

Eating with your eyes: Using portion control plates to reduce self-selected food portion sizes

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Video Abstract

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Abstract

Looking at these two figures, does one of the solid black circles appear larger than the other? What about these apples? If the apple or the circle on the right looks bigger, your eyes have been fooled by an optical illusion. One that may help fight obesity. Inspired by these illusions, researchers have recently developed a portion-control plate as a means to promote smaller meal sizes. A new study published in the journal, BMC Obesity, evaluates the success of this plate. The World Health Organization has officially declared obesity to be a global epidemic, with 38% of women and nearly as many men affected world-wide. An important reason for this is an increase in energy intake without the corresponding energy expenditure, and large portion sizes have been implicated as a key player in creating this imbalance. Unfortunately, many people find it a difficult task to learn healthy portion sizes and consistently consume the proper amount of food for every meal. In an attempt to remedy this, a team of researchers developed a plate designed to help people do just this. Borrowing from the two optical illusions, the plate contains small circles around the rim, is smaller than a standard dinner plate, and has serving size indicators built-in. When tested, they found that these plates did, indeed, help people choose smaller portion sizes. However, the researchers noted that the amount of vegetables selected during these studies was less than recommend. So, can these portion-control plates help with weight loss? Maybe. While it appears these plates have the potential to reduce self-selected portion sizes, more research is necessary to fully understand their utility as a tool in the fight against obesity.