



Effects of Aspartame: Study of Risks and Benefits

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SUMMARY. Artificial sweeteners are commonly employed as food additives because of their low nutrient value. They are used as sugar surrogates. Over the last few decades the consumption of artificial sweeteners has been greatly increased. Aspartame (aspartyl-phenylalanine-1-methyl ester) an artificial sweetener is not only consumed by diabetic individuals but, also by weight conscious individuals. However, a number of researches have revealed that consumption of aspartame is associated with health hazards such as mental, behavioural and metabolic changes. The purpose of the study is to evaluate the psychological and metabolic effects of aspartame in diabetic population. For this purpose, three hundred and forty diabetic patients were enrolled in the study with their informed consent. A questionnaire was asked to be filled by the participants. The results revealed that aspartame on long term impair memory and cognition with no effect on digestion in diabetic individuals. Similarly, 80% of the participants were found to be addicted to aspartame. Hence, it is concluded that aspartame is associated with psychological impairment and addiction. It should be used with caution and requires monitoring of the psychological functions in individuals suffering from diabetes.

RESUMEN. Los edulcorantes artificiales se emplean comúnmente como aditivos alimentarios debido a su bajo valor nutritivo. Se usan como sustitutos de azúcar. En las últimas décadas, el consumo de edulcorantes artificiales se ha incrementado en gran medida. Aspartame (aspartil-fenilalanina-1-metiléster) un edulcorante artificial no sólo es consumido por individuos diabéticos, sino también por individuos con sobrepeso. Sin embargo, una serie de investigaciones han revelado que el consumo de aspartamo está asociado con riesgos para la salud tales como cambios mentales, conductuales y metabólicos. El objetivo del estudio es evaluar los efectos psicológicos y metabólicos del aspartamo en la población diabética. Para este propósito, trescientos cuarenta pacientes diabéticos se inscribieron en el estudio con su consentimiento informado. Se pidió a los participantes que contestaran un cuestionario. Los resultados revelaron que el aspartamo a largo plazo afecta la memoria y la cognición sin efecto sobre la digestión en individuos diabéticos. Del mismo modo, el 80% de los participantes fueron adictos al aspartamo. Por lo tanto, se concluye que el aspartamo se asocia con deterioro psicológico y adicción. Debe usarse con precaución y requiere el control de las funciones psicológicas en personas que padecen diabetes.

KEY WORDS: Diabetes, artificial sweetener, aspartame, psychological effects

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