

# An Alternative Approach to Nutrition: Intuitive Eating

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## ABSTRACT

Intuitive eating is the act of eating in response to physiological hunger and satiety signals. In intuitive eating, environmental and emotional events are not affected, and it is possible to display intuitive eating behavior only by responding to bodily signals. Medical nutrition is a primary method in the treatment of obesity, the prevalence of which is increasing day by day. After medical nutrition therapy, drug therapy and surgical intervention come to mind. In addition to these medical interventions, intuitive eating and eating awareness practices, which are proposed approaches, are also methods with a high level of success in preventing obesity. In this review, the approaches to intuitive eating and the factors affecting intuitive eating behavior are discussed. Emotional eating theories, factors affecting emotional eating, and risk factors are emphasized, and the relationship between intuitive eating and emotional eating is examined. An inverse relationship was found between emotional eating and intuitive eating behaviors, and it was concluded that as the awareness of eating increased, the level of intuitive eating increased and emotional eating behavior decreased. Making peace with food is one of the basic principles of intuitive eating; it has been observed that the behavior of eating without any prejudice and without classifying foods as good or bad increases nutritional pleasure, and it has been concluded that individuals with eating behavior disorders, especially consuming foods that are described as "forbidden," reduce their eating attacks.

**Keywords:** Eating awareness, emotional eating, intuitive eating, obesity

## INTRODUCTION

Eating behavior is one of the basic behaviors that living things display throughout their lives in order to survive. Eating behavior develops with age and may change according to mood. The behavior of eating for survival can give pleasure to the individual, while at the same time, it can cause inadequate or excessive nutrition problems and also invite health problems such as eating disorders. Eating behaviors are highly influenced by human emotions.<sup>1</sup>

### Intuitive Eating

Intuitive eating is an approach developed in response to physiological hunger and satiety signals, without being affected by emotional and environmental stimuli.<sup>2</sup> Since intuitive eating is an approach that imposes on people how they should respond to their physiological signals, some addictions that people unintentionally create under the influence of external factors related to their bodies and foods are discussed under the name of intuitive eating.<sup>3</sup>

### Basic Approaches to Intuitive Eating Unconditional Consent to Eat

Unconditional consent to eat reflects readiness for consumption in response to homeostatic hunger signals and the desired food.<sup>4</sup> It is also expressed as the ability of an individual to eat the foods they want without hesitation when they are hungry and to refuse to label foods as "forbidden" or "bad."<sup>5</sup> Individuals who restrict the time of eating, amount and type of food consumed experience more feelings of deprivation and the eating situation can get out of control more easily. Dietary restriction can increase anxiety about food in the long run.<sup>4</sup>

### Eating for Physical Rather Than Emotional Reasons

Individuals with intuitive eating behavior do not use their eating behavior to cope with their emotional fluctuations. Instead, the sole purpose of eating behavior is to satisfy the homeostatic hunger drive.<sup>5</sup> When they are hungry, they exhibit the behavior of eating to avoid the feeling of hunger, and when the feeling of satiety occurs, they stop the eating behavior.<sup>6</sup> Since the level of intuitive

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eating improves coping skills, individuals who eat intuitively are less likely to use food as a means of coping with emotions.<sup>2</sup>

### **Relying on Hunger and Fullness Signals to Determine When and How Much to Eat**

According to intuitive eating, the innate homeostatic hunger and satiety signals of the human body control the eating behavior. Awareness of these innate internal signals can be replaced by external rules about when and how much to eat as social messages about the effect of food restrictions on weight loss in adulthood are adopted.<sup>7</sup>

### **Intuitive Eating and Physiological Signals**

It is known that the intuitive eating instinct is innate, and if we respond to our body's signals, the body is naturally capable of maintaining the required body weight and adjusting the nutrients it needs. This innate ability of a person is called "body wisdom." As a result of a recent study, it has been shown that the rate of dieting and eating disorders is lower in individuals who respond to signals from their body about when and how much to eat. Likewise, it has been shown that the rate of binge eating disorder is lower for women, and the rate of chronic dieting for women is lower because they stop eating when they feel full.<sup>8</sup> People's insistence on eating the food they make, advertisements encouraging them to eat, large portions in some restaurants, and so on are some of the factors taught by the society that prevent the body from responding to the hunger-satiety signals, that is, trying to undermine the innate bodily instinct. If the people who take care of the child (parents, grandparents, caregivers, etc.) force the child to eat when the child does not want to eat and use the food they want to consume to calm the children, the children's confidence in signals such as hunger, satiety, and appetite decreases and the development of body wisdom is prevented.<sup>9</sup>

#### **Main Points**

- In this review, the effect of intuitive eating on emotional eating and eating awareness was investigated. The relationship between eating awareness and eating behavior disorders is emphasized.
- The relationship between intuitive eating and body weight control and its effect on dieting behavior are mentioned.
- As a result of the literature reviews, a significant relationship was found between the intuitive eating behavior score and body weight control.
- Studies have shown that individuals with eating awareness have a lower risk of experiencing eating disorders.

## **Factors Affecting Intuitive Eating**

### **Gender**

One of the most influential factors on intuitive eating is gender. As a result of a study that examined the relationship between the level of intuitive eating and gender and conducted with the participation of 260 university students, it was seen that male individuals had higher total intuitive eating scores compared to female individuals. At the same time, it was concluded that the rate of displaying emotional eating behavior among men is lower than that among women.<sup>10</sup>

A significant gender difference has been noted in intuitive eating and health awareness.<sup>11</sup> Studies have shown that intuitive eating behavior is associated with low body mass index (BMI) for both men and women.<sup>12</sup>

In a study conducted on 182 female and 68 male participants, the average of the intuitive eating scale scores of men was found to be higher than that of women.<sup>13</sup>

### **Obesity**

As a result of studies examining the relationship between BMI and intuitive eating, it was concluded that there is an inverse relationship between intuitive eating behavior and BMI.<sup>14</sup>

In a study examining the relationship between intuitive eating behavior and body weight, it was determined that individuals with high intuitive eating scores had a lower BMI compared to individuals with low intuitive eating scores.<sup>11,12</sup> It is also suggested that intuitive eating plays a protective role in the development of obesity. As a result of another study conducted on students, it was found that people with high intuitive eating scores had lower BMI scores, lower health awareness, and higher behavior of eating for pleasure.<sup>12</sup>

### **Dieting Behavior**

Intuitive eating affects dieting behavior positively because it increases awareness of eating and directs it to healthy foods.<sup>15</sup> On the other hand, because diet is compatible with restrictions on individuals, dieting behavior negatively affects intuitive eating.<sup>15,16</sup> Given the failure of calorie-restricted diets in reducing body weight in the long term, intuitive eating is a very convenient way of eating to maintain appropriate body weight as a solution to the eating behavior relationship that is disrupted by long-term restrictive diets.<sup>16</sup> Weight loss is not one of the main goals of intuitive eating, but intuitive eating allows approaching the ideal body weight.<sup>12</sup>

### **Psychological Factors**

Like many eating-related behaviors, intuitive eating is also affected by psychological factors. Body dissatisfaction can

result in high BMI and excessive fat accumulation in the body as a result of unbalanced food intake. As the intuitive eating score increases, body satisfaction increases and eating disorder symptoms decrease.<sup>3</sup>

### **Emotional Eating**

Emotional eating is an eating disorder that is developed to cope with negative emotions and is characterized by excessive food consumption.<sup>17</sup> Studies have suggested that eating attacks may be closely related to emotional eating behavior. It has been observed that this uncontrolled binge eating reaction triggered by negative emotions is more common in women with eating disorders and in obese individuals.<sup>17,18</sup>

Stress and negative emotions can prevent dieters from being loyal to self-imposed rules and restrictions on food intake. In the case of undereating, the body distinguishes self-imposed food restriction from real food scarcity and acts as if it were in starvation mode. In this case, while the metabolic rate slows down, hunger and appetite increase.<sup>18</sup>

### **Emotional Eating Theories**

Although the relationship between negative emotions and binge eating is clearly associated, it is not known exactly which negative emotion triggers the urge to eat in individuals and by which mechanism. Theories about emotional eating are generally based on obesity research, since emotional eating behavior reduces success in dieting and prevents reaching the ideal body weight.<sup>19</sup>

### **Schachter's Internal-External Theory of Obesity**

The internal-external theory of obesity put forward by Schachter<sup>20</sup> proposes that while the symptoms of negative emotions such as fear, anxiety, and unhappiness in the body cause a decrease in food consumption for individuals with the ideal body weight, this does not happen for individuals with a BMI above 30 kg/m<sup>2</sup> who are in a state of insensitivity to internal stimuli. In Schachter's theory, it is stated that some aspects of hunger are learned, but this learning situation is not valid for individuals with body weight above normal. In the external eating theory, individuals are not sensitive to their homeostatic hunger and satiety signals. The extrinsic eating theory leads to the resumption of the eating event. The eating perceptions of individuals with an external eating attitude are only revealed when they are in the same environment with the food. External eating behavior occurs as a result of being affected by sensory characteristics such as the smell and appearance of the food.<sup>21</sup>

### **Restriction Theory**

The basis of the restriction theory is that as a result of the excessive desire to eat foods, the individual creates

a restriction in his/her own mind against this desire. Individuals with restrictive eating behaviors constantly complain about overeating and restrict their eating habits. What is mentioned in this restriction is the restriction that individuals make by their effort to consume less than the amount they want to eat, not to take food as much as they need.<sup>22</sup>

Individuals who limit their long-term eating behavior cause this restriction to disappear beyond their control after a while, and this behavior leaves its place to excessive eating behavior. The transformation of restrictive eating into excessive eating behavior is generally seen in individuals who restrict the amount of energy they need to take daily.<sup>23</sup>

### **Escape Theory**

The escape theory is the theory that is claimed to be used as an escape or self-defense from environments in which emotional eating causes negative awareness. It is thought that the escape theory is exhibited to avoid being in the same environment with stimuli that can change awareness or to distract attention from these stimuli. According to this theory, individuals who display emotional eating behavior tend to flee in order to avoid negative emotions and deterrent effects when they are confronted with information that threatens their selves. These individuals escape from this awareness by the act of turning to external stimuli that result in overeating.<sup>24</sup>

To make a general comment, it can be said that emotional eaters use their eating behaviors as a way of coping with negative emotions, and then this behavior gets out of control and becomes problematic.<sup>25</sup> The views advocated in the theories of emotional eating, that there is a tendency to avoid the negative effects of emotional eating, are also related to the way individuals cope with other independent situations. Strategies using these coping styles, especially emotion-directed and avoidance behaviors, were generally found to be closely associated with dieting, binge eating syndrome, and eating disorders.<sup>26</sup>

### **Physiological Mechanisms in Emotional Eating Behavior**

The internal mechanisms underlying binge eating behavior in emotional situations have not been clarified yet. Physiological changes due to nutrients are believed to have an effect on mood. Some studies on this subject say that there is a positive change in mood after consuming foods with a high carbohydrate content. This effect is related to the secretion of serotonin from the brain after eating. Proteins are also suggested to have a positive effect on emotional state. This situation is related to the fact that the protein, which is found in limited amounts in food, increases the tryptophan level in the blood-brain

barrier and causes the secretion of serotonin in the human body. Another study reported that a high intake of tryptophan-derived hydrolyzed protein has a positive effect on mood in the case of acute stress.<sup>17</sup>

## Risk Groups for Emotional Eating

### Children and Adolescents

It is seen that uncontrolled overeating in adolescents and children is spreading rapidly. In addition to obesity being a great risk for this group, there is also the possibility of eating disorders such as anorexia nervosa. Children and adolescents are a group that deserves great attention since eating disorders are most commonly seen in adolescence.<sup>27</sup> Early detection of emotional eating in this group is very important for the prevention of eating disorders and obesity.<sup>28</sup> In a study on the subject, the relationship between parenting and emotional eating was examined and it was determined that the family had a significant effect on exhibiting emotional eating behavior. Literature studies reveal that the self-efficacy and emotional maturity of children with authoritarian parents are more developed compared to other children. Children of families with weak bonds with their children are also much more likely to display unhealthy eating behaviors, as they will experience more emotional distress.<sup>29</sup>

### Obesity

It is known that emotional eating plays an active role in the etiology of obesity. It has been shown that the food consumed due to stress causes an increase in body weight. Obese individuals go to the method of suppressing the hunger they feel through foods in order to reduce emotional stress due to their previous experiences.<sup>30</sup> It is emphasized that teaching emotion regulation skills is important for the effective treatment of obesity in children.<sup>31</sup> In a study examining obese and normal individuals, the eating behaviors of individuals in response to anxiety-triggering emotions were compared, and as a result, the emotional eating scores of the obese individuals were found to be much higher than those of normal individuals.<sup>32</sup>

### Other Problems

Negative emotions such as stress, depression, and anxiety can cause an increase or decrease in food consumption. Emotional eating can occur through various mechanisms such as eating to cope with negative emotions, psychological fluctuations accompanied by emotional changes, and confusing internal states of hunger and satiety.<sup>33</sup> Apart from the groups specified for emotional eating, individuals with eating disorders and those using weight loss treatments are also at risk for emotional eating. In addition, some studies have noted that individuals with

binge eating disorder or bulimia nervosa are more alexithymic than normal individuals.<sup>17</sup>

## Factors Associated with Emotional Eating

There are various ideas about the effect of emotions on eating behavior. For example, a study examining the extent to which negative emotional states are effective in overeating showed that negative emotions trigger food intake more than positive emotions do.<sup>34</sup>

### Stress

Stress has both direct and indirect negative effects on health. There is some evidence that it adversely affects other physiological functional processes, with adverse cardiovascular function, suppressed immune response, and some contributing to cancer. Eating is one of the behaviors that are heavily affected by stress and impair health indirectly. Some individuals increase their food consumption when they feel stressed, which leads to obesity and related health problems.<sup>34,35</sup>

Stress also has an impact on what food people choose to eat. Studies on what kind of food people prefer when under stress have concluded that high-calorie desserts and fatty snacks are preferred more under stress.<sup>35</sup>

### Depression

Another factor that triggers eating behavior is depression. Depressed individuals often engage in binge eating behavior as a way of regulating their negative mood.<sup>36</sup> Recent systematic reviews and meta-analyses have concluded that there is a positive association between depressive symptoms and obesity.<sup>37</sup> At the same time, it has been found that depressed individuals prefer foods with high energy content and their BMIs are higher than that of individuals with stable mood.<sup>38</sup>

### Parent Modeling

Emotional eating behavior can be triggered through modeling. In particular, parents can seriously affect their children's eating behavior in food selection. The most important risk factor for childhood obesity is family obesity. The risk is particularly increased if both parents are obese. Some studies have determined that maternal obesity is more effective than paternal obesity, although it varies depending on prenatal and postnatal environmental and gender-oriented genetic mechanisms.<sup>39</sup>

### Anger

As a result of some studies, it has been revealed that anger triggers various addictions. Anger can also cause behavioral reactions such as restlessness, drug use, and excessive food consumption. It is an important emotion that also affects the process and outcome of eating disorders

treatment. It has been revealed that emotions such as anger and fear increase impulsive eating and there is a tendency to high-calorie foods such as junk food to regulate the emotional state. Clinical studies have proven that anger is an important antecedent of binge eating.<sup>40</sup>

### **Boredom**

Boredom is a major cause of eating disorders that many researchers and experts overlook. Although there are a few studies showing that adults tend to eat when they are distressed, detailed studies on this subject have not been conducted yet. In a study conducted with the participation of 139 students from different education levels, students' eating behaviors were investigated. It has been shown that students show more eating behavior when they are bored compared to other emotions.<sup>41</sup>

### **Happiness**

The effects of positive emotions on food consumption are related to limiting and controlling food consumption. It has been determined that women with high eating control and who are encouraged to eat when they are happy show more controlled eating behavior. In a study conducted on individuals who can and cannot control their food intake, the link between positive emotions and eating behaviors of the individuals who consume chocolate snacks was investigated. Participants who were able to control their eating behaviors decreased their snack consumption as their positive emotions increased.<sup>41,42</sup>

Observation of less food intake as a result of positive emotions is seen in people who can control their food intake. In individuals who do not have strong eating control, positive emotions such as happiness may cause more food consumption.<sup>42</sup>

## **Eating Awareness**

### **Definition of Eating Awareness**

Eating awareness focuses not on what is eaten but on why and how the eating behavior occurs. It is defined as the eating behavior characterized by internalizing the homeostatic hunger and satiety signals, being aware of how positive or negative emotions affect the eating behavior, without being affected by the stimuli coming from the environment and focusing only on the food at the consumption stage, without making any judgments during the selection phase of the consumed food. By focusing on the eating behavior, accepting the food, and putting emotions into the background during food intake, the individual can more easily decide on the healthy option in food choices. Eating awareness reduces food cravings and helps to control weight.<sup>43</sup>

Eating awareness includes being aware of the triggers that affect the desire to eat, food choice, amount and shape of food intake. Those who eat consciously are aware of the effects of the foods they consume and their eating behaviors on the human body.<sup>44</sup>

Eating awareness improves health and prevents disease-related quality of life.<sup>43</sup>

### **Effect of Eating Awareness on Nutritional Status**

Eating awareness aims not to show a reactive attitude towards foods and the emotions felt towards the foods consumed, and this situation minimizes the cases of remorse and self-restraint after eating. Some studies show that eating awareness can significantly reduce the behavior of eating in response to emotional states.<sup>45</sup>

Being able to perceive food with our senses can automatically increase food consumption. An individual with eating awareness, on the other hand, focuses on his/her own food in such a situation and excessive food consumption is prevented. Findings showed that eating awareness deautomates eating and reduces responses to food cravings, thus aiding in weight management.<sup>46</sup>

Eating awareness enables the individual to recognize the types of hunger and also prevents losing control over eating. It aims to realize food intake according to cellular hunger signals by being aware of cellular hunger rather than emotional hunger.<sup>47</sup>

### **Relationship Between Eating Awareness and Eating Behavior Disorders**

Studies show that individuals with eating awareness have a more balanced and regular diet. At the same time, awareness of eating reduces stress, provides weight loss, and prevents the development of eating behavior disorders.<sup>48</sup> Eating awareness also reduces the difficulties experienced by individuals with problematic eating behavior in controlling their food intake.

A study with the participation of 318 adults stated that as the eating awareness scale score increases, the eating test attitude score decreases. As a result of the study, it was noted that having awareness of eating reduces the risk of eating behavior disorder.<sup>49</sup>

## **CONCLUSION**

Intuitive eating has been demonstrated to be an alternative approach to medical treatments for body weight control. A significant difference was found between the emotional eating scales applied before and after the education of the groups in which eating awareness practices



were applied, and it was determined that as the eating awareness of the individuals increased, their emotional eating behaviors decreased. Likewise, increasing awareness of eating has also positively affected intuitive eating behavior and indirectly has a positive effect on body weight control.

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