PUBLIC PERCEPTION ON REASONS FOR PRACTISING KETOGENIC DIET

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Abstract--- There has been a sensational resurgence of enthusiasm for the ketogenic diet amid the previous quite a while. For some youngsters with hard to-control epilepsy, the eating regimen exhibits an elective way to deal with attempting various meds. The ketogenic diet's present achievement rate, when legitimately executed, incredibly surpasses that of the prescriptions which have as of late turned out to be accessible. Its reactions, both intellectual and unfavorably susceptible, seem less than most accessible prescriptions. The researcher used descriptive research to do the research. 1860 samples collected using a convenient sampling method. The dependent variables are composition of ketogenic diet, betterment of diet, reasons for practising ketogenic diet such as blood pressure, sugar, fat, abdominal obesity and stress. The research tools used are correlation, chi square and ANOVA. It has been found that there is a low correlation between betterment of ketogenic diet and age. It infers that if the age is high then the people are not bothered about ketogenic diet.

KEYWORDS: Diet, ketosis, low carbohydrate, high fat, merits.

I. INTRODUCTION

A keto diet is a well known diet for reducing carbohydrates. When we eat something that is rich in carbohydrates, our body will produce glucose and insulin. Glucose is the simplest molecule of our body to convert and used as an essential source of body i.e energy. Insulin is produced to process the glucose in circulatory framework by transporting it around the body. Since glucose is used as most essential, fats are not required. Usually in a common place, Very high starch diet, the body will use glucose as the vital form of source. By breaking down the structure of carbs, the body is moved into a state known as ketosis.

Our bodies are adaptable to what you put into it, it will begin to produce ketones as the basic source. Perfect ketone levels often have good health, weight reduction, and overall body health also benefits. There are various favorable instances that go with being on keto diet: from weight reduction and increased levels to healing. Everyone can access huge benefits by cutting down carbohydrates, high-fat eating regimen. Underneath, you'll find a short rundown of the points of interest you can get from a ketogenic diet.

Additionally, the ketogenic diet has shown good results that have varied in relation to lowfat and high-carb keeps away from immunity. Keto typically transports glucose levels due down to the sort of variation in food you have. Studies and research even reveal that the ketogenic diet is a more desired way to deal with controlling diabetes

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OBJECTIVES

- To study the importance of ketogenic diet
- To find the relationship between betterment of ketogenic diet from other diet and age
- To examine the association between major composition of ketogenic diet and the educational qualification groups.
- To find the agreeability towards practice of ketogenic diet among the occupational groups

LITERATURE REVIEW

Denis Barry, et. Al. (2018) - The authors have analysed that how ketogenic diet cures diseases. The objective of this research is to look into the functions of metabolism activities its transporter for development. They have found from their study that there is relationship between metabolism and central nervous system(CNS) of adults. Stella lacovider and Rebecca M.Meiring (2018) -The researchers have compared the ketogenic diet during sleeping, cognition and thyroid functions. They have checked if they are independent of weight loss. The researchers have focused on determining the effects of ketogenic diet on the weight loss of the person following the diet. They have found that there are many physiological benefits when we get into a ketogenic diet. Katrin Augustin, Aziza Khabbush, Shopie Williams (2018)- The researchers have explored an important technique for the production of ketones which provide more energy than the glucose to the brain cells. The result of the study implemented new medical and dietary therapies for epilepsy and other disorders. Qiang Zhang, et. Al. (2018) - The authors have inspected a study based on diabetic mice which has undergone a treatment with ketogenic diet and aerobic exercises through modulations of PPARs gene programs. The main focus of the study is to find a treatment for type 2 diabetes. They found that when a ketogenic diet and aerobic exercise with a moderate intensity are combined, it has improved the level of insulin in the diabetic mice. So, it would also be similar in the case of humans and will be very much effective for curing Type II diabetes. Christophe Kosinski and Francis R. Jornayvaz (2017) - The authors have studied the effects of ketogenic diet on cardiovascular risk factors. The main objective of this study is to study the importance of ketogenic diet on various heart related risk factors in all the animals, including humans referring to the existing evidence. The results are found by the researcher is very much contentious on cardiovascular determinants, in the animals but there are some notable improvements in the obesity and type 2 diabetes that have been discussed. Shahabuddin Rezaei, Kavoosi, Rez's Sherrington Badv (2017) - The authors have experimented the effects of ketogenic diet over the liver functions. Consuming High fat and carbohydrates can be a burden over the functioning of some organs, especially the liver. It was

evident that the function of the liver becomes detrimental during treatment of implantable cardioverter-defibrillator.

METHODOLOGY

The researcher used descriptive research to do the research. 1860 samples collected using convenient sampling method. The dependent variables are composition of ketogenic diet, betterment of diet, reasons for practising ketogenic diet such as blood pressure, sugar, fat, abdominal obesity and stress. The research tools used are chi square, correlation, and ANOVA.

ANALYSIS AND DISCUSSION

Hypothesis 1: Association between the major composition of ketogenic diet and educational qualification.

Educational qualification		Carboh ydrats	Fats	Proteins	Vitamins and minerals	Total
	Primary	28	70	57	3	158
	Higschool	13	321	51	2	387
	Higher secondary	220	460	112	12	804
	Degree & above	103	241	110	13	467
	Illiterate	10	13	20	1	44
Total		374	1105	350	31	1860

 Table 1: Cross tabulation : Major composition of Ketogenic Diet

	Value	df	p-value
Pearson Chi-Square	5.067	3	0.167

The results of Chi square test shows that there is no association between major composition of ketogenic diet and educational qualification. It shows that opinion on composition of ketogenic diet differs based on educational qualification

Hypothesis 2: Relationship between betterment of ketogenic diet and age.

Variable 1	Variable 2	p-value	Correlation coefficient
Age	Betterment of ketogenic diet	0.01	0.143

 Table 3: Correlation – Age and betterment of ketogenic diet

Correlation analysis is used to test the relationship between betterment of ketogenic diet and age. It shows that there is correlation between betterment of ketogenic diet and age. There is a low correlation between betterment of ketogenic diet and age. It infers that if the age is high then the people are not bothered about ketogenic diet.(r = 0.143, p = 0.01)

Hypothesis 3: Level of Agreeability towards the practice of ketogenic diet among the occupation groups.

		Sum of		Mean		
		Squares	df	Square	F	Sig.
High blood pressure	Between Groups	244.496	2	122.248	92.002	.000
	Within Groups	2467.501	1857	1.329		
	Total	2711.998	1859			
To loss weight	Between Groups	177.840	2	88.920	116.375	.000
	Within Groups	1418.894	1857	764		
	Total	1596.733	1859			
High blood sugar	Between Groups	86.344	2	43.172	59.428	.000
	Within Groups	1349.042	1857	0.726		
	Total	1435.387	1859			
Abdominal obesity	Between Groups	26.641	2	13.320	17.942	.000
	Within Groups	1378.655	1857	.742		
	Total	1405.296	1859			
stress	Between Groups	263.058	2	131.529	151.115	.000
	Within Groups	1616.316	1857	.870		
	Total	1879.374	1859			

Table 4: ANOVA for Reasons for practice of ketogenic diet

Using ANOVA it was analysed whether the level of agreeability regarding reasons for practice of ketogenic diet depends on occupation. It was found that there is significant difference in the mean scores of reasons for practice of ketogenic diet and occupation.

CONCLUSION

A carbohydrate level is reduced by increasing fat through ketogenic diet that reduces the production of glucose and insulin. From the research, it is clear that the ketogenic diet has benefits especially for diabetes. The ketogenic diet should be considered as an essential one for the persons affected with Type II diabetes. Many studies have found that the keto diet has worked very well as it uses all the muscle fat and reduces the weight of the person. This diet is very much needed for the obese patients. I recommend the same for reducing the weight of the person and for curing diabetes. When we implement a ketogenic diet in the eating process, it is affirmed that the diet can make the healthier by decreasing the risk of cholesterol, blood pressure, etc.

REFERENCES

- [1]. Abbasi, Jennifer. "Interest in the Ketogenic Diet Grows for Weight Loss and Type 2 Diabetes." *JAMA: The Journal of the American Medical Association*, vol. 319, no. 3, Jan. 2018, pp. 215–17.
- [2].Augustin, Katrin, et al. "Mechanisms of Action for the Medium-Chain Triglyceride Ketogenic Diet in Neurological and Metabolic Disorders." *Lancet Neurology*, vol. 17, no. 1, 2018, pp. 84–93.
- [3].Barry, Denis, et al. "The Ketogenic Diet in Disease and Development." *International Journal of Developmental Neuroscience: The Official Journal of the International Society for Developmental Neuroscience*, vol. 68, Apr. 2018, pp. 53–58.
- [4].Grandl, Gerald, et al. "Short-Term Feeding of a Ketogenic Diet Induces More Severe Hepatic Insulin Resistance than an Obesogenic High-Fat Diet." *The Journal of Physiology*, vol. 596, no. 19, Oct. 2018, pp. 4597–609.
- [5].Kosinski, Christophe, and François R. Jornayvaz. "Effects of Ketogenic Diets on Cardiovascular Risk Factors: Evidence from Animal and Human Studies." *Nutrients*, vol. 9, no. 5, May 2017, doi:10.3390/nu9050517.
- [6].Rezaei, Shahabeddin, et al. "The Influence of Ketogenic Diet on Liver Function in Children and Adolescents with Intractable Epilepsy." *Journal of Comprehensive Pediatrics*, vol. In Press, no. In Press, 2017, doi:10.5812/compreped.12609.
- [7].Zhang, Qiang, et al. "Treatment of Diabetic Mice with a Combination of Ketogenic Diet and Aerobic Exercise via Modulations of PPARs Gene Programs." *PPAR Research*, vol. 2018, Mar. 2018, p. 4827643.