

Cartas al director

El consumo de alcohol y la desregulación hormonal de la ingesta de alimentos: sería un camino a la contribución de la obesidad?G. D. Pimentel¹, F. S. Lira² y J. C. Rosa²¹Department of Internal Medicine, FCM, State University of Campinas (UNICAMP), Campinas, SP, Brazil. ²Department of Physiology Nutrition, Federal University of Sao Paulo (UNIFESP), Sao Paulo, SP, Brazil.

Historically, the consumption of alcoholic beverages in conjunction with meals or as an aperitif has been observed worldwide.¹ Moreover alcohol intake has been always a topic of great interest to medical community and patients. It follows from this those medical practitioners need information on how best to respond the patients' questions about alcohol and gain weight.

Recent studies have reported increased appetite after alcohol intake, and has been suggested that alcohol may have multiple effects on appetite, such as suppresses fatty acid oxidation and leptin and stimulated neuropeptide Y (NPY) and ghrelin, affecting innumerable neuroendocrine and peripheral systems involved in appetite control.^{2,3}

Several studies also showed that the alcoholist and/or when the individual pass for periods of withdrawal occur increase of hunger and food intake.^{3,4} Clinical studies showed that these processes homeostatic are mediated by greater secretion of ghrelin and by the powerful orexigenic neurons, such as NPY and agouti-related protein (AgRP).^{1,3}

Briefly, it is known that alcohol intake moderate to high (up to two doses equivalent to 30 grams of ethanol/day) can decrease the oxidation of fatty acids in the liver, increases or not change energy expenditure, activates the secretion of NPY,⁴ activates the release of ghrelin,^{2,3} a orexigenic hormone and inhibit the anorexigenic hormones, such as leptin,⁵ serotonin (5HT),¹ and GLP-1.⁵ On the other hand, abstinence/alcohol dependence increases the desire to eat sweet food, leading to weight gain and obesity.

However, no study had showed that the effects of alcohol intake alone lead to weight gain. Likewise, is known that alcohol intake is more associated with

abdominal fat than with body mass index. At the same time, strong evidences^{3,5} indicates that ethanol intake from low to high quantities may to stimulate several orexigenic peptides and inhibit the anorectic peptides. However, the literature is still scarce and more epidemiological studies could report better the relationship between alcohol and hormones that appetite control.

Therefore, the relation between alcohol intake and obesity represent a challenge for medical providers and scientific investigators, and also contentment for patients who are vulnerable to the misinformation that exists regarding alcohol and appetite regulation. Otherwise, health care providers are in the position of having to simplify much of the information provided by the scientific investigations.

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Correspondencia: Gustavo Duarte Pimentel.
Department of Internal Medicine.
State University of Campinas (UNICAMP).
Rua: Tessália Vieira de Camargo, 126.
CEP: 13083-970 Distrito Barão Geraldo-Campinas/SP, Brazil.
E-mail: gupimentel@yahoo.com.br

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