In 1995, Elyse Resch and I developed the Intuitive Eating (IE) model to help move consumers away from the hazards of dieting. Our model was informed by both evidence-based studies and our clinical experience working with patients. While the hazards of dieting had been well-documented at that time, a body of research continues to show the profundity of harm associated with dieting, including increased risk of eating disorders (EDs), binge eating, weight gain, food preoccupation, body dissatisfaction, and weight stigma, as well as poor psychological health, such as depression and anxiety.

Today there is robust research on IE, with more than 70 published studies showing benefits and providing growing recognition that IE is a healthy adaptive eating style that may aid in positive psychological and physical well-being. This article presents a brief summary of the research and implications.

What Is Intuitive Eating?

Intuitive Eating, an evidence-based model, is a dynamic integration between mind and body via 10 principles (Table 1, page 4) that work by either cultivating or removing obstacles to body awareness, known as interoceptive awareness.

Interoceptive awareness is the ability to perceive physical sensations that arise from within the body; this awareness is a direct experience mediated by the right brain. Indeed, several studies show that Intuitive Eaters have higher interoceptive awareness. However, body awareness itself is only one part of the process. The way in which an individual values and responds to these body sensations is known as interoceptive responsiveness. This responsiveness, or attunement, to physical body sensations provides a person with a powerful portal to tap into for identifying his or her needs, including:

- **Emotional feelings.** Every emotion has a physical sensation.
- **States.** States such as sleepiness or having a full bladder have a physical sensation.
- **Biological eating cues.** Cues such as hunger and fullness have unique physical sensations.

Ultimately, IE is a personal process of honoring health by listening and responding to the direct messages of the body in order to meet physical and psychological needs. The challenge in today’s dieting, clean eating, culture is that many people do not value, let alone trust, their body’s sensations. Instead, they eat based on
Key Characteristics of Intuitive Eaters

In 2006, Tylka published a four-part seminal study on IE that evaluated the health benefits of IE in female college students, and created and validated the Intuitive Eating Scale (IES). IES scores were negatively related to ED symptoms, body dissatisfaction, poor interoceptive awareness, pressure for thinness, and internalization of the thin ideal. High IES scores were associated with several indexes of well-being, including proactive coping, higher body satisfaction, and general life satisfaction. This scale was updated in 2013 and validated to include both men and women (2,600 college students); it has also been validated in other countries and in adolescents. The most current IES is composed of four subscales. It is based on the 10 principles of Intuitive Eating, and ultimately reflects four key characteristics of Intuitive Eaters:

1. Eating for physical rather than emotional reasons. Eating is based on satisfying hunger, rather than undertaken to escape emotions or self-soothe.

2. Presence of unconditional permission to eat. This reflects the ability to eat foods desired when hungry, as well as refusal to label foods as forbidden or bad. (Note that attunement is a vital aspect, as sometimes people mistakenly perceive this as an authorization to overeat.)

3. Reliance on hunger and satiety cues. Eating is based on internal hunger and satiety cues, and these cues are trusted to guide eating behavior.

4. Body-food choice congruence. This reflects the extent to which a person matches his or her food choices with the needs of the body.

Benefits of Intuitive Eating

A recent meta-analysis review of 24 studies published between 2006 and 2015 found that IE was associated with the following benefits:

- Greater body appreciation and satisfaction
- Positive emotional functioning
- Greater life satisfaction
- Unconditional self-regard and optimism
- Psychological hardness
- Greater motivation to exercise when focus is on enjoyment rather than guilt or appearance

Furthermore, IE was inversely related to disordered eating, dieting, poor interoceptive awareness, and internalization of thin ideal. Most of the research to date has been cross-sectional in nature and mostly limited to college-aged women. Prospective intervention studies are needed to verify the beneficial associations.

Another scholarly review evaluated the relationship between IE and health indicators, and found that IE was associated with improved blood pressure, blood lipids, and dietary intake. It is noteworthy that one of the earliest studies evaluated the health-related properties of Intuitive Eaters’ food choices. People scoring high on Hawk’s Intuitive Eating scale ate a more varied diet. It is important to note that Hawk’s scale is different from the Tylka scale. Hawk’s scale has four components: intrinsic eating (reflects eating based on inner body cues), extrinsic eating (reflects external triggers for eating such as mood and food availability), anti-dieting, and self-care (reflects taking care of the body).

Intuitive Eating and Recent Research

Eating Disorders

A recent study from Germany looked specifically at the relationship between IE and individuals who had a range of EDs. The results provided the first evidence of reduced IE
scores in individuals with EDs and suggest that the IES could be a useful tool in monitoring recovery progress. This is consistent with other studies, which indicate promise for using IE in the prevention and treatment of EDs.8,15–18 Similarly, a new study on retired athletes indicates that IE may help reduce disordered eating and help athletes to relearn how to trust their bodies’ signals about hunger and satiety once they leave their sport.19

Diabetes
Emerging research suggests that IE programs could be a valuable tool to improve glycemic control.20,21 In children and adolescents with type 1 diabetes mellitus, there was an inverse relationship between hemoglobin A1c and IE scores.20 Intuitive Eating may have even more saliency for people with diabetes. This is because people with diabetes are at higher risk of developing EDs, and IE is associated with decreased risk of problematic eating.

Intervention Studies
There are limited intervention studies, but the results are promising. A recent short-term study used a combination of IE with Acceptance and Commitment Therapy (ACT).22 ACT is a validated counseling process that cultivates psychological flexibility via mindfulness, based on a person’s value system. Women who completed the 3-month intervention improved in the areas of binge eating, general mental health, psychological flexibility, and IE.

A 10-week worksite wellness intervention program combined IE and mindfulness to address problematic eating behaviors, which is an unintended consequence of many traditional worksite wellness programs.23 The intervention group had improvements in body appreciation, IE, and problematic eating behaviors compared with the control group. Notably, weight and body mass index (BMI) were not used as indicators of success, because focus on these may trigger problematic eating.

Body Mass Index
The body mass index is fraught with problems because it does not accurately reflect health status.24–26 However, it is noteworthy that the majority of studies that have evaluated the relationship between BMI and IE have found a negative association.3,27–31 This is relevant for health practitioners who are concerned that letting people eat whatever food they desire (unconditional permission to eat) would lead to weight gain. It is important to remember that attunement is a vital part of this principle.

For some people, there may be a side effect of weight loss as a consequence of implementing the IE principles. However, given that IE is an internal-based process, the promo-
tion of IE for weight loss may undermine and interfere with the process, because weight loss is external-based. A recent 3-year prospective study illustrates this problem. Women who were trying to lose weight had a reduction in their IES score at year 3 compared with baseline scores.\(^{31}\) Furthermore, these women had increased episodes of binge eating, which is consistent with a body of research linking dieting to binge eating behaviors.\(^{23,28}\)

### Health at Every Size (HAES)

A plethora of research shows that focusing on body weight and weight loss is linked to diminished physical and psychological health.\(^{26}\) Particularly problematic is weight cycling, a byproduct of repetitive dieting, where weight is lost and regained—and is associated with increased mortality and morbidity, some forms of cancer, loss of muscle tissue, chronic inflammation, hypertension, and osteoporotic fractures.\(^{30}\) With the push for “healthy weights” in public health policy, there has been an unintentional consequence of weight stigma, which in and of itself is a risk factor for diminished health.\(^{2,17,26}\) For these reasons, a growing number of scientists and health professionals are calling for a weight inclusive or HAES approach, which advocates for IE.\(^{2,26,32}\) Rather than focus on weight, the focus of IE is on cultivating healthy behaviors, period. Body weight is not a behavior.

### Conclusion

A body of research indicates that IE is a promising and comprehensive approach to healthy eating with physical and psychological health benefits. For the health practitioner, it is a gratifying way to collaborate with patients to achieve sustainable healthy behaviors, while helping them become the expert of their own bodies. However, there are gaps in the research. In particular, there is a need for intervention studies in a variety of age groups and across socio-economic backgrounds and gender.

### References


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Upcoming Events

August 4-7, 2017
American Association of Diabetes Educators Annual Meeting, Indianapolis, IN. For information: AADEdiabeteseducator.org

October 7-10, 2017
AACVPR Annual Meeting, Charleston, SC. For information: American Association of Cardiovascular and Pulmonary Rehabilitation, www.aacvpr.org

October 21-24, 2017
2017 Food & Nutrition Conference & Expo™ (FNCE®)—Centennial Anniversary, Chicago, IL. For information: eatrightfnce.org SCAN events at FNCE are detailed on page 23 of this issue of PULSE. For updates: www.scandpg.org/fnce-2017/

October 30- November 2, 2017
Obesity Week, Washington, DC. For information: American Society for Metabolic & Bariatric Surgery and The Obesity Society www.obesity.org/ meetings/obesity-week

November 10-12, 2017
Annual Renfrew Center Foundation Conference, Philadelphia, PA. For information: www.renfrew.org

May 4-6, 2018

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