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# Wellness and Obesity: Implications for Health Care Costs Among Restaurant Managers

## **Abstract**

Overeating, inadequate exercise, work-related stress, and long working hours are accepted issues among restaurant managers. The underlying question was whether such life styles affect employers' health care cost and restaurant managers' health and ability to cope with imposed business requirements. The author discusses strategies to help employers reduce health care costs, increase employee productivity, and improve job satisfaction.

## **Keywords**

Said Ladki, Food and Beverage

# Wellness and Obesity: Implications for Health Care Costs Among Restaurant Managers

by  
Said M. Ladki

*Overeating, inadequate exercise, work-related stress, and long working hours are accepted issues among restaurant managers. The underlying question was whether such life styles affect employers' health care cost and restaurant managers' health and ability to cope with imposed business requirements. The author discusses strategies to help employers reduce health care costs, increase employee productivity, and improve job satisfaction.*

Although the literature on weight management is extensive, there are relatively few reports on obesity prevention and intervention programs specifically designed for restaurant managers. Brownell stated that the prevalence of obesity in the American population ranges from 15 to 50 percent, with the percentages varying among ethnic backgrounds, gender, and age.<sup>1</sup> Although the definition of obesity varies, it is clear that obesity increases the risk of medical complications, including diabetes and hypertension. According to the personnel director of a national restaurant chain, a U-shaped relationship between body mass and mortality is found, with the highest mortality in obese individuals.<sup>2</sup> The lack of guidance in meal selection has been reported to affect negatively adults' dietary food intakes. Marrale, Shipman, and Rhodes suggest that food service organizations should provide nutritional information on served foods to improve dietary intakes.<sup>3</sup>

Among restaurant managers, a great deal of interest is focused on proper nutrition, obesity, and weight control. Concern about these areas stems from personal awareness of body image and fear of obesity. If a program offering nutrition and weight control information is provided, fitness among restaurant managers may contribute to reduced organizational health care costs.

As health care costs continue to rise, more food service employers are recognizing the value of proper nutritional and fitness

practices. Whether interest is in health maintenance (prevention, wellness) or therapy (weight control, cardiac rehabilitation), today's health conscious food service employers are becoming more attentive to the close relationship between diet and exercise. Kirpatrick stated that in this decade, societal interest in health promotion has increased, and people are becoming more interested in taking control of their own health.<sup>4</sup>

### **Corporations Initiate Wellness Programs**

To reduce organizational health care costs and to encourage health conscious individuals, food service organizations such as General Mills and the Kahler Corporation have initiated wellness programs aimed at changing lifestyles (diet, exercise, smoking, drinking, and stress). Such organizations have recognized the value of keeping employees well in order to maintain productivity, reduce the number of illness-related absences, and lower health care costs. Organizational psychologists believe that preventive health care at the work site is a fiscally responsible contribution to cost control.

Preventing and treating obesity involves a spectrum of activities, including cognitive and attitudinal techniques, skills development, behavior modification, motivational strategies, and environmental changes. These efforts can be grouped according to their primary focus or avenue of delivery, including individuals, groups, and environment. Therefore, the objectives of this study have been to ascertain if a relationship exists between obesity and job performance, job satisfaction, and health care costs among restaurant managers and to evaluate restaurant managers' attitudes toward weight loss and participation in wellness programs.

Descriptive and analytical research techniques were used to investigate the impact of restaurant managers' obesity and wellness on employers' health care costs. The study design employs three dependent variables: job performance, job satisfaction, and health care costs. Obesity, wellness, and demographics represent the independent variables.

As suggested by Carmines and Zeller, this study's sample selection placed more emphasis on increasing the validity of collected data, rather than ensuring that the sample was representative of a population.<sup>5</sup> Such emphasis necessitates the use of purposive sampling technique. According to Dillman, purposive sampling is used in cases where certain important segments of the target population are intentionally represented in the sample.<sup>6</sup> The sample size was 157 mid-Atlantic restaurant managers employed in the following food service institutions: family restaurants, fine dining restaurants, hotel restaurants, and fast food restaurants.

A 56-item instrument was developed to assess restaurant managers' need for a weight management program in the workplace. The instrument was divided into three sections. The first

described demographics, i.e., age, gender, educational level, wage, years of experience, height, weight, and job classification. The second assessed respondents' attitudes toward obesity, weight control, eating habits, and degree of fatness. The third collected information on managers' interest in participating in a workplace sponsored wellness and/or weight management program, and program preference (type of physical activity).

With the exception of the first section, all questions were answered using a semantic differential scale. For example, to gather information about guilt and responsibility in weight control, and difficulty of weight management, respondents expressed their reactions on a five-point scale anchored by bi-polar adjectives, 1 = weight control is difficult to 5 = weight control is easy.

For the purpose of evaluating respondents' perception about their degree of fatness, a Body Mass Index (BMI) according to Miller, Coffman, and Linke,<sup>7</sup> and Kunkel<sup>8</sup> was assigned. Researchers analyzed and reported the difference in perception of body image between males and females. Underweight was considered BMI < 20, average weight BMI 20-24.9, a little overweight BMI 25-29.9, and a lot overweight BMI >30.

The instrument's content validity was evaluated by a panel of food service and dietetic counselors to ascertain the extent to which the items reflected the usual components used in weight control, attitudes toward weight control, and common motivations for weight loss. The instrument was then pilot tested by residence hall food service employees at a large mid-Atlantic university. Through the pilot test, the reliability of the instrument was evaluated by the Cronbach coefficient alpha, according to Green, Tull, and Albaum.<sup>9</sup>

Individual meetings were arranged with the management of each participating restaurant to solicit participation and explain the intent of the study. Those who agreed to participate had designated a date to have the instrument distributed to the rest of the management team. Upon completion, the instrument was returned to the investigator and prepared for data analysis.

The actual degree of fatness for each respondent was evaluated from self-reported height and weight by calculation of the Body Mass Index (BMI). The validity of self-reported height and weight has been reported by Stewart, Jackson, and Beaglehole.<sup>10</sup> Mean scores between male and female employees were tested for significance using ANOVA. Multi-variate regression analyses by job classification and demographics were conducted to determine the relationship between obesity, age, gender, and health care cost. In relation to obesity, Dunn's method for multiple pairwise comparisons of means was used to determine which age group means were significantly different. Those less than 25 years of age and those older than 56 years of age were eliminated from the Dunn's test because of the small sample size. After data analysis, an alpha level of  $p < .05$  was assigned for all tests of significance.

### **Food Is Tempting to Employees**

Of the 157 respondents, 56 percent (n=88) were female and 44 percent (n=69) were male. Female managers (52 percent) had completed a college education, as compared to 41 percent of their male counterparts. For female managers, regression analysis findings revealed that the relationship between age and weight was not significant. For male managers, the relationship was significant (MS = 29.84, F = 1.03, p = .05). Age, job classification, and type of restaurant facility were the only demographic variables significantly related to obesity. Sample demographic characteristics are summarized in Table 1.

Results of Dunn's multiple comparison indicated that managers in the 46 to 55-age group experienced higher levels of obesity than did younger managers (p<.05). Multi-variate regression analyses revealed that male restaurant and production managers were significantly more overweight than male bar and dining room managers (p<.05). Female managers who held positions in the food production areas were slightly more overweight than their female counterparts in the bar and dining room departments; however, this difference was not significant. Forty-seven percent of male production managers believed that their continuous contact with "exotic, enticing, and tempting" food products along with poor eating habits were the reasons for their obesity, while 21 percent of the same group acknowledged that their obesity was attributed to poor awareness of dietary and nutritional practices.

Among male managers, those who worked in family and hotel restaurants were significantly more overweight than those who worked in fast food and fine dining facilities (p<.05). The ones employed in family and hotel restaurants attributed their obesity to environmental issues such as slow business periods, large salad bars, daily specials, variety in menu selection, and management benefits (two free meals per day). Male managers employed in fast food and fine dining facilities (13 percent) were slightly overweight and attributed their weight problem to poor exercise, munching on the job, and limited high fat menu selections.

When managers rated the importance of normal weight to health and physical fitness, female managers displayed more concern toward maintaining good weight than their male counterparts (p<.05). Female managers, in general, monitored food intake, exercised, and felt comfortable with their body image. Male managers displayed concern for their body weight in relation to their health, but failed to monitor food intake or exercise. Obese male managers had poor perception of their body images, reported being dissatisfied with their bodies, and felt that their bodies were unattractive (p<.05).

**Table 1**  
**Sample Demographic Characteristics**  
**(n=157)**

<b>Job Grouping</b>	<b>male</b> <b>(n=69)</b>	<b>female</b> <b>(n=88)</b>
	%	
<b>Age</b>		
< than 25 years	7	0
26-35	21	27
36-45	36	43
46-55	28	25
> than 56 years	8	5
<b>Education</b>		
some grade school	0	0
completed grade school	0	0
some high school	11	0
completed high school	14	14
some technical college	6	6
completed technical college	10	21
some college	18	7
completed college	41	52
<b>Employment status</b>		
full time	76	69
part time	24	31
<b>Job classification</b>		
restaurant general manager	35	26
dining room manager	19	34
production manager	23	17
bar manager	6	4
line supervisor	17	19
<b>Facility classification</b>		
family restaurants		37
supper-dining restaurants		19
hotel restaurants		11
fast food restaurants		33

**Table 2**  
**Interest in Participating in a Worksite**  
**Weight Control Program**

Topic of Interest	Frequency of Mention	
	Men	Women
Evaluation of food habits	80%	81%
Behavior modification techniques	70%	82%
Dietary recommendations	68%	75%
Health consequences of overweight	61%	53%
Heart disease	59%	52%
High blood pressure	57%	54%
Exercise	52%	60%
Fad diets and vitamin supplements	46%	66%

### **Overweight Status Impacts Job Performance**

Thirteen percent of the obese managers affirmed that their overweight status was impacting their job performance, i.e., slow movement, shortness of breath, short temper, backache, and knee and foot pain due to extensive standing while welcoming guests or monitoring production lines, and contributing to employers' increased health care cost. Although it was not significant, a positive relationship between obesity and increase in health care costs was found. A negative relationship between obesity and job satisfaction was found as well; 27 percent of obese restaurant managers reported that they were not happy in their jobs. They felt that quitting their jobs or changing professions might help them overcome their problems with obesity. This feeling stemmed from their overeating on the job and having little or no physical exercise after the job. Other individuals (63 percent) felt ridiculed for being obese and working near food or in the food service industry. Overall, obese restaurant managers were dissatisfied with their jobs and felt the need to change professions.

Respondents (54 percent) were interested in participating in a weight control program in the workplace; these represented 29 percent of the males and 56 percent of the females. Respondents who were interested in a work site weight control program were asked to identify the topics of interest and then to rank their preferences in program format. Issues of greatest interest to both sexes included evaluations of employees' food habits, changes in eating habits through behavior modification, and education about nutrition and exercise, as shown in Table 2.

The weights, heights, and proportions of subjects who were overweight/obese by age were compared with the National Heart



**Table 3  
Subjects by Age**

	26-35 years	36-45 years	46-55 years	> than 55 years
<b>Weight (kg)</b>				
Restaurant managers	77.2 ± 9.8	81.7 ± 4.9	82.4 ± 9.9	88 ± 8.6
NHF study	76.6	78.4	79.7	77.1
<b>Height (cm)</b>				
Restaurant managers	179 ± 79	177 ± 6.0	174 ± 3.7	170 ± 6.4
NHF	176	174	174	172
<b>Proportion overweight*</b>				
Restaurant managers	42.9%	57.9%	77.1%	100%
NHF study	36.3%	45.6%	53.1%	53.1%

% weight/height<sup>2</sup> of 25 kg/m<sup>2</sup> and over.

\*Significantly higher than NHF result (p<.05).

Foundation (NHF) sample.<sup>11</sup> In all age groups, restaurant managers had a higher prevalence of being overweight than did the NHF sample. The 46 years and older age group reported a significantly higher Body Mass Index (BMI) than did the NHF sample. Over 67 percent of the surveyed sample was overweight, and the prevalence of being overweight increased with age (Table 3).

Respondents Body Mass Index (BMI) was compared to Kunkel categories, i.e., "underweight," "average weight," "a little overweight," or "a lot overweight."<sup>12</sup> Over half of the men and women considered themselves a little or a lot overweight, and such perception of body weight was similar to that of Kunkel.

### **Females Are More Aware**

Findings suggested that female restaurant managers had greater nutritional awareness/knowledge and practiced safer dietary intake than their male counterparts. Such awareness/knowledge was illustrated by the concern that female managers had toward their health, body image, and food intake.

Overall, male restaurant managers demonstrated limited nutritional awareness and knowledge, limited appreciation of physical well-being and fitness, and limited interest in committing themselves to safe dietary practices. To improve health among all employees, corporate-sponsored wellness programs ought to generate interest among male employees, while not alienating the female employees. Physically fit managers may serve as role models to obese employees as in the Big Brother/Big Sister support environment. Popular wellness programs that are accepted by employees (dietary counseling, exercise, and behavior modification) should be implemented.

Although Webster, Porritt, and Bernann found that excess weight has been associated with physiological variables, including increased blood pressure and plasma cholesterol,<sup>13</sup> obese restaurant managers appeared to accept their obesity regardless of health associated risks. Most overweight participants not only consider their present weight as not harmful to their health, but also acknowledge the fact that being overweight occasionally presented a negative impact on their job performance. Food service organizations interested in reducing employee health care costs should set physical standards (weight, blood pressure, blood level cholesterol, glucose, and lipid profile) to identify problem health areas among employees and provide appropriate follow-up support.

Obese employees are more prone than those who are non-obese to sicknesses and diseases that require medical attention. Such expensive medical care is the reason for employers' increased medical expenses. Therefore, developing obesity prevention and intervention programs for restaurant managers could result in employee-sustained behavioral changes, lower health care costs, and improved productivity and employee morale. Other benefits may include a reduction in obesity-related absenteeism, and, most important, a reduction in the number of professional restaurant managers who exit the industry due to their obesity. At present, however, no such programs exist because of the lack of information available on health, diets, and lifestyles specific to restaurant managers. If such a program is to be implemented, it must be specifically targeted to restaurant professionals, or be part of a more broadly-based institutional initiative.

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