrete M, Urbina VM, Martínez T, Cabrera L (2004) Role of fulvic acids for transporting and fixing phosphate and iron ions in bean plants by radiotracer technique. J Radioanal Nucl Chem 259: 311-314.
2. Navarrete M, Urbina VM, Martínez T, Cabrera L (2005) Autoradiography of mineral ions in green leaves and flowers, absorbed with and without synthetic fulvic acids. J Radioanal Nucl Chem 263: 779-781.
3. Navarrete JM, Müller G, Martínez T, Cabrera L, Gracia I, et al. (2006) J Phys 56 (Supp. D) 695.
4. Navarrete JM, Urbina VM, Flores JC, Gracia I, Fabila L (2009) Use of labeled ions to determine the effect of APS-750 on liver and kidney physiology in vertebrates. Proceedings of Nuclear and Radiochemistry- NUCAR 40: 56.
5. Morales OY, Navarrete JM, Gracia I, Macías L, Rivera M, et al. (2011) Effect of fulvic acids on the electrolytes physiology in vertebrates. Nuclear Instruments and Methods in Physics Research A 652: 838-840.
6. Morales OY, Navarrete JM, Gracia I, Macías L, Rivera M, et al. (2012) Bentham Open, The Open Conference Proceedings Journal 3: 24.
7. Morales OY, Navarrete JM, Gracia I, Macías L, Rivera M, et al. (2014) Fulvic acids, fertilizers first and then stimulants of vital functions in vertebrates. J Radioanal Chem 299: 839-841.