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Nutritional assessment in Anorexia Nervosa and Bulimia Nervosa

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Abstract

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Dietary intake was assessed by conventional methods in eating disordered patients, and controls. A validation study of recalled versus observed dietary intake, yielded high correlations. The relative distribution of energy between macronutrients (protein, fat, carbohydrates) did not differ between anorectics and bulimics, but when sources of macronutrients were calculated, qualitative differences were evident. Anorectics avoided fat and fatty products, and to obtain energy they consumed bread, grains and cereals, lean fish or meat, and non-fat dairy products. Fruits and vegetables occurred, but were not essential.

Normalweight bulimics and anorectic bulimics shared an identical eating pattern, both regarding the nonpurged eating (the food consumed during the intermittent starvation) and binge eating. During the nonpurged eating, bulimics consumed fruits and vegetables, meat and fish, and dairy products. They consistently avoided bread and cereals (complex carbohydrates), thus making this source of carbohydrates the distinguishing feature versus anorectics and controls. During binge eating, bulimics seemed to compensate the low intake from complex sources by consuming large amounts of these carbohydrates.

It was hypothesized that the nonpurged diet among bulimics might lead to a decreased synthesis of the neurotransmitter serotonin, which could account for the depression commonly seen in bulimics. The food items consumed during binges were precisely those which promote a rapid synthesis of serotonin, and binge eating could thus be viewed as selfmedication. The anorectic eating pattern, with generous amounts of complex carbohydrates, might possibly be protective against binge eating. Their high intake of dietary fibres may instead contribute to the high prevalence of early amenorrhoea among anorectics, since fibres exert an adverse effect upon the absorption of non-haem iron. This in turn could affect the irondependent conversion of thyroxine to triiodothyronine, which controls sexual functions, thermoregulation, basal metabolic rate and bowel functions - all of which are disturbed in anorexia nervosa.

Key words: Eating disorders, dietary assessment, nutritional status, food selection, serotonin, depression, fibres, amenorrhoea.

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