In our chapter contributed to the Handbook of Behavior, Food and Nutrition, we present a model of selective attention as a mediator between food motivation and action, and review behavioral and brain-based studies demonstrating the profound bias in our attention systems toward food-related information. With a special focus on clarifying key concepts, controversies, research, and applications, this chapter demonstrates how cognitive neuroscience can help us understand group and individual differences in eating patterns, including those associated with eating disorders.