ACTA SCIENTIFIC NUTRITIONAL HEALTH (ISSN:2582-1423)

Volume 4 Issue 2 February 2020

Mini Review

Is it Necessary to Dispense with Spices to Replace Salt and Give Better Flavor to Meals in Patients with Chronic Kidney Disease (CKD)?

Guillermina Barril Cuadrado*, Graciela Alvarez Garcia and Angel Nogueira Perez

Multidisplinary CKD Unit, Department of Nephrology, Hospital Universitario de la Princesa, Madrid, Spain

*Corresponding Author: Guillermina Barril Cuadrado, Multidisplinary CKD Unit, Department of Nephrology, Hospital Universitario de la Princesa, Madrid, Spain.

DOI: 10.31080/ASNH.2020.04.0604

Received: December 23, 2019 Published: January 06, 2020 © All rights are reserved by Guillermina Barril Cuadrado.

Abstract

One of the strategies to control hydrosaline retention and get good control of TA is the prescription of diet without salt (although some foods contain a minimum of Na). Spices are an alternative to give better flavor of certain foods by restricting salt, although some may have a p and/or K amount to consider. We propose this alternative taking into account the number of species added.

Keywords: Chronic Kidney Disease; Spices; diet

Introduction

The establishment of an adequate food plan with restriction of protein intake according to the stage of CKD taking care of the P/ Protein ratio [1,2] and the intake of excess K will be one of the basic pillars to consider in maintaining a good condition.

As the CKD increases, the tendency to Protein Energy Wasting (PEW) [3] increases and also the volume component for the control of the arterial blood pressure (ABP) should be considered since it tends to retain liquids (hyperhydration).

The restriction of salt intake is mandatory except when the etiology of CKD is an interstitial nephropathy (and there is no hydro saline retention or hypertension (HBP), although adherence to it is very difficult to achieve in a sustained manner.

Para el control de la TA la dieta sin sal es el primer factor a controlar, evitando además la retención de líquidos [4-7].

A good alternative to salt is the use of spices to give better palatability or a more pleasant taste and thus favor an adequate intake [8,9].

The aim of this review is evaluate the possibility to use spices as salt can substitute in advanced chronic kidney disease patients.

We find that certain spices have a content of k in 100 grams of them much higher than recommended, so in principle they should be advised against. When analyzing the most used species, we see in table 1 how the content of K in 100 grams can be high, although the amount we use is so low that its valuation can be useful.

	Ratio P/	Р	Р	Р	К	K	К
	protein	(100gr)	(10gr)	(2gr)	(100gr)	(10gr)	(2gr)
Laurel	14.1	113	11.3	2.26	529	52.9	10.58
Cinnamon	15.2	61	6.1	1.22	500	50	10
Pepper	15.7	173	17.3	3.46	1259	125.9	25.18
Frest Parsley	17.4	87	8.7	1.74	811	81.1	16.22
Oregano	18.2	200	20	4	1669	166.9	33.38
Dried Parsley	20.5	82	8.2	1.64	840	84	16.8
Saffron	21	252	25.2	5.04	1724	172.4	34.48
Paprika	23	345	34.5	6.9	2340	234	46.8
Curry	24.5	367	36.7	7.34	1170	117	23.4
Vinegar	25	25	2.5	0.5	100	10	2
Mustard	28.3	170	17	3.4	165	16.5	3.3
Nutneg	68.2	409	40.9	8.16	544	54.4	10.88

Table 1: Content in P and K of the most used species
in daily practice.

Therefore, it is necessary before establishing a food plan to determine the degree of CKD that the patient presents and if it is stage 5 whether or not he is on dialysis and modality (hemodialysis or peritoneal dialysis).

With this, we will establish the amount of proteins that should be taken favoring a part of high biological value and another part derived from vegetables that will help control acidosis and will have less absorbable P. As a general rule in advanced chronic kidney disease the protein intake will be 0.8 gr/kg adjusted weight/ day and calories intake. For calories, 30kcal/kg of adjusted weight/ day are used for people over 60 years old and 35kcal/kg of adjusted weight/day for children under 60 years [10].

We must reduce the salt intake as much as possible although some foods contain salt even a diet without salt can contain 60 mg of Na.

A good option is to use some of the above mentioned spices to flavor foods, considering the amount that we administer and the P and k content in 2-10 grams is very low.

As a final reflection, consider not only the concentration of P and K but also the amount used as an additive in the alternatives to salt.

Bibliography

- 1. Noori N., *et al.* "Association of dietary phosphorus intake and phosphorus to protein ratio with mortality in hemodialysis patients". *Clinical Journal of the American Society of Nephrology* 5.4 (2010): 683-692.
- Guillermina Barril Cuadrado., *et al.* "Table showing dietary phosphorus/protein ratio for the Spanish population. Usefulness in chronic kidney disease". *Nefrologia* 33.3 (2013): 362-371.
- 3. PEW y erc Obi Y, *et al.* "Latest consensus and update on protein-energy wasting in chronic kidney disease". *Current Opinion in Clinical Nutrition and Metabolic Care* 18.3 (2015): 254-262.
- 4. Rust P and Ekmekcioglu C. "Impact of Salt Intake on the Pathogenesis and Treatment of Hypertension". *Advances in Experimental Medicine and Biology* 956 (2017): 61-84.
- 5. Aaron KJ and Sanders PW. "Role of dietary salt and potassium intake in cardiovascular health and disease: a review of the evidence". *Mayo Clinic Proceedings* 88 (2013): 987-995.
- Isaka Y., et al. "The SONG (Salt intake and Origin from General foods) Study - A Large-scale Survey of the Eating Habits and Dietary Salt Intake in the Working-age Population". International Medicine 56 (2017): 2423-2430.
- Ohta Y., *et al.* "Blood pressure control status and relationship between salt intake and lifestyle including diet in hypertensive outpatients treated at a general hospital". *Clinical and Experimental Hypertension* 39.1 (2017): 29-33.

- 8. Silano V., *et al.* "Regulations applicable to plant food supplements and related products in the European Union". *Food Function* 2.12 (2011): 710-719.
- 9. Kirk J and Dunker KS. "Dietary counseling: the ingredient for successfully addressing the use of herbal supplements and probiotics in chronic kidney disease". *Advances in Chronic Kidney Disease* 21.4 (2014): 377-384.
- 10. Pocket Guide to Nutrition Assessment of the Patient with Chronic Kidney Disease, 4th Edition. National Kidney Foundation (2009).

Assets from publication with us

- Prompt Acknowledgement after receiving the article
- Thorough Double blinded peer review
- Rapid Publication
- Issue of Publication Certificate
- High visibility of your Published work

Website: https://www.actascientific.com/ Submit Article: https://www.actascientific.com/submission.php Email us: editor@actascientific.com Contact us: +91 9182824667