



Getting a Handle on Obesity

Once a problem only in the developed world, obesity is now a worldwide epidemic. The overwhelming cause of the epidemic is a dramatic increase in the food supply and in food consumption—not a surprise. Yet there are still many mysteries about weight change that can't be answered either inside the lab, because of the impracticality of keeping people isolated for long periods of time, or outside, because of the unreliability of dietary diaries. Mathematical models based on differential equations can help overcome this roadblock and allow detailed analysis of the relationship between food intake, metabolism, and weight change. The models' predictions fit existing data and explain such things as why it is hard to keep weight off and why obese people are more susceptible to further weight gain.



Photo: Ryan McVay



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